and installing more than 60 enhancements, and integrated the efforts of the other professional services units throughout that process. This required consistent and focused communication with the Department and all of the IME contractors. To facilitate that collaboration, Noridian developed and incorporated an electronic document management system (EDMS) and workflow system, OnBase, encompassing all of the IME contractors' business processes. This innovative approach to workload management and communication across multiple processing entities has proven to be critical to uniform and cost-effective program administration and communications.

Our implementation and ongoing support of OnBase has been referred to as “the glue that holds the IME together”, and has allowed us the opportunity to work with the IME contractors to learn their business functions and build relationships with their staff. These relationships have permitted us to develop and support a collaborative approach to service delivery which has contributed to the overall success of the IME operation.

7.1.2 Coordinating and Maintaining Communication

RFP Section 5.1, Requirements b and j

We understand and support the best-in-breed contractor model developed by the IME; we have been involved in the model since its implementation. As the current Core MMIS operations contractor, we regularly work with the Department and the other IME contractors and have developed first-hand knowledge of their business functions and the challenges facing them. We use this knowledge to communicate with the Department and the contractors to alert them to any potential impacts to their areas that could result from updates to key systems, and to look for areas of process improvements. We know that the success of the IME is dependent on this collaborative effort and that no single contractor in the IME can perform their required responsibilities without the coordination and cooperation of the other contractors.

Effective communication is the key to both the successful implementation of eCAMS, as well as ongoing operations. Therefore, Team Noridian develops thorough Communications Management Plans at the beginning of the project start-up and implementation phases, and updates those plans for each subsequent phase of the project. The Communications Management Plan describes, among other things, our methods for communications with each IME stakeholder and our schedules and procedures for meetings, reporting, and decision making. A more detailed description of our approach to developing our Communications Management Plan is provided in Section 8.2.7.7.1, Communications Management Plan. As we develop the Communications Management Plan for each phase, we will work with the Department to further define each stakeholder along with main points of contact for each of the IME contractors. We will share our proposed methods of communications with the Department and the IME contractors, and with the Department's permission, ask for suggestions and feedback on those approaches.

We hold meetings and communicate regularly with the IME contractors and will continue to do so throughout all phases of the project. The IME contractors are the end users of much of eCAMS, so it is critical to involve them during the start-up and implementation phases. We will work with the Department to determine when each IME contractor should be involved in joint application design (JAD) and other work sessions. During operations, we will work with the Department and IME contractors to collaboratively find methods for process improvements through system or business workflow changes and will provide mechanisms to track, control, and report on all changes. Team Noridian will provide knowledge transfer to the IME contractors when system changes occur, and continually seek feedback and suggestions for process enhancements.

7.1.3 Our Success in Cooperative, Collaborative Environments

RFP Section 5.1, Requirement c

Team Noridian is a proponent of cooperative, collaborative efforts and we work diligently to promote an open, positive environment throughout all of our many lines of business. As shown in Figure 7-1, Team Noridian's core business values are: Our Customers, Excellence, Integrity, and Dynamic Workplace. We carefully choose our subcontractors to ensure they share these values, and we instill these values in each of our employees. Adherence to these values by all Team Noridian members is an expectation. Developing mutually beneficial relationships with our customers and all project stakeholders is a key element in adhering to our business values.

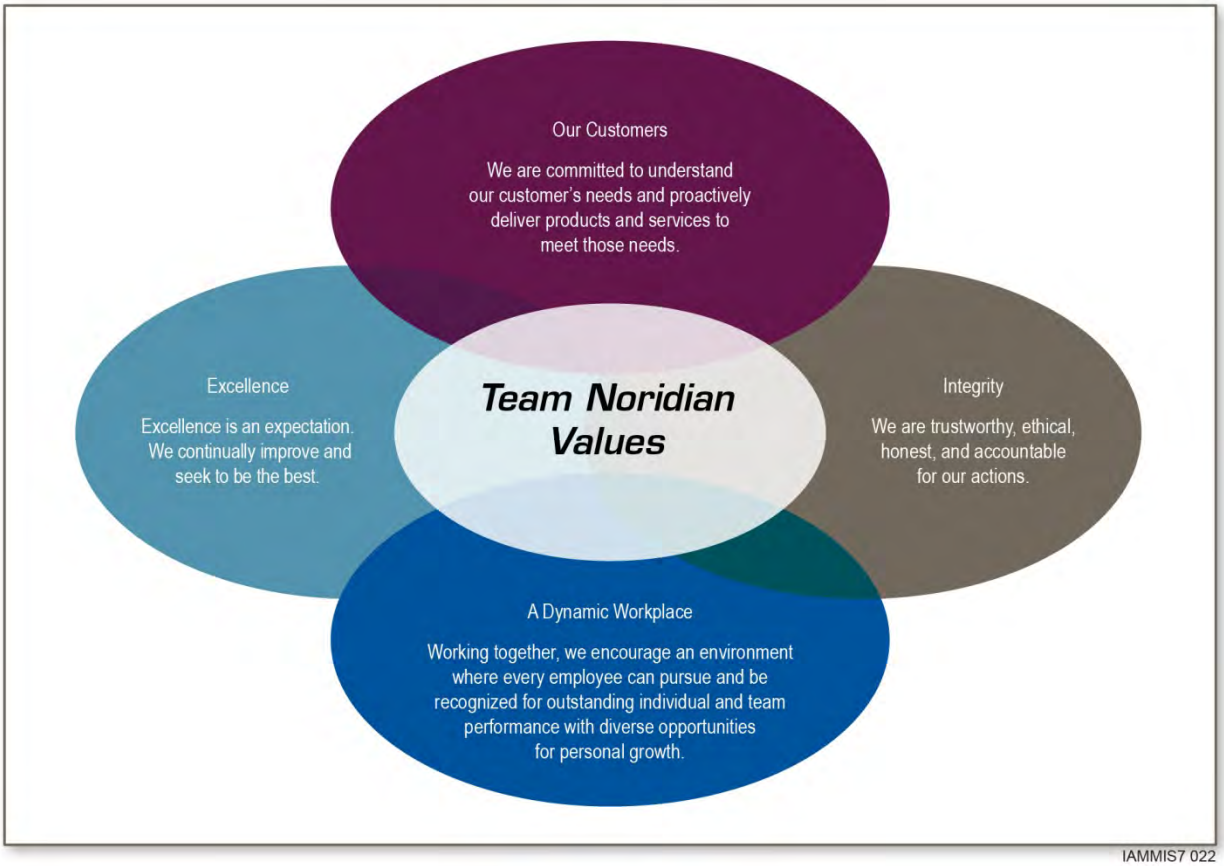

Figure 7-1. Team Noridian Values. Collaboration and communication with our customers and project stakeholders are key elements of the Team Noridian values.

As the current MMIS Core contractor, Noridian has successfully worked with all of the IME contractor unit managers and staff in combined efforts to improve performance and services, and we know the Department's role as contract monitor for all system services contractors. As Team Noridian, we will remain committed to this best-of-breed business model; we believe it results in a highly successful program and positive work environment. A few examples of collaborative efforts Noridian has contributed to within the IME include:

- Continually assessing and designing changes and updates to the OnBase workflow system which results in increased efficiencies for all IME contractors.
- Providing extensive support to the Provider Services unit through knowledge transfer on topics such as electronic billing, use of the PC-ACE Pro32 billing software, MMIS edits, and frequent billing issues discovered through claims processing. We participate in weekly collaborative meetings with the Provider Services contractor aimed at identifying issues early to decrease claims processing errors and increase provider satisfaction.
- Noridian's Electronic Data Interchange Support Services (EDISS) works with Iowa providers on behalf of the Provider Services contractor to help them successfully submit Medicaid electronic media claims for payment.
- Assisting by producing training documentation and manuals on electronic transactions, PC-ACE Pro32, and the Web Portal.
- Helping to conduct outreach to Iowa Medicaid providers in an effort to reduce paper claims.
- Building a new workflow for the IME Medical Services contractor that, in their words, resulted in the "most advanced project that we have created and the most advanced workflow we have in Medical Services".

Noridian's philosophy of creating win-win situations through collaborative work efforts extends to its other contracts:

- CMS has recognized Noridian for excellent performance in its Medicare operations. In the most recent award fee determination letter dated July 8, 2011, CMS commented on Noridian’s ability to undertake initiatives that benefit the Medicare program. CMS recognized Noridian’s ability to collaborate very well with other organizations handling Medicare workload.
- Noridian was recently honored with the CMS Provider Customer Service Program (PCSP) of the year award. One key reason for achieving this distinction is our focus on proactive collaboration. Noridian has proactively collaborated with the three other Durable Medical Equipment Medicare Administrative Contractors (DME MACs) in efforts to improve the overall program.
- In Noridian's Medicare operations, we interact with the Program Safeguard Contractor (PSC) responsible for performing post-pay provider reviews, medical reviews, and fraud and abuse investigations routinely by way of bi-weekly conference calls and quarterly face-to-face meetings. These meetings have improved the effectiveness of the full program.
- We established a relationship with FOX Systems, Inc. (FOX) in support of the National Provider Identifier (NPI) Enumeration Operation contract through CMS. For this project, Noridian provided the infrastructure and technical support along with process support. We were instrumental in establishing the business processes and the quality management activities that contributed to FOX’s achievement of International Standards Organization (ISO): 9001 certification for the NPI Enumerator Operation contract.
- Another present example of a contractual relationship that requires constant communication and collaboration is our work with the Mandaree Enterprise Company (MEC), a small disadvantaged business. MEC provides critical operational support for Noridian's DME MAC Jurisdiction D contract.
- We were the first DME MAC to offer our Comprehensive Error Rate Testing (CERT) score to our counterparts to encourage open communications to support development of a uniform process to identify and address the root causes of CERT errors. As a result, a joint DME MAC CERT Taskforce was established to develop consistent educational efforts to reduce error rates.

Our subcontractor, CNSI, also promotes this same philosophy of improvement through collaboration:

- CNSI and the state of Michigan project team have created a highly collaborative work environment to ensure effective communication at all levels of the project. The Integrated Project Management Office (IPMO) combines the leadership of CNSI and the state of Michigan into a single entity for effective and expeditious resolution of project issues. The IPMO meets weekly and has established

a baseline set of high quality governance documents (Risk Management Plan, Change Control Plan, and Issue Resolution Process). In January 2009, the Governor awarded the Michigan Medicaid Program Office the Director's Best Choice Award for most successfully run project in the state.

- CNSI has assisted many state agencies with planning, designing, and implementing efficient data-centric solutions through its in-depth knowledge of Oracle, Sybase, and Microsoft SQL Server products and key business processes. CNSI's offerings included application implementation, data warehousing/decision support, performance tuning and capacity planning strategies for database management, training, maintenance, security support, and enterprise-scalable solutions.
- CNSI is known for its ability to work collaboratively with its customers in developing leading-edge solutions for the government health care industry.

Both members of Team Noridian recognize the importance of working together to achieve the best outcomes for all of the users of Iowa's Medicaid program including the Department, the IME contractors, other state agencies, the providers, and the member community. This approach is at the core of our business values and has proven to be a successful approach throughout all of our lines of business. We have and will continue to work with the Department and the IME contractors towards the common goal of improved performance, processes, and services. We will capitalize on our successes and lessons-learned in building successful relationships with all of the entities involved in the IME.

7.1.4 Interfaces with IME Professional Services Units, State Entities, and Data Systems/File Transfers

RFP Section 5.1, Requirements d through f, and o

Team Noridian understands the need to interface with the IME professional services units, the Data Warehouse/Decision Support System (DW/DSS), the call center system, and other state systems to perform its responsibilities as the MMIS and Core MMIS operations contractor. These interfaces include both person-to-person interactions and automated data or file transfers, including authorized online updates to the IME data systems.

As described in the previous subsections, as the current MMIS Core contractor, we regularly meet and collaborate with the different IME professional services units to exchange ideas, discuss and resolve issues, design and develop system enhancements and changes, and explore areas for performance improvement throughout the agency and will continue to do so as Team Noridian. Additionally, we interact with the DW/DSS manager and staff and will provide a primary contact, with experience in preparing queries and reports, for developing queries and requesting assistance from the DW/DSS system manager.

As the MMIS Core operations contractor, we also interface with state entities including:

- **Division of Data Management.** Through meetings, e-mail, and phone calls to discuss data extracts and data pulls, project responsibilities, and collaboration on solutions to issues.
- **Department of Administrative Services Information Technology Department.** Through meetings, e-mail, and phone calls to discuss mainframe problems and solutions (including access), schedule file transfer jobs, backups, and space (disk volume) issues.
- **Eligibility Support Team.** We interface with this team through the same mechanisms as above to coordinate on projects or requested changes and issues.
- **Iowa Health Information Network (IHIN).** If needed, we interact with IHIN to discuss issues, changes, and possible projects to improve performance and efficiencies throughout the IME.

Team Noridian brings experience in multiple systems integration and business processes in support of large-scale health care operations. In fact, systems integration is a Team Noridian core competency as we have demonstrated our ability to work with multiple claims processing and ancillary supporting systems while effectively integrating and enhancing their functionality to support our operational excellence. Our

support of multiple lines of health care business requires not only systems integration but also supporting interfaces with multiple systems and data types such as:

- Scanning
- Imaging and workflow systems
- Optical character recognition (OCR) systems and applications
- EDI data file receipt, editing, and distribution
- Eligibility files
- Provider enrollment systems
- Fee schedules
- Crossover data
- Claims history
- Provider inquiry records stored in various types of customer relationship management (CRM) systems

Team Noridian recognizes the IME's and the Medicaid program's need for reliable, flexible, and secure access among partners and stakeholders, enabling improved data sharing and better business process integration. By understanding this need and building from the extensive experience of implementing interfaces in the current IME MMIS, and MMIS solutions for the states of Maine, Michigan, and Washington, Team Noridian is able to offer an integrated solution, incorporating reliable and flexible interface data exchanges and efficient interface management tools. This structured solution will allow the Department to better manage business partner relationships while promoting the necessary collaboration between the different units who all use the data.

As the IME Core contractor, we currently support the following interfaces with critical IME systems and data feeds:

- MMIS
- OnBase
- WorkView call logging software
- Pharmacy processing systems
- DW/DSS
- Coordination of benefits contractor (COBC)
- Data from other business partners

Our in-depth knowledge of the systems forming the backbone of the IME operation, coupled with our experience building and supporting interfaces, prepares us to seamlessly take on the interface responsibilities associated with the MMIS and Core MMIS operations contractor responsibilities.

eCAMS already contains the majority of the interfaces listed in the IME resource library, and the Department will have the option to pick from an extensive inventory of pre-existing interfaces that may not be yet identified in the Department's interfaces inventory. Team Noridian will adhere to a well-tested implementation methodology that follows multiple phases of the integration with the various interface partners.

Team Noridian understands that monitoring and reacting to the interface processes is an important task of operating an MMIS. Key interfaces, such as eligibility data and financial data from transactions, are constantly monitored. Any delays in the interface execution are escalated to various levels for analysis and remediation based on escalation policies established during the start-up and implementation phase.

Team Noridian will provide 24x7 services for operating and maintaining the infrastructure in Des Moines, Iowa. We will monitor the execution of interfaces and escalate when the interface alerts show errors or when any other escalation conditions occur. Our infrastructure support staff will be able to identify the type of error and escalate to the appropriate support teams based on the interface alert condition. These staff will be able to correlate between the interface system alerts and known system outages, and manage

the escalation appropriately. In situations where the Department permits contractors to use external data systems, Team Noridian will provide electronic interfaces from those external data systems to the IME data systems to support automated performance reporting.

Team Noridian acknowledges that as the MMIS Core contractor, we will have the authority and access to update files on the IME data systems (except those other state agencies operate) as needed to perform our system support responsibilities. When this occurs, information regarding these updates will be relayed to the Department and any other affected parties using established communications mechanisms to provide timely maintenance that is transparent to the IME data systems. A full discussion of our entire interface approach, including all processes, tools, and a description of all MMIS interfaces, is included in Section 9.3 Current MMIS External Interfaces.

7.1.5 Changes and Requests for Information

RFP Section 5.1, Requirements g through i, and n

Noridian currently provides processes that the IME uses to request, track, and report on system change management requests (CMRs) or system problems. The workflow process management system, OnBase, is at the core of these processes. We currently receive these requests from the IME contractors or Noridian staff, and triage them. Once we determine whether a system change is needed, Noridian meets with the Department and the affected IME contractor to discuss, schedule, and begin development on the request. The request is tracked through analysis, design, development, test, and implementation through our change management workflows. Requests for improvements in operational procedures are submitted and controlled using these same mechanisms.

For this new contract, Team Noridian will take advantage of some of the newer technology available, along with the workflow capabilities of eCAMS, to enhance our current OnBase CMR system with tools such as ReqTrace and Subversion. ReqTrace provides highly automated means of tracking requirements through the entire information systems development methodology (ISDM). Subversion tracks source code modification. We will work with the Department and the IME contractors to design and develop these improvements during the start-up and implementation phase to ensure all of the users of the current CMR system are aware of the enhancements to the system. The complete system flow will be fully documented in the operational procedures manuals, and we will provide knowledge transfer to the Department and the IME contractors prior to its implementation. The system will include the requisite steps for Department review and approval of CMRs, and requests for business procedure improvements. We will also use OnBase to respond to Department requests for information and assistance within the timeframe that the Department specifies. This process will be facilitated by the use of automatic alerts and timers built into the system.

Our in-depth IME experience and its associated contracts has allowed us to develop first-hand knowledge of the key details necessary to properly document a system change or notice of system problem. In our role as the IME Core contractor, we annually implement nearly 200 system change requests, and coordinate the resolution of, or implement corrections for, nearly 375 problem notifications. The enhanced system that we implement will take advantage of both this knowledge of current IME operations and new technology to augment the current processes.

As part of our full CMR procedures, Noridian currently maintains operational procedures for all of the tasks associated with MMIS Core contractor functions. Updates to these operational procedures are required when system changes occur. The operational procedure updates are currently tracked through the OnBase change management system to ensure they are made, reviewed, and posted. Team Noridian will continue to include the update of operational procedures and other system and/or user documentation as part of our change management processes.

7.1.6 Meetings and Reports

RFP Section 5.1, Requirements k through m

Clear, concise, and timely communications is critical to the continued long-term success in the delivery of the new MMIS. Our communications management processes are designed to foster strong business relationships based on leadership, trust, respect, and accountability with all involved parties. Communications management defines communication processes, guidelines, methods, decision-making protocols, reporting mechanisms, and meetings. It also sets expectations for the type and frequency of communication. Consistent and regular communication is the cornerstone of this effort. Regular and effective communication keeps all stakeholders involved and provides the means to manage expectations and outcomes. This is particularly critical in a project involving multiple stakeholders, such as this one.

Team Noridian's Communications Management Plan will be consistent with the Project Management Institute's (PMI's) Project Management Body of Knowledge (PMBOK), and will be tailored to best support the Department's requirements and our project management needs. A critical piece in developing the plan is the identification of all stakeholders with communication needs and matching these stakeholders with the communication methods they require. Team Noridian will work with the Department and its internal staff to define all of these communication needs and methods.

As part of our communications planning, we will set up the formats, mechanisms, procedures, and schedules for the main performance communications vehicles, which will be used during the different phases of the project. This will include establishing the different types of meetings and required participants needed to ensure relevant information is provided to all stakeholders on a regular basis.

Meetings are an excellent forum to allow the Department and the IME contractors to share information, provide overviews of performance standards, review account performance, discuss and resolve problems and issues, and reach decisions. At the onset of the operations phase, Team Noridian will work with the Department and the other IME contractors to determine the expected participants and the frequency or date and times of each meeting. This information will be stored on the Project Portal which will allow the Department and the IME contractors to set alerts reminding them of each meeting and notifying them if meeting schedules are changed.

Team Noridian will designate a primary person, as well as a back-up, responsible for maintaining the meeting schedule. Team Noridian and the Department will mutually decide on the format for the meeting agendas and minutes. We will develop initial formats for agendas and minutes formats, and these will be used as the templates to create final formats approved by all. Once the formats are finalized, Team Noridian will distribute and store the appropriate templates online on the Project Portal.

Based on our extensive experience in facilitating and participating in successful, results-oriented meetings, we believe it is important to set up and follow certain protocols and guidelines, especially when the meeting involves a large group. These include:

- Securing the necessary meeting space and scheduling its reservation at the beginning of the project
- Arranging for necessary call-in numbers at the beginning of the project
- Distributing an agenda at least two business days prior to the meeting
- Allowing a day for participants to add to the agenda
- Receiving Department approval on the agenda and distributing a final version, if needed
- Appointing a meeting facilitator who ensures the agenda is followed, the subjects stay on target, and the meeting is concluded within the timeframe allotted
- Distributing minutes within five business days of the meeting and allowing a time for comment, updates, and distribution of final minutes, if needed

Team Noridian will regularly provide status, progress, and performance measurement information to the Department through written reports. As specified in the RFP, Team Noridian will work with the

Department to determine the content, format, and frequency of these reports. In addition to the written reports, Team Noridian will also provide a performance dashboard called HealthBeat, which we will use to present metrics in a centralized location to the Department.

HealthBeat provides a comprehensive business activity monitoring framework, along with the capability to facilitate continuous process improvement. As the system handles each business process, it collects process-related data in the process data store. This data is then used to display the process dashboard and provide visibility to the process metrics and the health of the operation. The system also uses workflow-based analytics to provide feedback on the potential bottlenecks and business performance issues. Thresholds can be configured to display performance in the traditional "red", "yellow", and "green" dashboard status. All the identified business services, including those of component contractor's activities, will use a common framework to feed events into a single repository. This event repository uses metadata to show in real-time or near real-time (depending on the nature and the type of business service) the health of any process.

HealthBeat enables the setup of a hierarchy of business objectives (goals) that can be linked with metrics and business events and services. This will allow the Department to monitor the health of business processes not only in the short term, but also over the long-term to track the historical trend. This approach allows the Department to actively utilize real-life data in the business process configuration, and ensures continuous business process improvement across all business process areas. During the start-up and implementation phases, Team Noridian will work with the Department and with the other IME contractors (through the Department) to review and define all performance measurements, and methods and formats for reporting the measurements.

Team Noridian will use the Project Portal as the electronic project repository through all project periods. The Project Portal will be installed and configured upon contract award for use by both Team Noridian and the Department. All internal project participants, including designated Department staff, will be trained on its use through appropriate mechanisms.

The Project Portal will provide management control features that integrate all project management processes, including:

- Electronic repository for all project documentation and deliverables
- Assembling staff and team performance measurements through the performance dashboard
- Providing information to support the collection of information
- Continuous assessment of issues and risks

The Project Portal is integrated with electronic mail to provide project team members with the ability to receive alerts, special notices, reminders, and other messages regarding the project. As an electronic repository, the Project Portal provides mechanisms to organize materials, version control materials, alert team members when a document is changed, limit access by group or person, and check documents in and out. We will use the Project Portal as our method of delivery for all project products and deliverables. If specific stakeholders require a different method of delivery, Team Noridian will work with the Department and the other stakeholders to work out alternate means.

In addition to distributing information through these more formal means, Team Noridian encourages open communication and continuous collaboration between our staff, the Department, the IME contractors, and any other stakeholders. The fundamental goal is to avoid surprises and involve the Department and the IME community in a collaborative manner. We are committed to keeping the Department and IME contractors informed at all times and will do that through scheduled and unscheduled face-to-face meetings, e-mail, and telephone calls when needed, and will follow up with more formal communications as appropriate.

7.2 Staffing

RFP Section 5.2

Because Noridian, the prime contractor, is currently operating the IME Core MMIS contract, we already have staff experienced with core operations and the IME best-of-breed structure. In addition, with the implementation of your new MMIS, we will bring new expert technology resources to the Core staff. Those resources have worked with DDI and implementation of eCAMS and the other technologies we propose for the Core MMIS contract. By adding experts in our proposed technology to the group of individuals who make up our current core staff, we will be able to provide and maintain the best possible, qualified mix of all required staff.

In the following section we respond to the general requirements from RFP Section 5, specific to staffing.

7.2.1 Key Personnel

RFP Section 5.2.1 through 5.2.5

Team Noridian has the right key personnel for this project—key personnel with relevant qualifications and experience. As the Department works with our key personnel, the Department will find energetic and dedicated people who are truly motivated to help the Department attain its goals—goals that will be reached through open communication and ready collaboration.

We selected our well-qualified key personnel for the strengths they bring to the MMIS and Core MMIS operations project, as well as for their commitment to quality and professionalism. Experience enables our key personnel to make the right decisions, implement the right solutions, and communicate the right message on the Iowa MMIS project.

In working with our key personnel, the Department will find that the experience each brings to the project is invaluable in managing change. Our key personnel understand the systems, schedules, and processes they will be using, and because of their experience, they can anticipate the downstream impacts of changes; thereby, planning and managing change with confidence rather than reacting to change with uncertainty.

We understand that the RFP lists 13 key personnel positions for the IME System Services proposal. We are not bidding on the Pharmacy Point-of-Sale (POS) aspect of the RFP; therefore, we are not addressing the POS operations manager key personnel position. In Figure 7-2, we provide the names of the key personnel that the RFP requires be in place upon contract signing for the start-up and implementation phase, along with their relevant experience. These individuals will be 100 percent dedicated to the new Iowa MMIS project. The resumes, references, and letters of commitment for these people can be found in the Resumes and Letters of Commitment tab, found at the end of Tab 6 of this proposal response. Those resumes show that each key person for the start-up and implementation phase meets all of the RFP qualifications for their respective position.

We understand that the certification manager, operations account manager, claims operations manager, systems manager, operations quality assurance manager, and turnover manager must be named prior to their related project phases.

Key Personnel Position	Key Personnel	Relevant Experience for Iowa
Account Manager	Scott Hruska	▪ Nearly five years of experience as the account manager for the IME Core MMIS contract which includes management of contract resources, change management procedures and processes, and performance requirements.
Systems Implementation Manager	Rajesh Sharma	▪ Certified PMP with 10 years of experience in project planning, execution, monitoring-controlling, and implementations, including Texas Medicaid HIPAA 5010 and NCCI implementations ▪ Bachelor of Technology -Electrical Engineering, National Institute of Technology, Hamirpur, India

Key Personnel Position	Key Personnel	Relevant Experience for Iowa
Project Manager for PMO	Diana Grogan	▪ Three years of experience managing the project management and organizational change organizations for CNSI's MMIS projects ▪ More than two years of experience using Microsoft Project
Quality Assurance Manager	Karen Rowcliffe	▪ Six years of experience as Noridian's quality assurance manager, analyzing performance trends, communicating areas at risk, and developing and implementing performance improvement plans
Data Conversion Manager	Dev Vijay	▪ More than 13 years of technical and functional expertise in developing client, server, and web applications, including work on the CHAMPS, the state of Michigan's MMIS, and the Michigan EHR initiative ▪ Master's degree in Industrial Engineering, University of Cincinnati, Cincinnati, Ohio ▪ Bachelor's degree in Tech, Mechanical Engineering, Pondicherry University, India
Interface Manager	James Schloss	▪ 19 years of hands-on management and leadership experience including more than 10 years experience within the IT industry, including working through the system development life cycle to bring the Michigan MMIS, the Community Health Automated Medicaid Processing System (CHAMPS), online ▪ Bachelor's degree, University of South Florida, Tampa, Florida
Testing Manager	Arnab Datta	▪ More than nine years of diversified experience testing MMIS for Maine and Washington ▪ Master's degree in computer sciences, University of Bridgeport, Bridgeport, CT ▪ Bachelor's degree in electrical and electronics, University of Mysore, Mysore, Karnataka, India,

Figure 7-2. Required Key Personnel at Contract Signing. The experience of our key personnel prepares them to make the right decisions, implement the right solutions, and communicate the right message on your new MMIS project.

7.2.2 Department Approval of Key Personnel

RFP Section 5.2.6, Requirements a through d

As mentioned, Team Noridian has proposed names for seven of the key personnel for the start-up and implementation phase. We are confident that the Department will find these individuals have the knowledge, capabilities, and skills required to complete the tasks to ensure a successful implementation. Upon approval by the Department (approval sought during contract negotiations), these key personnel will be ready to begin work on the project.

Throughout the project contract, if any key personnel position must be replaced, our recruitment process to find a comparable replacement will begin immediately. If the process is expected to go beyond 45 days, Team Noridian will request in writing to the Department for an extension. We want to ensure the "right" person is selected to meet the Department's expectations. We welcome the Department to interview possible candidates for any replacements. Once a candidate has been selected, we will propose this individual to the Department for final approval.

7.2.3 Changes to Contractor's Key Personnel

RFP Section 5.2.7, Requirements a and b

We have provided a team that we believe builds a great foundation to ensure a successful project. If one of the key personnel must be changed, our account manager, Mr. Scott Hruska, will submit a written request to the Department for approval to replace the position, unless waived by the Department. We will fill the vacancy prior to the departure of the key personnel by immediately looking for a comparable, qualified person from existing resources. Noridian and CNSI both are experienced contractors with many resources in many states, but if we cannot find a suitable replacement from existing resources, we will begin the recruitment process. Unless unforeseen circumstances prevent it, we will find the replacement and have that person in place prior to the departure of the key personnel being replaced.

We have a proven process when recruiting new hires. We maintain close relationships with local and national recruitment and staffing firms who can quickly provide qualified individuals for consideration. These relationships are especially important when looking for candidates with specialized skills or in specific geographic areas. Once candidates are identified, they go through a series of interviews with peers and management before being presented to our customer. Through strong employee retention

programs, incentives and benefits, the members of Team Noridian all enjoy employee retention rates that meet or exceed the industry average. This not only reduces the need to fill vacancies, but also ensures that we often have experienced and qualified replacements on staff ready to step into a soon-to-be-vacant position. Our recruitment process will be complete when we receive approval from the Department on the replacement candidate.

Mr. Hruska will notify the Department within 15 business days of any proposed changes to our key personnel, unless waived by the Department due to unforeseen circumstances (death, terminations, or resignation). As we have provided in this proposal, we will provide the Department with resumes and references of potential candidates for the replacement position. We acknowledge the Department has 10 business days to review and then accept or reject a proposed replacement candidate. Within that time frame, if the Department elects to meet with the proposed candidate, we will make the arrangements for the candidate to be available to the Department in Des Moines.

7.2.4 Job Rotation

RFP Section 5.2.8

As the current Core MMIS contractor, Noridian, the prime contractor in Team Noridian, has extensive experience to ensure proper coverage for all operational areas. Cross training ensures all job functions can be performed regardless of staff absence, resignation, or termination. Job rotation ensures that during times of temporary increased staff needs in a certain area, staff can be allocated readily to that area to ensure work requirements are met. As an example, Noridian's adjudication staff is assigned specific claim locations to work on a daily basis, but each individual has been cross trained on all claim locations to assist with any absences. Cross training and job rotation expectations are documented within our operations procedures. We also have written operational procedures in a step-by-step process, which ensures consistency and accuracy in process completion.

In addition to employee absence, opportunities for job rotation between different job responsibilities arise with changes in work volume. To select staff to participate in job rotation, management will identify those employees who are fully trained and have demonstrated these abilities:

- Exceed expectations on monthly performance reviews
- Work well with others
- Show adaptability
- Work with minimal direct supervision
- Quickly grasp new concepts
- Manage workload

Job rotation may involve a short-term assignment of a day or two, or it may involve performing the requirements of more than one position on a routine basis. Employee performance during a job rotation will be closely monitored by the supervisor for that function to ensure the employee is a good match for the job rotation.

As evidence of our understanding of the value of cross-training and job rotation, Scott Hruska, the current IME Core MMIS account manager and our proposed account manager for the MMIS and Core MMIS operations contract, has already taken steps to make job rotation and cross-training part of Core MMIS operations. The program he instituted within IME mailroom, claims, and systems has increased the depth of skilled resources, improved efficiencies, and removed the vulnerability of a lack of knowledgeable resources for specialized tasks.

7.2.5 Coverage During Vacations for Sensitive Positions

RFP Section 7.2.9

As we described in Section 7.2.4, we ensure cross training and job rotation are in place for staff that are absent. This carries over to not only the front line staff, but also to our management and key personnel. Our account manager, Mr. Hruska, will ensure the Department is notified of any absence of key positions and will provide the name of an interim point of contact while that person is out. Our management team meets on a weekly basis, and in that meeting staff vacations are communicated. That communication will be shared with our Department unit manager.

7.2.6 User Access

RFP Section 5.2.10

Team Noridian understands the need to have a system that ensures the user experience is positive with the user interfaces. It is critical that end-users are able to perform work in a very productive manner. Team Noridian's architecture will enable users to be more productive and create a positive user experience.

Our MMIS solution provides metrics to monitor system performance via the eCAMS HealthBeat architecture. HealthBeat offers:

- An integrated dashboard for real-time monitoring of key business and system metrics
- A scorecard to measure long-term trends for continuous business process improvements
- Automated delivery of service level agreements (SLA) reports and metrics

We will ensure that our performance dashboard measures, monitors, and reports to the selected service level indicators from the Department to indicate availability of the selected application. Our reports will include an exception log indentifying those applications that were not available during the reporting period, network response time, as well as the calculation of user access availability in the report. We will obtain Department approval of the frequency, content, and methodology for reports.

To ensure compliance with system response time standards, Team Noridian can draw upon the following resources:

- Analysts to monitor network operations and create metrics on performance
- Network staff to monitor and resolve any performance issues related to telecommunication circuits, firewalls, routers, switches
- System administrators to monitor and resolve any issues related to servers
- Database administrators to monitor and resolve issues related to online transaction processing system, data warehouse, and pharmacy databases
- Storage area network (SAN) engineers to monitor and resolve issues related to the SAN
- Configuration management specialists to deploy code and resolve any issues related to code releases
- Technical helpdesk analysts to monitor and resolve laptop/desktop/printer issues

Team Noridian has created an infrastructure architecture that will meet high system performance levels. If it is determined that the system performance is not meeting standards due to hardware, Team Noridian will perform a root cause analysis. The root cause analysis will result in corrective action plans. If the corrective action plan requires an increase in capacity, Team Noridian will procure additional infrastructure. Team Noridian proactively monitors system capacity. Our proactive monitoring provides Team Noridian engineers advanced warning signs based on trending. These early warning signs will result in corrective action plans well before an issue occurs. We understand that we may perform system maintenance during off hours, from 7pm to 6am, central time.

We understand that we will be responsible for providing and maintaining all necessary telecommunication circuits between the Department offices and the contractor's facilities.

7.2.7 Employees and Subcontractors

RFP Section 5.2.11

Team Noridian complies with all federal and state employment regulations. Our Human Resources Department monitors and controls job posting procedures and the hiring process to ensure employees, regardless of race, color, religion, sex, age, national origin, physical or mental disability, veteran status, status with regard to public assistance, or marriage, have equal opportunity to compete for job openings.

7.2.8 Residency and Work Status

RFP Section 5.2.12

Team Noridian follows all federal and state laws regarding Social Security registration and legal work status of all staff employed or contracted by the company. Each newly hired and current employee who works in the United States must complete Form I-9. His or her information is electronically submitted to E-Verify to verify the employment eligibility.

E-Verify is an Internet-based system operated by Department of Homeland Security (DHS) in partnership with Social Security Administration (SSA) that allows participating employers to electronically verify the employment eligibility of their newly hired employees. It works by electronically comparing the information on an employee's Form I-9 with SSA and DHS records to verify the identity and employment eligibility of each newly hired employee.

7.2.9 Background Checks

RFP Section 5.2.13

Team Noridian understands and acknowledges that all temporary, permanent, subcontracted, part-time and full-time staff working on the Core MMIS contract will require criminal background checks prior to employment. As a government contractor on many projects that require public trust, secret, or top secret clearance, we thoroughly understand the activities to perform background checks for all project resources at the start of the project and on a routine basis thereafter, or upon request of the Department. The results will be submitted to the Department for review prior to the start of work on the contract. Team Noridian acknowledges that any employee with a background unacceptable to the Department will be prohibited from working on the contract or immediately removed from the Core MMIS project. As the prime contractor, Noridian will ensure that this requirement is stipulated in all of its subcontracts.

Team Noridian's staff management plan will provide the specific criteria and guidelines that are used for background checks. This plan will be submitted to the Department for review, comment, and approval. The Violent Crime Control and Law Enforcement Act (the Act) prohibits Noridian from hiring or employing individuals to engage in the business of insurance if they are convicted of certain kinds of felonies, those involving dishonesty or a breach of trust or convictions of a violation of 18 USC Section 1033. A "conviction" has been interpreted by regulatory agencies to include deferred imposition of sentence and all other resolutions of a charge, other than dismissal.

Because of the requirements of the Act and the potential individual and organizational penalties that may result from a violation of it, it is Team Noridian's policy to screen applicants as to whether or not they have a felony conviction. If an individual does have a felony conviction included within the Act, the individual will not be allowed employment.

Team Noridian conducts reference checks (a minimum of two references is preferred) and background checks before hiring. We have implemented a job classification system in which security levels are assigned to positions and background checks are conducted according to security level. The security level for each position is based on the level of certain job requirements:

- Claims approval/data access and/or viewing authority
- Check handling as part of the job duties
- Hours of access to the building(s)
- Segregation of duties

There are two security levels. Level 1 has a classification score of 3 to 22 and is primarily for non-management personnel. For Level 1, a background check consists of:

1. Review of pre-employment application
2. Verification of non-listing on the Government Accountability Office (GAO) Excluded Parties Listing Service (EPLS), Office of Foreign Assets Control (OFAC) and OIG List of Excluded Individuals/Entities (OIG or LEIE) websites
3. Personal interview
4. Contacting references provided by the applicant
5. Verification of work history for the previous seven years
6. Contacting the local law enforcement agency.

In addition, Human Resources or management may require any other review as deemed necessary (e.g., pre-employment drug screening, other background checks as needed, financial reporting).

Security Level 2 has a classification score of 23 and above and is primarily for grade levels 17 and above. It requires a Level 1 review, plus a criminal background check of the last seven years.

7.2.10 Bonding

RFP Section 5.2.14

Noridian and CNSI both currently have an active crime insurance policy, which is relevant for employees who handle or have access to checks. The crime policy covers the company for direct losses resulting from theft or forgery committed by those employees.

7.2.11 Subcontractors

RFP Section 5.2.15

Noridian has selected CNSI as its only subcontractor for this contract. Detailed information about CNSI's capabilities, experience, and knowledge has been provided in Tab 5. We acknowledge the Department has the right to prior-approve any or all subcontractors and their work locations as required for this contract.

7.3 Contract Management

RFP Section 5.3

Team Noridian brings the IME a comprehensive, sound contract management methodology, including a quality assurance program based on approaches developed over a long period of successful, large scale claims processing operations. These approaches have proven effective in maintaining quality levels that consistently meet or exceed our customer expectations and focus on continuous performance improvement in all areas.

Performance-based contracts work. Team Noridian has found that its best contracts are ones where the client is fully engaged in oversight of the contract based on agreed and understood criteria. Team Noridian possesses an excellent record of operations contract management performance. As the current IME Core MMIS contractor, Noridian has established a successful quality assurance program and consistently meets or exceeds all required performance standard measurements on the performance scorecards.

Noridian’s IME performance is exceptional; our contract management and quality assurance processes emulate from decades-long commitments to quality assurance and the highest levels of service.

Our ISO 9001:2000-evaluated quality assurance procedures have proven to be effective in increasing our processing efficiency and have produced higher levels of client satisfaction that comes from doing things correctly.

Similarly, Noridian's Medicare lines of business collect and report on these same types of performance measurements to the Centers for Medicare & Medicaid Services (CMS). Noridian recently received high praise in a CMS award fee determination letter which stated, "Noridian continued with the very strong Project Management oversight that was evident during the prior option year. During this option year Noridian had to react to various initiatives and Noridian very adequately supported each effort with knowledgeable and capable staff. In addition, Noridian reduced direct labor hours charged to the contract, without any performance impact." CMS acknowledged the effectiveness of Noridian's program management approach by awarding 100 percent of the award fee for contract management. This criterion measured critical aspects of the program management approach, including cost management, timeliness, staffing, flexibility, deliverables, communication, and innovation.

Our team member, CNSI has also demonstrated an outstanding track record of providing operational support in the states of Maine, Washington, and Michigan. Not a single payment cycle has ever been missed in any of those states and their MMIS regularly meets or exceeds all required performance measurements. This consistent approach to contract excellence is what we will continue to bring to the IME as Team Noridian.

7.3.1 Performance Reporting and Quality Assurance

RFP Section 5.3.1

7.3.1.1 Performance Standards

RFP Section 5.3.1, Requirement a

As a performance-based contract, Team Noridian understands that performance standards and measurements play a large role in determining the quality and timeliness of day-to-day Core MMIS operations. As a seasoned Medicaid, Medicare, and private health care administrator, we currently collect and report on over 600 different performance measurements. Like IME, our performance measures are measurable and quantifiable and include measures for timeliness, accuracy, and completeness for performance of or reporting about operational functions.

During the development of this proposal, Team Noridian conducted an assessment of current required performance measurements and those that were modified or added in the requirements in the RFP. In keeping with the new MMIS implementation, we have identified many new or improved automated methods to measure our conformance to those standards. We will implement these through eCAMS functionality, such as HealthBeat, and others through additional alerts built into our workflows. For example, we will implement new OnBase workflow processes to ensure all operational procedures are updated within 10 days of any changes. During the start-up and implementation phase, Team Noridian will work with the Department to discuss all the performance measurement standards and ensure we provide the means to capture and report on all of them. The standards include timeliness, accuracy, and completeness of operations and reporting, and we will ensure all performance standards are quantifiable. Many performance measurements will be automatically collected and reported using our HealthBeat performance dashboard which provides a highly automated means of tracking, disseminating, and reporting on the data. We will also use our Measure, Monitor, and Enforce (MME) process to monitor and compile statistics on employee and unit performance. We understand that the Department will select a subset of the standards for Team Noridian to include in a public quarterly report.

We will monitor workload based on the performance requirements set forth in the RFP, contract, and internal workload measurements. Typically, we track workload in three categories: receipts, completed, and pending. These categories are further defined within each operational area according to contract

standards for performance, such as mailroom paper processing timeliness. These workload statistics are compiled on a regular basis and distributed to management. This data is analyzed to evaluate current staffing requirements and workload management plans.

The data will be collected and reported on through the HealthBeat performance dashboard, which provides automatic trending and comparisons to increase accuracy of the performance information and present metrics for management review. Managers, supervisors, and leads meet weekly to discuss inventory levels and define workload management strategies. The HealthBeat system uses workflow-based analytics to provide feedback on the potential bottlenecks and business performance issues. Thresholds can be configured to display performance in the traditional "red", "yellow", and "green" dashboard status. When yellow and red flags are present, management works with the quality assurance staff to determine the corrective action steps to bring inventory levels into a position where performance expectations can be met.

Team Noridian will use a combination of mechanisms to evaluate and report on workload and adherence to performance requirements. As specified in the RFP, during the start-up and implementation phase, we will work with the Department to discuss and finalize the specific performance reporting and measurements we assessed during the proposal preparation process. Once finalized, these will be published, along with the method for collection and reporting, as an appendix to the Quality Management Plan. The performance measurements are used to inspect trends in performance and identify where underlying issues may be impacting ability to meet performance expectations. For example, if a decline in performance is trended over several weeks, additional inspection at the process, employee, and workload level is conducted to eliminate risks.

We will regularly provide the performance statistics to Team Noridian staff members for review. We have found this fosters buy-in with frontline staff and supports their desire to positively impact the unit's goals. It also provides a correlation between each staff member’s performance and the unit's overall capability. The performance monitoring will be compiled and provided to the Department through the contract’s regular reporting mechanisms such as HealthBeat, MME reporting, or other MMIS reports.

Identification of nonconformance and deficiencies may occur as a result of all performance measurement monitoring activities such as workload, system response time compliance, and documentation update requirements. When nonconforming situations are identified, we follow a formal process to implement corrective actions related to operations. Through this process, performance issues are defined and contributing factors are identified to establish the magnitude and cause of the deficiency. The contributing factors may range from employee production and quality concerns to high workload receipts. Problems will be identified and tracked using this system.

Management, with the support of the quality assurance (QA) staff, analyze the nonconforming situations and determine appropriate action which is documented in corrective action plans (CAPs) and provided to the Department for review and approval. The situation is monitored using data and other methods to ensure the nonconformance is corrected. Management and the QA staff review and report progress on CAPs and must together, along with the Department, agree on the closing of a CAP.

Examples of possible CAPs include:

- System changes to automate additional processes
- Changes to business workflows
- Workload balancing and distribution among staff
- Refresher or updated training courses

The account manager, including Team Noridian's executive management when necessary, determines the most effective method to correct and prevent reoccurrence of performance issues and defines the necessary actions to take. These actions are framed by outlining the actionable steps, the projected impact of those steps, and the projected resolution timeframe.

All CAPs are subject to Department approval and are presented to the Department for review prior to beginning the work on any CAP. Team Noridian will work with the Department to discuss and develop a timeline for the CAP to be implemented and if the CAP results in system changes, we will execute the CAP using our established systems development life cycle (SDLC) methodology and change management procedures. We track and report on the CAP through completion and immediately notify the Department of any problems with the implementation of the CAP. Once the issue is corrected, an evaluation of the CAP is conducted to identify lessons learned to be applied to future CAPs.

7.3.1.2 Internal Quality Assurance Activities

RFP Section 5.3.1, Requirement b

Team Noridian brings the Department a comprehensive quality assurance (QA) program based on management approaches developed over a long period of successful development, implementation, and large-scale claims processing operations. These approaches have proven effective in maintaining quality levels that consistently meet or exceed customer expectations, while continually adapting to the changing health care environment from that in which our quality program began. The adoption of our quality principle, based on Noridian's corporate values, ensures our commitment to quality is at all levels of the organization. Noridian's quality practices meet the requirements of the International Organization of Standardization (ISO) 9001:2000 standard for quality management programs and stem from an ongoing focus on quality that has evolved in over 70 years of health care administrative services.

Team member CNSI's management and quality processes have been externally assessed at Capability Maturity Model Integrated (CMMI) Level 2 and are compliant with Level 3, with the official assessment at Level 3 expected in 2012. CMMI is the industry standard for quality managed repeatable system life cycle processes, and CNSI's commitment to CMMI is consistent and enhances Team Noridian’s quality assurance approach.

As part of our Core MMIS operations, Team Noridian will enhance its current internal QA program and associated plan with guidelines, tasks, and activities designed to monitor all of our processes, deliverables, and procedures. This program will include the use of eCAMS, the next-generation claims processing system, and OnBase, our document management and workflow system, which provides the ability to automate quality control activities using business rules for random sampling.

The independent Quality Monitoring and Control Unit will be responsible for measuring and reporting the quality, accuracy, and timeliness of all performance requirements including subcontractor performance. QA activities have been centralized within this unit to ensure consistency in establishing and measuring quality expectations across the organization. Quality improvement responsibilities are integrated to facilitate process improvements based on objective measurements. The Quality Monitoring and Control Unit communicates this information to the account manager, through the Project Management Office (PMO). The account manager is ultimately responsible for overall contract performance including Team Noridian staff members and all subcontractors working on the project.

Team Noridian fosters a culture of quality management and compliance which forms the basis for all work activities. Quality is an expectation at all levels and is promoted through several mechanisms:

- Routine staff management activities which focus on employee performance and each employee's commitment to quality
- Monthly one-on-one meetings between management and staff to discuss individual performance and quality

- Monitoring of workload and timeliness through the MME program which clearly communicates performance and quality expectations to all staff, and measures the expectations at the individual and team levels
- Ongoing training and feedback methods for staff
- Internal process reviews that continually assess business function workflows and processes for adherence, and to develop opportunities for process improvements
- Internal operational audits that independently review all business processes and record problems or deficiencies
- Automation to perform QA sampling using the OnBase workflow management system to provide online checklists for work processes, and the eCAMS rules engine to automate sampling of work based on imaged documents
- Use of a robust performance measurement tool that automatically collects and reports on the various standards we are required to meet as the Core contractor

7.3.1.3 Staff Management

Team Noridian has programs, policies, and practices in place to hire, manage, retain, and motivate all employees. Team Noridian's standardized human resources policies and procedures conform to industry best practices and cover the activities of recruitment, credential verification, placement, training, benefits management, and staff retention programs. As a federal and state contractor, we are built to operate in a highly-regulated environment. Our policies and procedures provide for compliance with all federal, state, and local employment laws in locations where we have operations. We encourage an environment where every employee can pursue and be recognized for outstanding individual and team performance, with diverse opportunities for personal growth. Team Noridian offers employees a dynamic, fast-growing, team-based environment where a can-do spirit is valued and rewarded.

Team Noridian's staffing plan and infrastructure provides for effective staff management and monitoring. We organize our operations structures based on clear lines of communication and well-defined authority, roles, and responsibilities. The organization structure we have developed for the Core MMIS operations business function is based on those same principals. Operational accountability is clearly defined at the manager level. It is at this level that day-to-day operational processes, procedures, and monitoring activities of frontline staff is performed. The establishment of an independent Quality Control and Monitoring unit provides an additional, objective performance monitoring mechanism.

The entire organizational structure enables varying levels of performance reporting and monitoring to ensure the most relevant and appropriate data can be discerned at the appropriate level of responsibility. We have formal processes to provide objective quality, time, and performance metrics, and informal processes in place to monitor and report on staff performance and provide the necessary feedback or CAPs. Managers, supervisors, leads, and QA staff are expected to seek staff feedback and input for process and project improvements. Noridian's account manager will continue as the single point of contact to the Department regarding all Core MMIS operations. He will serve as the head of the PMO during operations and as the direct liaison and coordinator with the start-up and implementation phase PMO.

Managers enforce quality through their regular staff monitoring and oversight activities. As part of that, we use a performance program called Measure, Monitor, and Enforce (MME) to review, evaluate, and report on employee work performance. The MME process measures and monitors four elements: production, quality, time and attendance, and values and behaviors. Employee production and quality expectations are determined and communicated to employees and then measured and monitored through objective and subjective means to evaluate performance. Since we consider regular attendance as vital, each employee's time and attendance is included in the measuring process. Values and behaviors, the final element, look at each employee's behavior as demonstrated in the workplace. The MME process is an assessment vehicle for recognizing and reinforcing strong employee performance. It identifies weak employee performance levels at an early stage and provides the opportunity to immediately correct and

strengthen performance. Additional training, mentoring, and coaching are used to improve employee performance.

Managers conduct monthly one-on-one meetings with each employee to discuss performance requirements and measured results. These meetings provide an excellent tool for communication between management and the employee. Information from these meetings is recorded and incorporated into each employee's annual performance appraisal. Managers are responsible to communicate all performance issues impacting overall performance requirements to the account manager. Appropriate action is taken when necessary.

Noridian has subcontractor management policies in place which are used to manage and monitor the work of any subcontractors assigned to a project. On this contract, the Noridian account manager will be responsible for the performance of our subcontractor throughout all phases of the contract. The account manager uses verbal and written performance information gathered from Noridian managers and the Quality Monitoring and Control unit to evaluate and assess subcontractor performance. The Noridian subcontractor management process requires that subcontractor performance and work is monitored and evaluated regularly to ensure they are meeting Noridian's expectations in order to allow Team Noridian to meet or exceed customer expectations. This is accomplished through monthly performance reports, as well as periodic subcontractor reviews. Noridian monitors the subcontractor performance documented in the contract by conducting periodic status reviews with the managers who are responsible for managing the day-to-day project progress.

The account manager, working with the other members of the PMO, documents compliance against the contractual commitments. If contractual commitments are not being met, the account manager will initiate the necessary corrective action. All subcontractor employees are subject to the same quality performance and timeliness expectations as Noridian staff members and when non-compliant, the subcontractor organization is subject to the same monetary penalties as Noridian.

7.3.1.4 Knowledge Transfer

Knowledge transfer is a critical component of our overall contract management and quality assurance activities. Team Noridian's training philosophy focuses on ensuring every employee has the knowledge and tools needed to do their job in a fashion that meets or exceeds performance requirements and provides each employee with job satisfaction. Team Noridian's knowledge transfer program will focus on the use of training materials and methods that are consistent, comprehensive, and flexible. We will ensure knowledge transfer programs incorporate retraining modules, assessment, and evaluation methods, feedback to employees, and reporting mechanisms to the Department for their review. Repetition in various presentation modes and testing for knowledge acquired, help confirm staff are becoming fully capable and knowledgeable to perform their job functions.

For job-specific knowledge transfer, we use a variety of methods and tools including operational procedures, manuals, visual aids, computer-based training using a learning management system (LMS), hands-on training, and role-playing to ensure lessons are successfully communicated and comprehended. The training specialist, assisted by designated business analysts or other staff who are subject matter experts in their defined area, conduct actual job-specific training. The training specialist is also responsible for the development of knowledge transfer materials and may be assisted by subject matter experts. We follow a consistent five-step process for the development and delivery of staff training which includes:

- Assessing knowledge transfer needs using an established template
- Preparing the trainers and knowledge transfer materials
- Delivering the training
- Evaluating and updating the knowledge transfer for continuous process improvement
- Obtaining client approval for the knowledge transfer

Because of the sensitive nature of our business, Team Noridian places special emphasis on Health Insurance Portability and Accountability Act (HIPAA) privacy and security rules, policies, and regulations. We require all staff, including subcontractor staff, to participate in initial knowledge transfer upon hire and then refresher knowledge transfer on a yearly (or as-needed) basis.

One very important aspect of our privacy and security knowledge transfer is following proper procedures to safeguard data and records. These procedures include allowing system admittance only to authorized individuals, requiring passwords and employee identifiers for system access, and maintaining confidential materials in secured areas. Training programs will focus on the importance of maintaining confidentiality and safeguarding data and files. Another important aspect of compliance, privacy and security training is the procedure for reporting security breaches. Team Noridian will allow for multiple methods of reporting breaches in security, including by telephone, in writing or electronically. Security breaches may be reported anonymously.

7.3.1.5 Process Reviews

As part of its QA program, Team Noridian reviews all work processes and operational areas on a regular basis. (This process differs from the internal audit process described later in Section 7.3.1.6 Internal Operational Audits, which is conducted independently of the operational area). This helps ensure the quality of work is meeting or exceeding the acceptable level and the defined operational procedures are followed. Reviews of business processes are essential to uncover deficiencies, process improvement opportunities, and training needs.

The highest level of review is an overall management review which continues the project monitoring efforts begun during the start-up and implementation phase of the project. This monitoring focuses on the schedule of various operational efforts, budget, deliverables, and level of quality. Regular status meetings are normally the vehicle for monitoring the project and assuring it is on course. The account manager, with input from the operations manager, the system manager, and supervisors, is responsible for these regular reviews of the overall project. The purpose of these overall management reviews is to determine if:

- Specific project management processes are being performed in accordance with documented plans and the project work plan/schedule
- The project is within budget—or reasons why it is not—have been fully documented and agreed upon
- Any new development or enhancement projects are on the schedule, and the schedule has been updated and agreed upon
- Deliverables such as status reports and performance measurements are being delivered on time and in the agreed upon format
- Staffing is adequate to perform the necessary job functions
- Risks are being properly tracked
- Issues are being tracked and resolved according to the documented processes

Supervisors, managers, and quality analysts perform another level of review—specific job function process reviews—on a regular basis. At least one formal review must be conducted before any new process or function is implemented and a review must be conducted when any process changes significantly. After that, business processes are subject to informal and formal reviews. Formal reviews consist of meetings and walkthroughs with the appropriate parties, while informal reviews may be one-on-one meetings or the observation of work in process. Formal reviews are scheduled while informal reviews may be scheduled or conducted randomly. When an audit or review requires a follow-up audit or review, we conduct this as soon as possible after the deficiency has been corrected.

We document the findings from process reviews and conduct meetings with the affected area's team members and management. When necessary, the affected supervisor or manager, with other assistance as needed, develops a corrective action plan (CAP) to correct the deficiency. When this occurs, we will provide the Department with the CAP within 10 days of the discovered problem for their review and approval. We will discuss and develop a timeline for the plan to be implemented. If it results in system changes, we will execute the CAP using our established SDLC methodology and change management procedures. The plan could also involve other changes or actions such as new training initiatives, updates to operational procedures, increased employee monitoring, or disciplinary action depending on the circumstances. For any of these CAPs, we track and provide updates through to completion and will immediately notify the Department of any problems with its implementation.

7.3.1.6 Internal Operational Audits

A key component of our internal QA program is the performance of internal operational audits. Noridian, the prime contractor, has a designated team within our corporate organization responsible for conducting independent audits of all operational areas on a regular basis. This operations review team, comprised of knowledgeable internal auditors, conducts these operational reviews. The audits provide an outside-of-the-operational-area verification that operations are meeting contract performance requirements, including requirements associated with accuracy, timeliness, and quality. In addition, the reviews provide assurance that proper internal controls are in place and reporting is accurate. The operations review team has conducted annual audits on the IME Core contractor business functions for the past six years and will continue this practice into the near future.

The operations review team follows a documented standard audit process of planning, scheduling, conducting, reporting results, and maintaining records of internal audits. Internal auditors are trained on the audit standards and contract performance requirements. The audit standards are available to the auditors online for reference. The 150-page manual describes the internal audit process the internal auditors follow and contains the audit work paper and audit file standards along with examples. The manual outline is shown in Figure 7-3.

Standard Audit Process Manual Outline

1. **Background Information**
   - 1.1 Operations Review Unit Functions and Processes
   - 1.2 New Hire Process
   - 1.3 Responsibilities of the In-Charge Auditor
2. **Audit Stages**
   - 2.1 Pre-Audit Planning Activity
     - 2.1.1 Notice to the Auditee
     - 2.1.2 Entrance Conference
     - 2.1.3 Planning – Preliminary Meetings with Management
     - 2.1.4 Planning Memo
     - 2.1.5 Development of the Audit Program
     - 2.1.6 Assignment Checklist
   - 2.2 Fieldwork Activity
     - 2.2.1 Work Paper Preparation and Standards
     - 2.2.2 Findings and Recommendations
     - 2.2.3 Finalization of Work Papers
   - 2.3 Post-Audit Activity
     - 2.3.1 Audit Report – Draft
     - 2.3.2 Management Review
     - 2.3.3 Completion of Audit Review Points
     - 2.3.4 Exit Conference
     - 2.3.5 Audit Report – Final
     - 2.3.6 Reportable Condition Meeting
     - 2.3.7 Handling of Disagreements with Audit Findings
     - 2.3.8 Tentative Findings and Recommendations
     - 2.3.9 Establishment of Defined Dates of Implementation
   - 2.4 Audits
     - 2.4.1 Current Year Carry Forward Points / Notes for Future Audits
     - 2.4.2 Update the Follow-Up Database
     - 2.4.3 Budgeted / Actual Hours Summary
     - 2.4.4 Customer Survey
     - 2.4.5 Audit File Storage and Retention
   - 2.5 Follow-Up
     - 2.5.1 Entry of Audit Findings into the Follow-Up Database
3. **Quarterly Progress Reporting**
   - 3.1 Monthly Reporting to Management
   - 3.2 Closure of Audit Finding
   - 3.3 Follow-up Verification

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Figure 7-3. Audit Outline. The operations review team follows a documented standard audit process of planning, scheduling, conducting, reporting results, and maintaining records of internal audits.

A periodic review occurs for each operational area, along with any subcontractors working within the operational area. The selection of the areas for review is prioritized based on risk assessments. The risk assessment identifies business functions associated with the contract and evaluates each business function based on a series of risk factors. These weighted risk factors identify areas at greatest risk of failing to meet contractual performance requirements. Operational areas identified as higher risk are audited earlier and more frequently than areas identified as lower risk.

The annual audit plan is presented to the Audit, Compliance, & Governance Committee of our board of directors. The plan is provided to the committee members for their review and a presentation is given at a committee meeting. The annual audit plan is also distributed to executive and management staff. The plan identifies the operational areas to be audited during the upcoming fiscal year and provides a brief description of each planned audit.

The audit process consists of the following:

- **Planning.** The audit process begins with the planning stage. Auditors develop an audit program based on management discussions and risk assessment results. Before the audit, the internal auditor gives notice to the operational area being evaluated that an audit will be taking place. Typically, this notice is sent one to two weeks in advance of the entrance conference. The notice is sent to managers and executive management of the areas being examined. The chief executive officer, chief operations officer, and compliance officer receive copies of each notice. The auditor holds a formal entrance conference to communicate the purpose and objective of the audit.
- **Audit Fieldwork.** Fieldwork for the audit begins shortly after the entrance conference. Fieldwork consists of testing and verifying the audit objective. Testing may include interviewing, observation, data analysis, reviewing documentation, recalculation, and sampling from a larger population. A standard work paper format is used to document the auditor's examination in detail. If the auditor discovers areas where the operation is not meeting a certain condition or criteria, the finding is discussed with the appropriate management staff during the fieldwork so they can correct the condition as soon as possible.
- **Final Audit Report.** Once audit objectives have been tested, a final audit report is issued and work papers are organized into an audit file. The manager of operations review examines the audit file for quality.
- **Review of Audit Findings.** The auditor provides the audit findings to the account manager. If there are defects or deficiencies noted, the account manager is required to submit a CAP to the operations review team and the Department unit manager. The operations review team also requires the root cause of the audit finding be documented on the tentative finding and recommendation form. All CAPs that result from any operational audit will follow the same processes, monitoring, and reporting as CAPs from the reviews discussed previously.
- **Formal Exit Conference.** A formal exit conference is held, communicating the results of the audit to Core contractor managers and Team Noridian executive management. If audit findings exist, CAPs are developed. The audit findings, recommendations, CAPs, and detailed audit information are entered into a database to track findings from issuance to closure.
- **Post Audit Activities.** At the completion of the audit, a customer service survey is issued to the subject of the audit to provide feedback on the auditor's performance during the audit. Internally, shortly after the exit conference, the final audit report is distributed to the management staff of the area audited, executive staff, the Audit, Compliance & Governance Committee of the board of directors, and the compliance department.

7.3.2 State Responsibilities

RFP Section 5.3.2, Requirements a through n

Team Noridian understands and acknowledges the Department's responsibilities for contract administration of the IME specified in this section. We will support the Department in meeting these responsibilities through the use of established QA processes and reviews, change control procedures to prioritize and coordinate change requests; internal monitoring of all work and performance, and the implementation of mutually agreed upon communications practices.

Team Noridian will maintain visibility for the Department into the operational performance of the contract through the use of the MMIS project portal, the LMS, the eCAMS HealthBeat dashboard, MME reports, and other workload reporting. These vehicles will provide the Department the tools and visibility necessary to monitor performance, receive status reports, monitor change requests, and review and approve documentation.

7.3.3 Contractor Responsibilities

RFP Section 5.3.3

We have provided responses to the contractor responsibilities in the subsections that follow. Requirements have been organized and grouped to facilitate our narrative flow. Many of the requirements were also covered previously in the general overarching Section 7.3.1 Performance Reporting and Quality Assurance.

7.3.3.1 Communication, Reporting, and Records

RFP Section 5.3.3, Requirements a, b, c, g, h, i, m, and p through s

Team Noridian considers effective and efficient communication between all interested parties key to the success of the IME program. We will communicate with the Department in all Core MMIS operations activities through several different mechanisms. As part of our management planning activities, we will develop Communications Management Plans for the start-up and implementation, operations, certification, and turnover phases that will document all methods of communication with the Department. Those plans will discuss the various avenues of communication with the Department and other stakeholders such as the other IME contractors, and will include information on meetings, reporting, decision making protocols, and communications tools. Some of the major vehicles for communicating our activities and performance measurements are discussed below.

The eCAMS operational performance dashboard, HealthBeat, is used as one of our quality management integration points, providing user friendly dashboards to visualize quality metrics and key performance indicators. This tool provides a robust interface to systems for gathering and compiling performance data allowing near real-time access to workload and system performance information. Implemented during the start-up and implementation phase, HealthBeat will provide an easy transition of performance data throughout the contract, allowing source data changes as well as ongoing changes to performance metrics and key performance indicators. HealthBeat facilitates trending capabilities to show the achievement of performance metrics over time and to trigger when corrective action may be needed.

HealthBeat provides a comprehensive business activity monitoring framework, along with the capability to facilitate continuous process improvement. As the system handles each business process, it collects process-related data in the process data store. This data is then used to display the process dashboard and provide visibility to the process metrics and the health of the operation. The system also uses workflow-based analytics to provide feedback on the potential bottlenecks and business performance issues. Thresholds can be configured to display performance in the traditional "red", "yellow", and "green" dashboard status. All the identified business services, including those of component contractor's activities, will utilize a common framework to feed events into a single repository. This event repository, using the

metadata, will be able to show in real-time or near real-time (depending on the nature and the type of business service) the health of any process.

HealthBeat enables the setup of a hierarchy of business objectives (goals) that can be linked with metrics, business events, and services. This will allow the Department to monitor the health of business processes not only in the short term, but also over the long-term to track the historical trend. This approach allows the Department to actively utilize real-life data in the business process configuration, and ensures continuous business process improvement across all business process areas. During the start-up and implementation phase, Team Noridian will work with the Department and with the other IME contractors (through the Department) to review and define all performance measurements and methods and formats for reporting the measurements.

Figure 7-4 provides a graphical depiction of the types of views available through HealthBeat.

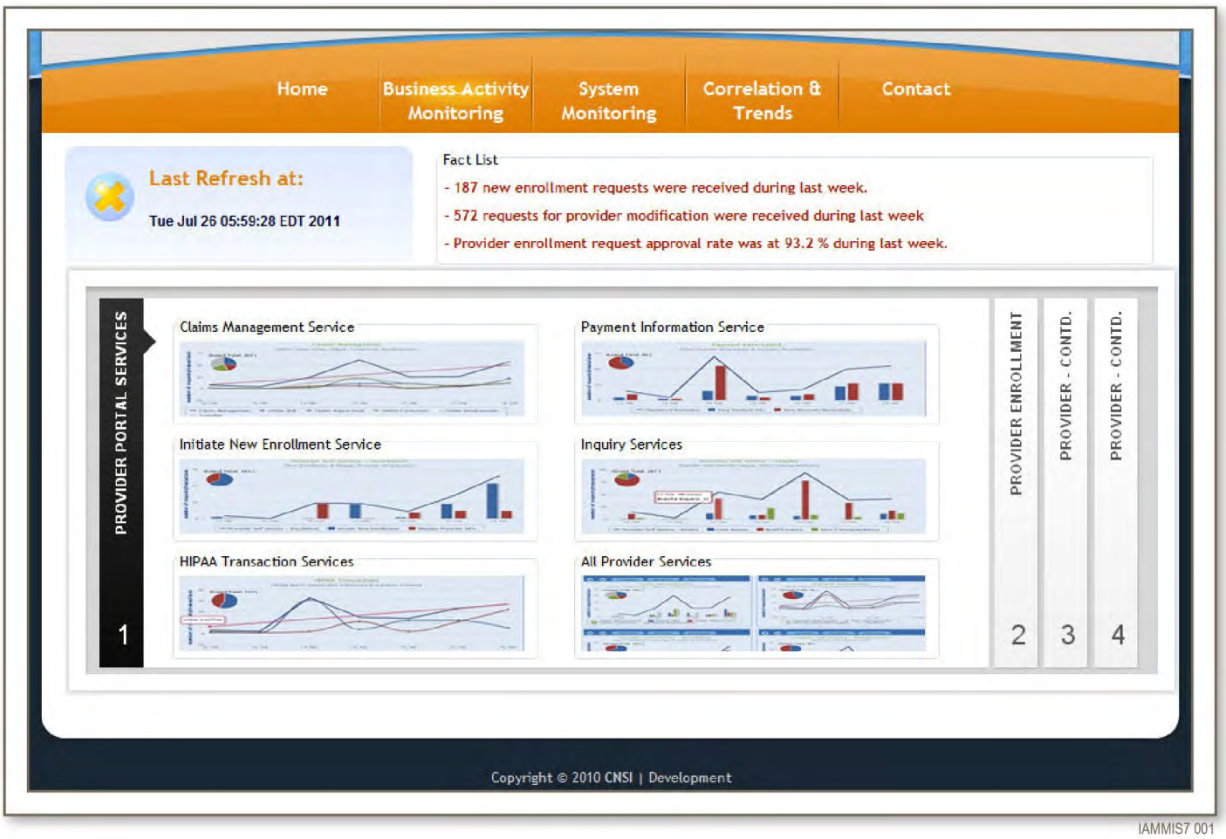

Figure 7-4. HealthBeat Dashboard Example. This figure demonstrates the monitoring and reporting capabilities available through a centralized eCAMS HealthBeat reporting dashboard system.

Performance thresholds can be configured in HealthBeat to meet Department requirements, and changed as needed to reflect new conditions. Operational management staff regularly monitors data displayed through the dashboard and are able to proactively respond if performance indicators begin to decline. In this way, Team Noridian can implement corrective actions before a "red flag" situation occurs. In addition, e-mail alerts can be set up to notify appropriate Department and Team Noridian staff based on configured exception thresholds.

In the event that a performance standard is not met, Team Noridian will develop and implement a CAP to address the problem. We will develop the CAP, along with an estimated schedule, and deliver it to the Department for review and approval within the negotiated timeframe. Once reviewed and approved, the

CAP is updated and fully documented along with all supporting information. The CAP is tracked through to completion and if the CAP involves system updates, it will be designed, developed, tested, and implemented using the procedures and processes of our SDLC via our normal change management routine. We track progress and report on the CAP through regular status reporting and schedule updates, if applicable. We take corrective action if the estimated completion date appears to be in jeopardy. Once the CAP is complete, we provide documentation, such as test results or a change in an operations manual, to the Department to ensure it meets requirements.

All records, including information on any CAP, are maintained in accordance with the Team Noridian Records Control and Retention procedure and policy. The foundation of this procedure is the Record Retention Policy which outlines and prescribes the contract requirements for record retention where they exist. Where no contract requirements exist, Team Noridian has adopted policies that comply with relevant legal requirements and managerial considerations. Records may include, but are not limited to, employee and team quality assurance records, results of process reviews or internal audit findings, results of external audits, working papers, CAPs and supporting information, status reports, and performance reports. All records are maintained on the MMIS project portal and are available to authorized users at all times. MMIS operations reports are maintained in OnBase with online access. Team Noridian also maintains documentation of the methodology used to measure and report completion of all requirements and attainment of all performance standards.

Team Noridian will regularly communicate with the Department through scheduled status meetings and progress reports, including schedule updates when applicable, throughout all phases of the contract. We will produce quarterly reports of all quality assurance activities, findings, and corrective actions electronically and in hardcopy. We will provide a written response to the Department, with a description of our resolution, by e-mail within two business days of receipt of questions on routine issues, and within one business day of receipt of an emergency request. We will encourage and proactively seek meetings with the Department and other IME contractors to review our performance and address issues or problems or introduce improvements to the system. In addition to more formal methods of communication, Team Noridian will actively encourage and support an open-door policy between our staff, the Department, and other stakeholders including the IME contractors. We are committed to keeping the Department and stakeholders informed at all times and will do that through scheduled and unscheduled face-to-face meetings, e-mail, mail, and telephone calls when needed, and will follow up with more formal communications as appropriate.

7.3.3.2 Change Activities

RFP Section 5.3.3, Requirements d, e, and f

As previously discussed, all system or procedural changes arising from our internal QA activities, or needed as a result of performance problems, will be submitted to the Department for review and approval. System changes are all developed and implemented following our SDLC methodology and using our established change management processes. Operational procedures are also implemented through our change management procedures. Our SDLC and change management procedures use a checklist and alert system to ensure all applicable operational procedures or other documentation is updated as a result of any changes. All user and system documentation is maintained on our project portal and regularly reviewed and audited to ensure it is current and conforms to published standards. Versions are strictly controlled so that our staff and the Department always have access to the most current update.

7.3.3.3 Monitor Quality and Accuracy

RFP Section 5.3.3, Requirement l

Our methods for monitoring the quality and accuracy of our own work are documented throughout Section 7.3 Contract Management. As described, we will develop an internal quality assurance program and associated plan with guidelines, tasks, and activities designed to monitor the quality of our own work

including all processes, deliverables, and procedures. We will use several mechanisms to monitor and promote quality, including:

- Routine staff management activities which focus on employee performance and each employee's commitment to quality
- Monthly one-on-one meetings between management and staff to discuss individual performance and quality
- Monitoring of workload and timeliness through the MME program which clearly communicates performance and quality expectations to all staff and measures the expectations at the individual and team levels
- Ongoing training and feedback methods for staff
- Internal process reviews that continually assess business function workflows and processes for adherence and to develop opportunities for process improvements
- Internal operational audits that independently review all business processes and record problems or deficiencies
- Automation to perform QA sampling using the OnBase workflow management system to provide online checklists for work processes, and the eCAMS rules engine to automate sampling of work based on imaged documents
- Use of a robust performance measurement tool that automatically collects and reports on the various standards we are required to meet as the Core contractor

Please refer to Section 7.3.1 Performance Reporting and Quality Assurance for our discussion on monitoring our internal quality and accuracy.

7.3.3.4 Federal and State Privacy and Security

RFP Section 5.3.3, Requirement j

Team Noridian's security architecture encompasses physical, system, and administrative (non-system/procedural) components, to ensure appropriate privacy and security for its proposed solution and operations. As a Medicaid and Medicare contractor, Team Noridian currently adheres to extremely rigid security requirements in the support of those programs.

eCAMS meets or exceeds industry security standards, as well as state and federal government regulations, such as Section 508 of the Rehabilitation Act of 1973, the Americans with Disabilities Act, and HIPAA. Team Noridian knows that Medicaid data is health data and, as such, requires the utmost security. However, organizations must weigh the need for privacy against the ability to be responsive to the operational requirements for data use. HIPAA has further helped define these issues. Any system built today must have the ability to withstand attack and the ability to provide data easily and properly when requested. While security is often examined from an access perspective, the issue of limiting access, even when it is granted, exists. Therefore, all new systems must have the ability to provide module, page, field, and record level security.

Our MMIS and ancillary systems provide for role-based security access at the application level for each specific user, to assure only authorized individuals are allowed access to the functions and data that meet privacy and security requirements. Security and privacy protection is built into our eCAMS system from the ground up, which assures appropriate security at all levels and tiers of the architecture.

Administrative security and privacy policies and procedures are leveraged from our existing Team Noridian-audited systems which support both Medicaid and Medicare programs. Our data centers and offices are physically secured through key card access and other physical mechanisms to secure the physical system and data assets of the operation, both electronic and hard copy.

As described in Section 7.3.1.4 Knowledge Transfer, Team Noridian trains all employees and subcontractor employees in privacy and security policies and requires annual refresher training.

Team Noridian team members will also be required to sign a HIPAA business associate agreement for handling data containing personal health information (PHI).

7.3.3.5 Quality and Performance Improvement Procedures

RFP Section 5.3.3, Requirement k, n, and o

Team Noridian fosters a culture of continuous performance improvement in all of its lines of business, and will continue this philosophy with eCAMS and the Core MMIS operations contract. A few examples of these efforts include:

> "Thank you, I don't think I have mentioned lately how awesome OnBase works for us!"
>
> Misty Stockbauer
> IME Medical Services

- We received kudos from the IME Medical Services contractor recently when we built a new workflow that resulted in "most advanced project that we have created and the most advanced workflow we have in Medical Services".
- Noridian continually assesses and designs changes and updates to the IME OnBase workflow system which results in increased efficiencies for all IME contractors.
- At the IME, we developed a new report to identify potential claim overpayments before the payment cycle was run.
- Noridian implemented an automated tool and process at the IME that improved quality and reduced the manual efforts in working claims.
- We implemented a cross-training program within the Core MMIS operations to reduce vulnerabilities and improve efficiencies.
- We created performance metrics within each of the Core MMIS operations teams to establish productivity levels and utilization.
- In our Medicare claims processing business, we introduced automation to decrease the Jurisdiction 3 (J3) Part A/B Medicare Administrative Contractor (A/B MAC) institutional claims suspense rates to less than one percent.
- We were also able to decrease J3 A/B MAC professional claims suspense rates from 20 percent to four percent using automation.
- We reduced improper claim payments by $3 million by actively participating in Administrative Law Judge hearings.
- Implementation of the automated workflow and image retrieval capabilities in our Medicare business allowed us to combine business rules and actions throughout the functional areas, saving the Medicare Program $3.2 million per year while maintaining accuracy and increasing efficiency and customer service.
- CNSI has implemented further automation in eCAMS to catch many overpayments before the check is issued, saving the time and effort needed for pay-and-chase activities.

We will continue to initiate and maintain aggressive efforts designed to proactively identify ways to improve the performance of critical work functions. Managers, supervisors, and quality analysts will conduct regular workflow analysis of processes within each of our areas. As process improvement opportunities are identified, or changes to workflow are needed to enhance or improve performance, the quality analyst will work with the functional area supervisor or manager to assure suggested changes are documented.

We will work with the Department to apply a process improvement review procedure at regularly scheduled points during the operations phase of the project. The frequency of these process improvement reviews will be determined with input from the Department. To facilitate these reviews, we will:

- Use a structured, documented methodology to conduct these reviews
- Ensure results and recommendations from the reviews are documented and distributed to the appropriate parties

- Implement meetings with the appropriate operational area supervisors, managers, and Department personnel to discuss opportunities for process improvements
- Use lessons learned from improvements in other operational areas to help determine possible improvements in the process
- Develop and track corrective action plans as needed

The results of the analysis will be shared with management and reported to the Department. We will work with the Department to establish the reporting expectations and protocols for this information. Workflow improvement suggestions will be discussed with the Department for approval. If capital investments are required, proposals will be developed and presented to the Department for their review and approval prior to further action being taken.

Regular evaluation of the continuous process improvement outcomes allows us to seize opportunities for further process improvement. Using the lessons learned in this process, we can identify best practices and determine processes to be changed or eliminated. Emphasizing continuous process improvements result in streamlined processes, greatly reduced margins of error, reduced costs, and increased customer satisfaction.

7.3.4 Performance Standards

RFP Section 5.3.4, Requirements a through g

Team Noridian understands and currently meets or exceeds all of the current performance standards outlined in this section. We have already assessed the new and changed performance measurements and will build all of these standards into our operations processes, while monitoring compliance as part of our contract management activities. Schedule-driven performance standards, such as monthly contract management and monthly performance monitoring reports, are built into our operations work plan for tracking. The performance standards associated with contract management are:

- Provide the monthly contract management reports within three business days of the end of the reporting period
- Provide monthly performance monitoring report within 10 business days of the end of the reporting period
- Provide knowledge transfer on operational procedure changes as a result of upgrades or other changes within two weeks of the upgrade
- Complete updates to all documentation related to modifications performed on the system as defined by the Department
- Update operational procedure manuals within 10 business days of the implementation of a change
- Provide a response and resolution to the Department unit manager team within two business days of receipt to requests made in any form (e.g., e-mail, phone) on routine issues or questions
- Provide a response within one business day to the Department unit manager team on emergency requests, as defined by the state

7.4 Annual Performance Reporting

RFP Section 5.4

7.4.1 Reporting Deadline

RFP Sections 5.4 and 5.4.1

Team Noridian currently produces annual performance reports as part of the MMIS Core contractor responsibilities and will continue to do so under the new contract. We will work with the Department during the start-up and implementation phase to introduce the enriched capabilities of our HealthBeat performance tool, and define any new or changed reports or formats. As described in Section 7.3.3 Contractor Responsibilities, HealthBeat will allow for timelier, robust tracking, reporting, and monitoring of all performance standards and measurements.

We understand that the reports for the state fiscal year ending in June must be provided by October 15 of each contract year, and have built those tasks into our operational project work plan. The Department will publish the annual measurements by the following February 15.

7.5 General Documentation

RFP Section 5.5

Team Noridian will provide visibility into the new MMIS functions through thorough documentation and reports that we will provide to the Department and maintain throughout the entire contract period. Our concept for document management is based on delivering high-quality documents to the Department that meet all its standards and acceptance criteria as initially defined in the DXD for each type of documentation, and then updating all documentation in a timely fashion using the Department's defined standards.

Team Noridian uses industry best practices, standards, and tools to streamline document development, delivery, maintenance, and updates, as well as to streamline document acceptance by the Department. In order to maintain the cohesive, customer friendly environment that we have created with the Department, we will continue to provide all Core MMIS operational reports as well as up-to-date and accurate system and user documentation and operational procedures on the processes we maintain. Team Noridian has a full set of proven documentation, standards, and templates from previous MMIS projects that we hope to leverage, with Department approval, and tailor for the new MMIS in accordance with the Department's standards. This baseline set will significantly reduce documentation development time during the start-up and implementation period, and will aide in the maintenance and updating of processes and documentation throughout operations.

7.5.1 Documentation Creation and Maintenance

RFP Section 5.5, Requirements a and e

Since the beginning of the current MMIS contract, Noridian has improved on the performance requirement for the creation of timely system documents by 25 percent.

Team Noridian understands the need to develop and maintain proper and full documentation to enable users—whether they are from the Department, external sources, the IME professional contractors, or the Team Noridian technical and operations staff—to effectively use, maintain, and operate the system. This includes internal documentation as well as web-published materials that assist the providers with using the Web Portal. For those reasons we use a repeatable documentation process which emphasizes obtaining advance approval of the format, content, and acceptance criteria for each type of documentation. This gives both Team Noridian and the Department a clear and timely understanding of expectations for the documents, encourages involvement of the Department throughout the documentation development process, and ensures that all documents are developed and updated in the state-prescribed formats. We adapt this process to meet the needs of each of our projects, but the element of customer participation throughout the process is fundamental for all projects. Team Noridian's system and user documentation development processes are fully described in Section 8.4.2 Post Implementation Activities the subsections below focus on the specific requirements of RFP Section 5.5.

The prime contractor, Noridian, has developed processes using OnBase, the current change management request (CMR) system, to control documentation changes. As shown in Figure 7-5, all change requests are sent to a queue where they are reviewed to determine if documentation updates are needed. Change request workflows track each change to ensure that the appropriate documentation is developed or updated for the change. Keywords provide the ability to link and track all of the components that may need updates because of a change.

For this new Core MMIS operations contract, Team Noridian will enhance its documentation maintenance processes and the use of the CMR workflows to improve control over the updates, reviews, and acceptance of documentation updates. Team Noridian will implement the use of reusable objects developed as part of other MMIS implementations and use those in conjunction with the CMR workflows. These objects are maintained in a content database or content vault that contains the objects and a catalog of where the objects are used in the documentation. This approach allows us to develop an object, make it available for use in the entire project, or use objects from other projects as applicable, and when the object changes, whether in response to a CMR or correction of a defect, to expeditiously make changes to documentation impacted by the change. This use of the content vault to quickly identify which documents or deliverables need to change because of a change to a system or correction of a defect, will greatly expedite the process of documentation updates, while at the same time maintaining consistency of content across the documents that use the object. Updates to system documentation, user documentation, and artifacts such as system design documentation and data dictionaries are controlled using these processes. All updates will be made within 10 business days of the implementation of a change.

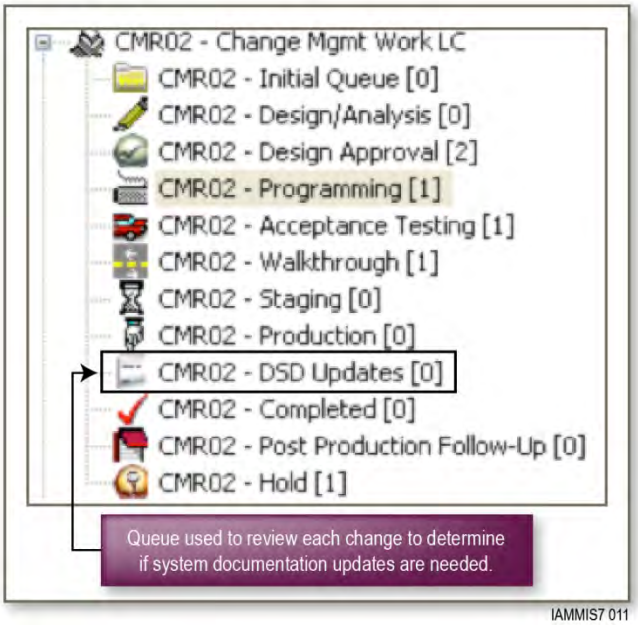

Figure 7-5. Documentation Review. The CMR workflow contains a documentation review queue which is used to check if updates to documentation are needed as a result of a CMR.

7.5.2 Corrective Action Plans

RFP Section 5.5, Requirements b and c

As discussed previously in Section 7.3 Contract Management, Team Noridian will develop and implement a CAP to address any deficiencies, problems, or performance improvement opportunities found through any means including regular workload monitoring, internal QA reviews, performance measurement reports, or Department reviews and audits. We will develop the CAP, along with an estimated schedule, and deliver it to the Department for review and approval within 10 business days of discovery of a problem. Once reviewed and approved, the CAP is updated and fully documented along with all supporting information. The CAP is tracked through to completion, and if system updates are necessary they will be designed, developed, tested, and implemented using the procedures and processes of our ISDM through our normal change management routine. We track progress and report on the CAP through regular status reporting, schedule updates (if applicable), and take corrective action if the estimated completion date appears to be in jeopardy. Once the CAP is complete, we provide documentation, such as test results or a change in an operations manual, to the Department to ensure it meets requirements.

All records, including information on any CAP, are maintained in accordance with the Team Noridian Records Control and Retention procedure and policy. The foundation of this procedure is the Record Retention Policy, which outlines and prescribes the contract requirements for record retention where they exist. Where no contract requirements exist, Team Noridian has adopted policies that comply with relevant legal requirements and managerial considerations. Records may include, but are not limited to, employee

and team quality assurance records, results of process reviews or internal audit findings, results of external audits, working papers, CAPs and supporting information, status reports, and performance reports.

All records are maintained on the Project Portal and are available to authorized users at all times. MMIS operations reports are maintained in OnBase with online access. Team Noridian also maintains documentation of the methodology used to measure and report completion of all requirements and attainment of all performance standards including the source of the data and sufficient detail to allow the Department or Team Noridian to replicate the results.

7.5.4 Training

RFP Section 5.5, Requirement d

> Noridian has received 100 percent of points allowed for conducting training on system changes since fiscal year 2010.

Team Noridian understands that as the Core MMIS contractor, we are responsible for providing the necessary knowledge transfer to the professional services contractors' staff when new processes are implemented or when changes occur in the system. Noridian currently provides this training or a notification to the designated trainer or contact for each unit, if there is a potential impact to the unit, provider, or member community.

For the new Core MMIS contract, we will designate a training specialist who will have the primary responsibility for this knowledge transfer. The Quality Control and Monitoring Unit will support the training specialist, along with subject matter experts in each of our areas, to help develop the materials and deliver training.

Team Noridian's knowledge transfer program will focus on the use of training materials and methods that are consistent, comprehensive, and flexible, based on quality plans. We will ensure training programs incorporate retraining modules, assessment and evaluation methods, feedback to trainees, and reporting mechanisms to the Department for their review. Repetition in various presentation modes and testing for knowledge acquired help confirm staff are becoming fully capable and knowledgeable to perform their job functions.

We use a variety of training methods and tools including operational procedures, manuals, visual aids, computer-based training using a LMS, hands-on training, and role-playing to ensure lessons are successfully communicated. The training specialist, assisted by designated business analysts or other staff who are subject matter experts in their defined area, conduct the actual training.

We will assist the Provider Services unit by providing them knowledge transfer and information on eCAMS so they can publish the necessary provider manuals. Team Noridian will provide online help as part of the new MMIS and will provide documentation to assist the EDI submitters in the correct submission of claims.

7.6 Operational Procedures Documentation

RFP Section 5.6

Team Noridian's documentation process for the eCAMS implementation and operations is a comprehensive deliverable process. The process involves the Department, Team Noridian, and other stakeholders associated with the new MMIS project to ensure that delivered documentation meets the IME's business needs.

Team Noridian will develop operational procedures as a subset of the user documentation we develop for eCAMS. The existing Core MMIS operational procedures provide a guide for the ongoing management and operation of the MMIS, and Noridian currently produces and maintains them as part of our Core

MMIS contractor responsibilities in Iowa. Team Noridian will update these procedures to allow users to take maximum advantage of enhanced functionality in eCAMS.

The operational procedures and user manual documents are cooperative documents and should be utilized in tandem. The user manual documents provide the system users instructions needed to use eCAMS. The operational procedure documents provide the job steps needed by functional users in each business process area to operate the new business processes.

7.6.1 Operational Procedures Maintenance

RFP Section 5.6, Requirements a through e

Team Noridian will deliver an operational procedure for each of the Core MMIS operations business process areas impacted by eCAMS. These procedures will address how the business area can obtain maximum benefit from the new system. Team Noridian recognizes that the other IME contractors maintain their own operational procedures. For those areas, Team Noridian understands that the other contractors will most likely use the new MMIS user documentation to update their own business operational procedures. We will be available to assist with this process as requested in order to ensure clarification and understand of eCAMS functionality.

As part of our eCAMS implementation, Team Noridian will update all Core MMIS operational procedures to address changes in business processes due to new system functionalities. As the current Core MMIS operations contractor, Noridian is aware of the Department's prescribed format and will work with the Department during the start-up and implementation phase to review those formats and finalize any required changes.

To help manage the creation and updates of operational procedures, Noridian worked with the Department in 2010 to build an OnBase workflow to track and manage operational procedures for the IME. Noridian and the other IME contractors currently use this workflow for updating all their operational procedures. The users are able to request the current operational procedure for updating and then the operational procedure is available in a workflow in Microsoft Word format. During the operations phase, Team Noridian will continue to use this workflow and will work with the Department to leverage the automated capabilities of eCAMS and our Project Portal to enhance the process where possible.

The operational procedure workflow requires that users adhere to the Department-defined format and receive approval from the appropriate Department staff member before an update or new procedure can be created. As shown in Figure 7-6, Noridian added an additional requirement for the Core MMIS unit, which requires each Noridian area to review operational procedures every six months. Adding this additional layer of review ensures that our documentation is always up-to-date.

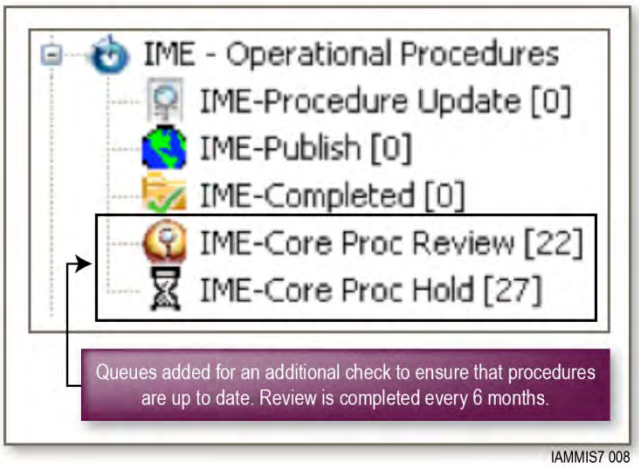

Figure 7-6. Operational Procedure Reviews. The operational procedure workflow provides a mechanism to ensure Team Noridian will review operational procedures for compliance every six months.

The operational procedure workflow contains an electronic form (e-form) which is completed for each change to a procedure or for any new operational procedures. The e-forms, shown in Figure 7-7, specify what is being changed or the reason for the new procedure and are housed within OnBase for review.

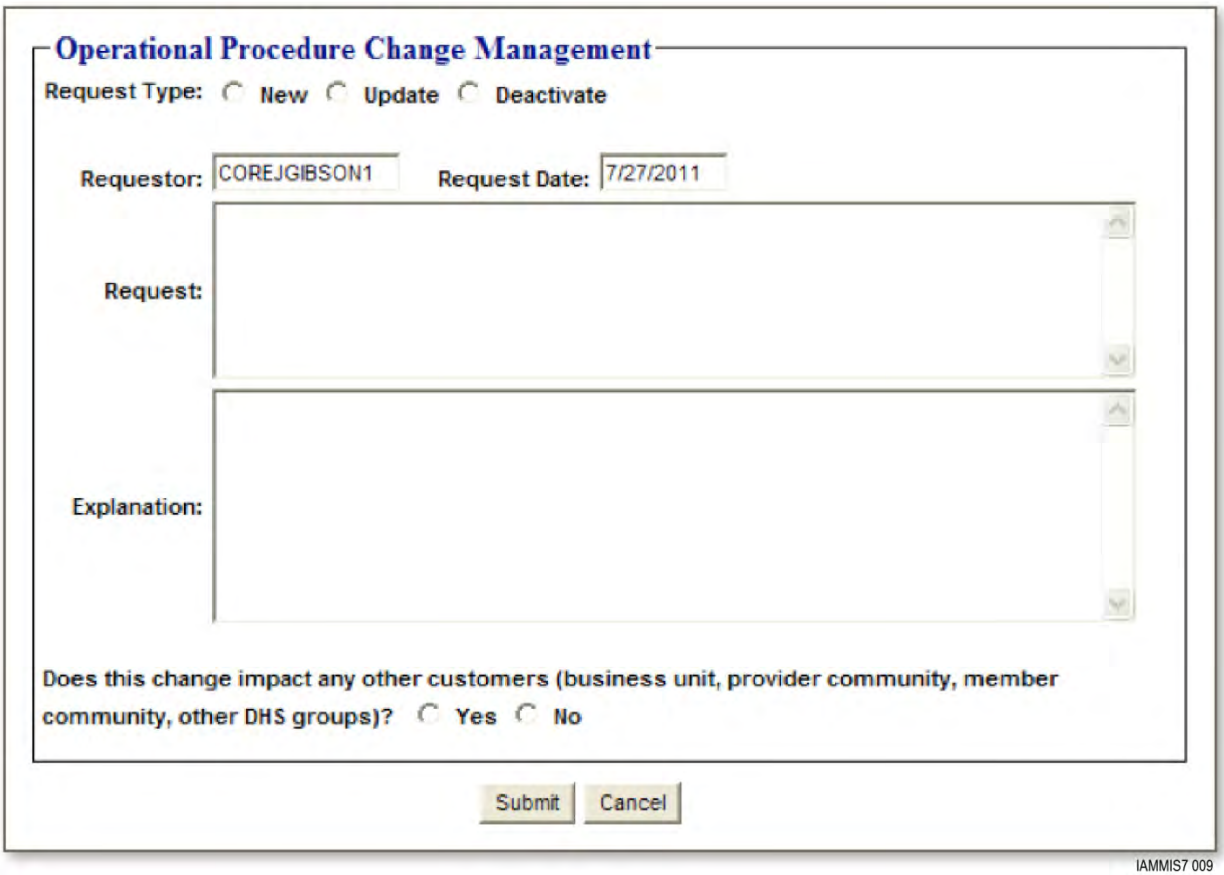

Figure 7-7. Operational Procedure E-Form. The operational procedure change e-form provides information on the change needed and allows the Department and other users to review all requests related to a specific operational procedure.

As part of our enhancements to the current operational procedures update process, Team Noridian will implement the use of the Project Portal as our online electronic repository for these operational procedures and all other documentation. While the current processes will be used to route and update the operational procedures, the final products will be housed on the Project Portal with all other MMIS-related work products. This provides a one-stop central area where a stakeholder can access all information related to eCAMS.

As shown in Figure 7-8, the Project Portal will provide the capability to shown an audit trail of the updated documentation along with the primary owner of the document change and the associated date of the change to ensure the most current documentation is available at all times.

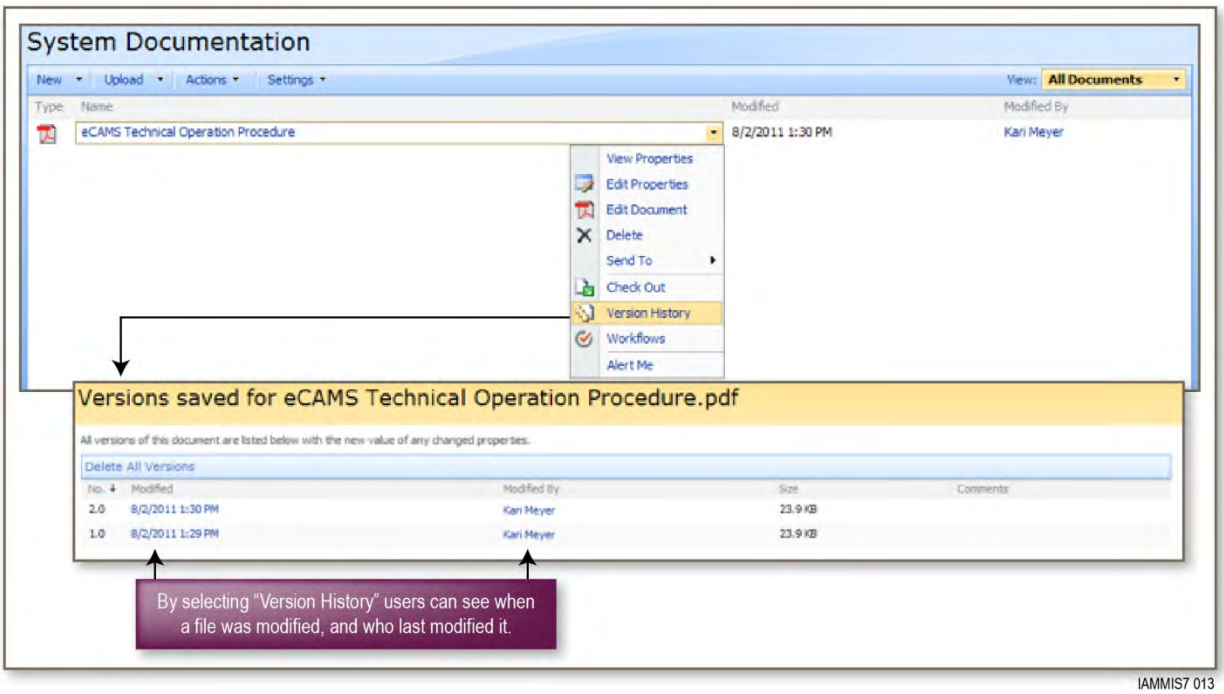

Figure 7-8. Operational Procedure E-Form. The operational procedure change e-form provides information on the change needed and allows the Department and other users to review all requests related to a specific operational procedure.

Team Noridian will document all changes within 10 business days of a change in format as defined by the Department, and we understand that we must provide changes in documentation within 10 days of the installation of any system or process change before the Department will sign-off on the task. We also acknowledge that we will maintain standard naming conventions as verified during the start-up and implementation phase and we will not reference any of Team Noridian's corporate names in any documentation.

7.7 Knowledge Transfer

RFP Section 5.7

Team Noridian will draw on its vast training experience to support implementation and operational training needs. We offer low risk to implementation and ongoing operations because we bring proven knowledge transfer approaches and innovative training tools. Our methods will benefit the Department; IME service contractors and stakeholders; and Team Noridian internal staff by enabling them to quickly and successfully perform their job functions within the new MMIS environment.

Implementing the new MMIS brings new functionality that will expand the overall capabilities of the IME and increase MITA maturity, but with the new system comes an expanded need for training and cultural change management to support staff as they adjust to new processes. To achieve knowledge transfer, we bring you a wealth of experience in staff and stakeholders, established training methods, and innovative training technology.

Team Noridian has an established, extensive history of successfully providing training for staff and stakeholders. In our collective years of health care service and administration, we have trained more

than 3,500 staff and offered education and outreach to more than 150,000 providers. Our depth of experience has allowed us to develop knowledge transfer plans and curricula for staff, providers, and stakeholders that provide ongoing support of day-to-day processes and procedures necessary to successfully complete job functions during start-up and implementation, as well into the operations phase. Our training program also offers advanced and specialty training opportunities, professional development, and self-paced online and computer-based courses in order to meet the training needs and interests of all staff, providers, and stakeholders.

Using just-in-time training, trainees immediately incorporate new knowledge into their daily tasks. This practice results in less errors and improved efficiency as staff work the new systems and applications. Our training evaluation and process improvement approaches ensure that we are continually improving in order to provide a better product to the training audience. Our learning management system, Brainshark, helps facilitate just-in-time training.

Brainshark enables the quick launch and management of on-demand learning initiatives, progress tracking of learners and groups, and an increase of employee productivity due to the ability to rapidly deliver learning programs. Brainshark provides functionality that allows training staff and supervisors to manage the training effort both by unit and on an individual basis. Figure 7-9 lists Brainshark's features and the relevant application of those capabilities.

Brainshark Features	Application
Create and Manage Courses	Create new on-demand courses, schedule courses, define completion and pass/fail criteria, manage access, invite and enroll learners, and track learner statistics.
Create and Manage Curriculum	Create a set of courses that learners must take in a prescribed or random order; and enroll learners and groups of learners. Set prerequisites; designate curriculums as Open enrollment or Limited (by invitation only).
Course Catalog	Enable learners to browse and select open-enrollment courses and curriculums
Enrollment Management	Invite and enroll learners, and send reminders to those who have not enrolled or not completed the course.
Self-Registration	Enable learners to self-enroll by visiting a select URL, which is ideal when reaching out to large audiences or delivering education to learners outside the Core MMIS operations, such as the Department and other contractors.
Certification	Deliver certificates to learners who complete course or curriculum requirements.
Instant Delivery and Easy Access	Make it easy for learners to access a course by delivering it directly to their e-mail inbox. One click of a URL is all it takes for learners to begin. Send links in e-mail, post to other sites, or allow learners to search and browse the course catalog and view courses from their learning locker.
Tests, Surveys, and Polls	Integrate test, survey, and poll questions within any course to engage your audience, increase knowledge retention, and measure proficiency. Report on results by individual or course.
Advanced Reporting	Run reports by course, learners, and groups. Exception reports provide valuable information about who requires additional learning or has not completed or passed a course. Scheduled reports sent via e-mail to department and training managers provide convenient views into learner progress.

Figure 7-9. Brainshark Learning Features. Using Brainshark, we offer a learning management system that provides a "one stop shop" for managing and delivering training curriculum and reporting.

The use of an online learning management system has greatly enhanced our training program. Having access to online and computer-based training courses 24 hours a day provides training opportunities for staff whose job functions may not allow them time away from their desks to participate in classroom-style training courses. Staff members are able to learn at their own pace, and can use the resources in the learning management system for refresher training whenever necessary.

7.7.1 Systems Functions Knowledge Transfer

RFP Section 5.7, Requirement a

Team Noridian will build a knowledge transfer plan and schedule for approval by the Department, which describes our intention for training Team Noridian, Department, and other contractor staff during each phase of the contract. We will build the knowledge transfer plan to capitalize on our experience in preparing, scheduling, and conducting systems training of health care processes and systems.

Our agile development approach includes development of business areas of systems functionality in iterations throughout the development phase. Training will be conducted to coincide with user acceptance testing of each business area to ensure staff from the Department and other IME contractors have the requisite systems knowledge to perform testing. Training materials will be updated and enhanced throughout the user acceptance testing phase to reflect system changes or changes of process in preparation for training all operational staff.

Team Noridian has proposed an early roll-out of provider management functionality. Doing this roll-out early not only allows the provider community the opportunity to take advantage of enhanced systems functionality prior to the full operational go-live date, but also creates the opportunity for a staggered training approach. Training of the provider services contractor on the systems functionality associated with this early roll-out limits the scope of training taking place immediately prior to the implementation, reducing risk associated with a big bang implementation and associated knowledge transfer.

As shown in Figure 7-10, we will train all contractors on specified areas of the MMIS that are relevant to their work responsibilities.

IME Components and Responsibilities	Training
DHS Policy Administration Unit ▪ Responsible for Medicaid Policies that govern Medicaid services in each program area	▪ Use of RuleIT rules engine for assessment of current policy and consideration of policy change ▪ Support for facilitating exception to policy ▪ Use of new MMIS for claims and correspondence retrieval and inquiry
Member Services Unit ▪ Member enrollment, inquiry and relations, outreach and education	▪ Access to Medicaid and waiver member eligibility through the new MMIS ▪ Support access to Web portal for distribution of member information ▪ Use of new MMIS for claims and correspondence retrieval and inquiry
Medical Services Unit ▪ Medical support, prior authorization, HIT	▪ Use of RuleIT rules engine to automate approval of approved set of prior authorization requests ▪ Ability to retrieve prior authorization and supporting records for approval ▪ Use of new MMIS for claims and correspondence retrieval and inquiry
Pharmacy Medical and Pharmacy POS Unit ▪ Pharmacy claims processing, pharmacy prior authorization, drug rebates	▪ Interface to receive pharmacy claims file into the MMIS for payment ▪ Receipt of applicable prior authorizations ▪ Use of new MMIS for claims and correspondence retrieval and inquiry
Provider Cost Audit Unit ▪ Rate setting, cost settlement, cost audits	▪ Retrieval of checks and related images ▪ Access to historical data in new MMIS ▪ Updating accounts receivable and accounts payable ▪ Use of new MMIS for claims and correspondence retrieval and inquiry
Provider Services Unit ▪ Provider enrollment, inquiry and relations, outreach and education	▪ Receipt of provider enrollment applications and updates ▪ Maintenance of provider file ▪ Access to Web portal for provider transactions and outreach ▪ Use of new MMIS for claims and correspondence retrieval and inquiry
Revenue Collections Unit ▪ TPL recovery, provider overpayment and withholds, lien recovery	▪ Retrieval of checks and related images ▪ Access to historical data in new MMIS ▪ Updating accounts receivable and accounts payable ▪ Use of new MMIS for claims and correspondence retrieval and inquiry
Program Integrity Unit ▪ Data analytics, SURS, medical value management	▪ Receipt of SURS and related reports ▪ Use of new MMIS for claims and correspondence retrieval and inquiry
Data Warehouse Unit ▪ Reporting	▪ Receipt on claims data ▪ Use of new MMIS for claims and correspondence retrieval and inquiry
Core Unit ▪ Mailroom, claims receipt (EDI), claims processing, MMIS, OnBase	▪ Claims adjudication and adjustment processes ▪ Receipt, imaging and indexing, and retrieval of images ▪ New MMIS reference file updates ▪ Configuration of new rules to support changes in policy ▪ Use of new MMIS for claims and correspondence retrieval and inquiry

Figure 7-10. IME Training Summary by Unit. As the MMIS and Core MMIS operations contractor, Team Noridian will provide eCAMS training that is customized to the business functions of each unit.

7.7.2 Conducting MMIS and Workflow Process Management Knowledge Transfer

RFP Section 5.7, Requirement b

Our training methods for MMIS and workflow process management knowledge transfer have been proven effective. The training methods used to train staff for the Washington and Michigan MMIS replacement projects resulted in achieving CMS certification, which is indicative of proper use of the system capabilities in those self-administered states. Not only have our methods been proven successful, but with Noridian as our prime contractor, we bring six years of experience conducting MMIS training and workflow training to the Department and all users within the unique IME operational environment. Through development of OnBase workflows, we have intimate knowledge of the business processes presently used by each of the IME services contracts. Team Noridian will perform a detailed gap analysis comparing existing business processes to those processes now available through the new MMIS. This knowledge and experience will be invaluable to the Department and the success of this project.

We will train on MMIS and workflow process management during start-up and implementation phase, as well as throughout operations for any new functionality implemented. Using Brainshark for training, we will be able to create static training material, and as appropriate, insert screen capture / video to customize training and simulate step-by-step how to use the system.

7.7.3 Knowledge Transfer for System Services Contractors

RFP Section 5.7, Requirement c

Development of the new MMIS requires interface with existing IME systems and tools such as the call center tracking tool and the data warehouse. Team Noridian already possesses knowledge of these systems through its present experience integrating with the legacy MMIS. We will coordinate with the Department to receive additional training on these tools to support improved functionality brought through the implementation of the new MMIS.

7.7.4 System and Operational Procedure Knowledge Transfer for Staff

RFP Section 5.7, Requirement d

We will use Brainshark for training Team Noridian staff as well as Department and contractor staff. A critical input for the development of training through Brainshark will be our operational procedures--essentially the textbooks upon which training will be based. We document operational procedures in a step-by-step manner, supporting each step with relevant graphics and supporting the whole procedure with a flowchart. Each operational procedure is posted online so they are readily available for staff to complete their tasks. We consider these operational procedures to be an important internal control because they increase consistency in performing tasks, which has a positive impact on both productivity and quality. When procedures change due to implementation of new or modified policies and procedures, maintenance of our operational procedures is a by-product of our change management process. We provide staff with operational procedures in a timely manner, prior to implementation of system changes.

We will provide staff with adequate training to support the day-to-day operations of the new MMIS. Because we will implement eCAMS in phases to minimize the impact of the system replacement activities to claims processing operations, we will create an integrated training plan in which ongoing operational training occurs concurrently with training of new systems in a transitional stage. In addition, the ongoing training needs of legacy systems and applications not yet transitioned will continue to be addressed. As such, Team Noridian will continue to utilize and update established training schedules within the annual training plans in order to ensure timely training for staff that will not interfere with other staff training courses or with ongoing operations

Our approach to managing the operational training efforts has worked exceedingly well for Team Noridian's current Medicaid, Medicare, and commercial contracts. Collaboration between team leads, training specialists, and quality analysts to assess training needs, prepare training materials, deliver training, evaluate training results, and update training materials has allowed for the integration of consistent training methodologies across job functions and different lines of business. In addition, they are able to share best practices with each other and incorporate them into each unit's core training curricula.

The use of Brainshark as an online learning management system allows supervisors, trainers, and other IME contractor staff the ability to control training content and timing, while also monitoring individual training progress and success.

7.7.5 Designating a Trainer

RFP Section 5.7, Requirement e

The training specialist in the Quality Monitoring and Control Unit will work with Team Noridian business analysts as system changes are assessed, implemented, and tested, and as documentation is updated to stay abreast of changes and their impacts and prepare training materials to coincide with time frames for implementation.

In turn, the training specialist will train professional services contractor staff to be able to perform their job functions using the new MMIS.

7.7.6 Providing Initial and Ongoing Knowledge Transfer for Operational Procedures

RFP Section 5.7, Requirement f

Assessing training needs is the first step of our training process. It drives the preparation of trainers and training materials and the delivery of training. Events such as the hiring of new or replacement staff, performance results, or staff requests for training trigger training activities that meet the needs of those staff. The implementation of new policies and procedures, and implementation of changes to policies or procedures trigger change management processes; and training is a crucial aspect within our change management processes.

Team leads are responsible for managing the training needs of their staff. They work in collaboration with the training specialist and quality analysts to assess new hire training needs, as well as ongoing training needs of their unit. They also work together to identify opportunities for one-on-one training for individual unit members. To address the training needs of their units, team leads may require staff to participate in existing training courses, or as new courses or series of courses are developed, they may ask staff to participate in the development of those courses to ensure they fully meet the needs of staff.

Just as the training specialist collaborates with the team leads, the training specialist will collaborate with the Department and IME services contractor staff to identify and address the training needs of the Department and services contractor staff. We will build on our collaborative relationships with the other units to support continued identification of opportunities for both group and individual training. As the Core MMIS contractor, we will also have a unique vantage point for identifying provider training needs, and we will share those observations with the Department and the provider services contractor, as well as collaborate with them to develop a provider training, if desired.

Once training needs have been identified, the training specialist will collaborate with the team lead and quality analyst to determine the scope of the training course. It is necessary to determine the learning objectives, or the key items each participant should take away from the training session, as the training course detail and supplemental materials will be built around meeting these objectives.

Training participants complete an evaluation form after each training course and share their feedback, which is reviewed by the unit trainer, training coordinator, and supervisor. Comments and suggestions are applied and applicable updates are made to the course content, training materials and delivery to improve the training course.

7.8 Security and Confidentiality

RFP Section 5.8

Team Noridian's security and confidentiality solution consists of multiple components that implement and reinforce security and confidentiality policies, procedures, and guidelines. Our security architecture encompasses physical, system, and administrative (non-system/procedural) components, to ensure appropriate security and confidentiality as they apply to HIPAA and other industry regulations. Administrative security and confidentiality policies and procedures are leveraged from our existing Team Noridian-audited Centers for Medicare & Medicaid Services (CMS) systems.

Team Noridian understands that security and confidentiality are critical to the Department given that the solution deals with PHI, and has proven expertise to implement and operate Medicaid systems and business operations borne from our extensive experiences in both Medicare and Medicaid.

Team Noridian's commitment to maintaining the security and confidentiality of data is demonstrated through our strong ethical and values-oriented corporate culture, which forms the foundation for our system of internal controls. We have established personnel policies, a code of conduct, and corporate values that clearly communicate a commitment to these principles:

- **Our Customers.** We are committed to understand our customer's needs and we proactively deliver products and services to meet those needs.
- **A Dynamic Workplace.** Working together, we encourage an environment where every employee can pursue and be recognized for outstanding individual and team performance with diverse opportunities for personal growth.
- **Excellence.** Excellence is an expectation. We continually improve and seek to be the best.
- **Integrity.** We are trustworthy, ethical, honest, and accountable for our actions.

Team Noridian expects that security and confidentiality compliance is the duty of all staff, not just a given functional department. Security and confidentiality have many facets, and Team Noridian has implemented a management structure and has defined specific expectations related to internal controls to ensure data privacy is always considered and practiced. We have an existing entity-wide security and confidentiality program that meets all the Department's requirements.

Team Noridian believes it is an employee's responsibility to promote and ensure the integrity of confidentiality requirements. To provide Team Noridian employees a forum for voicing concerns, we have established incident reporting policies and procedures. The procedures identify the types of security and confidentiality incidents that must be reported and the individual to whom reports should be made. The procedures allow for multiple methods of reporting incidents, including by telephone, in writing, electronically, in-person, or anonymously. Team Noridian's security and confidentiality architecture solution consists of multiple components that implement and reinforce confidentiality and security policies, procedures, and guidelines. Our security architecture encompasses physical, system, and administrative (non-system/procedural) components, to ensure appropriate confidentiality and security for our proposed solution. Administrative security and confidentiality policies and procedures are leveraged from our existing Team Noridian-audited CMS systems.

Our solution, as depicted in Figure 7-11, is designed to protect the IME data assets from both intentional and unintentional attacks. Our solution is flexible and can be adapted and administered to meet all the federal, state, and local laws applicable to the contract.

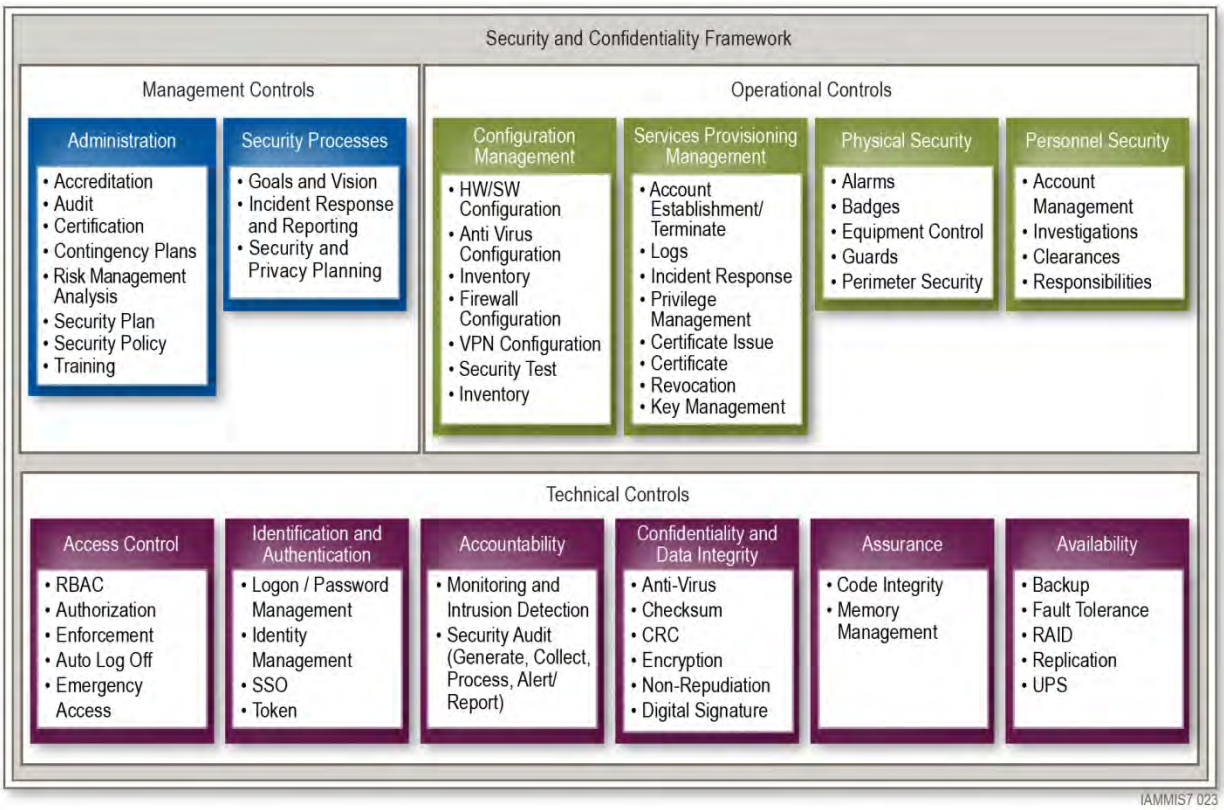

Figure 7-11. Team Noridian's Security and Confidentiality Framework. We address physical and technical aspects of security in addition to administrative controls to protect data assets and provide a safe environment for all employees.

7.8.1 Security of Facilities, Systems and Data

RFP Section 5.8, Requirements a, b, c.4, c.6, and c.7

Team Noridian is dedicated to adherence to HIPAA privacy and security policies, as well as a host of other applicable industry regulations put forward by prominent standards-setting bodies. Team Noridian has a comprehensive, enterprise-wide security and confidentiality program, which has been audited in a variety of different methods, including Statement on Auditing Standards number 70 (SAS 70) and Chief Financial Officer (CFO) reviews. Our program includes strict policies, procedures, employee-training requirements, and a strong emphasis on information technology (IT) system security controls, which provide the right people with the right access at the right time to applications and data, while protecting PHI and confidential business information from unauthorized users.

Our system security and confidentiality program complies with the following:

- Federal Information Processing Standards Publications (FIPS PUBS)
- Federal and state mandates
- Federal and state legislation
- Office of Management and Budget (OMB) Circular A-130
- Federal Information Security Management Act (FISMA)
- Applicable International Organization for Standardization (ISO) standards

- Sarbanes Oxley
- National Institute of Standards and Technology (NIST) publications

Team Noridian also adheres to standards and procedures to measure security compliance, including but not limited to NIST 800-53, NIST 800-26, lockdown guides, and other NIST special publications.

Team Noridian has strict standards for all locations that we are responsible for, such as the development data centers, the temporary facility in use in Des Moines during the start-up and implementation phase, and any additional physical locations we are asked to provide, should additional room be necessary outside of the IME facility. For our temporary facility, we will secure the work area using a swipe card system. This ensures only those with proper authorization can access the building. Team Noridian uses a security system at its site and a second set of secured doors for all computer and networking equipment rooms. This security system generates logs for all entries. Management performs periodic reviews of access to each door across the organization.

Employees are issued a photo security badge upon hire, and they are required to wear their badge at all times while in the workplace. Employees are required to access all Team Noridian facilities by scanning their security badge at proximity card readers located at secured entrances. Access to the computer rooms are controlled by use of a second proximity card reader. Any request by an employee for change of access hours or for access to restricted areas (e.g. data center) must be approved by the employee's management, facilities, and the restricted area owner.

The security badges are color-coded to indicate the access level of an individual:

- White – Team Noridian Employee
- Blue – Team Noridian Employee with computer room access
- Red – Vendor, Department staff
- Green – Vendor with computer room access

Employees are prohibited from allowing any unauthorized individual access to a secured area, including fellow employees, government personnel, temporary employees, vendors, members, or providers. Employees are specifically prohibited from following other employees into a secured area without also scanning their security badge (i.e., "piggybacking"). Visitors and others without authorized access, including employees who have forgotten or misplaced their security badge, must access the facility through designated visitor entrances that are monitored. Any visitor to the office building who does not have a security badge for access to the facility must sign a visitor log, obtain a temporary visitor security badge, and be escorted at all times by an employee with authorized access to that area.

Badge records are kept on Secure Perfect, the security computer system. Employees are required to report lost or stolen badges to security or building services. All employees must return their badges to Team Noridian upon termination of employment or upon request.

Beyond physical security, Team Noridian has additional security measures to protect systems and data. These measures will be used in the temporary facility during the start-up and implementation phase, and will follow Team Noridian as best practices into the state-space provided at the IME. Team Noridian has formal policies and procedures in place regarding segregation of duties to ensure staff only has access to data necessary to perform their job functions. Documented job descriptions accurately reflect assigned job functions and segregation of duties principles. Management is responsible for annually reviewing and updating job descriptions. During these reviews, management evaluates the essential functions of each position to ensure proper segregation of duties. Procedural manuals that evidence proper segregation of duties are linked to job descriptions.

Systems access is granted to staff based on their job description as an additional check and balance to ensure staff are only able to access the minimum necessary information to perform their job functions. Each

functional operation has its own processing guidelines, which the teams develop in conformance with company policies, Department policies, federal and state regulations, HIPAA regulations, and best practices.

7.8.2 Awareness and Review of Procedures

RFP Section 5.8, Requirements c.1 and c.2

Team Noridian's approach is to institutionalize the confidentiality and security program within the organization. We conduct initial training for new hires, and follow up with annual refresher training. We integrate the confidentiality and security program into our day-to-day operations and have appropriate organizational structures in place to support it. We will apply these procedures within our temporary facility during the start-up and implementation phase, as well as any additional physical locations we are asked to provide, should additional room be necessary outside of the IME facility.

These policies are published through Team Noridian's online Learning Management System (LMS), which is accessible by all Team Noridian staff. All staff, whether employed by a subcontractor or by Noridian, are required to read and acknowledge their understanding of these policies. The LMS requires sign-off on each policy. The employee sign-off is monitored to ensure all employees have the same awareness and commitment to adherence of security and confidentiality throughout the performance of their daily responsibilities.

We further ensure integration with employee day-to-day operations through implementation of various mechanisms and have appropriate organizational structures in place to support it. The confidentiality and security program is fully sponsored and practiced by management at all levels of the organization. The following are some examples of how Team Noridian ensures adherence to HIPAA privacy and security regulations while fostering a culture of compliance throughout the organization.

Education and Training. Team Noridian's workforce members receive confidentiality and security training as part of new hire orientation, with periodic refresher training and reminders. This training explains our security policies, procedures and rules concerning:

- Desktop security
- Printing confidential information
- Faxes
- Strong passwords
- Building access
- Employee identification badges

Workforce Facility Access. Team Noridian will take several precautions to ensure only authorized individuals may enter our temporary facility during the start-up and implementation phase, as well as any additional physical locations we may be asked to provide, should additional room be necessary outside of the IME facility. Employees are issued photo identification badges and electronic key cards for building access. All badges are color coded to allow easy identification of the areas to which the badge holder may enter. Contractors and temporary workers are issued non-photo identification badges and electronic key cards. Badges must be worn and displayed at all times while on the premises.

While working in the IME facility, Team Noridian will follow the Department's security protocol to have identification badges created by the state. Team Noridian will have the same expectation that our staff must wear their security badges at all times while in the IME.

Visitor Facility Access. All visitors must sign a Visitor Confidentiality Agreement before being granted access to Team Noridian's facilities. Visitors must also sign a visitor log and receive and wear a visitor identification badge. Visitors are escorted at all times once they leave the lobby area and have no access to areas where protected health information (PHI) is either visible or being discussed. If visitors enter the equipment room, they are required to sign a log upon entry and exit. While in the IME facility, Team

Noridian will meet all visitors at the front desk, enabling them to be signed in and escorted through the facility by a Team Noridian staff member.

We will leverage our existing Security and Confidentiality Plan as the starting point for the development of a plan to meet the Department's needs. We will transfer a number of administrative controls in addition to physical security controls that will apply during the start-up and implementation phase. The Security and Confidentiality Plan contains the risks that may threaten covered data and information maintained by Team Noridian; information on written policies and procedures, information on technical controls, and information on the overall security architecture in place with Team Noridian. The plan will be updated to reflect the new technologies brought as components of our technical and business solution.

A key driver in the development of our Security and Confidentiality Plan is an information security risk assessment. Team Noridian performs an initial risk assessment and reviews it annually, or more often as necessary. Risk assessments are based on NIST Risk Assessment Methodology. The Risk Assessment Methodology includes NIST Special Publication Draft 800-39, Managing Risk from Information Systems: An Organizational Perspective and NIST Special Publication 800-30, Risk Management Guide for Information Technology Systems.

As part of the risk assessments, each facility and every business unit that participates in the operations will be reviewed for risks and appropriate safeguards associated with, at a minimum, disasters, disruption, unauthorized disclosures, errors, theft, and fraud. These risks include:

- Unauthorized access of covered data and information by someone other than the owner of the covered data and information
- Compromised system security as a result of system access by an unauthorized person
- Interception of data during transmission
- Loss of data integrity
- Physical loss of data in a disaster
- Errors introduced into the system
- Corruption of data or systems
- Unauthorized access of covered data and information by employees
- Unauthorized requests for covered data and information
- Unauthorized access through hardcopy files or reports
- Unauthorized transfer of covered data and information through third parties

Since technology growth is not static, we monitor new risks regularly. Accordingly, our information security team will actively participate and monitor advisory groups for identification of new risks. We will assess all risks in accordance with both the Department and NIST guidance.

The Security and Confidentiality Plan will be subject to periodic review and adjustment. Continued administration of the development, implementation, and maintenance of the program will be the responsibility of the Systems Security area who will assign specific responsibility for implementation and administration as appropriate. The Systems Security area will review the standards set forth in policy and recommend updates and revisions as necessary. It may be necessary to adjust the plan to reflect changes in technology, the sensitivity of customer data, and internal or external threats to information security.

This plan will be updated in accordance with document change control policies and procedures. At a minimum, we will update the plan annually. The plan will also be updated based on annual Risk Assessments, audits, at the implementation of significant changes to the system or operating environment, or as directed by the Department.

Performance in meeting security and confidentiality requirements is verified and validated through performance reviews. Team Noridian fully supports and is experienced with all forms of reviews, including periodic audits, evaluations, tests and assessments of systems, processes, and facilities. With

each review, we assign an internal coordinator to assure reviewers' needs are met and review objectives are accomplished efficiently and effectively. In addition, our process includes periodic internal audits to assure we continue to meet all security and confidentiality requirements.

The following corporate policies in Figure 7-12 provide the basis for our Security and Confidentiality program. The corporate policies are administered by our Systems Security Officer, who is a subject matter expert in the field of security and confidentiality. Team Noridian will take these corporate policies and customize them to apply to the IME contract, taking into account any unique requirements such as state-specific security requirements. This customization will be done by Team Noridian's Quality Monitoring and Control Unit in Des Moines.

Policy Number	Policy Name
1.00	Privacy Polices for Protected Health Information
1.01	Treatment, Payment and Health Care Operations
1.02	Minimum Necessary
1.03	De-Identified Health Information
1.04	Individuals or their Legal Representative
1.05	Authorization
1.06	Oral Authorization
1.07	Drug and Alcohol Abuse Records
1.08	Psychotherapy Notes
1.09	Designated Record Sets
1.10	Right to Access Records
1.11	Right to Amend Records
1.12	Accounting of Disclosures
1.13	Right to Request a Restriction
1.14	Confidential Communications
1.15	Business Associates
1.16	Group Health Plans and Plan Sponsors
1.17	Marketing
1.18	Fundraising
1.19	Research
1.20	U.S. Department of Health and Human Services
1.21	Limited Data Set
1.22	Permitted or Required by Law
1.23	Public Health Activities
1.24	Health Oversight Activities
1.25	Notice of Privacy Practices
1.26	Privacy Complaints
4.00	Security Policy
4.01	Secured Area Access
4.03	E-mail Policy
4.04	User - ID
4.05	Password Policy
4.06	Acceptable Use
4.07	Internet Policy

Policy Number	Policy Name
4.09	SDLC
4.11	Faxing
4.12	BCCP Policy
4.14	Information Destruction Policy
4.15	Mobile Devices
4.18	Segregation of Duties
4.19	Information Owner and Information Custodian
4.20	Incident Reporting
4.21	Electronic Information Storage/Data Security
4.22	Information Classification
4.23	Training Policy

Figure 7-12. Team Noridian Security and Confidentiality Policies. Team Noridian's established policies provide a strong base for development of a security and confidentiality program that meet the Department's requirements.

Many of Team Noridian's policies stem from our commitment to a strong internal controls program, which supports the security and confidentiality of data. The Team Noridian Internal Controls program meets the requirements of the General Accounting Office (GAO) Federal Standards of Internal Processing Documentation, Guidelines, and Procedures.

The GAO defines internal controls as an integral component of an organization's management that provides reasonable assurance that the following objectives are being achieved: (a) effectiveness and efficiency of operations, (b) reliability of financial reporting, and (c) compliance with applicable laws and regulations. Five broad standards define the minimum level of quality acceptable for internal controls in government and provide a basis against which agency internal controls can be evaluated. These five standards cover the areas of:

- Control environment
- Risk assessment
- Control activities
- Information and communications
- Monitoring

Internal controls exist as part of our daily work environment to ensure the completion of specific quality-related tasks, as well as the overall success of the processes used by each operational team. Internal controls ensure that all operational teams have the necessary controls in place and are effectively safeguarded. The internal controls program provides assurances that each operational team's processes are performed in accordance with established program requirements.

Employees are expected to treat confidential information with the utmost discretion and protect it from improper disclosure in accordance with state and federal laws and regulations, as well as company policy. Employees may disclose confidential information only to authorized individuals who have a legitimate need for the information. Team Noridian limits the collection, access, and use of confidential information to the minimum amount of information necessary to accomplish the intended purpose. Employees do not share information in any manner except as necessary and appropriate to perform their assigned duties. Employees do not leave their immediate work area unless their workstation is secured from access and confidential information is secured. In addition, it is against company policy to remove confidential information from Team Noridian offices without management approval.

Security and confidentiality training for staff will be accomplished by a combination of mandatory orientation classes, annual security and confidentiality training by management, and annual compliance training by the compliance department.

Each year, the corporate systems security unit carries out a number of tasks, functions, meetings, and communications related to orientation and training. Examples of this include:

- Periodic e-mail reminders to all Team Noridian employees on security and privacy topics
- Routine reminders on the Team Noridian intranet site
- Assisting departments in the review of their policies and procedures
- Customized security and compliance training sessions administered for all new employees and annually for all staff

Employees attend orientation on their first day of employment. They are educated on the importance of building access security. In addition, they receive a separate presentation for privacy and security awareness, including confidentiality of information, user education concerning virus protection, importance of monitoring login success/failure, password management, where to report problems, and building security.

Management is required to provide customized security and confidentiality training to their employees. New hires receive customized training prior to being allowed access to sensitive information. Annual security and confidentiality awareness training is given to all employees. This customized training includes reviews of existing policies and review of new policies. The corporate systems security unit tracks the various rosters to ensure all employees receive training.

7.8.3 Incident Response

RFP Section 5.8, Requirement c.3

Team Noridian believes it is an employee's responsibility to promote and ensure the integrity of privacy requirements. To provide Team Noridian employees a forum for voicing concerns, Team Noridian has established incident reporting policies and procedures. The procedures identify the types of privacy incidents that must be reported and the individual to whom reports should be made. The procedures allow for multiple methods of reporting incidents, including by telephone, in writing, electronically, in-person, or anonymously.

Team Noridian believes that all incidents require investigation. The outcome of the investigation often concludes that employees have been overly cautious and no PHI was divulged. In these cases, we educate the reporting party and advise the individual or individuals about whom the incident was reported. In the event the investigation identifies PHI or confidential information that was disclosed improperly, immediate action is taken to educate employees, determine the root cause of the breech, assess any potential process or system failure, and determine appropriate disciplinary action. Team Noridian will immediately notify the Department of any incidents that are reported and will provide regular updates on the status of the resulting investigation.

We will use our established Incident Response Plan for handling suspected system intrusions, system misuse, or any situations where unauthorized access to confidential information is suspected. The Incident Response Plan defines the procedure for identifying and handling a computer-related security incident, including the members of the incident response team, the stages of response, and escalation procedures.

All incidents are reported, logged, and investigated to determine if it is a genuine incident. Once it is determined that it is an incident, it is given a severity level based upon impact to business. A team is assigned based on the severity of the incident and then containment and eradication of the incident is completed. On completion, we document investigative and corrective actions.

The Incident Response Plan includes timelines and escalation procedures, including automated alerts after a certain amount of time. These automated alerts will ensure we notify appropriate staff authorities of inappropriate disclosures of sensitive information. In addition, our structured incident response process and escalation procedures will ensure we are timely in reporting security or confidentiality breaches to the Department.

Team Noridian's security and confidentiality policies also include the ability for employees and stakeholders to report any complaints that may indicate the misuse of sensitive program information. We will provide a complaint e-mail address and telephone number where concerned parties can report suspected abuse. These complaints will be processed in the same manner as other security incidents, following our standard Incident Response Plan and escalation procedures.

7.8.4 Department Assets and Back-ups

RFP Section 5.8, Requirements c.5 and d

Team Noridian will maintain a listing of all Department-controlled IME assets through our configuration management tool. Within this tool, we will be able to readily identify any assets that are part of the IME. Our configuration management tool also lets us readily identify potentially related systems in the case of a failure or security breach.

Team Noridian recognizes the Department has the right to establish back-up security for IME data. If the Department so chooses, Team Noridian will work with the Department to provide back-up data files. Those files will be turned over to the Department to be kept in their possession. Team Noridian recognizes this will not relieve Team Noridian of its responsibilities.

7.8.5 Security Staff

RFP Section 5.8.1

In keeping with our dedication to HIPAA privacy and security compliance, Team Noridian employs a corporate systems security officer. The security officer has the responsibility to oversee all new regulations, determine impact to the organization, and modify existing policies or develop new policies.

The security officer is also responsible for conducting reviews of our operations, which includes internal controls as well as subcontractor and employee system access and rights, on an ongoing basis to prevent and detect fraud. This program encompasses all sensitive systems, such as automated and manual, physical and logical. It includes the policies, procedures, guidelines, safeguards, and audit controls that protect data confidentiality, data integrity, privacy rights, and ensure the integrity, security, and availability of these systems. More specifically, the security officer provides direct management oversight to the systems security unit and is responsible for:

- Development and maintenance of policies, procedures, and standards
- Employee awareness and training
- Identification and review of the security infrastructure
- Maintaining a communication plan
- Developing data release and non-disclosure agreements to ensure sensitive and confidential information is handled appropriately

Another driver in the development of our plan is an awareness of all state and federal security and confidentiality regulations to ensure systems continue to meet all requirements. The security officer is responsible for oversight of the plan maintenance process. The security officer and systems security unit monitor changes in the environment, as well as legislative and mandated changes, to ensure necessary updates are made to the Security and Confidentiality Plan. Designated plan coordinators from each business unit are responsible for updating procedures, making changes to their assigned plans where appropriate and submitting modifications when needed.

Segregation of Duties. Team Noridian has formal policies and procedures regarding segregation of duties. Segregation is an important part of the Team Noridian internal controls program. Segregation of duties is established through various teams within each area. For example, the systems unit has distinctly separate teams for development, technical support, and data center personnel.

Documented job descriptions accurately reflect assigned duties and segregation of duties principles. Management is responsible for reviewing and updating job descriptions annually. During these reviews, management is responsible for reviewing job duties for segregation of duties issues. Procedural manuals that evidence proper segregation of duties are linked to job descriptions.

Job Classification. The classification system described in Figure 7-13 ensures that employees have access to the appropriate information and facilities necessary to accomplish their job function and Team Noridian business.

Claim Approval Authority	Data Access and / or Viewing Authority	Handle Checks	Hours of Access
Mass – 10	Mass – 10	Routinely – 5	Unlimited – 10
Individual – 5	Individual – 5	Infrequent – 3	Daily, Weekday Eves and Sat – 5
None – 0	Causal – 1	None – 1	Daily and Sat – 1

Figure 7-13. Team Noridian Job Classification. The job classification system is used to aid the process of determining system access and segregation of duties.

Level 1 (Classification Score 3 - 22). Review of pre-employment application, verification of non-listing on EPLS and OFAC Exclusion List, personal interview, contacting references provided by the applicant and contacting the local law enforcement agency. Also, human resources or management may require any other review as deemed necessary (e.g. pre-employment drug screening, other background check as needed, which may include financial reporting).

Level 2 (Classification Score of 23 or Above, or Grade 17 and Above). Requires Level 1 review and criminal background check of the last 10 years.

Information Classification. Due to varying levels of information sensitivity and criticality within government contracting, Team Noridian has a system to identify and protect the more sensitive and critical information. The purpose of information classification is to provide a system for identifying and protecting sensitive information that is critical to the mission of Team Noridian. The information classification system is designed to help protect information from unauthorized disclosure, use, modification, or destruction.

Information is consistently protected in a manner appropriate with its sensitivity and criticality, regardless of where it resides, what form it takes, what technology is used to handle it, or what purpose it serves. Team Noridian information is assigned one of the following classification levels. When information is contained within two or more classification levels, the information must be assigned the highest level of classification.

- Public (Level 1)
- Internal Use Only (Level 2)
- Confidential (Level 3)
- Restricted and Confidential (Level 4)

Information must be labeled with the appropriate classification level in accordance with the information handling matrix, which is a matrix of 16 categories of information with information handling instructions for each information classification level. Policy 4.22, Information Classification, is the existing Team Noridian policy that details the acceptable handling of information and includes the information handling matrix.

Security Profiles. All employees have a security profile, which documents their authorized physical and logical access to systems, data, and facilities. This authorized access is based on what is necessary for employees to perform their job responsibilities. At a minimum, management reviews and updates the security profiles annually for every position that reports to them.

As part of employees' security profiles, minimum access profiles are defined for all job code and cost center combinations. These minimum access profiles define the minimum access an employee in a job code and cost center needs to perform the requirements of the job. Minimum access profiles are maintained by the systems security unit. Any access request not contained within a minimum access profile for a position is treated as an exception. These exceptions are reviewed and approved by management prior to granting access.

All changes to security profiles, including emergency and temporary access authorization, are made through the Remedy system. All requests to add additional access to an employee's security profile must be approved by management and the resource owner, if appropriate. The Team Noridian systems security unit makes any changes to security profiles. All actions are logged during updates, and any unusual activity surrounding security profiles is investigated. The centralized administration of security profiles reduces risk of unauthorized changes to security profiles and access to secured information.

7.9 Accounting

RFP Section 5.9, Requirements a and b

Our prime contractor, Noridian, brings sound accounting practices based on years of experience managing health care contracts. Our processes are consistent with the Project Management Institute's (PMI's) Project Management Body of Knowledge (PMBOK,) and Generally Accepted Accounting Principles (GAAP), and internal and external audits have confirmed our adherence to those standards.

Noridian's primary business is to provide administrative and contracted services to government clients, including state and federal agencies. Noridian, as a matter of practice, adheres to the highest standards of practice for all its accounting practices, including GAAP and Federal Accounting Regulations (FAR). Noridian's current portfolio of contracts includes performance experience under Fixed Price, Time and Material, and Cost Plus Incentive Fee types. As such the company must be and is extremely diligent in all accounting practices, ensuring that all records accurately reflect all aspects of our financial performance. These records are maintained at the individual contract level and then rolled up at the top level for the entire company. Noridian's cost management processes are integrated with the project budget and the management of the contract (including acquisitions and invoicing) and time reporting (attendance and timesheet tracking) processes. Noridian's accounting system, Deltek, provides the methodology for the proper identification and accumulation of costs incurred for a contract using a project-based general ledger accounting system. As such, our DCAA-accepted accounting system will ensure the proper controls required for the reporting and compliance for the MMIS and Core MMIS Operations contract.

Under Noridian's disclosed accounting practices, costs for projects are primarily comprised of labor (including applicable fringes), subcontractor costs, and other direct costs (materials, equipment, supplies, travel). The majority of the material costs that will be incurred are costs associated with hardware and software. In addition to these costs, Noridian uses various operational overhead rates and a general and administrative (G&A) rate to allocate indirect expenses to final cost objectives. These indirect rates are applied to the contract automatically through the Deltek Costpoint project accounting system. All amounts are ultimately reconciled back to the accounting system and Noridian financial statements.

As we have done in our current IME contract, Noridian will continue to maintain accounting and financial records that properly document all of the costs and expenses of the contract, separately and independently of other Noridian's accounting records. All hours expended are recorded daily in Deltek Time & Expense and validated against attendance records. Managers review and approve employee time each pay period in

accordance with Noridian's labor reporting policy. Consultants and subcontractors are required to submit monthly time sheets showing labor hours worked by work breakdown structure (WBS) category. Each week, labor hours chargeable to this contract will be converted to costs to track the cost of the current progress and monitor whether the project is currently within and is expected to complete within budget. Overall costs are provided to the Noridian account manager on a monthly basis by the corporate Chief Financial Officer (CFO). Variances are reviewed and analyzed to determine the cause and possible mitigations or corrections. Additionally, all non-labor costs, such as hardware, software, and facilities, are tracked within Costpoint's general ledger system (GLS).

Frequent audits of our accounting and fiscal management policies have confirmed our adherence to all applicable government standards applicable to delivery of contract management and fiscal management associated with our large-scale health care contracts. We provide our staff instructions and tools for entering financial transactional and time reporting information in a consistent and accurate manner. We perform periodic internal audits of employee time reporting, management review of time reporting, and associated collection of costs. These internal audits are a proactive mechanism to assure continued compliance with regulations and have allowed us to perform well during external audits of similar business functions.

In August, 2009, Noridian underwent its first Defense Contract Audit Agency (DCAA) floor check audit assessing compliance with labor reporting. During this audit, 22 employees were randomly selected for labor reporting and time sheet completion testing. We passed the audit with zero findings, which is evidence of our diligence in not only reporting contract costs accurately and timely, but also evidence of our commitment to training and enforcing employee actions for accuracy and timeliness in labor reporting.

When taking on new business, we assess the type of contract and implement and maintain safeguards, restrictions, and any checks and balances to provide assurances that our policies, Cost Accounting Standards (CAS), federal and state regulations and laws, GAAP, and specific contract requirements are followed. These policies collectively dictate the collection of indirect and direct costs, in addition to a host of other financial information, and are customized where necessary to accommodate any unique contract requirements.

In support of our commitment to timely submission of labor hours and prompt management review and approval of these hours, we will ensure MMIS and Core MMIS operations staff has access to our secure Deltek system to capture labor hours and other contract costs accurately and timely.

Financial records are maintained for seven years following the end of the federal fiscal year during which the contract is terminated, or until final resolution of any pending state or federal audit, whichever is later. Financial records are stored and maintained to assure they are independently identifiable per contract. Additionally, those records are stored separately from other accounting records for each contract. Records involving matters of litigation will be maintained for one year following the termination of such litigations if the litigation has not been terminated within the seven years.

7.10 Banking Policies

RFP Section 5.10

Responsible handling of checks, money orders, and cash is a priority for Team Noridian. Our procedures ensure that all monetary items received are sorted, logged, scanned, and distributed accurately using our proven procedures and automated workflows.

Noridian, the prime contractor, has been logging, sorting, and scanning checks and money orders for the Iowa IME since 2005. During that time, Noridian established and documented processes, forms, and guidelines that cover the entire procedure from receipt to distribution. Those processes were audited by the Department in 2010, and externally with a Statement on Auditing Standards (SAS) 70 Type I audit in 2009, and a SAS 70 Type II audit in 2011. Each of these audits resulted in no findings and verified that Noridian met all requirements for check handling and distribution. In addition, Noridian routinely processes cash receipts and checks for its Medicare lines of business using the same proven methods for check receipt, handling, and distribution.

> Noridian has accurately scanned and logged over 75,000 checks for the IME since 2005 and has never misplaced an item.

7.10.1 Sorting, Logging, and Scanning Checks and Money Orders

RFP Section 5.10, Requirement a

Team Noridian's approach to controlling checks, cash, and money orders provides for dual custody of mail as it is being opened so that the receipt of sensitive items, such as checks, is handled with extra care. The dual custody process ensures that there are always two people within immediate proximity at all times when opening envelopes. This establishes control over all documents to ensure none are misplaced between opening and subsequent processing. Strict and specific disciplinary measures are in place for when this policy is not followed.

Locked boxes are used for mail that contains checks. When an envelope is found to contain a check or money, both the opener and the partner are instructed to verify the number of checks and the dollar amount, initial the envelope with their count, and deposit the envelope and its contents into a locked box. No other action is permitted until a manager, supervisor, or designated authorized staff member is present. Managers or supervisors control the keys and oversee mailroom personnel when they retrieve the contents of the locked boxes for daily processing. This includes supervising the scanning of the checks and all associated correspondence, logging the details of the checks, and routing for proper processing based on the post office box address to which the check was mailed. Once completed, the checks and documentation are returned to the lockbox, which is delivered to the revenue collections unit who is responsible for making all deposits. All checks, cash, or money orders are processed and delivered to the revenue collections unit on the day of receipt. The flow for this process is shown in Figure 7-14.

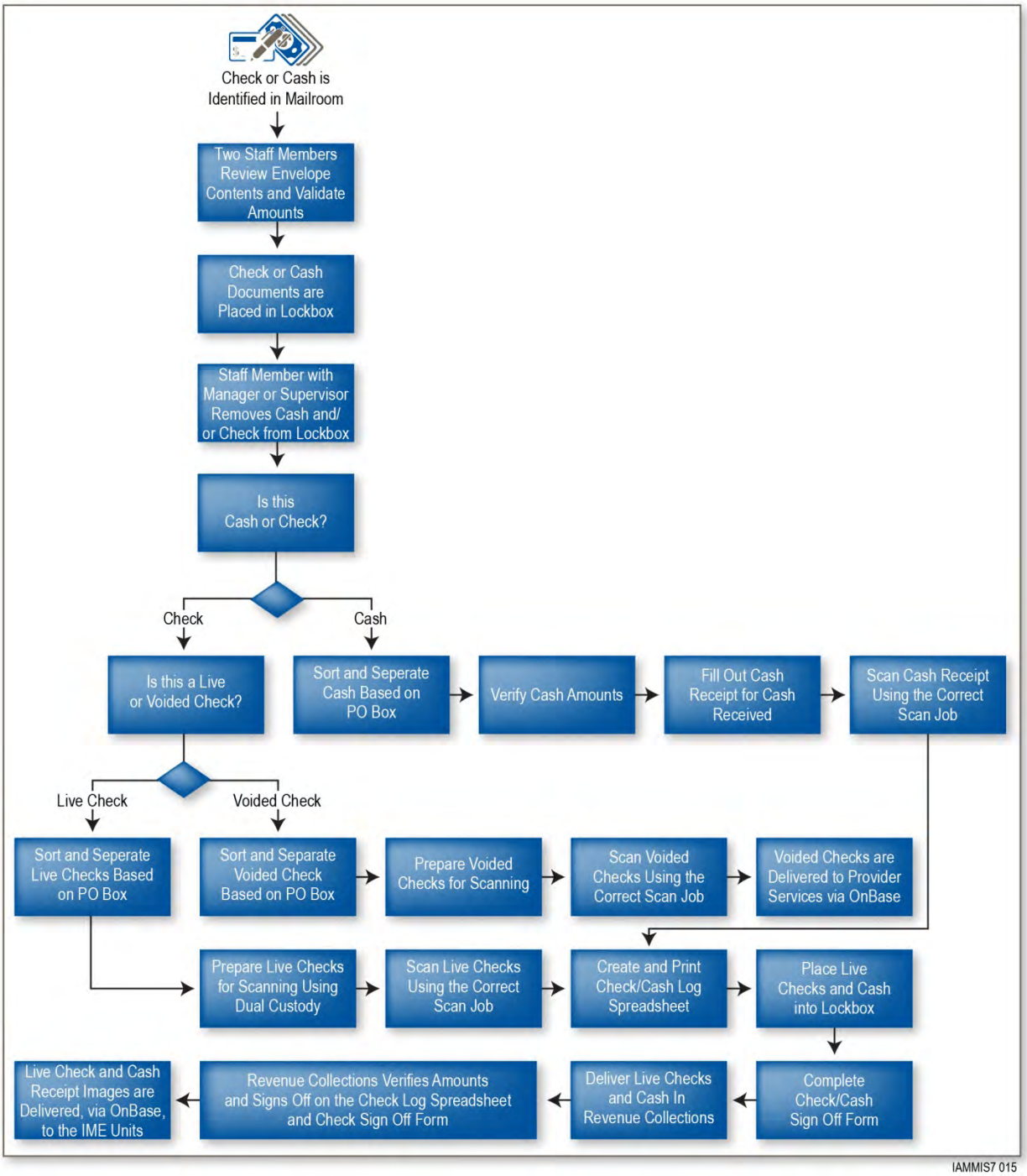

Figure 7-14. Check and Cash Handling. Team Noridian will use the current proven dual-custody procedures to accurately log, scan, and route all checks, cash, or money orders received in the mail room.

Check and cash receipt images are routed to the appropriate unit in the IME based on the post office box address on the envelope. The various units process the checks using OnBase workflows customized to their business rules, created by Noridian as part of our Core MMIS operations responsibilities.

7.10.2 Check Classification

RFP Section 5.10, Requirement b

Noridian originally worked with the Department and IME units to create a check receipt and keywords e-form that allows for classification of the checks for entering, reporting, and searching.

As shown in Figure 7-15, the keywords e-form allows users to enter the check with the appropriate variables, such as the check date, check number, the status of the check, and other identifying information. As part of that process, the check is classified according to predefined values such as lien recovery, claim error, or cost settlement. Team Noridian will continue to use this form under the new contract and understands that each IME unit that handles checks is responsible for assisting in the review, update, and maintenance of these classification codes as needed. When a unit determines that changes are required, Team Noridian will work with the Department and the IME contractor to develop, test, and implement the new code(s) on the e-form through our normal change management processes.

Once the check information is entered it will be routed to eCAMS through an interface for financial transaction processing.

Noridian has collaborated on over 30 changes related to checks processing, including the development of workflows in OnBase for the IME units that process checks.

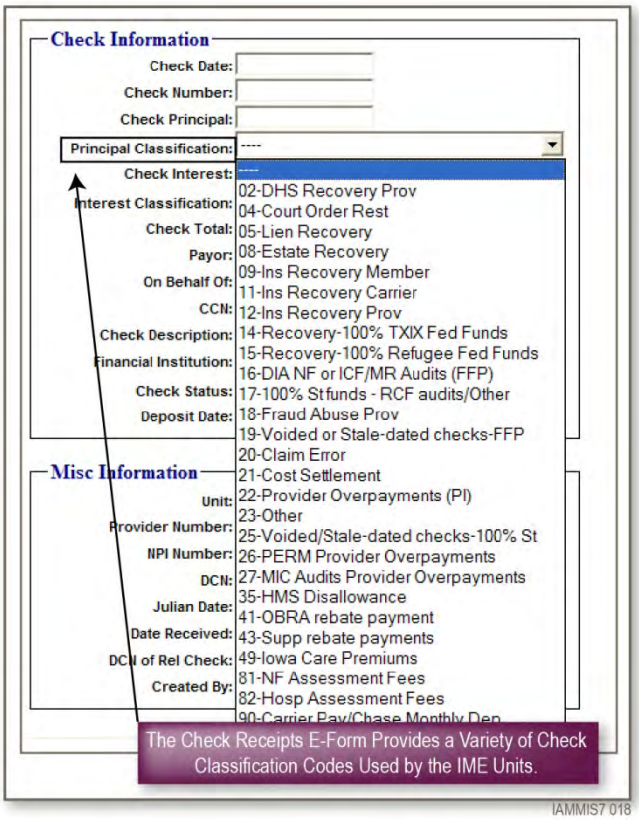

Figure 7-15. Check Receipts E-Form. The IME units use the check receipts e-form to log all check or cash information and classify the check according to the check classification schematic.

7.10.3 Providing Assistance with the Reconciliation of the Title XIX Recovery Bank Account

RFP Section 5.10, Requirement c

Team Noridian will continue to work with the Department to assist in the resolution of any questions and issues related to any check or bank processing as we do today. If needed, our knowledgeable staff will be available to support the Department and the Division of Fiscal Management with the reconciliation of the monthly Title XIX Recovery bank account. As stated previously, only the revenue collections contractor will make the actual deposits.

7.11 Payment Error Rate Measurement Project

RFP Section 5.11, Requirements a and b

Team Noridian understands the requirements for supporting the Payment Error Rate Measurement (PERM) project. As the current Core MMIS operations contractor for the IME, Noridian participated in the 2008 PERM project, and is preparing for the 2011 review now. Team Noridian will work with the Department to provide all necessary support to ongoing PERM requirements.

The purpose of the PERM project is to measure improper payments in the states' Medicaid and Children's Health Insurance Programs (CHIP), and produce state and national level error rates for each program. The

errors are determined by studying a large sample of each state's fee-for-service and managed care payments (when applicable) for a fiscal year. States also conduct eligibility reviews and report eligibility related errors. The PERM program helps to:

- Promote more efficient Medicaid and CHIP operations
- Ensure medical services are provided to eligible members
- Identify program problems or processes that may result in erroneous payments

The PERM project is required by the CMS. PERM reviews are conducted for each state every three years to review processing of claims to ensure that payments are made accurately according to a member's eligibility, and that payment rates are correct. Our prime contractor, Noridian, participated in the PERM review in 2008 and is currently preparing for the 2011 review. Our knowledgeable operations Team Lead, Ms. Joselyn Gibson, and Operations Manager, Ms Cathy Fosselman, provided their expert support in 2008 and will do the same during the 2011 process. They are familiar with the PERM requirements and what the Department expects for the review.

The 2008 PERM review resulted in an IME error rate of 4.91 percent, with only 1.7 percent being fee-for-service errors. The PERM review confirmed what we knew from our own quality management and performance measurement—that the IME was performing far better than the national average. Noridian is pleased that this external review documented its processing accuracy, and the value of the IME as a whole. This review established the state of Iowa as one of the nation's most accurate claims processors. The IME error rate was lower than the national average by 3.5 percent, based on the 2008 PERM Medicaid Corrective Action Plan Executive Summary.

With quality comes intrinsic benefits; the total dollar amount in error was less than $20,000. The lower error rate reduces the number of necessary recoupment or adjustment actions with real savings in time and costs, and less hassle for providers. Processing accuracy has a ripple effect across the IME:

- Provider services has fewer cases to work with providers, as there are fewer recoupments and a fewer appeals
- Provider Cost Audits and Rate Setting has less effort for re-pricing and consultations of reimbursement methodology
- Program Integrity can focus in other areas since there is less effort expended in provider follow-up and recovery activities

Team Noridian will continue to support the Department's PERM process during each of its measurement cycles. Support will include:

- Providing a contact person to work with the Department on any PERM-related issues
- Assisting in providing claims extract samples, and in Medicaid expertise and clams processing, pricing and payment logic traceability audits, and consultation
- Supporting the Department in their review of eligibility cases and researching any possible improper payments based on incorrect eligibility determinations and providing the necessary supporting documentation
- Working with the Department to support CMS for on-site activities and reviews of related business processes and documentation
- Providing subject matter experts to research problems and issues
- Supporting the Department in any CMS meetings, as requested
- Developing and implementing corrective action plans (CAPs) to resolve any improper payments or vulnerabilities with the Department's approval
- Tracking and report on the status of all CAPs
- Conducting additional training to staff or the other IME contractors as needed to resolve improper payment problems or issues

In addition to supporting the Department with the PERM project, Noridian has assisted other IME units in responding to PERM questions. Our staff members have a wealth of experience with the IME and are well qualified to continue to support this process, both directly and in operating the claims processing function accurately and timely to ensure full Department and CMS compliance.

7.12 Subcontractors

RFP Section 5.12

Noridian Administrative Services, LLC (Noridian), the prime contractor for this project, has procurement management policies in place which are used to manage and monitor the work of any vendors or subcontractors assigned to a project. These policies are part of Noridian's corporate procurement management procedures that we have used to successfully procure, manage, and report on the many subcontractors we have used throughout our long history in federal and state business.

Noridian is very judicious in its selection and use of subcontractors during the performance of our contracts. We understand the value and contributions that selective subcontractors can provide to enhance not only our business capabilities, but also that each subcontract adds additional management processes to ensure that value and ability to achieve contract obligations is met. Our ISO9001-assessed processes for vendor management help ensure that our contractors are performing at a level that not only ensures compliance with but also meets the additional criteria for performance satisfaction. Noridian takes full responsibility for all contract requirements. Our processes work, and we have an excellent track record of contract management. Each subcontractor or vendor organization is assigned a single point of contact within Noridian for contractual matters. In this case, our account manager, Mr. Scott Hruska, will fulfill that role and will be responsible for oversight of our subcontractor, CNSI, throughout all phases of this project. Each subcontractor will identify their own single points of contact within their respective organizations for contractual matters.

The Noridian procurement process requires that subcontractor performance and work be monitored and evaluated regularly to ensure it meets expectations in order to allow Noridian, as the prime contractor, to meet or exceed customer expectations. This is accomplished through scheduled performance reports, as well as periodic subcontractor reviews. Noridian monitors the subcontractor performance documented in the contract by conducting regular status reviews with the managers who are responsible for managing the day-to-day project progress. The account manager uses verbal and written performance information gathered from Noridian managers and the Quality Monitoring and Control unit to evaluate and assess subcontractor performance. All subcontractor personnel are expected to interact with any Noridian personnel as needed to fulfill the agreements or subcontracts.

The account manager, with support from the PMO, documents compliance against the contractual commitments using the information gathered. If contractual commitments are not being met, the account manager will initiate the necessary corrective action. All subcontractor employees must comply with all requirements of this Request for Proposal (RFP) and are subject to the same quality performance and timeliness expectations as Noridian staff members. Noridian monitors SLA achievement and works directly with its subcontractors to implement corrective action; this simplifies the management of the contract for the Department as the Department need only interact with Noridian and is not responsible for working with subcontractors directly.

Our account manager will meet with a delegate of the subcontractor organizations to discuss any issues of concern to either party. The subcontractor delegate is usually a senior employee of the subcontractor who is not directly involved in the delivery of contract products or services. The purpose of these meetings is to facilitate the project and to remove any impediments to success. If a dispute occurs between the parties of the contract that cannot be resolved by the account manager and his counterpart in the subcontractor's organization, the issue is submitted in writing to the corporate contract management team as identified in

the procurement agreement or subcontract. The contract management team researches the issue with the account manager and the subcontractor. This may involve communicating with the business representatives or the contract management group from the other party. The contract management team facilitates discussion between the organizations to resolve that issue. Issues that cannot be resolved through such discussion will be handled according to a predefined contractual dispute resolution process.

7.13 Regulatory Compliance

RFP Section 5.13

Team Noridian's new MMIS solution, eCAMS, is a proven and certified MMIS system that—in addition to meeting the current State and Federal Regulatory Compliance—provides a platform to adapt to subsequent regulatory changes. eCAMS is proven and operational in the states of Washington and Michigan, and will meet the State of Iowa and federal regulatory compliance for system service components.

Team Noridian's proposed solution is based on the eCAMS platform that is fully aligned with the Medicaid Information Technology Architecture (MITA). eCAMS was recently certified by CMS in the states of Washington and Michigan using the latest toolkit. eCAMS' core principles of modularity, open standards, and especially its business-driven architecture, enables its alignment with the MITA direction. eCAMS is evolving to support adoption of the harmonized standards around health information exchange (HIE) as the Medicaid program becomes a key component of the CONNECT health care framework. With the realization that the MITA is continually evolving, Team Noridian provides a point-in-time assessment of the proposed solution offering and its alignment with MITA. eCAMS is compliant with: 1) the Health Insurance Portability and Accountability Act (HIPAA) of 1996, Public Law 104-19, Title II, Sections 261-264; 2) the HIPAA Administrative and Simplification Provisions for Privacy (2002) and Security (2003), Code of Federal Regulations (CFR) 45, parts 160, 162, and 164); and 3) the Health Information Technology for Economic and Clinical Health (HITECH) Act of 2009 (enacted as part of the American Recovery and Reinvestment Act of 2009). Team Noridian's processes ensure all systems and services related to this procurement, including transactions, common identifiers, and privacy and security standards, continue to remain in compliance as stipulated in legislation or other regulatory requirements.

7.13.1 Fully Compliant System Services Components

RFP Section 5.13, Requirement a

Team Noridian has extensive experience working within the HIPAA regulations related to transactions, code sets, identifiers, privacy, and security in similar MMIS implementations, including the Washington ProviderOne and Michigan CHAMPS projects. This experience has provided Team Noridian with a comprehensive understanding of the issues and risks associated with implementing HIPAA. Team Noridian has reviewed the RFP requirements and concludes that all are met with the proposed solution. In addition, eCAMS is operated in full HIPAA-compliance in Michigan and Washington. eCAMS currently processes HIPAA-compliant code and transaction sets in the approved electronic formats and has a flexible design allowing the MMIS to be readily adjusted to accommodate future changes in regulations and code set standards. Team Noridian is in the process of upgrading to 5010 transactions to meet the compliance date of January 1, 2012, and the planning is underway for accommodating ICD-10 as well.

Team Noridian incorporates the necessary processes and procedures to ensure the MMIS and business operations are fully compliant with HIPAA regulations regarding standards for privacy, security, and individually identifiable health information. Team Noridian understands the broader issues concerning HIPAA privacy and security regulations. The major goal of the privacy rules are to ensure that an individuals' health information is properly protected while allowing the flow of health information to continue, thus promoting the availability of quality health care. HIPAA privacy rules must be translated into a comprehensive security policy with governance that permits the use of information, while protecting the privacy of members.

The reference business process area in eCAMS includes identifying, establishing, and maintaining reference file data for code sets—which include HIPAA mandated code sets. eCAMS contains code sets, such as procedure codes, revenue codes, International Classification of Diseases (ICD-9) codes, HIPAA code sets (such as place of service), and facility codes (institutional). In addition, the reference file data includes pricing information related to the codes.

Figure 7-16 illustrates the HIPAA compliance business architecture and its interaction with the eCAMS business process areas. These interactions include the following:

- Claims adjudication business process area for all claims related to HIPAA EDI transactions
- Managed care business process area for all contract management related HIPAA transactions
- Service authorization business process area for 278 transactions
- Enrollee related business process area for 270/271 transactions
- Reference business process area for validating all the code sets mandated by HIPAA and additional code sets approved by the Department
- Provider business process area for trading partner and other provider-related validations

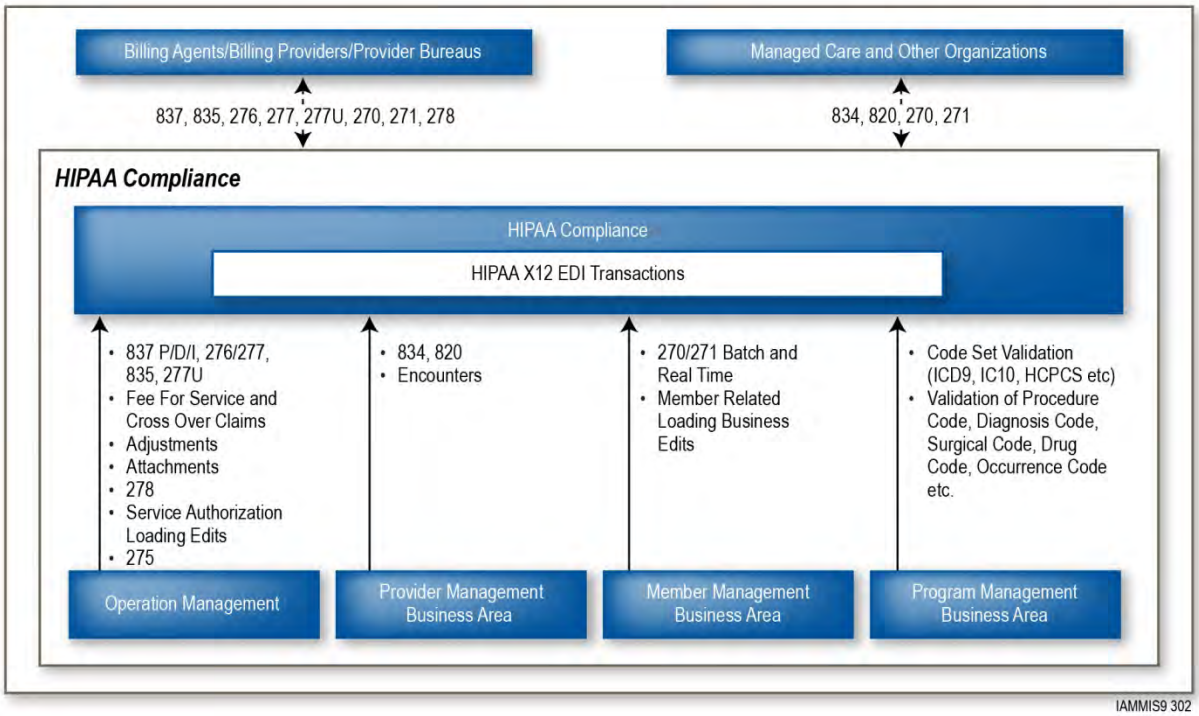

Figure 7-16. HIPAA Compliance Business Architecture. Robust and proven architecture assures compliance with HIPAA regulations across the different business process areas.

The eCAMS user interface complies with usability standards such as the American Disabilities Act (ADA), Older Americans Act, and the Rehabilitation Action Section 508 subpart B Section 1194.21. The eCAMS Web pages are supported by most commonly used screen readers such as JAWS and Microsoft Narrator. It also complies with the accessibility color schemes specific to Windows operating systems.

The reference business process area also includes the functionality to support service limitations, National Correct Coding Initiative (NCCI), and supports the various programs under fee-for-service (FFS) and managed care. In addition to the online update capability, eCAMS also provides automated interfaces for large volume batch updates to the reference datasets such as Health care Common Procedure Coding System (HCPCS), current procedural terminology (CPT), current dental terminology (CDT), and logical

observation identifiers, names, and codes (LOINC), as received from external data sources. Figure 7-17 shows the supported code set interfaces along with the source of the dataset.

Code Set	Available From	Code Set	Available From
HCPS	CMS	National Drug Code by Format	Federal Drug Listing Branch HFN-315
ICD-9-CM	U.S. National Center for Health Statistics	Treatment Codes	CMS
National Uniform Billing Committee Codes	National Uniform Billing Committee	Remittance Remark Codes	Washington Publishing Company
National Drug Code	First Data Bank	CLIA Number	CMS
American Dental Association Codes (CDT-4)	American Dental Association	NUBC Condition Codes	National Uniform Billing Committee
Claim Adjustment Reason	Washington Publishing Company	NUBC Occurrence Codes	National Uniform Billing Committee
Health care Financing Administration (HCFA) - Code Lists	CMS	NUBC Occurrence Span Codes	National Uniform Billing Committee
Diagnosis Related Group Number	Superintendent of Documents - U.S. Government Printing Office	NUBC Value Codes	National Uniform Billing Committee
Admission Source Code	National Uniform Billing Committee	UB92 Bill Type Code	National Uniform Billing Committee
Admission Type Code	National Uniform Billing Committee	UB92 Facility Type Code (Two Digits)	National Uniform Billing Committee
Uniform Billing Claim Form Bill Type	National Uniform Billing Committee	UB92 Revenue Codes	National Uniform Billing Committee
Place of Service	CMS	Provider Taxonomy Codes	Washington Publishing Company
Patient Status Code	National Uniform Billing Committee	Logical Observation Identifier Names and Codes (LOINC)	Regenstrief Institute of Health care

Figure 7-17. Supported Interfaces Along with Source. The eCAMS reference business process area with reusable standard interfaces.

7.13.2 Meeting and Maintaining Regulatory Compliance

RFP Section 5.13, Requirement b

Our solution will provide a platform that will enable the Department to adhere to any subsequent changes in HIPAA regulations, without a major re-haul to the MMIS. eCAMS provides large, configurable options to adhere to ever-changing needs. Though these configurable items will need to be tested in the user acceptance testing environment, and some new and major regulatory items may require customization to MMIS, the eCAMS platform will provide the ability to adapt to the changes to regulations in a systematic way with the goal of ensuring business continuity.

Team Noridian serves on the Workgroup for Electronic Data Interchange (WEDI), and the HIPAA Strategic National Implementation Process (SNIP) Transactions and Code Sets Workgroups. Team Noridian also works directly with CMS on the Technical Advisory Group (TAG). Such involvement is critical, allowing us to stay abreast of industry initiatives and changes, such as changes to the Business Associate Agreement and security requirements due to the HITECH Act, ensuring our systems and activities support ongoing HIPAA compliance.

Team Noridian is in the process of upgrading to 5010 transactions to meet the compliance date of January 1, 2012. eCAMS has the ability to load and store the ICD-10-PCS code set in the database. The reference business process area in eCAMS is responsible for maintaining reference file data for code sets received from external data sources.

eCAMS currently complies with the regulatory requirements for privacy, security, and standard transactions including the HIPAA Security, HIPAA Administrative and Simplification Provisions for Privacy and Security, the HITECH provisions, the Department's Information Technology Security Policy, the Department's privacy policies, and all stated and federal requirements to ensure the privacy and security of the Department's Medicaid data.

Team Noridian has policies to safeguard data to ensure protection of PHI during all phases of the project. We will continue to update our policies as necessary to ensure that we are compliant with state and federal mandates. During development, we identify the security policies that will apply to the IME operations and incorporate those safeguards into our procedures. We provide workforce education and training on all applicable security policies and procedures to ensure that our employees, contractors, and temporary workers understand their responsibilities concerning physical site security. Team Noridian is committed to ensuring compliance and will collaborate with the Department to rollout changes required for regulatory compliance.

7.14 Audit Support

RFP Section 5.14

Team Noridian will support and provide assistance with any state and federal audits and certifications as the Department requests. We currently support existing customers' audits including, but not limited to:

- SAS-70 Type I and Type II
- CFO audits
- CFO electronic data processing audits
- CMS section 912 reviews
- United States federal A123 audits
- External security assessments
- Other miscellaneous internal reviews and audits

Noridian, the prime contractor, has performed some of these audits at the IME location, including the SAS-70 Type I and Type II audits, and annual internal reviews and audits of its operations. External auditing firm KPMG performed the SAS-70 audits, and the Department prior to execution of the audit approved all control objectives. All controls were tested and found to be working as documented and intended. Key personnel led both audits from Noridian's headquarters office in Fargo, North Dakota. 2011 was the last year during which a SAS70 is performed at Noridian for its other lines of business. Noridian has begun implementation of the new SSAE 16 standards and will be audited under these standards starting in 2012.

7.15 No Legislative Conflict of Interest

RFP Section 5.15, Requirements a through d

Noridian, the prime contractor, has not had direct legislative involvement and has not otherwise supported legislation impacting the Medicaid program outside its current role as an IME contractor.

Team Noridian agrees to abide by the “No Legislative Conflict of Interest” parameters set forth in paragraphs (a), (b), (c), and (d) of this section.

7.16 No Provider Conflicts of Interest

RFP Section 5.16, Requirements a and b

Team Noridian warrants that it does not have an interest in any provider pursuant to the description in paragraphs (a) and (b) of this section. Team Noridian agrees that it shall not acquire such an interest in a provider that would conflict, or appear to conflict, in any manner or degree with its obligations and performance of services under this contract. Team Noridian agrees that, if it were to acquire such an interest in a provider, it will meet the paragraph (b) specifications to preclude participation in the stated prohibited provider activities.

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Tab 8 - Start-Up and Implementation Phases

RFP Section 9.2.9, Section 6

Team Noridian's new Medicaid Management Information System (MMIS) is a proven and innovative 21st Century Web-centric system. The flexibility and configurability of our rules engine driven system will enable the Department to be more responsive to legislative, regulatory, and business process changes.

The flexibility of the new MMIS provides an opportunity for Team Noridian and the Department to establish a proactive approach to managing the project to ensure goals and objectives are aligned with the Department's vision and to achieve rapid success through early implementation of functionality. eCAMS, the foundation of the new MMIS, is CMS certified in two states under the new checklist. Team Noridian's proposal describes in detail how the new MMIS will be implemented to comply with the Department's requirements outlined in the request for proposal (RFP). Our detailed approach to implementation, development, architecture, testing, transition to operations, and documentation are based on six years of successful experience working as the Core MMIS contractor at the Iowa Medicaid Enterprise (IME) and lessons learned from our 81 combined years delivering health care systems and services.

Team Noridian Advantage

Team Noridian's approach to Start-Up and Implementation Phases provides ongoing evidence of project progress and accomplishments and is based on:

- tailored project management processes based on industry standards and our extensive Medicaid and healthcare implementation experience
- iterative application implementation approach that builds momentum and provides demonstrable progress throughout the implementation phase for reduced risk
- a proven, certified MMIS solution

"This is the most advanced and demanding information technology project in the history of Washington State, and it works."

Susan N. Dreyfus, Secretary
Washington Department of Social and Human Services

Our approach and methodology involve the following three fundamental "tracks" that are orchestrated by our professional team:

- **Project Management and Integration.** Ensures that collaboration is occurring among the various teams, and that the project is moving in the right direction in an efficient and effective method.
- **Implementation.** Establishes the innovative, high-value Medicaid information technology (IT) infrastructure for the MMIS and ensures that the new MMIS capabilities are traced to the RFP requirements and that gaps are managed and addressed.
- **Transition to Operations and Certification.** Ensures that the infrastructure is ready to accept the system going into production, data conversion accurately accounts for legacy data, and that the Department and Team Noridian organizations are fully prepared for production operations.

Within 45 days of contract award, Team Noridian's leadership team will form a Team Noridian Project Management Office (PMO) which will be the central organization that will govern and drive implementation success, and which will work closely with the Department PMO. Our approach is to form a partnership with the Department to establish a common vision and process for the management of risks, issues, changes, and the information systems development methodology (ISDM). This partnership will also be extended to the selected Pharmacy Point-of-Sale (POS) vendor in order to ensure the proper integration between the MMIS and POS. The PMO will enable us collectively to better align our teams, instill a sense of common goals, and streamline how we address risk and issues. As we will outline in the proposal, our approach and methodology is highly collaborative and involves systematically traversing a series of steps, control gates, and reviews to successfully release system capability over the

32-month overall project schedule. The PMO will have the people, tools, and processes in place to measure, monitor, and lead.

Team Noridian's comprehensive management approach contributes to our success in two ways. First, it contains a set of integrated processes for performing project work focused on Department satisfaction. Second, it provides a control structure that governs how we will plan, execute, control, track, and close out the tasks and activities described in our project work plan. Our project management methodology is based on the Project Management Institute's (PMI) Project Management Body of Knowledge (PMBOK), combined with our MMIS implementation experience and lessons learned. Our project management methodology establishes the processes, templates, checklists, schedule, metrics, and milestones necessary to provide the "guard rails" for monitoring the contract. Our PMO establishes a project performance environment that is poised for success. We will use our project management discipline to integrate and control the execution of MMIS activities, ensuring that the operational system fully meets the Department's business needs.

We have also blended the structure and discipline of PMBOK processes with the Capability Maturity Model Integration (CMMI) for organizational maturity. CMMI Level 2 and 3 processes form the fabric of Team Noridian's iVision360 ISDM. Our iVision360 ISDM is specifically customized for the Medicaid market, and represents a unique blend of the waterfall methodology, iterative agile development, and rapid prototyping, resulting in the following benefits:

> "The CNSI staff involved in this project have brought a level of skill, expertise, dedication and sheer determination that was amazing as we moved through the project and is even more impressive in retrospect. Through continuous effort, long days and nights of work, and unfailing dedication, and deadline pressures, your staff met each of these requirements and have delivered a product that meets our defined needs. Throughout the project CNSI staff have worked with us as partners in development of CHAMPS. We have been team united in pursuit of our common goal. This level of collegiality and cooperation is, in my experience, unprecedented in large system projects."
>
> Jay Slaughter
> Director, Medicaid Payments Division
> State of Michigan, Department of Community Health

- **User Centric.** Our primary motivation in developing iVision360 was to put the user at the center of the entire life cycle. Software projects succeed or fail largely from the level of understanding the developing organization has regarding the customer's business rules, requirements, and needs. The more insight the developing organization can gain, the greater the quality and likelihood of success of the software project. Successful projects have significant interaction with end users and place the user at the center of the development life cycle. Every phase and task of iVision360 focuses on interaction and collaboration with the user community. We do this by implementing agile techniques and building functioning software in an iterative fashion with user validation at periodic intervals.
- **Common Goals.** Users actively participate in design sessions with an integrated team of developers, analysts, and testers. This method avoids the pitfalls of waterfall development and test methods, which leave, for example, test case refinement and execution until the full completion of development. In an implementation, it provides the team with a sense of purpose, goal, and drive to accomplish the end objective—software that meets the business requirements.
- **Testing Early and Often.** The formal system and subsequent test phases are more likely to meet schedule expectations with a lower error rate.
- **Prototyping to Reduce Complexity.** Prototypes are developed, where necessary, to model and present complex interactions, thereby further reducing the risk of problems being discovered in later phases of development.

The collaborative and somewhat "free-form nature" of iterative, agile development is balanced with the structure and baseline management features of the waterfall methodology. By introducing the baseline management features of waterfall, we minimize the risk of scope creep that can be associated with iterative development, and we achieve the clarity of a common understanding of the scope of work. Moreover, implementing and integrating with our PMO processes will provide integrated change, issue,

and risk management processes. Figure 8-1 describes the key benefits of each industry standard methodology that are blended into iVision360.

Methodology	Key Benefits Blended into iVision360
Waterfall	▪ Baseline approval of requirements ▪ Structured documents and customer approvals ▪ Formalized testing
Iterative/Agile	▪ Frequent customer interaction ▪ Decomposing work into small meaningful features that are presented in working software ▪ Frequent course corrections ▪ Ability to measure real progress ▪ Early and frequent testing ▪ Teams formed between developing organization and customer ▪ Sense of common vision and goal
Rapid Prototyping	▪ Reduce risk by visualizing complex features ▪ "Picture is worth a 1,000 words" ▪ Immediate sense of progress

Figure 8-1. Key Benefits of iVision360. The best features of multiple ISDM methodologies have been incorporated into our iVision360 methodology.

Team Noridian's iVision360 ISDM is a complete methodology that addresses each of the RFP-defined MMIS project phases and tasks. Our detailed analysis and planning have resulted in a comprehensive management approach and work plan to achieve the goals and objectives outlined in the RFP.

The implementation phase involves the systematic configuration, modification, development, test, and implementation of the MMIS. Implementation results in the implementation of a CMS certifiable MMIS. Our approach to Implementation also establishes the necessary framework, processes, and documentation to successfully execute process-based IT services and business operations management. We establish the IT infrastructure and business foundation necessary to realize the Department's larger health care vision.

Figure 8-2 provides an overall task diagram for project management during start-up and implementation.

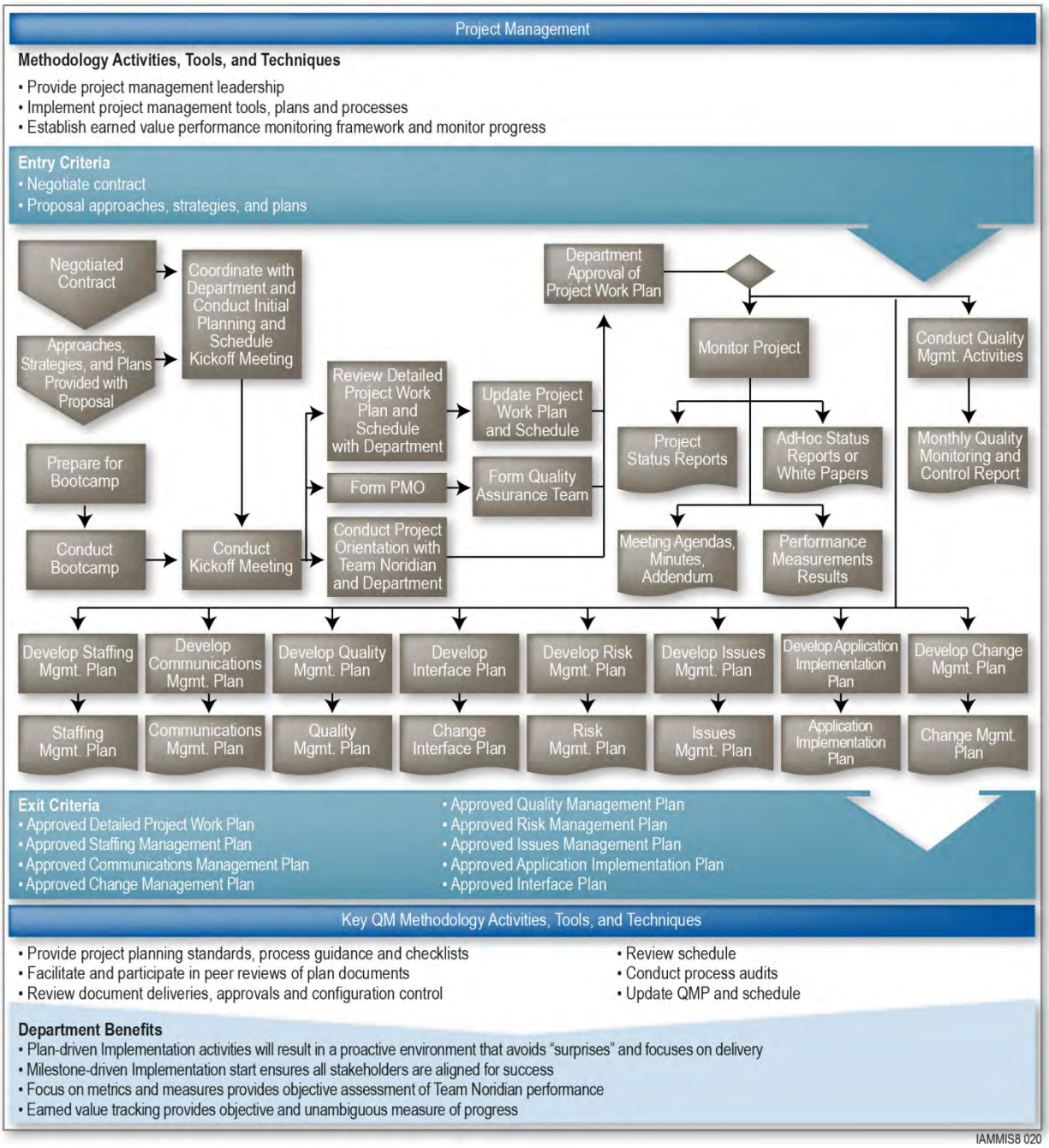

Figure 8-2. Overview of the Project Management Task. Team Noridian establishes a trusted partnership with the Department to provide an environment of success for the Implementation teams.

Team Noridian's iVision360 is unique in that it combines project management and ISDM methodologies into one comprehensive approach to implementations. iVision360 includes the design and analysis, implementation, testing, and transition to operations processes required to implement the new MMIS, while applying comprehensive management oversight and measurement processes. These processes have integrated QA processes, and are also able to be tailored to support a department IV&V contractor's needs. Noridian's partner CNSI has experience working successfully with IV&V contractors on the

implementations in Washington and Michigan, and both Noridian and CNSI have experience working with IV&V and QA Services contractors on multiple large implementation projects.

Our approach to facilities for the MMIS project is provided in Section 8.2.6. Team Noridian will implement all hardware and software required to support the MMIS in the Department data center in Des Moines, Iowa. Team Noridian understands the requirement for the contractor to operate and maintain of all hardware and software for a period ending one month after the MMIS is certified by CMS unless the Department elects to exercise the option to extend the contractor's operation and maintenance of the MMIS for one or more years, and in which case will operate and maintain through the end of the contract. Team Noridian has experience in the operations and maintenance of Medicaid and other large healthcare solutions in multiple states and can fully comply with this requirement. Team Noridian also understands and accepts the requirement to transfer ownership of all hardware and software licenses to the Department at the end of the contract.

8.1 Contract Phases

RFP Section 6.1

Within Tab 8, Team Noridian will present the methodologies, processes to start up the MMIS project, implement the MMIS and transition our certifiable new MMIS to operations. Our detailed approaches and plans for these phases are presented in Figure 8-3.

Implementation Step	Supporting Approaches and/or Plan(s)
Design	▪ Section 8.3.1 Analysis and Design
Development	▪ Section 8.2.7.7.7 Applications Implementation Plan ▪ Section 8.2.7.7.8 Interface Plan ▪ Section 8.3 Implementation Phase ▪ Section 8.3.1.2.6 Business Continuity Plan ▪ Section 8.3.1.2.7 Disaster Recovery Plan ▪ Section 8.3.2.1 Data Conversion Task ▪ Section 8.3.2.2 Configuration and Rules Engine
Test	▪ Section 8.3.2.3 Testing Tasks
Transition to Operations	▪ Section 8.3.2.4 Knowledge Transfer Activities ▪ Section 8.4Transition to Operations
System and User Documentation	▪ Section 8.4.2 Post Implementation Activities

Figure 8-3. Team Noridian's Plan-Driven Approach. Detailed plans establish the approach for each phase and avoids "surprises".

Team Noridian has also presented in this proposal a comprehensive approach to quality assurance across all phases of the project. The details of our quality assurance and Quality Management Plan by phase are presented in Tab 6 of this proposal.

8.2 Start-Up Phase

RFP Section 6.2

The start-up phase represents a foundational series of activities that will:

- Establish lines of communications between Team Noridian, the Department, and other contractors
- Orient the entire project team on project processes to ensure that "everyone is on the same page"
- Agree on the rules of engagement for the project

As we begin start-up, Team Noridian will establish the PMO. This body will oversee other start-up activities as we prepare for Implementation to begin. In addition, throughout Implementation, the PMO will provide oversight of all project management processes, tools and progress reporting.

8.2.1 Entry Criteria

To begin the project management activities, Team Noridian will have a signed contract. In addition, Team Noridian will have start-up team members review all of the RFP and proposal materials. These form the foundation of the project management plans and requirements database.

8.2.2 Activities

RFP Section 6.2.1

During start-up, Team Noridian will begin the following planning and preparation activities:

- Prepare for and conduct boot camp sessions
- Coordinate and conduct initial planning and a kick off meeting
- Review and update the detailed project work plan and schedule
- Form the PMO
- Conduct project orientation sessions
- Form the quality assurance team
- Develop detailed management plans for: communications; risk management; issues management; quality management; staffing; application implementation; and interfaces.

Many of these activities will be worked in parallel as most of them are required to be delivered to the state within 45 days of contract award. Team Noridian has experience with quick-start MMIS projects and, as our response shows, has mature processes and tools that will be ready to meet the Department's schedule.

8.2.2.1 State Responsibilities

RFP Section 6.2.1.1 Requirements a through f

Team Noridian's approach to the Start-Up phase requires close collaboration with the Department and other contractors. The Department will have responsibilities to ensure that the right foundation is established for eventual project success. Figure 8-4 provides specific responsibilities of the Department within the framework of our approach.

Start-Up Activity	Department Responsibilities
Executive Buy In	▪ Name executive sponsor for project ▪ Validate goals and objectives for the project
Planning	▪ Participate in kick-off meetings ▪ Review all contractor deliverables and provide response within 15 business days ▪ Identify the members for the implementation team ▪ Identify the IV&V and QA Services vendor ▪ Identify named representatives from other contractors who support the IME and who will participate in implementation activities
Monitoring	▪ Review Team Noridian deliverables and provide response within 15 business days

Figure 8-4. Specific Department Responsibilities During the Start-Up Phase. Team Noridian's approach is based on clear roles and responsibilities at every phase and step of the project.

8.2.2.2 Contractor Responsibilities

RFP Section 6.2.1.2 Requirements a and b

Team Noridian has standard contract start-up processes for MMIS contracts. These include holding boot camps for contractor staff and holding kick-off meetings with the state and project teams.

As shown in Figure 8-2, Team Noridian will form the PMO and develop project management plans. These activities are discussed in detail in Sections 8.2.7.5 and 8.2.7.7 of this proposal.

Conduct Boot Camp

Once the contract negotiations are completed and Team Noridian is authorized to begin work, Team Noridian will begin project initiation activities. Our proposed approaches, strategies, and plans will be further detailed to establish the project work plan. Team Noridian's focus is to ensure that personnel are adequately briefed on the project and fully understand their role and responsibilities on the project as well as the tools and processes available to them to ensure success. A feature of our approach is an internal implementation boot camp that we conduct prior to the start of implementation. The boot camp is a rigorous series of activities that include classroom instruction, role playing, and system demonstrations. Boot camp covers the following topics:

- Introduction to the project
- Fundamentals of MMIS projects
- Expectations, goals, and objectives
- Organizational structure
- Roles and responsibilities
- Overview of the project work plan
- Overview of the proposed solution
- Demonstrations of system capability
- Department standards
- Security and privacy
- iVision360 methodology
- Training on facilitating small and large groups
- Conducting effective meeting
- Presentation skills
- Project tracking and monitoring
- Project governance processes (i.e., change, issue, and risk management)
- Deliverable and document management
- Introduction to the project tools
- Project administration (e.g., travel, timesheets, facilities)

We have successfully used this approach on all of our MMIS projects. The boot camp will be completed prior to contract start and will lead into the project orientation session we will conduct with the Department during project initiation. The intent of the boot camp is to prepare Team Noridian staff and ready them for the phases and activities that follow. In addition, boot camp has the added benefit of preparing materials that are necessary to provide project management approaches and processes to the Department. Lastly, the boot camp prepares Team Noridian for project orientation sessions that will be conducted for the Department.

Conduct Kickoff Meeting

One of the first activities Team Noridian conducts after the contract effective date is the next phase of the planning process, which is initiated with a project kickoff meeting with the Department stakeholders. Team Noridian will hold a kick-off meeting with the department within 10 days of award.

The purpose of the kickoff meeting is to establish initial working relationships and plan for program execution in accordance with contract requirements for initial support and coordination; information exchange; team communication; initial roles and responsibilities; initial schedule; project startup readiness; action items; and other discussion points. A proposed kickoff meeting agenda is provided in Figure 8-5; this will be finalized with the Department post contract award. The kickoff meeting minutes will provide a detailed summary of items discussed during the initial contract meeting between Department personnel and Team Noridian key personnel.

Item #	Kickoff Meeting Agenda
1	Opening remarks (Department PMO, Team Noridian account manager)
2	Introduction of key personnel and subject matter experts (SMEs)
3	Team Noridian and Department Organization review (chart, roles, and responsibilities)
4	Team Communication Points of contact Regularly scheduled meetings Upcoming collaborative sessions The MMIS Project Portal
5	Initial Schedule and Deliverables (highlight contract deliverables coming in next 30 days/60 days) (milestones occurring in the next 30 days/60 days)
6	Start-up Status
7	Facility Status
8	Overview of Project Governance
9	Implementation Items
10	Review of Action Items resulting from this meeting

Figure 8-5. Kickoff Meeting Agenda. Based on our previous implementation experience a successful kick off meeting where the audience are presented with a vision for the project and detailed project procedures is critical to engaging state and contractor workers in a meaningful manner.

Once the kickoff meeting is conducted, Team Noridian begins a series of activities to complete the planning process. This includes forming the PMO and finalizing the remaining management plans.

Form the PMO

Team Noridian will form a PMO to support all phases and tasks of the MMIS contract beginning on the contract effective date. The PMO is discussed in more detail in Sections 8.2.7.3 and 8.2.7.5.

Finalize Remaining Management Plans

Once the detailed project work plan is approved by the Department, Team Noridian will complete the implementation planning with the development of the following detailed plans:

- Communications Management Plan
- Project Work Plan Baselines
- Risk Management Plan
- Issue Management Plan
- Quality Management Plan
- Staffing Management Plan
- Applications Implementation Plan
- Interface Plan
- Change Management Plan

The approach to developing each of these plans is discussed in Section 8.2.7.7.

8.2.3 Exit Criteria

Project Management start-up completion will be measured by the approval of the required project work plan and project management plans, boot camp completion, and completion of kick off activities.

8.2.4 Key QM Methodology Tools Activities, Tools and Techniques

The Quality Monitoring and Control unit team has two key roles to play during start-up. First, they will be providing input into plan and process development, leveraging best practices, industry standards and prior MMIS experience to provide templates, checklists and other guidance on plan development or

modification. Secondly, the Quality Assurance manager will be reviewing plans and deliverables to ensure they meet the stated standards and guidelines. This is especially important during start-up, where the Department reviewers may not be familiar yet with Team Noridian deliverables and where deliverables must be approved in a very short timeframe.

8.2.5 Project Management Approach and Plans

A detailed description of Team Noridian's approach and methodologies for implementation and operations is provided in Section 8.2.7. It includes our approach to analysis and design, development, testing and transition to operations for an MMIS in accordance with the responsibilities, deliverables, milestones, and development method outlined in the RFP.

8.2.6 Facilities

RFP Section 6.2.2

As a major federal, state, and commercial health care administrator, Team Noridian, has developed an enterprise with extensive and sophisticated facilities, data processing, and operations capabilities. With multiple offices across the country, Team Noridian has the requisite experience to solicit, acquire, build-out, wire, and operate secure large-scale facilities, networks, and data center operations. Team Noridian's complex and diverse lines of business require the ability to provide a safe, efficient, comfortable, and productive workspace for more than 2,000 employees who support health care processing operations.

Team Noridian has managed numerous facility acquisitions and build-out projects of large size and scope on a nearly annual basis. Over the past 15 years, Noridian, the prime contractor, has successfully completed the logistics for 17 transitions of large-scale claims processing workload. These transitions include multiple lines of work including Medicare Parts A and B transitions, and the transitions of DME Jurisdiction D (JD), the Competitive Acquisition Program for Part B Drugs and Biologicals (Drug CAP), the DME Pricing Data Analysis and Coding (PDAC) contract, the National Provider Identification (NPI) enumerator, and medical review of DME JD. Each of these takeovers and transitions required complex project planning and execution to successfully provide facilities, infrastructure, hardware, software, and support services.

Team Noridian's procurement management approach is characterized by formal planning, control, and methodical execution of procurement plans. The goal is to ensure that project required procurements are executed timely and in compliance with internal policy and industry governed requirements through the following six fundamentals:

1. Plan purchases by determining the desired products and services
2. Plan contracting by establishing requirements for needed products and services
3. Request vendor or contractor response on capabilities and price
4. Select vendor or contractor to provide the products and services
5. Execute contract by managing the relationship with the contractor and vendor by measuring and monitoring performance
6. Close contract when products or services are adequately provided

Team Noridian will use this procurement management approach to procure the temporary facility and services needed to support the MMIS and Core MMIS Operations contract.

8.2.6.1 Temporary Office

RFP Section 6.2.2.1

Team Noridian recognizes the need for temporary facilities in Des Moines, Iowa, to support the start-up and implementation phase. Team Noridian would be open to working with the selected POS contractor to

establish one facility that can be utilized for both contractors. This would allow the Department easy access to both contractors.

Team Noridian's primary office location for the start-up phase of the contract will be in Des Moines. We conducted a review of available space in Des Moines and found a suitable building, pictured in Figure 8-6, located at 6100 Thornton Avenue, Des Moines, Iowa. This location is approximately 6.2 miles—a 12-minute car ride—from the IME facility at 100 Army Post Road, Des Moines, Iowa. The temporary space can accommodate all required Team Noridian functions, and provide secure space for the Department's use. The proposed temporary space will be established within 45 days of contract award.

IAMMIS8 088

Figure 8-6. Team Noridian's Proposed Temporary Facility. Team Noridian has identified space available in Des Moines for its temporary facility during start-up and implementation.

Access to the Team Noridian Des Moines temporary facility will be secured using photo ID badges. These badges are color-coded to indicate the type of staff accessing the facility, and Team Noridian will designate a color to indicate Department employees with access privileges. The security badges use a proximity reader to grant access based on access profiles. Badge security is centrally managed by Team Noridian and they will facilitate the granting of access to the Des Moines facility. The office will be equipped with a standard Noridian security configuration including:

- Cameras with 24x7 video monitoring via manned operations center at each entrance, and strategically located as necessary
- Access by smart cards which are programmable based on access need
- Perimeter secured with high security key locks
- Intrusion detection (door ajar/forced open or glass breaks)

Team Noridian agrees that during the start-up and implementation phase all Core MMIS system implementation key personnel will perform their duties at the Des Moines facility. The development environment of Team Noridian's solutions will be housed at existing Team Noridian sites as shown in Figure 8-7. The testing and production environments will be housed in the IME data center. All work related to this contract will be performed in the United States.

Location	Functions
Des Moines, IA	Key personnel, meetings with the Department, and testing facility
Fargo, ND (Noridian)	Development Data Center
Gaithersburg, MD (CNSI)	Development Data Center and Network Monitoring

Figure 8-7. Team Noridian Start-Up Phase Facilities. Team Noridian has selected a start-up site in Des Moines that supports a close working relationship with the Department for key activities balanced with cost-effective use of existing facilities.

8.2.6.2 Meeting Rooms and Workspace Requirements—Start-Up and Implementation

RFP Section 6.2.2.2

Team Noridian's proposed temporary facility in Des Moines meets the requirements outlined in the RFP for meeting rooms and workspace requirements. Our extensive experience in setting up office space will be used to design the best use of space to meet all the needs for workspaces, testing workspaces, meeting rooms, training rooms, a break and kitchen area, and offices for Team Noridian and Department staff.

Team Noridian's IT staff will be responsible for setting up the temporary office with telecommunications, local servers, printers, desktops, multi-function devices, and security systems. The temporary space Team Noridian has identified in Des Moines will provide the Department with 10 dedicated parking spaces, and additional sufficient parking for staff that attend meetings and testing at this facility.

8.2.6.2.1 State Responsibilities

RFP Section 6.2.2.2.1, Requirements a and b

Team Noridian will provide to the Department our suggested location for approval. Team Noridian will provide the Department a floor plan, similar to the sample one shown in Figure 8-8, a parking plan, and a list of equipment that will be in the temporary facility for the Department's approval.

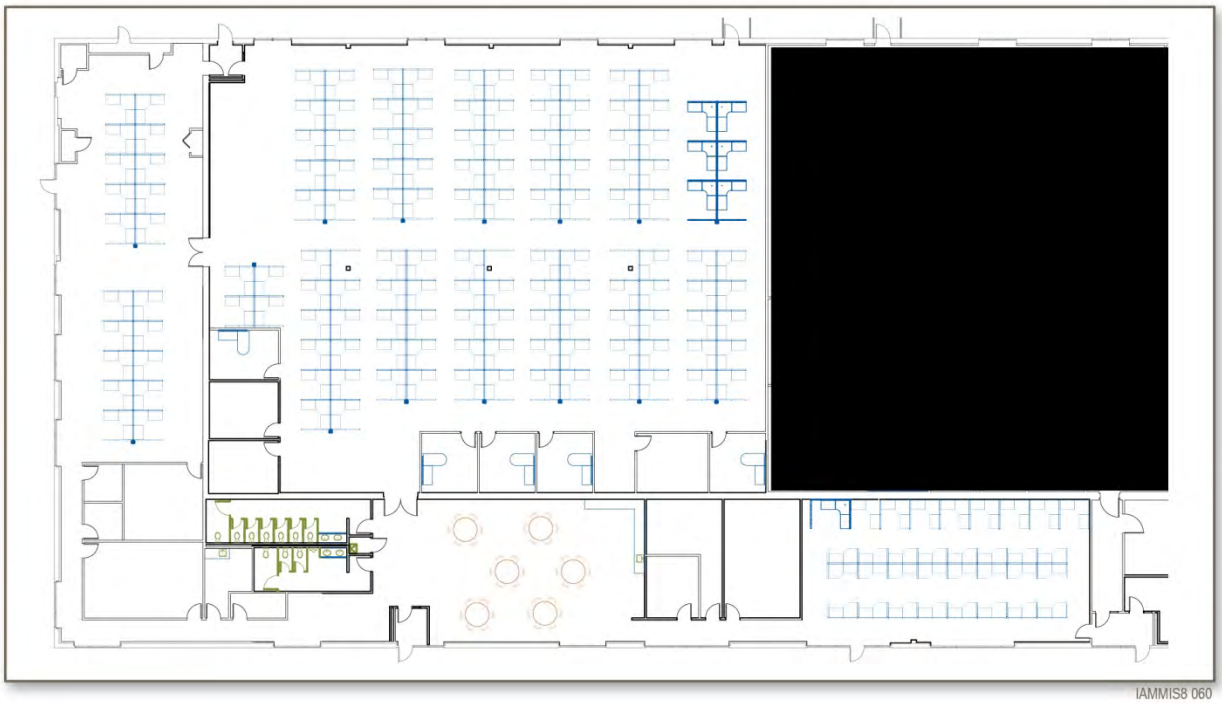

Figure 8-8. Sample Floor Plan. Team Noridian will provide a floor plan of the temporary facility to the Department for approval.

8.2.6.2.2 Contractor Responsibilities

RFP Section 6.2.2.2.2, Requirements a through d

As described in Section 8.2.6.1 Temporary Office, Team Noridian has already identified potential space for rent in Des Moines near the existing IME facility. Team Noridian is prepared to secure this space within 45 days of contract award. In the past, Team Noridian has had offices in Des Moines and will use past relationships with vendors of supplies and services to build out the space for occupancy. With Des Moines being less than 500 miles away from Team Noridian's corporate headquarters in Fargo, furniture and equipment can be driven to the Des Moines office in less than a day. The Des Moines office space will be configured with all necessary furniture, telecommunications, network, Internet access, telephone service, and personal computers to support Team Noridian staff, as well as Department and other contractor staff. The initial floor plan includes two large conference rooms for status and strategy meetings. Additional smaller conference areas will exist for break-out meetings. Team Noridian will provide 10 dedicated workspaces for Department use. The facility will have room for over 100 people, and Team Noridian will supply telecom equipment to support at least 100 users, including network access, printers, and other supplies. For testing, Team Noridian will ensure that at a minimum there are 30 dedicated testing workstations for Department and other contractor testers. In addition to the workspaces

and conference rooms, Team Noridian will supply a break and kitchen area for staff to prepare lunches and take breaks. Also, the facility has ample parking to accommodate reserved parking spaces for the required 10 Department parking spaces.

The Des Moines facility will be configured with sufficient conference rooms to support start-up and testing activities, including two meeting room facilities that will support Team Noridian staff and 20 Department implementation team members. The two large conference rooms will be configured with equipment to support Internet-based and Microsoft PowerPoint presentations via two internet-connected PCs that will also have access to printers within the facility. Also in the rooms, Team Noridian will supply two projectors and screens. Point-to-point interactive video conferencing sessions will also be supported through Skype. Internet-based presentations, application sharing, and larger video conferences will be available through WebEx. The rooms will also be equipped with high quality Polycom speakerphones for teleconferences.

8.2.6.3 Permanent Facilities

RFP Section 6.2.2.3

Team Noridian looks forward to continuing to be a part of the IME permanent facility during the operations, certification, and turnover phases. In Tab 6, Team Noridian has supplied an organizational chart and staff levels, including key personnel and other management positions, for use by the Department in determining spacing requirements in the IME. Team Noridian's staff will be located in Des Moines during operations, certification, and turnover phases. The COTS product's base product code will be built by the vendors in their facilities, with publicly available releases being given to Team Noridian for IME-specific requirements to be configured in Des Moines. Team Noridian’s solution is based on the highly configurable eCAMS platform. The core components of the platform are shared across multiple projects that include MMIS, Medicaid Incentive Payment Program, and Health Insurance Exchange implementations. A centralized team conducts maintenance and support for the eCAMS platform and this model provides cost savings for both Team Noridian and its customers. This team consists of:

- **Applications Support.** Maintains core application code and application programming interfaces (API)
- **Database Support.** Performs database management and administration support
- **Systems Infrastructure Support.** Maintains and administers server settings, releases, and configuration management of standardized components

Team Noridian is also prepared to extend the lease for the temporary facility in the case that the IME facility is not available.

8.2.6.3.1 State Responsibilities

RFP Section 6.2.2.3.1, Requirements a through i

Team Noridian's experience with the IME permanent facility has been positive over the past six years. Team Noridian recognizes and appreciates the Department providing the space, furniture, computing equipment, standard software, telecommunications, and printing equipment and supplies during the operations, certification, and turnover phases.

8.2.6.3.2 Contractor Responsibilities

RFP Section 6.2.2.3.2, Requirements a through d

Team Noridian recognizes that as the Core MMIS contractor, we will supply access to the software packages we are proposing as part of our response. Team Noridian will bring adequate licenses for Department and other contractor staff to have access to the systems such as, but not limited to, the Web Portal, the eCAMS MMIS, and OnBase. Team Noridian will work with the Department to determine the required number of licenses, realizing there are approximately 400 contractor and Department staff at the IME facility.

We will provide any office supplies and special needs equipment, including but not limited to ergonomic equipment, required by Team Noridian. If a need for personal workstation printers is identified, we will obtain Department approval. If the Department approves, Team Noridian will work through Team Noridian's IT division to procure printers, cables, and software, and will sign over ownership to the Department at the time of connection to workstations in the IME facility.

8.2.7 Project Management

RFP Section 6.2.3

We use a comprehensive project management and information system development methodology that is based on numerous industry standards. We will establish a PMO. We will define metrics and reporting mechanisms that allow all PMO members to assess the project and support primary PMO objectives such as change and issue management. Our project portal further enables the PMO by providing a secure, centralized, auditable repository of project information.

Team Noridian's perspective in planning and managing this implementation is that this project represents more than just an implementation of an MMIS. This project is about establishing a resilient infrastructure, while meeting current needs, to prepare the Department for the focus on health care and a continued focus on meaningful quality outcomes. Our iVision360 methodology puts the user and the business context at the center to ensure each component is built correctly the first time. A lesson we have learned is to continually evolve and improve the methodology to incorporate experiences from actual projects. We have continued to refine iVision360 and customize it specifically for the MMIS market. One of the overarching features of iVision360 is that it integrates our project management and ISDM processes into one comprehensive, integrated approach to total project delivery and assurance.

In this section, we also present the key tenets and the philosophy for Project Management during start-up and implementation, and the entire project that is within a framework of our PMO processes and quality management methodology. Much of the content of our response, and in the detailed project work plan, is a result of detailed planning born out of the discipline and maturity we have achieved from many similar projects and contracts, including the MMIS implementations in the states of Washington and Michigan as well as existing contracts with IME and multiple Medicare implementations.

Noridian, as the prime contractor, has policies in place to manage large implementation and operations efforts. These processes are compliant with Generally Accepted Accounting Principles (GAAP) and they allow us to adhere to the highest ethical standards, and exert financial and audit controls, and separation of duties. Specific contract management processes are described in more detail in Tab 7.

Team Noridian’s proposal is also based on a plan-driven approach and methodology. Our approach to each of the RFP-defined phases and tasks documents the results of our planning and is based on detailed plans that are ready for implementation, upon Department approval, when Team Noridian is selected as the MMIS system services contractor. A central theme is our highly-collaborative delivery model. Department and other IME contractor stakeholder involvement is a key element of our approach and we strive to involve stakeholders in a meaningful manner. It will ensure that we are “right the first time” and will result in end-user satisfaction. We deliver on this promise with our interactive approach to establishing the plans, implementing the Project Portal to increase the level of collaboration, and conducting detailed design and construction in an iterative manner. The Project Portal is implemented using Microsoft SharePoint and is discussed further in this section.

8.2.7.1 State Responsibilities

RFP Section 6.2.3.1, Requirement a through s

Team Noridian understands and acknowledges the Department’s responsibilities for the requirements specified in this section. We will support the Department in meeting these responsibilities through the

deliverable creation and acceptance procedures, formation of the PMO, implementation of the Project Portal and development of the project management plans and project work plans. These requirements are:

- Provide access to documentation of any state-mandated project management policies, processes and tools
- Identify resources for the Department's PMO
- Provide direction to the IV&V) and QA Services vendor
- Review and approve contractor's project management approach and methodologies and deliverables
- Review and approve metrics and data sources that Department, contractor(s) and IV&V and QA Services vendor will use to measure project progress and effectiveness
- Participate in weekly project status meetings with the contractors and IV&V and QA Services vendor
- Review and approve the contractor(s) project status reports
- Review and approve all deliverables
- Report ongoing project progress to IME executive management
- Obtain decisions from executive steering committee on any identified issues, as needed to keep the project on schedule
- Complete, review and approve any change management requests (CMRs) arising from maintenance and system enhancement requests that exceed the scope of the requirements for the implementation
- Review and approve the project management plans that must be implemented for each project during the start-up phase
- Review and approve the measurement, calculation, content and format of contract management reports
- Approve contractor's key personnel, including reviewing resumes of proposed key personnel and notifying the contractor(s) in writing of its approval or disapproval
- Monitor the contractor's performance and compliance with contract terms, standards, and conditions
- Provide access to appropriate Department staff
- Review and approve contractor(s) invoices and supporting documentation for payment of services
- Coordinate the Department, state and federal reviews, certifications and compliance audits
- Respond within 10 business days to any documents presented for review and requests for information

8.2.7.2 Contractor Responsibilities

RFP Section 6.2.3.2

Team Noridian has structured Tab 8 according to the RFP instructions, and many of the details of our project management approach are provided in specific sections as noted below.

8.2.7.2.1 PMO Implementation, Project Approaches and Methodologies, and Project Monitoring

RFP Section 6.2.3.2 Requirements a through c

Team Noridian will implement a PMO as detailed in 8.2.7.2.1 of this section.

Team Noridian will provide the department project management approach and methodologies within 45 days of contract award. Our intent is also to conduct project orientation sessions to train the Department staff on our proposed project management approaches and methodologies. Explanations of the approach to developing these plans and descriptions of the documents are available in Section 8.2.7.7.

8.2.7.2.2 Project Status Reporting

RFP Section 6.2.3.2 Requirements d through f

Team Noridian will participate in weekly, monthly and quarterly project status meetings as and prepare status reports as described in Section 8.2.7.11. Team Noridian will provide materials such as status reports, contract management reports and the Project Portal dashboards to report ongoing project progress.

8.2.7.2.3 Project Governance

RFP Section 6.2.3.2 Requirement g through k

Team Noridian will use the Issues Management Plan for issue management. This approach includes processes to identify, monitory, control and report issues, including statistics and aging criteria. Issues will be logged in the Project Portal. This plan is described in detail in Section 8.2.7.7.4.

Team Noridian will follow the processes documented in the Change Management Plan to manage and communicate changes with the Department. This plan includes the process to provide justification for CMRs. This plan is described in detail in Section 8.2.7.7.9.

Team Noridian will provide the names of key personnel, including resumes for changes to the proposed personnel, within 15 days of contract signing.

Team Noridian will submit contractor invoices in a timely manner and in the format required by the department as specified in the contract, and as outlined in the sample contract.

Team Noridian will participate in or support the Department in state and federal reviews, certification and audits as detailed in Tab 11 of this proposal response.

8.2.7.3 PMO Processes, Policies, and Procedures

RFP Section 6.2.3.3

Team Noridian knows that diligent adherence to disciplined project management processes, which are part of the overall Quality Management Plan, is key to the success of this project. The primary focus of our project management approach is to ensure the MMIS project remains on schedule, while ensuring that we deliver high quality products and services that meet or exceed the requirements. Our approach also ensures roles, responsibilities, and resource allocations are clear and managed by our teams and meets customer expectations while minimizing risk. It also positions the project to accept and manage the changes that are likely to occur over a 32-month implementation.

Team Noridian's project management approach is based on the formation of a trusted partnership with the Department and is focused on ensuring that the Department successfully achieves its project objectives. To this end, Team Noridian will develop a PMO overview document to describe the purpose and charter for the PMO. The purposes driving our PMO approach include:

- Defining, guiding, and disciplining the implementation of an MMIS
- Implementing and operating a certified MMIS
- Providing reliable, consistent, client-focused project management services in support of the Department's goals and overall mission
- Communicating the right information to the right people at the right time

The PMO overview document will include:

- Members by role and name
- PMO staff roles and responsibilities
- Descriptions of any PMO working groups, such as the risk assessment board, and their function
- PMO methodologies and tools used to report, monitor and control the projects
- How project activities are scheduled and prioritized
- Document management processes
- Methods to track and approve deliverables and milestones
- Methods to track action items and decisions

In addition, the PMO overview will reference other project management plans that include processes that involve the PMO, such as:

- Change Management Plan
- Risk Management Plan
- Issue Management Plan
- Quality Management Plan
- Application Implementation Plan

Team Noridian will also provide the Project Portal to function as the central repository of project documentation and artifacts. The Project Portal is described in detail in 8.2.7.6.

Our approach to managing and controlling the MMIS project is based on our lessons learned and experience with state and federal PMOs, which provide the structure and processes we propose for our PMO. One example of a lesson we have learned from prior implementations, is to introduce iterative development with iVision360 to improve tracking and control of development activities. We establish an environment where project management and quality assurance methodologies are integrated with technical processes necessary to build and deploy the solution. This integration is accomplished through PMI PMBOK practices, Capability Maturity Model Integration (CMMI) processes, and the use of an earned value management system. Earned value management enables our management team to monitor progress in an unambiguous and quantitative manner.

Success with the MMIS necessitates that both the Department and Team Noridian remain fully aligned. Under the PMO, we will more effectively orchestrate processes and assign our resources to support the collaborative delivery model of our iVision360 ISDM.

8.2.7.4 Industry Standards

RFP Section 6.2.3.4

Professional project management and the associated discipline of well-defined processes is the major contributor to our success. Team Noridian's plans and execution approach for the scope defined in the RFP and our project work plan is consistent with the PMI PMBOK. We integrated the PMBOK-based project management practices with the Software Engineering Institute's CMMI processes. In addition, we internally measure and monitor our work using an earned value management system to enable our management team to monitor technical progress in an unambiguous and quantitative manner.

In addition PMBOK, Team Noridian uses several other sources of standards such as PMBOK, ISO, IEEE and ANSI. Figure 8-9 provides a cross reference of IEEE standards referenced in RFP and how they are implemented in our approach.

RFP Par. #	RFP Reference	New Standard	How We Implement
6.2.3.4	IEEE/EIA 12207.0-1996, Standard for Information Technology-Software Life Cycle Processes (Note: There are 2 companion 12207 standards, 12207.1-1997; and 12207.2-1997. 12207.1 is still active and 12207.2 has been superseded by 12207.2008)	Superseded by ISO/IEC/IEEE 12207.2008. This International Standard establishes a common framework for software life cycle processes, with well-defined terminology, that can be referenced by the software industry. It applies to the acquisition of systems and software products and services, to the supply, development, operation, maintenance, and disposal of software products and the software portion of a system, whether performed internally or externally to an organization. Those aspects of system definition needed to provide the context for software products and services are included. Software includes the software portion of firmware. This revision integrates ISO/IEC 12207:1995 with its two amendments and was coordinated with the parallel revision of ISO/IEC 15288:2002 (System life cycle processes) to align structure, terms, and corresponding organizational and project processes. This standard may be used stand alone or jointly with ISO/IEC 15288, and supplies a process reference model that supports process capability assessment in accordance with ISO/IEC 15504-2 (Process assessment). An annex provides support for IEEE users and describes relationships of this International Standard to IEEE standards.	We use these standards as a framework for creating our organizational life cycle process model and tailoring this model to specific needs of each project. The standards provide us a comprehensive checklist of phases, processes, tasks, and activities; and a set of outcomes for each process that we use to verify process adherence and as exit criteria for “stage gate” reviews.

RFP Par. #	RFP Reference	New Standard	How We Implement
6.2.3.4	IEEE Standard 1058-1998, IEEE Standard for Software Project Management Plans (SPMP)	This standard has been superseded by ISO/IEC/IEEE 16326:2009. This new standard provides normative content specifications for project management plans covering software projects, and software-intensive system projects. It also provides detailed discussion and advice on applying a set of project processes that are common to both the software and system life cycle as covered by ISO/IEC 12207:2008 (IEEE Std 12207-2008) and ISO/IEC 15288:2008 (IEEE Std 15288- 2008), respectively. The discussion and advice are intended to aid in the preparation of the normative content of project management plans. ISO/IEC/IEEE 16326:2009 is the result of the harmonization of ISO/IEC TR 16326:1999 and IEEE Std 1058-1998.	We use this as a framework for creating our project management plans. The new 16326:2009 standard is coupled with the revised 12207:2008 and 15288:2008 software life cycle standards that allow for an integrated, comprehensive project management capability for software-intensive systems and software products. These standards allow integration among all stakeholders (i.e., customer, prime contractor, sub-contractors, and key end users).
6.2.3.4	IEEE 1074-1997, IEEE Standard for Developing Life Cycle Processes	Superseded by 1074.2006.	This standard provides a process for creating a software project life cycle process. It includes the templates for project activities from inception to retirement; together with activities, inputs, and outputs.

Figure 8-9. RFP Standards Comparison. A matrix that explains how these industry standards are used in the iVision360 ISDM.

8.2.7.5 Establish a Project Management Office (PMO)

RFP Section 6.2.3.5

To demonstrate our organizational commitment, Team Noridian will form a PMO within 45 days of contract award, comprised of Team Noridian project leadership and the account manager, and overseen by the Project Manager key resource. The purview of the PMO is to manage and oversee project management activities for the start-up and implementation phases of the project. The PMO also provides the point of contact to manage the relationship between the Team Noridian, the Department's PMO, IV&V, and QA services vendor.

The PMO enables the business and technological leadership from all members of Team Noridian to review performance and recommend strategic and tactical changes to the Department. The PMO will:

- Work closely with the Department's PMO, IV&V, and the QA services vendor to ensure consistency of processes;
- Review our collective performance over the prior period and provide corrective actions and guidance;
- Discuss best practices and lessons learned and how these lessons can be tactically implemented;
- Discuss changes in methodology or approach to achieve better performance;
- Review and discuss technological changes and impacts;
- Discuss the Department's strategic goals and objectives and changes to them; and
- Identify and discuss critical success factors and the project's success towards these goals.

The PMO is Team Noridian's management control center and ensures that all contract, development, quality, and business process operations are performing to the service levels stipulated in the contract. Our PMO will maintain and own the methodology and related processes. The following activities will be provided by the PMO:

- Provide project management leadership
- Implement project management tools
- Review and agree to acceptance criteria for plans
- Establish and maintain project communications
- Review, approve and submit formal deliverables to the department
- Establish earned value performance monitoring framework and monitor progress

The PMO is the first step in establishing a culture of partnership on the project. Our governance processes (i.e., issue resolution, risk management, and change control) are centered on the PMO and close

collaboration with the Department. The PMO meets weekly and operates from an established baseline set of high quality governance documents. Our PMO will be chartered to manage, monitor, and control all tasks and activities associated with the MMIS. The PMO also establishes the tempo and culture associated with the project. Specifically, our PMO will be based on five key tenets for success:

1. Continually align with the Department's goals and objectives. Every work element of the project must consider the goals and objectives of the project to ensure continual alignment and course corrections should they be necessary.
2. Open communication and continuous collaboration. Successful projects have effective communications, involve key stakeholders in a meaningful manner, and maximize the number of interaction points with the end-user and business community. The fundamental point is to avoid surprises and involve the larger Department community and with IME contractors in a collaborative manner. Our project is organized in a manner that promotes this tenet. In addition, we have the tools, such as the Project Portal, ready to achieve high levels of collaboration. The Communication Plan is an integral part of Team Noridian's project management plans which will be delivered after contract award. Team Noridian will work with the Department to synchronize and integrate the Communication Plan with activities that may be underway within the Department to provide a "single face" regarding project communications.
3. Clear roles and responsibilities. A major cause of rework and schedule delays on projects is the lack of clear roles and responsibilities and defined communication channels. This tenet is closely related to open communications but it goes further in that it requires that each position on the project be clearly delineated. It also requires a commitment to training to ensure that Team Noridian staff is ready to engage with the project when assigned.
4. Well-defined processes based on the Software Engineering Institute's CMMI levels 2and 3 and the PMI PMBOK. Team Noridian's partner, CNSI is independently assessed at CMMI level 2 and is currently practicing many of the CMMI level 3 key practices.
5. Quantitative management. Measuring and reporting real progress is a challenge for most large implementation projects. We have the tools and processes in place to remove "guess work" and to provide our team leaders and project management staff, quantitative data from which to make decisions. We have integrated Earned Value reporting into our status report processes.

8.2.7.6 Project Management Portal

RFP Section 6.2.3.6

Team Noridian will use the Project Portal as the electronic project repository through all project phases. The Project Portal will be installed and configured within 45 days of contract award for use by both Team Noridian and the Department and IME contractors for IV&V and QA Services. All internal project participants, including designated Department staff, will be trained on its use.

The Project Portal will provide management control features that integrate all project management processes, including:

- Electronic repository for all version controlled project documentation and deliverables, with history of drafts and revisions
- Store staff and team performance measurements
- Providing information to support the collection of information
- Continuous assessment of issues and risks
- Monitoring of implemented change requests

The Project Portal will provide authorized users the view deliverables, including the project work plan, and to generate reports to view project status. In addition authorized users including IME contractors will have the ability to upload documents to the Project Portal. Team Noridian will provide a secure

Project Portal environment, and understands that user access and privileges are dependent on authorization by the Department.

The Project Portal is integrated with email to provide project team members with the ability to receive alerts, special notices, reminders, and other messages regarding the project. As an electronic repository, the Project Portal provides mechanisms to organize materials, version control materials, and alert team members when a document is changed, limit access by group or person, and check documents in and out.

The MMIS project will be assigned its own “site” on the Project Portal which will be the central repository for the entire project community. There may be other "sites" on the Portal to support other Team Noridian activities; these sites will be commissioned and decommissioned to support the current ISDM phase.

As part of our communications planning efforts, Team Noridian will determine the different views that best suit the project. A typical view is one that is known as a “portal view” and usually contains directories to the type of information shown in Figure 8-10.

Portal Area	Description	Use on the Project
Deliverables	▪ Library containing current and historical project deliverables ▪ Provides automated check-in and check-out process, and maintains a record of all changes to a record	▪ Store, track, and publish project deliverables ▪ Maintain historical versions of each iteration of each deliverable ▪ Check-in and check-out
Calendar	Record of all critical meetings, reviews, audits, review sessions and walkthroughs	▪ Establish agenda and purpose of each meeting ▪ Record meeting minutes ▪ Attach all relevant documents discussed or presented at the event ▪ Record action items captured during meeting
Risks	Manage project risks	▪ Identify and track project risks ▪ Establish risk responses ▪ Record response plans to address risks ▪ Integrate with project’s management processes
Issues	Tracking of issues	▪ Capture and manage issues ▪ Integrate with project’s management processes
Action Items	Manage action items	Record, track, and manage action items from project meetings and other activities
Knowledge library	Library of best practices, lessons learned, document templates, white papers, and other informal documents	Maintain all non-deliverable work products to share within each project team Publish the project’s policies, processes, and procedures
Discussion	Ad-hoc discussion threads	Post-discussion threads and undertake an asynchronous “conversation” to address project items
Communication log	Track significant correspondence	Maintain unique number and copy of logged correspondence
Decision and Agreements Log	Track and record decisions and agreements reached through the course of the project	Capture decisions and agreements that may be reached in meetings or at other project events
Corrective Action Reports Library	Library of information related to any corrective actions	Captures corrective action reports and other information that may be needed for the project
Resources	View resource labor information	View reports and data related to labor hours planned and expended
System Documentation	View system documentation online	Provide access to system documentation once they are developed

Figure 8-10. Information Stored on the Project Portal using Microsoft SharePoint. The Project Portal is the central project communications hub.

8.2.7.6.1 State Responsibilities

RFP Section 6.2.3.6.1 Requirement a through d

Team Noridian will deliver the project management portal plan before implementation of the Project Portal.

Team Noridian will populate the Project Portal once available. Team Noridian will train project team members on the correct use of the portal so that the portal folders are maintained according to documented policies.

Team Noridian will provide access to the Project Portal based on approval of users and roles by designated Department approvers and will notify the Department when user access has been granted and resolve issues reported by the Department.

8.2.7.6.2 Contractor Responsibilities

RFP Section 6.2.3.6.2

Project Portal Set-Up

RFP Section 6.2.3.6.2, Requirement a

Team Noridian will deliver the project management portal plan for review and approval before implementation of the Project Portal. After approval, Team Noridian will deploy and populate the Project Portal.

Project Portal Administration

RFP Section 6.2.3.6.2, Requirements b, c, e, f and g

Team Noridian SharePoint administrators maintain security settings for the Project Portal in accordance with the project management portal plan. Team Noridian will provide Team Noridian access to the Project Portal based on approval of users and by the Project Manager or Implementation Manager. Team Noridian will provide access to the Project Portal for Department, IV&V and QA Services users based on approval of users and roles by designated Department approvers. Team Noridian users will test access and privileges for contractor users.

Project Portal Knowledge Transfer and Training

RFP Section 6.2.3.6.2, Requirements d, h and i

Team Noridian will train project and Department team members on the correct use of the portal during project orientation. Team Noridian will train project team members on the correct use of the portal so that the portal folders are maintained according to documented policies. Team Noridian SharePoint administrators will support the Project Portal throughout all phases of the contract. Team Noridian will provide Project Portal training materials and updates to the portal management plan throughout the contract as necessary.

8.2.7.6.3 Performance Standards

RFP Section 6.2.3.6.3, Requirements a and b

It is Team Noridian's intention that the Project Portal the central information hub for the project and hence will have current information from our project team members. Team Noridian will keep the Project Portal current within one week of approval of project deliverables. The following project plan snapshot in Figure 8-11 shows that the Project Portal will be delivered and receive approval within 45 days of contract award.

ID	WBS	Tasks, Subtasks, and Activities	Estimated Start Date	Estimated Finish Date
30	**A1.4.4**	**IA MMIS Project Management Portal**	**Wed 2/1/12**	**Mon 3/19/12**
31	A1.4.4.1	Initial Project Management Portal Set-Up and Deployed	Wed 2/1/12	Wed 2/1/12
32	A1.4.4.2	Set-up for Optional Waiver	Thu 2/2/12	Thu 2/2/12
33	**A1.4.4.3**	**Develop Deliverable Expectations Document (DXD)**	**Wed 2/1/12**	**Thu 2/23/12**
46	**A1.4.4.4**	**Configuration of Project Management Portal**	**Thu 2/2/12**	**Tue 2/21/12**
47	A1.4.4.4.1	Define Framework Updates for Project Management Portal	Thu 2/2/12	Wed 2/8/12
48	A1.4.4.4.2	Configure and Deploy Project Management Portal	Thu 2/9/12	Tue 2/14/12
49	A1.4.4.4.3	Test Project Management Portal	Wed 2/15/12	Tue 2/21/12
50	**A1.4.4.5**	**Review and Approval**	**Wed 2/22/12**	**Mon 3/19/12**
51	**A1.4.4.5.1**	**Conduct Internal Review**	**Wed 2/22/12**	**Wed 2/22/12**
56	**A1.4.4.5.2**	**Department Review**	**Thu 2/23/12**	**Mon 3/19/12**
57	A1.4.4.5.2.1	Walkthrough and submit deliverable to Department	Thu 2/23/12	Thu 2/23/12
58	A1.4.4.5.2.2	Department review of initial submission	Thu 2/23/12	Thu 3/8/12
59	A1.4.4.5.2.3	Update deliverable based on review	Thu 3/8/12	Thu 3/8/12
60	A1.4.4.5.2.4	Internal quality assurance review	Thu 3/8/12	Thu 3/8/12
61	A1.4.4.5.2.5	Update deliverable based on review	Thu 3/8/12	Thu 3/8/12
62	A1.4.4.5.2.6	Management review/approval for submission to Departm	Thu 3/8/12	Thu 3/8/12
63	A1.4.4.5.2.7	Walkthrough and submit deliverable to Department	Fri 3/9/12	Fri 3/9/12
64	A1.4.4.5.2.8	Department review of final submission	Mon 3/12/12	Fri 3/16/12
65	A1.4.4.5.2.9	Department approves deliverable	Fri 3/16/12	Fri 3/16/12
66	A1.4.4.5.2.10	Roll rollout of approved Project Management Portal	Mon 3/19/12	Mon 3/19/12

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Figure 8-11. Project Portal Schedule. Team Noridian will implement the MMIS project portal within 45 day of contract award.

Team Noridian uses the Project Portal to submit deliverables. As comments and changes are made, Team Noridian updates the deliverables on the Project Portal. We anticipate that the Department staff will post their comments to deliverables directly to the Project Portal to enable an added level of collaboration. In addition we store the formal deliverable approval on the Portal with the delivery letter and history. As part of the approved MMIS deliverable processes, Team Noridian will update the project portal with approvals.

8.2.7.7 Project Management Plans

RFP Section 6.2.3.7

Team Noridian brings years of experience with MMIS implementations, large implementation project management and State of Iowa business Medicaid practices to the project. Over these years we have developed and refined our project management approach, iVision360, to leverage the best of industry standards such as PMBOK, IEEE and ISO into comprehensive and coordinated management practices that inform, guide and measure projects, providing the best approach to improve quality, efficiency, project team satisfaction and risk mitigation.

This section will provide a detailed description of out project management methodology for each of the major project management plans included in the iVision360 approach as described in Section 8.1, and as Team Noridian has tailored it for the MMIS Implementation. In addition this section provides a table of contents and the tools used to manage each plan. Team Noridian understands the importance of proper planning on a project of this size, and will deliver the project management plans within 45 days of contract award, as required in the RFP. Development will not begin until the plans are approved.

8.2.7.7.1 Communication Management Plan

RFP Section 6.2.3.7.1

Communications Plan Outline

Project communications is one of the largest contributors to project success. Team Noridian establishes the Communications Management Plan by conducting stakeholder analysis, using creative methods of communicating (e.g., project dashboards, social media technologies), establishing a full spectrum of

communications vehicles, and integrating with other communications activities within the Department that may relate to the MMIS project. A communications plan outline we have used for previous engagements is provided in Figure 8-12. This and all deliverable formats are subject to Department review and approval.

Communication planning begins with the identification of all stakeholders and their specific communication needs. To manage the needs of our stakeholders, Team Noridian will conduct the following activities upon contract award:

- Determine internal stakeholders and their needs and develop contact lists
- Identify and document all internal communications vehicles
- Develop an internal communications matrix

We acknowledge that during proposal preparation, Team Noridian has been limited in our ability to plan all communications in the absence of extensive discussions with the Department to determine all project stakeholders and their specific communication needs. So, we have developed a preliminary stakeholder analysis based on our experience on similar projects, the information in the RFP, and other sources.

Communications Management Plan

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10.1. Process Documentation and Reporting 20
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10.3. Coordinating with Interested Parties 20

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Figure 8-12. Communications Management Plan Outline. Internal project communications is one of the most significant elements of project success.

We will further refine the internal stakeholder definition by naming each of the members of each sub-group and documenting all contact information including, title, electronic mail address, phone numbers, address, and any notes or comments. These will become the internal contact lists and will also be published as appendices to the Communications Management Plan. The contact list will be posted on the Project Portal.

As part of our initial development of communication matrices, Team Noridian established a set of major communications vehicles that are typically used during implementation engagements. These are a generic set of communication tools which will be refined to reflect specific reporting mechanisms as we fully develop the communication needs for each period of work. Note that these communications matrices target internal stakeholder groups.

In addition to distributing information through more formal means, as is done today Team Noridian will actively encourage and support an open-door policy between our staff, the Department, and any other stakeholders. We are committed to keeping the Department and all stakeholders informed at all times and will do that through unscheduled face-to-face meetings, electronic mail, and telephone calls when needed, and will follow up with more formal communications, as appropriate.

Team Noridian will use the formal communications vehicles shown in Figure 8-13 as our major internal reporting mechanisms throughout the start-up and implementation phases. In many cases, these are the same mechanisms that Team Noridian will use for reporting during the implementation. However, formal reporting will be augmented by Joint Application Development (JAD) sessions and technical walk-throughs of products as they are developed.

Type of Communication	Function and Content	Audience	Frequency
Weekly status report	▪ Provides status of deliverables and milestones due in the reporting period ▪ Compares actual progress to planned progress ▪ Uses approved format ▪ Described in detail in Section 8.2.7.11.1	▪ Implementation team members ▪ The Department ▪ Team Noridian senior management ▪ Department and Team Noridian PMO	Weekly
Monthly status report	▪ Provides status of deliverables and milestones due in the reporting period ▪ Compares actual progress to planned progress ▪ Uses approved format ▪ Described in detail in Section 8.2.7.11.1	▪ Implementation team members ▪ The Department ▪ Team Noridian senior management ▪ Department and Team Noridian PMO	Monthly
Quarterly status report	▪ Provides status of deliverables and milestones due in the reporting period ▪ Compares actual progress to planned progress ▪ Includes CMS reporting ▪ Uses approved format ▪ Described in detail in Section 8.2.7.11.1	▪ Implementation team members ▪ The Department ▪ Team Noridian senior management ▪ Department and Team Noridian PMO	Quarterly
Progress meetings	▪ Representatives from each implementation team brings first-hand knowledge of activities, status, issues in each area ▪ Facilitates cross-team communication, prioritization of issues, and problem solving ▪ Accelerates agreement on corrective actions	▪ Implementation team members ▪ The Department	To be determined
PMO meetings	▪ Examine project status and progress as well as resolve problems requiring executive attention. ▪ Review items escalated for review	Department and Team Noridian PMO	Monthly
Meeting agendas and minutes	▪ Distributed before and after each meeting to outline items to be covered at the meeting and report on all activities that occurred at each meeting	▪ Implementation team members ▪ The Department ▪ Team Noridian senior management	Agendas distributed two days before each meeting Minutes distributed within two days of the meeting

Figure 8-13. Major Communications Vehicles. It is vital that communication vehicles are in place and continually assessed from implementation inception to completion.

Team Noridian will produce and deliver other indicators of performance including risk assessments and any other agreed-upon reporting and tracking requests.

In addition to distributing information through more formal means shown in Figure 8-13, Team Noridian encourages open communication and continuous collaboration between our staff, the Department, and any other stakeholders. Successful projects have effective communications, involve key stakeholders in a meaningful manner, and maximize the number of interaction points with the end-user and business community. The fundamental point is to avoid surprises and involve the Department community in a collaborative manner. Our project and communication vehicles are organized in a manner that promotes this tenet.

8.2.7.7.2 Project Work Plan for Implementation

RFP Section 6.2.3.7.2

Team Noridian uses a proven, repeatable process to develop highly-detailed project work plans which also serve as the project schedules. Our approach is based on industry best practices aligned with the Project Management Institute's (PMI) Project Management Body of Knowledge Guide (PMBOK), Fourth Edition. Time (schedule) management processes as defined in the PMBOK, are closely aligned with the PMBOK scope management activities and the work breakdown structures (WBS) that are created as part of the scope management activities are the main input to work plan creation.

We develop our work plans based on the principals outlined in the scope management and time management knowledge areas of the PMBOK and continually refine our plans using both top-down and bottom-up methods until we deliver aggressive yet achievable schedules. As specified in the PMBOK, our WBS and project work plans are work product based meaning that every group of tasks results in a discernable product or milestone.

The goal of the project work plan is to show the work, defined by the project scope, broken down into assignable units of work which facilitates resource management, project dependencies, project measurement, and control for the project. We update and control our project work plans using documented procedures and guidelines throughout the contract period.

Project Work Plan Baselines

RFP Section 6.2.3.7.2.1

Once Team Noridian has delivered the project work plan and the Department has approved the plan, change management of the baseline, whether requested by Team Noridian or the Department, is performed following the change management plan described in Section 8.2.7.7.9 and can only be made with Department approval.

The baseline schedule will be used for all schedule metric reporting for the project. Project deliverables will be clearly identified in the project work plan. Deliverables will be delivered following the contract deliverable submission and approval procedures.

8.2.7.7.3 Risk Management Plan

RFP Section 6.2.3.7.3

Team Noridian's Risk Management Plan establishes the processes to identify risks and issues, assess them, and develop and review plans to address risks. This plan includes processes for corrective action plans used when significant deviations from the project schedule, requirements, or the contract occur that require greater explanation and documentation than a typical issue needs.

This Risk Management Plan will be used to address the particular risk aspects of MMIS project that are likely to occur. It will be used as a blueprint followed by each group to approach, identify, analyze, handle, and resolve risks as early as possible.

Our approach is to collaboratively involve any relevant stakeholder to identify sources of risk, detecting risk triggers, and communicating them to the assigned Risk Manager (a role of a member of the risk assessment board) for the project. Once the risk has been identified, the strategy will shift to a simple assessment approach for analyzing and prioritizing the risk, which may include mitigation or contingency plans. The risk assessment board will meet monthly to review risks.

Our PMO will meet on a periodic basis (to be defined during project initiation) to review risks and issues, assign staff to address them, and if necessary to escalate items.

A risk management plan outline we have used for previous engagements is provided in Figure 8-14. This and all deliverable formats are subject to Department review and approval.

Team Noridian uses historical data and a repeatable, standards-based risk assessment process as described in PMBOK as the framework to develop a MMIS-specific risk profile based on this particular project's characteristics. We began this effort during the proposal process by producing a preliminary risk assessment based on our experience with similar large-scale undertakings. The risk assessment looks at all operational areas in addition to general project-wide possible risks which in theory, are inherent in any complex, large-scale project. As we progress through implementation, the team members) for each MMIS development and business process area, together with input from the Department, add their contributions to the initial risk assessment. Throughout the start-up and implementation phase, the team is constantly

alerted to anticipate and watch for new risks, assess previously identified risks, and sound the alarm to execute approved mitigation processes should a risk trigger event approach or occur. New risks and updates to known risks are maintained in the project's risk profile on the Project Portal.

Risk sources may be internal or external and they may be generated from issues arising during the course of the project. For example, identified risks could be issues related to loss of connectivity, abuse of privacy information, inability to hire a sufficient number of staff in time, loss of prior contractor staff to other employment opportunities, or facilities problems. The best way to address risk is to identify it early and prevent, reduce, or avoid the risk from happening. We review anticipated risks and develop a mitigation plan for those risks.

Addressing risks requires management attention and clear definitions of responsibilities and expectations. During start-up the Account Manager provides the implementation project team with specific roles and clear responsibilities, which include communicating issues, notifying stakeholders of risks, and mitigating risks.

Risk Management Plan

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Figure 8-14. Risk Management Plan. Team Noridian's Risk Management Plan is based on our implementation experience with large scale projects such as an MMIS implementation.

Risk management consists of open communication as we conduct implementation tasks and activities. Our organizational structure ensures that we have the assistance of the project leadership involvement, as needed, to mitigate all risks in a timely manner while staying on schedule and budget.

8.2.7.7.4 Issues Management Plan

RFP Section 6.2.3.7.4

Team Noridian's Issue Management Plan establishes the processes we implement to identify issues, assess them, and develop and review plans to address them. The issue management process is both reactive and proactive in nature. As a reactive process, issue management responds to incidents reported to Team Noridian. As a proactive process, we seeks to identify potential problems before they impact the project. An issues management plan outline we have used for previous engagements is provided in Figure 8-15. This and all deliverable formats are subject to Department review and approval.

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Figure 8-15. Issue Management Plan. Team Noridian's Issue Management Plan is based our experience with large scale implementation projects.

The PMO will meet on a periodic basis (to be defined during project initiation) to review risks and issues, assign staff to address them, and if necessary to escalate items. The PMO will:

- Review all new issues and identify the business owner and resolution path (workgroup responsible for performing analysis and formulating alternatives, group responsible for forming a recommendation, and the group responsible for the final decision) and priority;
- Ensure that issues are documented in Project Portal and documentation is current;
- Review all open issues and status weekly; and
- Approve resolution and closed issues.

The Department will also participate actively in the issue management process. The Department will review and sign off on all new issues and recommendations.

Issues may also be closed when a final decision is reached by the appropriate decision makers from Team, Noridian and the Department, by changing the issue to a risk, by creating a Change Request, or by incorporating project tasks and resource assignments into the work plan.

As issues are identified and presented to the PMO, the PMO assigns responsibility to an owner to analyze the issue, identify alternatives, and present those alternatives to the appropriate decision makers. Ad hoc workgroups may also be formed to assess issues.

In addition to keeping the Department apprised of new developments through continuous collaboration, Team Noridian's goal is to minimize the impact of changes on the project. This goal is accomplished as issue management identifies and corrects the underlying causes of problems so that the problems do not occur repeatedly. Our structured approach to issue management provides the basis for successful containment and resolution of issues as well as provides the framework for analyzing and evaluating issues. It defines a strategy for gaining closure quickly and effectively. Team Noridian's Issue Management Process follows a straightforward approach that is used across the project:

- Identify and prioritize the issue;
- Develop alternative solutions;
- Select and implement the solution; and
- Monitor to completion to ensure the issue is solved.

Lastly, the issues management plan will include procedural descriptions and automated reporting processes for action items resulting from issues.

8.2.7.7.5 Quality Management Plan

RFP Section 6.2.3.7.5

A Quality Management Plan outline we have used for previous engagements is shown in Figure 8-16. Included in the Quality Management Plan are the process, template and

Quality Management Plan

1. Overview
   - 1.1. Date of Issue and Status
   - 1.2. Issuing Organization
   - 1.3. Approval Authority
   - 1.4. Updates
2. Scope and Background
3. Reference Documents and Standards
4. Glossary
5. Quality Management Overview
6. Quality Management Policies
7. Quality Management Process Overview
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10. Quality Management Activities
    - 10.1. Quality Management and Reporting
    - 10.2. Quality Assurance and Quality Control
    - 10.3. Quality Audits and Corrective Action
    - 10.4. Internal Quality Management Administration and Recordkeeping Activities
11. Quality Management Process Evaluation and Improvement
12. Quality Management Plan Change Procedures and History

Appendix A - Quality Management Processes, Checklists, Reports and Forms

1. Processes
2. Checklists
3. Reports
4. Forms

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Figure 8-16. Quality Management Plan Outline. Quality Management is embedded within all of our tasks and activities to ensure the Department that our commitments are met.

timeline. This and all deliverable formats are subject to Department review and approval.

Team Noridian will produce a Quality Management Plan (QMP) that will apply to all phases of the contract. It will be updated before the start of each phase Page: 27
with processes, staff, resources, and tools specific to that phase, and annually. The plan will identify quality requirements and standards for the project and documents how the project will demonstrate compliance. Quality management ensures proper internal controls are in place and validates review sign-offs, documentation, requirements tracking, and Department approval of all deliverables. The QMP establishes the organization, roles and responsibilities, and processes and procedures for the Quality Management and Control Unit. It also establishes the quality standards and processes that will be employed across the project.

8.2.7.7.6 Staffing Management Plan

RFP Section 6.2.3.7.6

As part of this proposal, Team Noridian developed components of what will become our Staffing Management Plan. This information includes:

- Organization charts for each phase with a description of the roles and responsibilities of assigned personnel (contact information will be added to this when we submit the formal plans)
- Representative job descriptions for each position
- Our approach to recruitment
- Information on our key personnel and their qualifications
- Key personnel resumes and letters of commitment, when applicable
- Our processes for replacement or changes to key personnel, if needed
- Policies for job rotation and coverage during vacations or time off for sensitive positions
- Our procedures for conducting reference and background checks

Team Noridian will base its Staffing Management Plan on plans we have used successfully on past projects. Our proposed outline is shown in 8-17. We understand that this outline is subject to Department review and approval.

At the beginning of start-up and implementation, we will compile the above information and other Team Noridian and Department required staffing details into our Staffing Management Plan. We will develop Staffing Management Plans for each subsequent

Staffing Management Plan

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2. Staffing Management Policies
3. Staffing Management Process Overview
4. Staffing Management Responsibilities
5. Staffing Management Organization
6. Staffing Management Orientation and Training
7. Staffing Management Costs and Schedules
8. Staffing Management Process Description
8.1. Staff Planning and Estimating Approach
8.2. Staff Recruitment
8.3. Staff Hiring, Interviews, and Background Checks
8.4. Staff Management, Monitoring, and Evaluation
8.5. Staff Recognition and Awards
8.6. Staff Rotation and Coverage
8.7. Staff Knowledge Transfer
8.7.1 Staff Onboarding (Orientation)
8.7.2 Job Specific Knowledge Transfer
8.7.3 Personal Development
8.7.4 Management Training
8.7.4 Cross-Training
8.8. Key Personnel and Alternates
8.9. Organization Charts and Contact Information
8.10. Roles and Responsibilities
8.11. Job Descriptions
9. Staffing Management Process Evaluation
10. Staffing Management Communication
10.1. Process Documentation and Reporting
10.2. Coordinating with Stakeholders
10.3. Coordinating with Interested Parties

IAMMIS8 075

Figure 8-17. Staffing Management Plan Outline. Team Noridian's Staffing Management Plan is based on plans we have used on other large scale projects and will be tailored to meet all of the Department's requirements.

phase and submit them to the Department for review and approval prior to the beginning of each phase. We will also provide annual updates to each of the plans and understand that if the Department finds any staffing deficient, that we will revise the plan within 15 days and employ any required additional staff at no cost to the Department.

Staff Management Tools

Team Noridian will use the following tools for staff management activities:

- Microsoft Project for development of WBS, schedules, and allocating resources
- Measure, Monitor, and Enforce (MME) system which is used to monitor employee, subcontractor, and unit quality, timeliness, and performance
- Deltek Electronic Timesheets used for employees to record their hours
- Earned value method to track progress and measure completeness of schedule driven tasks such as deliverables or milestones
- Brainshark as our learning management system used to develop knowledge transfer materials and conduct training

8.2.7.7.7 Applications Implementation Plan

RFP Section 6.2.3.7.7

One of the key tenets from our iVision360 methodology is that we provide proven standards, procedures, artifacts, and best practices from our previous implementations which can be leveraged on new implementations. Our iVision360 methodology was built to provide an integrated engineering effort to meet cost, schedule, and technical objectives of our customer. Team Noridian's Application Implementation Plan will document our iVision360 ISDM and other RFP required information to fully communicate our approach to implementing the system.

8.2.7.7.8 Interface Plan

RFP Section 6.2.3.7.8

Our approach to interface management incorporates the two key concepts of reusability and singularity. Team Noridian employs the concept of reusability to interface management in the following ways:

- **Pre-Built MMIS Interfaces.** Base on Team Noridian's experience implementing new MMISs for other state Medicaid enterprises, the new MMIS has an extensive library of pre-built interfaces, which are maintained in the eCAMS Interface Specifications Repository (ISR). These pre-built interfaces can be easily reused and quickly implemented. The benefits to the The Department benefits by reducing implementation time, costs, and risk. In the event a pre-built interface becomes obsolete due to an external system change or requires a substantial modification, the interface will be built as a service within EXACT.
- **Interfaces as Services.** New interfaces built for Team Noridian's new MMIS will be built in EXACT as services and published to the EXACT Service Registry. The EXACT Service Registry uses the Universal Description, Discovery and Integration (UDDI) standard to register services and make them discoverable and available to service consumers for reuse. As with the eCAMS pre-built interfaces, future reuse of these new interfaces can save money and reduce the cost and risk associated with building and deploying new interfaces.
- **Repeatable Processes.** Team Noridian's new MMIS distinguishes itself by using the EXACT SOA infrastructure framework for it integration platform rather than a mere Enterprise Service Bus (ESB). EACT brings the extra value of pre-built services that help accelerate the process of developing and deploying new services. For example, EXACT not only includes a BPEL/BPMN engine in its technology stack but it also includes Orchestration services which helps eliminates repetitive steps in building business processes such as the interface Definitions. The Orchestration services can be reused and refined to greatly reduce the time and cost associated with building numerous interfaces.

Team Noridian implements the concept of singularity to interface management in the following ways:

- **Single Source of Truth.** Team Noridian's new MMIS provides the Department a single source of truth as to the current status as well as change history of all interfaces. This single source is maintained in the EXACT Service Registry as a universal interface catalog, which is updated when current interfaces are modified or a new interface is added. The EXACT universal interface catalog provides the Department one source to manage, tracking, and review enterprise interfaces.
- **Single Source of Access.** Team Noridian's new MMIS leverages the integration power of EXACT and the technology sophistication of eCAMS to provide a single source of access to all relevant information related to the new MMIS interfaces. Interface performance can be access in real-time or aggregated and presented in reports through the eCAMS HealthBeat Dashboard. EXACT's Service Register maintains the universal interface catalog, which includes performance and audit information relating to all interfaces. This information is presented via the eCAMS HealthBeat Dashboard. The advantage to the Department is that Team Noridian's new MMIS provides a single source of access to view the current and historical performance of all interfaces.

Figure 8-18 illustrates Team Noridian's interface management solution, which is based on the new MMIS n-tier SOA. The business processes for the new MMIS interfaces include Scheduling, audit trail, alert and escalation procedures, pre-validation of transfer files, interface performance and error log, error and exception status, and synchronization between the Service Registry and ISR.

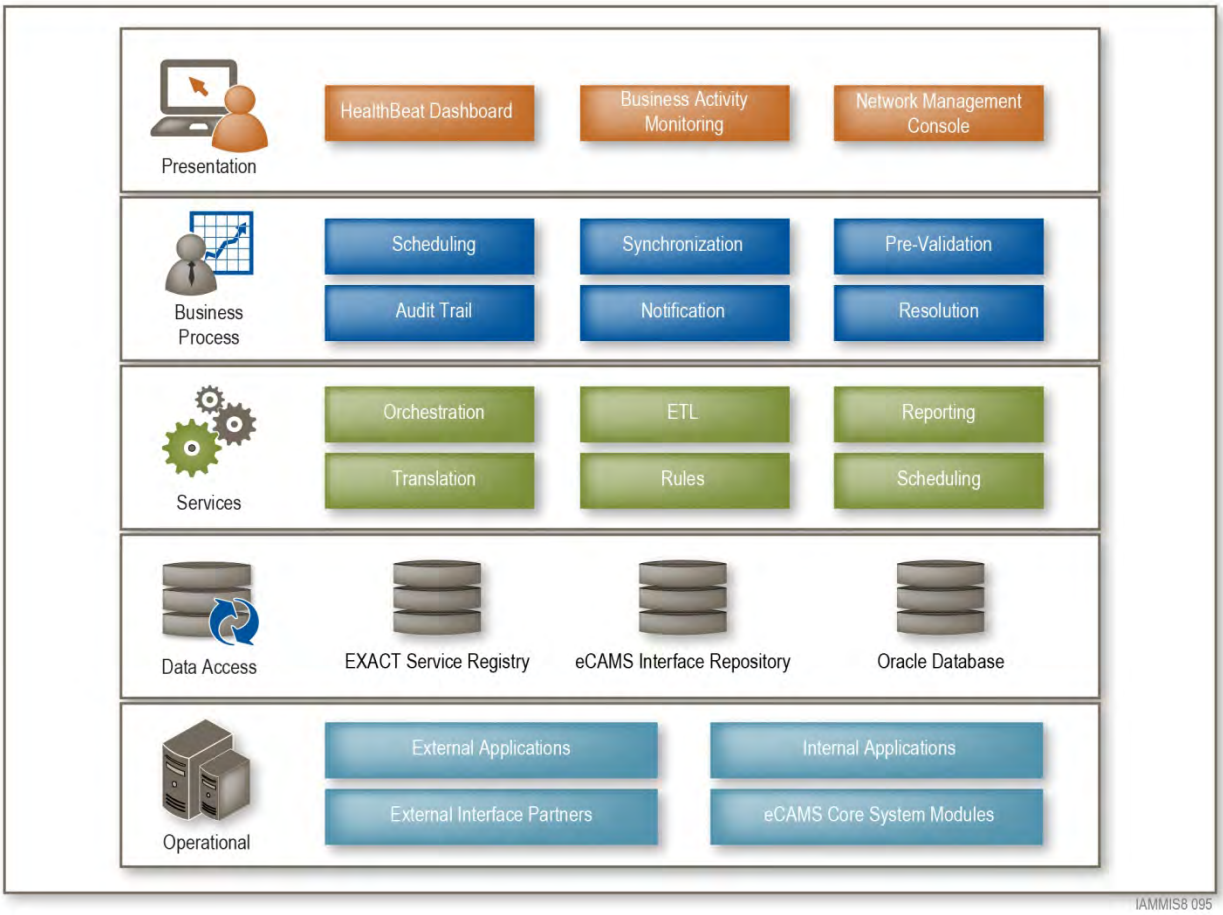

Figure 8-18. N-Tier SOA Interface. Team Noridian's n-tier SOA interface management service, which leverages the integration and orchestration strengths of EXACT and the sophistication and intellectual capital of eCAMS.

In addition to its focus on reusability and singularity, Team Noridian's approach to interface management provides the following capabilities:

- Scheduling and orchestrating data exchanges in a completely-configurable fashion. EXACT's Orchestration services provide the flexibility to address needs of individual interface partners exchanging data with the new MMIS. Combined with its rules, translation, and other services as well as the suite of services inherent to eCAMS, which are accessible through EXACT's Integration Services (ESB, Mediation, and translation services), Team Noridain's new MMIS enables automation of the interface process. As a result, manual intervention will only be required to handle unique exceptions.
- Completes the communication loop by providing feedback to the business partners. Feedback to the system administrator and interface partners as to the successful transmission of data and other pertinent information. This functionality is configurable on an individual interface level.
- Provides automated alerts and notifications to the external system and system administrators when interface events are not occurring according to an interface's Definition.
- Applies checks and balances on the incoming interface data to ensure data integrity, quality, and validity before the data is applied to the new MMIS. Where appropriate, pre-validation of data can include complex business rules, including initiating a workflow in OnBase.
- EXACT's Integration Services, comprising of EXACT's ESB, Mediation and translation services, controls the data traffic between the new MMIS and the external interfacing systems.
- Provides data transfer security. The web service and file-based interface framework provide a robust framework that transmits data in a secure manner. When implementing Web services and file-based, interfaces, this implementation adheres to the Health Insurance Portability and Accountability Act (HIPAA) security guidelines. An internal communication framework also provides a secure communication path between the eCAMS core system and the EXACT framework.

Team Noridian's interface management approach to automate the management and monitoring of the new MMIS interfaces include the following:

1. Team Noridian will document all external system interfaces in Interface Control Documents (ICD) (Deliverable 3.5) to document the inbound and outbound interfaces with systems external to the MMIS. The ICDs will include the message structures and protocols, data structures, mapping logic, business process and rules, audit trail and error messaging requirements, escalation procedure, notification channel, scheduling, and other pertinent interface information (collectively, an interface's "Definition"). The ICDs will be organized by business process area and will be further categorized by the set forth in the Interface Plan section below.
2. Pre-built eCAMS interfaces that align with the current MMIS external interfaces set forth in RFP Section 7.1.5 will be modified as needed in accordance with each interface's definition. The definition will be stored in the eCAMS ISR.
3. New interfaces will be built according to the requirements set forth in the applicable interface Definition. The definition for each interface will be published as a service to EXACT's Services Registry, which uses UDDI standard to store and register services.
4. The business process for each interface will be determined by its Definition. The process will be built using EXACT's Orchestration services, which leverages and enhances the capabilities of the ActiveVOS BPEL/BPMN engine used by EXACT.
5. EXACT will automatically synchronize the contents of the ISR and the EXACT Service Registry, updating the EXACT Service Registry on a predefined schedule as well as upon a triggering event, such as a modification of an eCAMS pre-built interface.
6. EXACT's Service Registry will maintain a universal interface catalog that provides a single source of truth as to the current status and historical changes for all interfaces.

7. Real time access and reporting capabilities will be available via the eCAMS HealthBeat Dashboard. Figure 8-19 illustrates the synchronization service and universal interface catalog maintained by Team Noridian's new MMIS.
8. In the event of a transfer error or failure, EXACT will initiate the alert and escalation procedures according to the interface's Definition stored in the Service Registry. EXACT supports multiple channels of communication including email, Simple Network Management Protocol (SNMP) and can send alerts to a Network Management Console or Network Operation Center. EXACT also supports the use of Business Activity Monitoring, which can be access through the eCAMS HealthBeat Dashboard.
9. In addition to automating the management and monitoring of interfaces, EXACT also inherently provides the ability to automate pre-validation of data prior to upload to eCAMS. EXACT's dynamic capabilities can support simple pre-validation rules as well as complex rules which may require access to data located on internal Department systems or external third-party systems.
10. Likewise, EXACT can enable the automation of error handling and exception resolution. An automated process can include reconciling transfer data with updated information located either internally or externally to the Department.
11. EXACT automatically produces a full audit trail of all service activities for an interface. This information, including error logs, exception resolution status, and success or failure of any particular transfer is accessible via the eCAMS HealthBeat Dashboard.

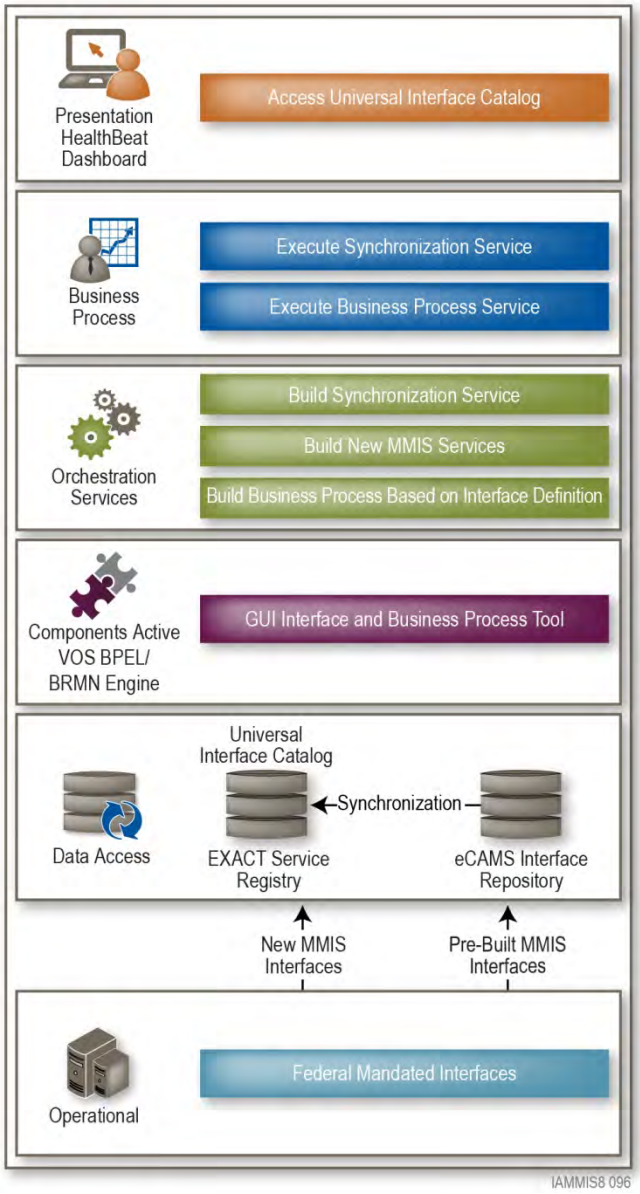

Figure 8-19. Team Noridian's Universal Interface Catalog and Synchronization Service. This catalog provides the Department a single source of truth and access to the current status of interfaces and historical changes.

Team Noridian's new MMIS recognize the following four interface functional groups:

- **Federally-Mandated Interfaces.** These are data exchanges and sources such as Healthcare Common Procedure Coding System (HCPCS), Correct Coding Initiative (CCI), and Relative Value Unit (RVU) established by the Centers for Medicaid & Medicare Services (CMS), and are required to support certification and critical business processes for the MMIS system. Many of the federally-mandated interfaces are pre-built for the eCAMS core system. These interfaces utilize data services to upload data elements into the target system. Any modifications to handle MMIS-specific usage will be accommodated using the business rules engine. Figure 8-20 illustrates the process for eCAMS pre-built federal mandated interfaces.
- **Intra-application Interfaces.** These are data exchanges that are executed between different applications or systems of the overall MMIS system. These interfaces include data exchanges, such as those between the document content repository and the claims adjudication engine, or pharmacy point of service (POS) systems and the financial payment engine. These interfaces are executed to handle data and process consistency between the different applications. For example, the payment process involves data transfer from the claims adjudication engine to financials, and then back again with the warrant or check data. This data interface, instead of being hard wired, is implemented as an asynchronous process and utilizes the EXACT Framework to route the data as illustrated in Figure 8-21.

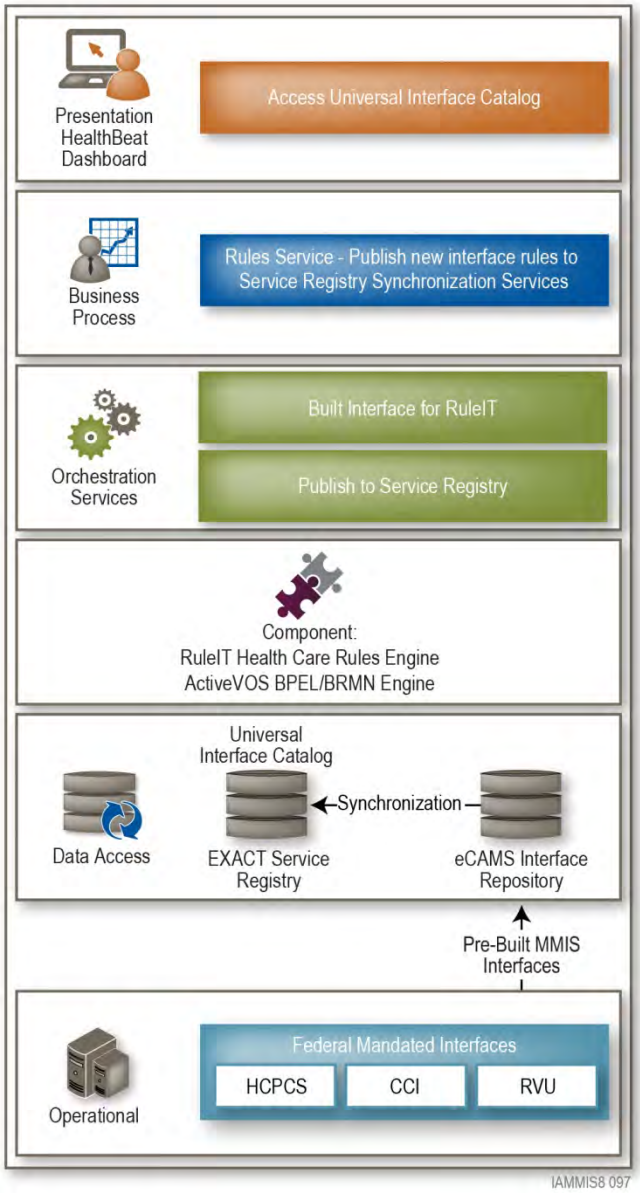

Figure 8-20. Federal Mandated Interfaces. We illustrate the process for eCAMS pre-built federal mandated interfaces.

- **Intrastate Agency Interfaces.** These are data exchanges that are executed between the MMIS system and other state agencies, such as the state accounting system or the state of corrections. Team Noridian is able to leverage its new MMIS architectural approach and use the EXACT SOA infrastructure framework to standardize the operational model for exchanging data with external state agencies. The EXACT framework will provide a communication hub that will accommodate different communication modes like Secure File Transfer Protocol (SFTP) and messaging-based exchanges. The EXACT framework will also ensure that each trading partner has a well-defined service contract that establishes the required details, such as communication protocol, exception handling, and notification process.

- **Other Interfaces.** These are data exchanges that are established to support communication with other federal, state, and non-government agencies for specific data needs. Team Noridian's new MMIS uses the publish model approach for outbound data feeds that are tailored by EXACT's Orchestration Services and based on the trading partner profile, or pushed directly to the trading partner for transformation.

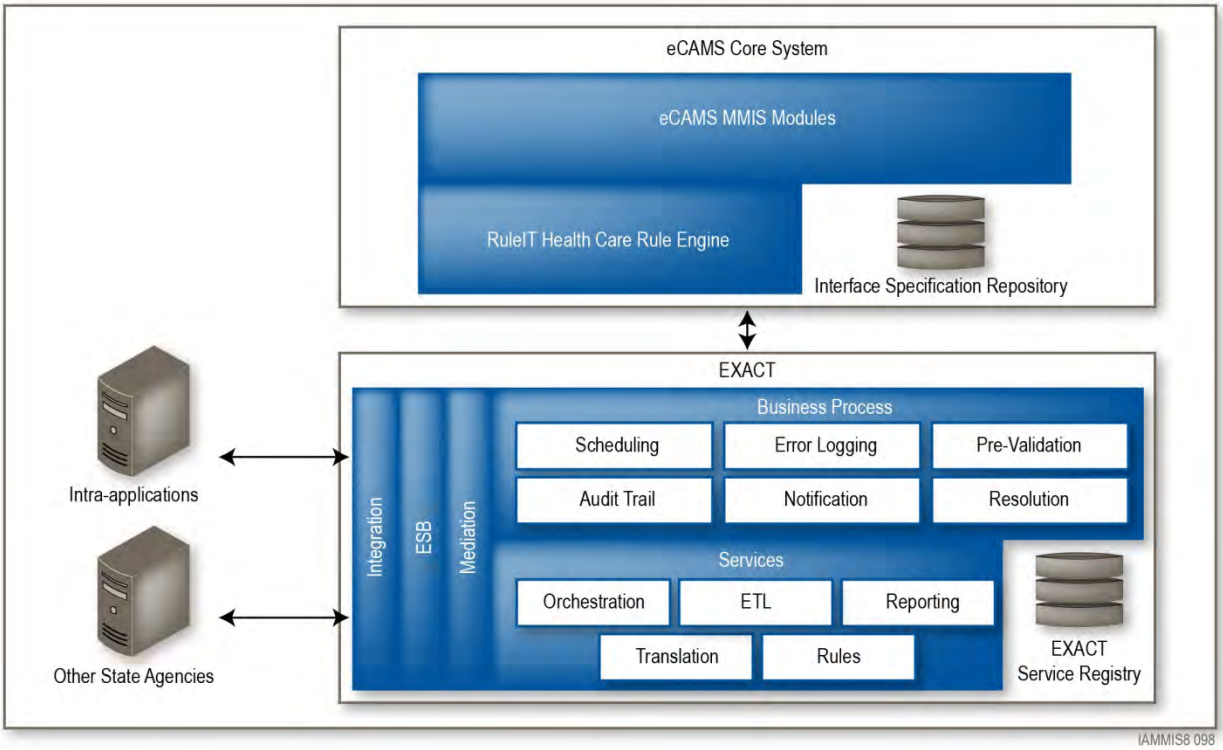

Figure 8-21. EXACT SOA Framework. The EXACT SOA framework prepares the Department to support presently identified interfaces inside the agency, across other agency partners, and outside the agency, while preparing a framework to accommodate new interfaces into the future.

Each of these categories can be further divided into inbound data feeds (data consumed by the MMIS system) or outbound data flows (data published from the MMIS system). The exchange of data with billing providers, clearinghouses, and trading partners using HIPAA transactions is not listed in these categories since EDI exchange is handled through the eCAMS gateway service, which also leverages the EXACT framework.

Electronic Data Interchange (EDI)

Team Noridian has experience collecting and processing state, government and commercial health care claims since prior to the inception of HIPAA. We have been involved since the beginning in developing, maintaining and operating HIPAA-compliant claims processing systems and have safeguards in place within our systems and operations areas to secure protected health information.

Team Noridian’s solution accepts electronic transactions mandated under HIPAA in the approved electronic format. Team Noridian’s solution architecture is modularized and can be modified with ease to accept new HIPAA requirements as they are mandated and released.

Our HIPAA-compliant solution to process electronic health care transactions is eCAMS. eCAMS is a robust, comprehensive, and configurable solution to accept, track, and retrieve all current X12 version 4010 and 5010 HIPAA transactions. eCAMS is presently modified to implement X12 5010 transactions for the Department of Washington and the Department of Michigan. Team Noridian will leverage this

implementation experience from these states while incorporating 5010 and D.0 transactions for the MMIS to ensure ongoing HIPAA compliance.

The complete EDI solution also includes validation and translation software from EDIFECS, an industry leader whose HIPAA transaction processing software is in 26 out of 50 state Medicaid agencies. We use EDIFECS for validating the HIPAA EDI transactions for X12 syntactical and HIPAA implementation-specific rules. After the inbound file is pushed to the internal file server from our EDI gateway, the validation (EDIFECS) process validates the file against the HIPAA transaction standard. Failures are classified as Type 1 through 7 as required by the Strategic National Implementation Process (SNIP). Acknowledgment transactions, such as TA1, 997, and 999, are created at the end of validation and pushed to the EDI gateway. eCAMS also creates proprietary acknowledgment files that render HIPAA acknowledgments in a user readable form to assist operations personnel during their provider calls.

The translation component uses EDIFECS to convert the HIPAA files to a proprietary Intermediate Record Layout (IRL) format. The translation process also converts IRL format to HIPAA EDI format for outbound transactions, such as the 835, 820, 834, 277, 277U, and 271. Use of this COTS product helps the Team Noridian leverage the advantages of industry proven solutions in providing effective services to the provider community and helps maintain compliance with evolving HIPAA standards.

Interface Implementation Approach

As set forth above, Team Noridian will document all external system interfaces in Interface Control Documents (ICD) (Deliverable 3.5). Team Noridian's approach to requirements validation, architectural design, and integration of interfaces is to conduct iterative sessions by business process area team in tandem with the functional integration activities. In fact, the business process area teams will have ownership of their associated primary interfaces. We have learned from experience that if we centralize interfaces under a separate team which is not integrated with the business process area teams, there is a higher risk of interface requirements being missed or not being addressed properly and may result in the discovery of potential issues with interfaces late in the lifecycle. The analysts and SMEs on each business process area team from both the Department and Team Noridian will be the most knowledgeable in the business rules and data needs of the Department and should be responsible for interface requirements within their areas of expertise.

There will be numerous points during architectural design, configuration, and integration which the Department will be needed to provide relevant information to Team Noridian and participate in the actual collaborative requirement and design activities. While it is Team Noridian's responsibility to validate the requirements and adequately document the interface design, the Department is responsible for providing requested information on the existing legacy system interfaces and business requirements; making staff available to participate in the collaborative sessions and interviews; and providing assistance to validate the interface data layouts and understand the data dictionary. The State will be requested to attend the collaborative iteration sessions and walk-throughs of the ICD deliverables before they are formally submitted by Team Noridian.

Interfaces will be iteratively tested in parallel with the business process area iterations during the Configuration and Integration task. As the business process area teams are conducting functional integration testing during interim releases, the interfaces will also be tested to the most extent possible. Interfaces will be fully tested during the end-to-end testing of the System Integration Test phases and will be tested again through end-to-end scenarios by the Department during UAT and ORR.

8.2.7.7.9 Change Management Plan

RFP Section 6.2.3.7.9

Team Noridian will produce a Change Management Plan during project start-up and maintain the plan throughout the life cycle of the project. Initially, the plan will focus on the start-up and implementation

phase and will be updated periodically as required. Well before transition to the operations phase, the change management organization, staffing, roles and responsibilities, processes, forms, reports, and tools will be reviewed and updated as required to accommodate operations and maintenance. The plan will then be reviewed and updated, if required, after each major maintenance/enhancement release.

Change Management consists of the tools, people, and process for planning and coordinating the implementation of all project changes in a logical and orderly fashion. Change management covers the entire project life cycle from inception to retirement. The basis objectives of change management are:

- To minimize the adverse impact of any necessary changes of the requirements and design on the project during Implementation and any changes on system integrity, security, and service to the project during Operations,
- To allow the coordination of planned changes in order to provide a stable production environment.
- To maximize the productivity of the people involved in the planning, coordinating, and implementing of "quality" changes.

The key to maintaining control of changes throughout the project life cycle is to create and maintain a viable change control plan, and to have the discipline to follow the process. This will result in a better, more stable and capable system; with reduced time and cost needed to manage and implement needed changes to the system.

Figure 8-22 provides the outline for the Change Management Plan we have used for previous engagements. This and all deliverable formats are subject to Department Review and Approval.

Change Management Plan

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Figure 8-22. Change Management Plan Outline. Team Noridian's change management processes have been successful conducted on multiple MMIS and other health information technology projects.

8.2.7.7.10 State Responsibilities

RFP Section 6.2.3.7.10, Requirement a

Team Noridian will provide project management plans within 45 days of award for Department review. Team Noridian anticipates a 10 day review cycle for plans.

8.2.7.7.11 Contractor Responsibilities

RFP Section 6.2.3.7.11, Requirements a through j

Team Noridian will provide the Department project management plans for review and approval within 45 days of contract award as shown in the project work plan in submitted in Tab 6.

8.2.7.7.12 Performance Standards

RFP Section 6.2.3.7.12, Requirements a through k

Team Noridian will provide the department project management plans within 45 days of contract award as shown in the project work plan submitted in Tab 6.

8.2.7.8 Contract Deliverable Procedures

RFP Section 6.2.3.8

Team Noridian understands the Department's timeline for review and approval of contract deliverables is an aggressive benchmark that can only succeed if the Department understands the format and content of the deliverable to be approved. Deliverables cannot be needlessly lengthy or contain information not pertinent to the scope of work to be reviewed. Team Noridian has also learned from experience that many deliverable reviews are better facilitated through collaborate deliverable walkthroughs or demonstrations, where Team Noridian and the Department walk through the deliverable, whether system or document based, and explain how the requirements have been met.

Team Noridian appreciates that the Department plays a key role in the deliverable process and needs to plan for the availability of the necessary resources to facilitate that procedure. We have carefully considered all of the Department’s’ stated responsibilities related to each deliverable and have included all of the required review and re-review steps in our project work plans to support the Department’s planning. All deliverables are included in our project work plan and are clearly marked in the Indicator column as "Deliverable”. In addition, our tasks are all deliverable-based so that all associated tasks and milestones are grouped to show relation to completion of each Department required deliverable.

Team Noridian develops Deliverable Expectation Documents (DXD) for each contract deliverable. These DXDs describe the proposed format and content of each deliverable and once approved, are used by staff members to produce the deliverable. Team Noridian understands that all DXDs are subject to the Department’s review and approval before the deliverable can be started and we build tasks and time into our project work plan to handle this initial review. No work will begin until the DXD is approved, and Team Noridian understands that the department may reject deliverables that do not conform to the approved DXD. Team Noridian has a library of documentation from previous projects and implementation and can often provide examples of prior deliverables, in addition to the DXD.

Before submitting any DXD or deliverable to the Department, Team Noridian will execute our internal review process which includes a preliminary walkthrough with management and quality assurance staff to introduce them to the deliverable format, purpose, and suggested content. Following that walkthrough, we perform an internal quality assurance review, any re-work based on that review, and subsequent management review and sign-off on the submission. These internal steps help to ensure that the DXD or deliverable as submitted will meet expectations.

Team Noridian's deliverable creation, review and approval process is described in Figure 8-23.

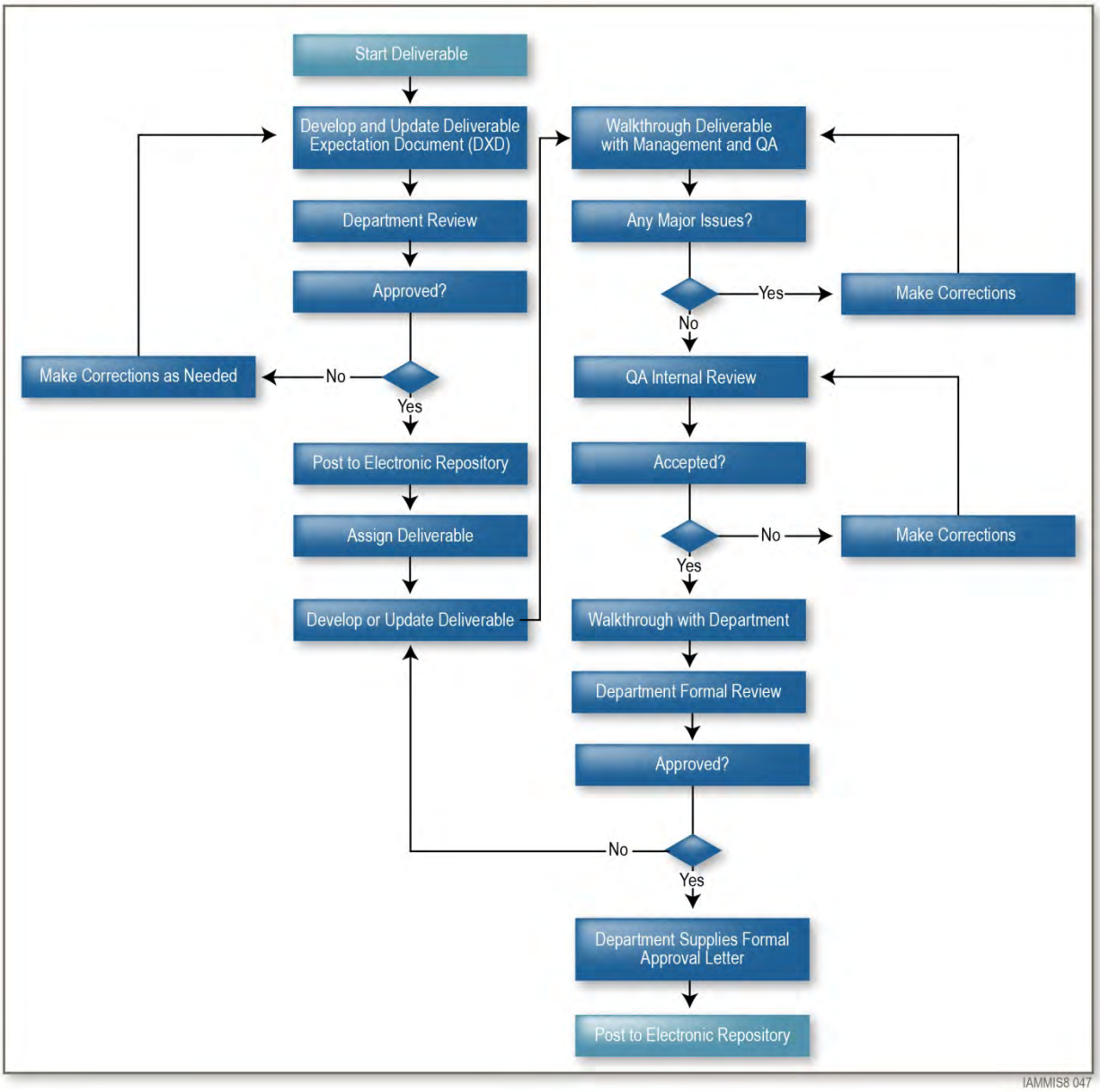

Figure 8-23. Deliverable Process. Based on prior experience in MMIS projects and work with the Department, Team Noridian has developed a deliverable creation and approval process to ensure deliverables meet Department expectations.

We facilitate the deliverable review process by formally scheduling a Department walkthrough at draft submission and one at final submission. In addition, as we have done on past projects, for more complex deliverables, such as design specifications, we recommend walkthroughs during the Department's official review period to facilitate understanding and the resolution of issues. Throughout the development of the deliverable, Team Noridian posts output of the work in process on an iterative basis to our electronic repository which is available to the Department at all times.

We work with the Department through collaborative work sessions such as JAD sessions, for review and validation prior to the first formal submission. These informal reviews allow the Department to preview the document in smaller, more focused pieces. This immediate feedback helps prevent errors in the final product and allows the Department to become more familiar with the deliverable, expediting the formal

review process once the draft is delivered. However, it should be noted that even when sections of the deliverable are made available for incremental review during deliverable development, these portions of the document remain in draft status until they are formally delivered for review. Any incremental reviews during deliverable development are considered internal reviews and do not constitute formal review and acceptance by the Department.

Team Noridian has scheduled 10 business days for the Department to initially review the DXD of each deliverable and then an additional 5 days to review any needed re-work. We have used the same timeframe for the review and re-review of all deliverables with the exception of a few more complex deliverables including the DSD and user manuals where we have scheduled 15 days for the initial review. The review period does not include the day of submission.

8.2.7.8.1 Deliverable Standards

RFP Section 6.2.3.8.1 Requirements a through f

During analysis and design, Team Noridian will conduct a variety of requirements and design sessions, including Joint Application Design (JAD) sessions, with the Department to validate requirements, review existing system functionality, prototypes, and develop the use cases to describe system functionality. These meetings include demonstrations of existing system functionality, discussions of changes or enhancements, and are crafted to elicit feedback from the Department on all aspects of the solution.

Team Noridian's approach includes early use of eCAMS during requirements and design. Team Noridian encourages open discussion between the department and Team Noridian staff throughout design, development and implementation. Questions and suggestions are encouraged, both by project team members and department staff. Requirements documents will indicate, where appropriate, which system area or function was demonstrated to meet the requirements. Design documents will include screen shots, menus, and data specifications from the system and identify system modifications.

Team Noridian will prepare all formal deliverables in writing in a format agreed upon with the department in the DXD.

Before submission to the department, each deliverable will be evaluated against an agreed-upon set of criteria as specified in the DXD and Quality Management Plan. This review includes checks for readability, grammatical, spelling, punctuation and formatting errors, as well as proper usage of common document components such as headers, tables of contents and figures, glossaries, indices, and appendices. This criteria will form the basis for measuring (scoring) the quality of each document prior to delivery. Team Noridian will also ensure each deliverable includes a title page and delivery letter which identifies the project name, deliverable title, deliverable tracking or reference number, version number, approvers, and date.

Team Noridian conducts an internal review of deliverables before it they are delivered w the Department, conducts a walk-through of the deliverable with the Department upon delivery, and works with the Department to understand and incorporate their review comments for final delivery.

A sample generic document review checklist is shown in Figure 8-24. Each checklist is tailored to include the specific review topics of each deliverable.

Category	Grade	Component
Style		Capitalization
		Section numbering
		Page layout
		Use of tables and figures
		Spelling and grammar
		Abbreviations, acronyms

Category	Grade	Component
		Font type and size
		Use of italics, bold, underscore
		Table of contents
		Index
		Glossary
		Cross references
Readability		Overall logical layout, organization, and flow
		Section layout and flow
		Writing style
		Sentence structure
		Acceptable reading grade level
		Visual effectiveness of illustrations and tables
		Amount of info on charts
Content and Technical		Accurate and Correct
		Complete
		Right amount of content and detail
		Relevant and useful
		Easy to understand
		Easy to use (methods)
		Easy to find
		Clear and concise
		Consistency with other, related documents
		Traceability to standards
		Traceability to references
Exercises and Examples		Relevant and useful
		Clear
		Concise
		Easy to understand
		Easy to do
		Appropriate usage
Adherence to Standards		List applicable standards and compliance status:
Other		Video
		Audio

Figure 8-24. Document Review Checklist. Our checklists provide for a thorough and complete review of documents.

For example, when reviewing a requirements specification, each requirement is reviewed against an agreed-upon set of criteria, as is the whole specification. Team Noridian uses the criteria shown in Figure 8-25.

Attribute	Definition	Comments
Fit for use	▪ Features: The total set of product features and quality characteristics that meet the customers' needs under the environment for which the product is to be used. ▪ Freedom from defects: The degree to which the product is free from deficiencies that prevent the product from operating as specified.	N/A

Attribute	Definition	Comments
Correct	▪ Individual requirement: Each requirement is an accurate and precise description of a feature or process of the product. For each output, the range of acceptable input values should be defined. ▪ Requirements specification: For a requirement's specification document to be correct it must accurately and precisely identify the individual conditions and limitations of all situations that the desired capability will encounter and it must also define the capability's proper response to those situations. The Requirements Specification Document (RSD) should define any applicable timing constraints such as minimum and maximum acceptable delay.	Each requirement and the set of requirements must be externally consistent with a higher-level document (e.g., system specification, scope of work).
Unambiguous (clear)	▪ Individual requirement: Every requirement has only one interpretation. At a minimum, this requires that each characteristic of the final product be described using a single, unique term. ▪ Requirements specification: The RSD should be unambiguous both to those who create it and to those who use it. However, these groups often do not have the same background and therefore do not tend to describe software requirements the same way. Representations that improve the requirements specification for the developer may be counterproductive in that they diminish understanding to the user and vice versa.	In cases where a term used in a particular context could have multiple meanings, the term should be included in a glossary where its meaning is made more specific.
Complete	▪ Individual requirement: The stated requirement is complete and does not need further amplification. ▪ Requirements specification: An RSD is complete if, and only if, it includes the following elements: ▪ All significant requirements, whether relating to functionality, performance, design constraints, attributes, or external interfaces. In particular, any external requirements imposed by a system specification should be acknowledged and treated. ▪ Definition of the responses of the software to all realizable classes of input data in all realizable classes of situations. Note that it is important to specify the responses to both valid and invalid input values. ▪ Full labels and references to all figures, tables, and diagrams in the SRS and definition of all terms and units of measure.	▪ Any RSD that uses the phrase "to be determined" (TBD) is not a complete RSD. The TBD is, however, occasionally necessary and should be accompanied by: • A description of the conditions causing the TBD (e.g., why an answer is not known) so that the situation can be resolved; • A description of what must be done to eliminate the TBD, who is responsible for its elimination, and deadline for elimination.
Consistent	▪ Individual requirement: (not applicable to individual requirements statements). ▪ Requirements specification: An RSD is internally consistent if, and only if, no subset of individual requirements described in it conflict. This is true when: ▪ No statement or representation contradicts another statement or representation, ▪ A given term, acronym, or abbreviation means the same thing throughout the document, and ▪ A given item or concept is referred to by the same name or throughout the document.	Consistency refers to internal consistency. If an RSD does not agree with some higher-level document, such as a system requirements specification, then it is not correct.
Ranked (for importance and stability)	▪ Individual requirement: Each requirement should be ranked for importance or stability to indicate either the importance or stability of that particular requirement. Typically, all of the requirements that relate to a software product are not equally important. Some requirements may be essential, especially for life-critical applications, while others may be desirable. Requirements are ranked by importance and /or stability to the customer. ▪ Requirements specification: Requirements are ranked on an individual basis; however, when documenting the set into a requirements specification, the requirements should be reviewed as a set and ranked accordingly (verify individual rankings) to ensure consistency throughout the document.	▪ Stability can be expressed in terms of the number of expected changes to any requirement based on experience or knowledge of forthcoming events that affect the organization, functions, and people supported by the software system. ▪ Importance can be used to distinguish classes of requirements as essential, conditional, and optional. • Critical: The software is not acceptable unless these requirements are provided in an agreed-upon manner. Additionally, these requirements will result in a failure that could lead to a hazardous system state (safety critical), a breach of system security (security critical), or a breach of system privacy (privacy critical). • Essential. Implies that the software will not be acceptable unless these requirements are provided in an agreed-upon manner. • Important: There will be a significant loss of customer utility or customer segments served. If these requirements do not get implemented, the system would function but be marginally useful for some users.

Attribute	Definition	Comments
		• Conditional: Implies that these are requirements that would enhance the software product, but would not make it unacceptable if they are absent. Implies a class of functions that may or may not be worthwhile. This gives the supplier the opportunity to propose something that exceeds the SRS. ▪ CMMI uses the term "appropriate to implement"
Verifiable	▪ Individual requirement: A requirement is verifiable if, and only if, there exists some finite cost-effective process with which a person or machine can check that the software product meets the requirement. ▪ Each requirement is stated in concrete terms and measurable quantities. A process should exist to validate that the product (when developed) will satisfy the set of requirements. ▪ In general, any ambiguous requirement is not verifiable because it does not use concrete terms and measurable quantities. ▪ Requirements specification: An SRS is verifiable if, and only if, every requirement stated therein is verifiable.	Verification methods include: ▪ Test ▪ Inspection ▪ Analysis ▪ Demonstration ▪ Many organizations use testable instead of verifiable.
Modifiable	Individual requirement: (not applicable to individual requirements). Requirements Specification: An SRS is modifiable if, and only if, its structure and style are such that any changes to the requirements can be made easily, completely, and consistently while retaining the structure and style. The structure and style of the requirements are such that any necessary changes to the requirements can be made easily, completely, and consistently. Modifiability generally requires an SRS to: ▪ Have a coherent and easy-to-use organization with a table of contents, an index, and explicit cross-referencing; ▪ Not be redundant (i.e., the same requirement should not appear in more than one place in the SRS); ▪ Express each requirement separately, rather than intermingled with other requirements.	N/A
Traceable	▪ Individual requirement: The origin of each requirement is clear and facilitates the referencing of each requirement in future development or enhancement documentation. The following two types of traceability are recommended: • Backward traceability (i.e., to previous stages of development). This depends upon each requirement explicitly referencing its source in earlier documents. • Forward traceability (i.e., to all documents spawned by the SRS). This depends upon each requirement in the SRS having a unique name or reference number. ▪ Requirements Specification: A requirements traceability matrix is generally used to aggregate traceability of the complete set of requirements to higher-level requirements, product design, and test.	▪ Traceability is especially important to ensure that the product complied with its own requirements. ▪ Traceability between requirements and test cases is critical to ensuring that the system has been adequately and sufficiently verified (tested) against the set of requirements, demonstrating that the system functions in accordance with the set of requirements. ▪ Traceability allows the project to handle "what if" questions, such as "What if this requirement is changed - what is impacted, e.g., design, test cases; and how much the change will cost?" This helps to manage change of the project.
Feasible (Achievable)	▪ Individual requirement: In the knowledge and experience of the evaluator, a given concept, set of requirements, design, test, etc. violates no known principles or lessons learned that would render it impossible to carry out. ▪ Requirements specification: The set of requirements can be accomplished within cost and schedule and is possible to implement.	▪ Requirements are achievable by methods available to the project that will supply or develop required products or services. ▪ Requirements are operationally feasible and can satisfy needs and expectations considering context, assumptions, and constraints of the intended environment. Assure feasibility in terms of affordability and risk. ▪ CMMI uses both Feasible and Realizable as 2 separate attributes.
Understandable	▪ Individual requirement: The user and developer communities are able to fully comprehend a requirement. ▪ Requirements specification: The user and developer communities are able to fully comprehend the aggregate set of requirements.	N/A

Figure 8-25. Requirements Attributes Review Checklist. Our checklist provides for a thorough and complete review of requirements.

8.2.7.9 Cost Management

RFP Section 6.2.3.9

Team Noridian's resource management processes are rooted in our experience in determining and managing staff for large scale development, design, implementation, and operations projects and are based on industry best practices aligned with the Project Management Institute's (PMI) Project Management Body of Knowledge Guide (PMBOK), Fourth Edition. Time (schedule) management processes as defined in the PMBOK, are closely aligned with the PMBOK scope management activities and the work breakdown structures (WBS) that are created as part of the scope management activities are the main input to work plan creation. In turn, the work plan which describes all tasks, activities, deliverables, and schedule required for each project is the main framework used to determine the resources needed for each project.

The purpose of activity resource estimating is to schedule the resources needed to perform the work within the prescribed timeframe. This involves determining the types of resources (skill sets) and numbers of each resource needed for each schedule activity. Our resource estimating uses and considers the following as inputs to the process:

- Organization job descriptions for each position title
- Activity attributes developed during the activity definition step
- Any imposed constraints such as a set deadline
- Past experience with similar tasks on similar projects
- Staff availability information to determine when existing resources, where applicable, will be available

Team Noridian uses a bottom-up/top-down approach to determine the overall number of resources needed to accomplish each activity. We rely on subject matter experts (SME) and historical data used in developing similar project schedules to make an educated assessment of the resources needed and the time each activity will take. As we define and sequence all activities, we continually examine all resulting schedule activities to ensure that they are at the level of decomposition needed to properly manage the task. This level of decomposition differs depending on the type of task. For example, the Department's review of a deliverable might need to be decomposed to a two week level while day-to-day operations tasks, such as system support, can be properly managed at a much higher level of decomposition.

Once we have assigned resources to each of the tasks at the proper level, we perform sanity checks using our past experience along with automated tools such as Microsoft Project to validate data to ensure staff members are not overextended and that the work allocations are achievable and sensible. We adjust the staffing allocations as needed by changing the timeline, or assigning additional resources, or further decomposing the tasks.

Estimates for WBS elements and their associated work packages have already been developed as we developed the proposal; however, these estimates will be further refined and modified during project start-up to reflect the results of contract negotiations and any start-up discussions. Costs will be baselined and monitored and controlled by the Team Noridian PMO. Team Noridian maintains actual versus planned costs for each work package defined by the PMO and our leads and supervisors and required to report and explain variances as a part of our management system. Team Noridian will report cost variance information from the data collected as a part of our normal monitoring process.

8.2.7.10 Project Execution and Control

RFP Section 6.2.3.10

Team Noridian's proven management approach emphasizes proactive monitoring actions to ensure milestones are met and corrective actions are implemented early. Noridian Administrative Services, LLC (Noridian), the prime contractor on this project is ultimately responsible for the success of the project and

for ensuring that the project remains on schedule and within budget. Our account manager is charged with complete oversight of the project and provides a single point of contact to the Department for all items and communications associated with the project.

During the start-up and implementation phase, our account manager is supported by the PMO who serves as a governance and oversight body to help ensure that the project as a whole stays on schedule, stays within budget, deliverables are met, and progress is tracked across all project activities. As the central collection point for all project status during the start-up and implementation phase and the keeper of all risks, issues, and change management artifacts, the PMO constantly and consistently provides a view of overall project status. The PMO along with the Quality Monitoring and Control unit are charged with ensuring processes and procedures are followed and that actions are immediately elevated if the schedule and/or work quality is not meeting expectations. These management and control processes ensure the project is appropriately and proactively tracked across all tasks and that any problem in a specific area is immediately examined to judge and manage its affect on overlapping and/or subsequent tasks.

Team Noridian will measure the completion of tasks through our project work plans (schedules). Our project work plans are product driven so almost all tasks and activities lead to a discernable deliverable, product, or a milestone. When we develop our schedules, we include both the Department's required milestones and deliverables and define our own work products and milestones.

Team Noridian will use earned value (EV) to track progress and measure completeness for the start-up and implementation phase. In the EV method, the project schedule aggregates and extends the expected value to be earned from all deliverables over time. At any given point in the schedule, the “planned value” of the project is the total of all deliverable value that was scheduled to be earned by that point. Planned value is pinned to a particular instance of the schedule (usually the baseline) so that it does not change over the project.

Progress is determined by looking at the work that was actually completed as of a given point in the schedule. Each deliverable in the schedule is assigned a value that has been earned according to its earning pattern. Continuing the document deliverable example, a particular deliverable may have been scheduled to have reached internal approval by the report date, resulting in a planned value of 55% (25% for completion of draft, 30% for internal approval).

Team Noridian will provide the Department with visibility into project status at all times through our routine project management activities including:

- Weekly status meetings
- Weekly, monthly, and quarterly status reports
- Work plan (schedule) updates
- Performance and workload monitoring reporting (during operations)
- Ad hoc communications

Communication is key to our early identification of problems. Management communicates regularly with staff formally and informally and escalate potential problems through regular reporting channels immediately. Ongoing regularly scheduled status meetings with the Department along with ad-hoc meeting requests are major vehicles used to discuss and resolve potential and actual problems.

Any schedule variances will be reported to the Department through these channels and Team Noridian will work with the Department to resolve the problems using our established issues and risk management processes. We understand that the Department will work with us to approve any corrective action plans such as fast-tracking or the reallocation of our resources to help ensure completion of the project within the state time and budget constraints.

8.2.7.11 Status Meetings

RFP Section 6.2.3.11

Weekly project status meetings are a key element of our communications plan to ensure that all stakeholders and Team Noridian are kept abreast of the latest information regarding the performance of the project and ongoing operations. Team Noridian will coordinate with the Department to establish the schedule, processes, governance, rules of engagement, and membership for the project weekly status meetings during the project start-up period. From time to time we may revise the membership as the project progresses through the systems development life cycle (SDLC). For example, more test team representation may be necessary during the development and testing tasks than during design tasks. The status meeting will be chaired by the Department PMO and supported and led by the Team Noridian Account Manager and the PMO staff. Team Noridian understands that the Independent Validation and Verification (IV&V) and Quality Assurance (QA) Services vendor may participate in these meetings.

Team Noridian will prepare the agenda for each project status meeting at least 24 hours prior to the meeting, if not earlier, and submit that to the Department for approval prior to distributing it to other participants. Project status meetings are intended to ensure that all team members understand the overall status of the project; in particular, those work plan tasks assigned to them. The meeting will help the team understand the latest accomplishments, current tasks status, which corrective actions for any variances between the current project statuses are required, any other project work plan adjustments that are needed (subject to formal change control should key dates change the approved baseline), and all upcoming key events. The project status meetings will be held at least once per week. Additional meetings may be necessary from time to time, depending upon the project critical path. Team Noridian will record the minutes, key decisions, and action items resulting from the meeting and publish the meeting minutes for within five business days following the meeting in a format approved by the Department. A sample meeting template we have used on other projects is provided in Figure 8-26.

NORIDIAN Administrative Services LLC

MMIS and Core MMIS Operations Project Meeting Record

Meeting Information

Meeting Name:			
Date:		Location / Call-in #:	
Start Time:		Stop Time:	

Meeting Attendees

X	Name	X	Name

Meeting Agenda Items and Minutes

Item No.	Topic/Issue and Related Discussion Items	Presenter
1.		
2.		
3.		

Action Items

Item No.	Topic/Issue and Related Discussion Items	Presenter
1.		
2.		
3.		

Note: Visit the Project Portal for the latest status

Follow-Up Meetings

Meeting	Date

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Figure 8-26. Meeting Minutes. Team Noridian has processes, templates, and procedures ready for the project from day one which will be provided to the Department for review for use on this project.

When possible, the MMIS project portal will be updated in real time during the meeting to record action items, update action item status, and document decisions and agreements reached. Action items will be tracked to closure using the MMIS project portal and the Department will have access to the portal for a truly collaborative and integrated environment.

In addition to the regularly scheduled project status meetings, one meeting each month will have additional time set aside for more focused risk management discussions. Our risk management committee will consist of the same group of staff who attend the weekly status meetings since that group is responsible for the oversight and monitoring of the project. The risk portion of the meeting will review

each of the identified risks, proposed mitigation strategies, and contingency plans. In addition, the group will discuss all outstanding issues and action items that could become risks.

8.2.7.11.1 Weekly, Monthly, and Quarterly Status Reports

Our project status reporting is integrated so that it includes items such as project progress, risks, issues, and any schedule variances. Team Noridian will prepare and submit weekly, monthly, and quarterly project status reports to support the project communications processes and plans. During project initiation Team Noridian will work with the Department and seek approval of the format, media, and schedule of the weekly, monthly, and quarterly project status reports. Status reports are one of the primary vehicles of communications for the project and they are a critical part of Team Noridian's project management control and reporting system.

Weekly Project Status Reports

RFP Sections 6.2.3.11.1, Requirements a through i

The weekly projects status reports will be published on the MMIS project portal at the same time each week at least 24 hours before each subsequent weekly meeting and delivered in hardcopy at the meeting. The reports will include the following Department required items:

- Report on the status of each task in the WBS that is in progress or overdue
- Tasks completed during the week
- Tasks that were not started on the approved date along with:
  - An explanation for the late start
  - A new revised start date
  - Corrective actions taken to assure the task will start on the revised date
  - Corrective actions to complete a delayed task on the original completion date
- Tasks in danger of not being completed on the estimated completion date including:
  - Corrective action plan
  - Explanation of action taken to assure the task is completed on the original scheduled date
- Tasks that were not completed on the originally scheduled dated and:
  - A projected completion date
  - Explanation for the reason for late completion
  - Corrective action to ensure the tasks will be completed on the revised date
- Report on issues that need to be resolved including progress and actions taken
- Report on the status of risks with emphasis on changes in risks, risk trigger, or the occurrence of risk items. This section will also include the progress toward resolution of the risk and actions taken to remedy or alleviate the risk.
- A schedule variance report showing the earned value versus the planned value and any variance
- Status of deliverables

In addition to the Department required elements, Team Noridian will include:

- Attendees scheduled for the next weekly progress review
- Action items and decisions made at the previous weekly progress review
- Status of quality management activities, such as process and product audits

If the Department disagrees with conclusions documented in the weekly status report or requires that Team Noridian modify the weekly status report, we will discuss these items with the Department and take the necessary actions. Any Department comments and the revised weekly status report will be posted on the MMIS project portal.

Monthly Project Status Reports

RFP Section 6.2.3.11.2, Requirements a through n

These reports will contain both quality and quantitative information. Consistent with our philosophy of promoting project management discipline and decision making at the lowest possible levels of our organizations, much of the source of the reporting data will be the individuals on the project teams. Some of the reporting data on the monthly report summarizes the weekly status reports however we also add additional items such as lists of change management requests, executive summaries for presentation to oversight bodies, and status on critical path tasks. The report will be published electronically on the Project Portal by the close of business on the second business day following the end of the month. Authorized Team Noridian and Department personnel have the ability to set up alerts to notify them by e-mail when the report is available for review. Team Noridian will work with the Department during the project start-up period to define the format for these status reports. The report will contain the following Department required elements:

- Complete set of updated and current output from our project work plan (Microsoft Project) including an updated Gantt chart along with the corresponding project schedule in an electronic version. (This is always available on the Project Portal for Department review).
- A description of the overall completion status of the project in terms of the approved project schedule
- Plans for activities scheduled for the following month
- Deliverable status with percentage of completion and time ahead or behind schedule
- Identification of contractor employees assigned to activities
- Problems encountered, proposed resolutions, and actual resolutions
- List of all change management requests
- Risk information including anticipated risks, mitigation strategies, and resolved risks discussed during the monthly risk management meeting described previously
- Any updates needed in the change management strategy or approach
- Testing status and test results
- Proposed changes to the project schedule (if any)
- Financial information related to expenses and billings
- Executive summaries for presentation to management and oversight bodies

In addition to the above items, Team Noridian proposes adding:

- A summary of the earned value performance data and rationale for any deviations greater than our established threshold
- Critical path tasks and results of critical path analysis
- Department resources required for the upcoming period
- Any changes in staffing

If the Department disagrees with conclusions documented in the monthly status report or requires that Team Noridian modify the monthly status report, we will discuss these items with the Department and take the necessary actions. Department remarks and the revised the monthly status report will be posted on the Project Portal.

Quarterly Project Status Reports

RFP Section 6.2.3.11.3, Requirements a through c

The quarterly status reports will be posted to the Project Portal by the close of business on the second business day following the end of each quarter. Team Noridian will provide the following Department required information in the report:

- Complete set of updated and current output from our project work plan (Microsoft Project) including an updated Gantt chart along with the corresponding project schedule in an electronic version. (This is always available on the Project Portal for Department review).
- A description of the overall completion status of the project in terms of the approved project schedule
- A Centers for Medicare & Medicaid Services (CMS) report that meets requirements to be determined by the Department. Team Noridian understands that the CMS central office and regional office require status and progress information for their oversight and budgeting activities. This includes items such as detail against the project work plan and financial expenditures. We will work with the Department during the start-up and implementation phase to develop the specific needs of these reports.

Team Noridian will also provide a series of dashboards that summarize overall project performance over the prior quarter in addition to:

- Executive summaries for executive presentation
- Summarized data from the weekly and monthly reports
- Financial performance information
- Current industry business and technology trends and directions

If the Department disagrees with conclusions documented in the quarterly status report or requires that Team Noridian modify the quarterly status report, we will discuss these items with the Department and take the necessary actions. Department remarks and the revised the quarterly status report will be posted on the Project Portal.

8.3 Implementation Phase

RFP Section 6.3

Team Noridian provides a low risk implementation given that our processes have been honed over more than 3 million man-hours of design, development, and implementation for multiple state and federal government projects.

Team Noridian will configure and implement our proven eCAMS-based platform that has been in production in the state of Washington since May 2010. Our Washington implementation, called ProviderOne, is a certified MMIS using the new certification toolkit. The flexibility and configurability of our rules engine-driven system will enable the Department to be more responsive to legislative, regulatory, and business process changes. Team Noridian proposes not only a proven solution; we are also proposing proven implementation processes, methodologies, tools, and techniques that have resulted in successful implementations resulting in a certified MMIS.

As we will outline in the proposal, our approach and methodology is highly collaborative and involves systematically traversing a series of steps, control gates, and reviews to successfully release system capability over the 32-month overall project schedule. We have blended the structure and discipline of Project Management Body of Knowledge (PMBOK) processes with the Capability Maturity Model Integration (CMMI) for organizational maturity. CMMI Level 2 and 3 processes form the fabric of Team Noridian's iVision360™ information systems development methodology (ISDM). Our iVision360 ISDM is specifically customized for the Medicaid market, and it represents unique blend of the waterfall methodology, iterative agile development, and rapid prototyping.

Team Noridian’s iVision360 consists of an organized, iterative, and agile set of the tasks and activities for configuring, integrating, and testing the new MMIS. Each iVision360 activity is organized around the methods and processes necessary for implementing our eCAMS solution. iVision360 activities represent major bodies of work that must be accomplished to move systematically through the life cycle. Figure 8-27 provides a graphical overview of our iVision360 ISDM.

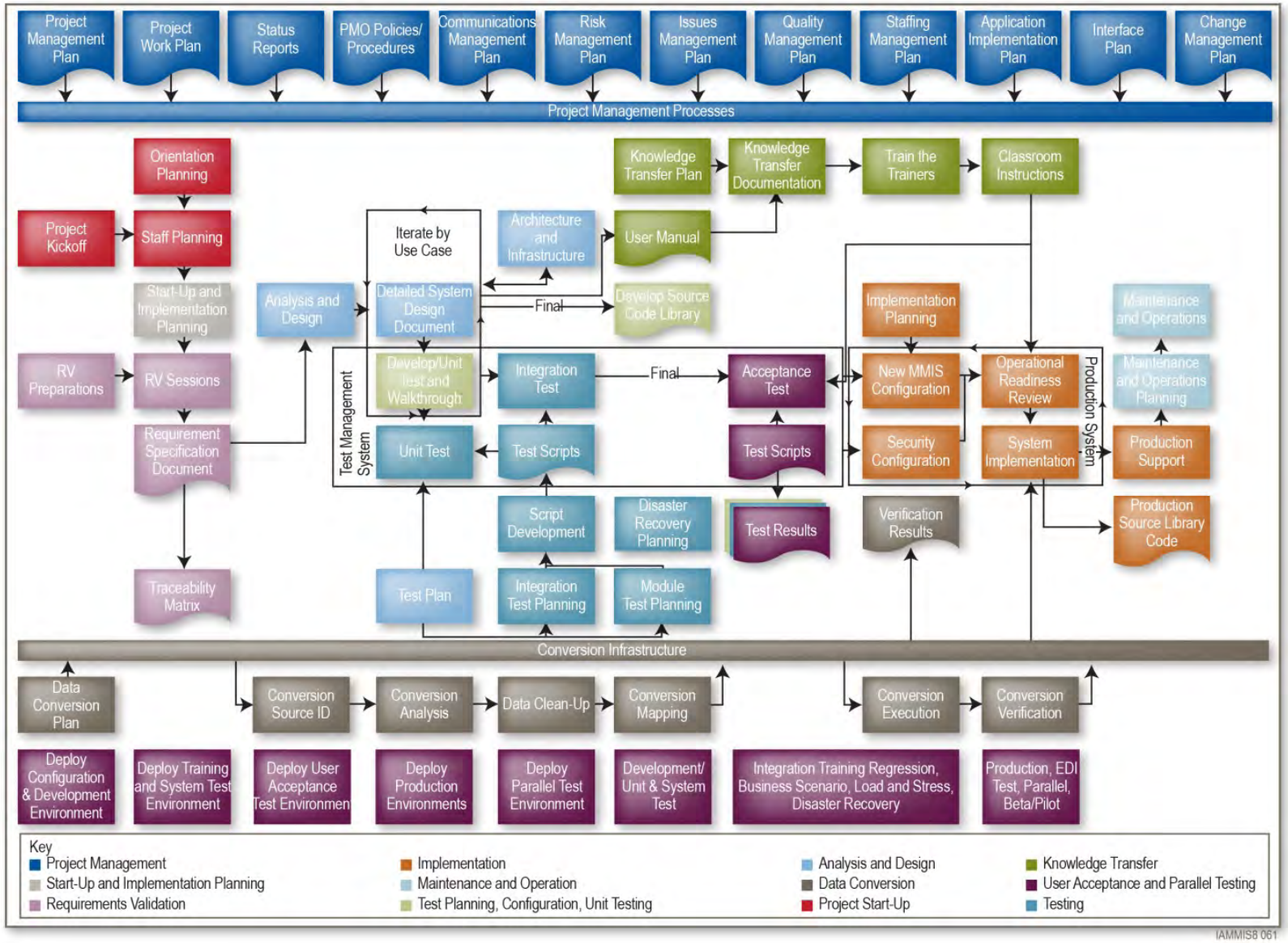

Figure 8-27. iVision360 ISDM Overview. Team Noridian's iVision360 is specifically designed for a successful new MMIS implementation.

We have analyzed and mapped the RFP to iVision360 and our team will use RFP-defined terminology for consistency. Figure 8-28 describes the iVision360 activities and how they map to the RFP.

iVision360 Activity	RFP Phases/Activities	Major Functions	Key Artifacts / Deliverables
Planning	Start-Up	▪ Finalize plans for the project ▪ Develop deliverable expectation documents ▪ Establish project monitoring and control environment	▪ Deliverable expectation documents for each formal deliverable ▪ Project Work Plan ▪ Project work breakdown schedule (WBS) and schedule ▪ Project Management Plans
Orientation	Start-Up	▪ Train project team on processes and expectations ▪ Set "rules of engagement" ▪ Conduct kickoff meeting	▪ Project Orientation Documents
Requirements Definition and Analysis	Implementation/ Analysis and Design	▪ Conduct preparation and establish schedule ▪ Conduct architecture reviews ▪ Conduct Requirements Validation sessions ▪ Ensure common understanding of requirements ▪ Establish requirements traceability	▪ Requirements specification documents ▪ Requirements traceability matrix ▪ Updated requirements database ▪ Initial use case listing
System Design and Development	Implementation/ Analysis, Design, and Development	▪ Perform architecture development ▪ Establish enterprise architecture alignment ▪ Conduct system design in collaborative manner ▪ Perform iteration planning ▪ Perform iterative development, and testing ▪ Conduct technical reviews ▪ Perform source code management ▪ Design and develop reports and correspondence ▪ Design and develop system interfaces ▪ Develop user manuals and online help	▪ Iteration Plan ▪ Architecture and System Requirement ▪ Detailed system design documents ▪ Software ready to test ▪ Test plans ▪ Test cases and procedures ▪ Requirements traceability matrix ▪ Updated requirements database ▪ User manual
Module and Integration Testing	Implementation/ Development (Testing)	▪ Perform module testing once iterative development is completed ▪ Maintain requirements traceability ▪ Develop test scenarios, cases, and data ▪ Automate test cases where possible	▪ Module and Integration test results ▪ Tested software ▪ Automated test cases ▪ Acceptance test cases ▪ Requirements traceability matrix ▪ Updated requirements database
Conversion	Implementation/ Development (Conversion)	▪ Begin the process from day one ▪ Conduct proactive planning and analysis ▪ Perform various steps in process: source identification, conversion analysis, data cleanup, mapping and rules, execution, and validation	▪ Conversion Plan ▪ Conversion specifications ▪ Conversion test validation ▪ Converted data
Acceptance Testing	Implementation/ Development (Testing)	▪ Plan and execute test cases ▪ Develop final requirements traceability matrix ▪ Conduct operational readiness testing	▪ Acceptance test results ▪ Requirements traceability matrix ▪ System documentation ▪ Operational Readiness Test results
Implementation	Implementation	▪ Prepare production environment ▪ Conduct final conversion ▪ Develop implementation checklists ▪ Complete implementation checklists	▪ Implement plan and checklists ▪ Readiness review briefings ▪ User documentation ▪ System documentation
Training	Implementation/ Development (Knowledge Transfer)	▪ Conduct training needs assessment ▪ Develop training plan ▪ Prepare training environment ▪ Prepare training data ▪ Plan and prepare training facilities ▪ Develop training materials	▪ Training Plan ▪ Training materials ▪ Training evaluations
Certification	Certification	▪ Establish library of operational reports ▪ Prepare system documentation for certification team ▪ Develop conference materials	▪ Certification Readiness Plan ▪ Update CMS Checklists ▪ System documentation ▪ Operational reports ▪ Certification Readiness checklists
Maintenance and Support	Operations	▪ Develop maintenance plan ▪ Conduct post-implementation support ▪ System monitoring ▪ System maintenance and tuning	▪ Updated Project Management Plan ▪ Operational Reports

Figure 8-28. iVision360 Activities and Artifacts. Team Noridian has mapped the RFP to iVision360 and has aligned our methodology to meet the Department's expectations.

Our methodology also has many supporting activities to ensure that each software project has the necessary infrastructure. These supporting activities cut across each of the iVision360 activities and they are described in Figure 8-29.

Supporting Activity	Major Functions	Artifacts
Application Support	▪ Data Model Support • Develop scripts to maintain standard data in the system's databases • Develop scripts to maintain the data structure for the system's databases ▪ Product upgrades and capability • Continually updates product capability to meet merging requirements • Maintains product road map	▪ Data model ▪ Data element dictionary ▪ Product road maps ▪ Standardized documentation
Database Support	▪ Manage database configurations ▪ Support movement of test and training database between environments ▪ Perform fine tuning of SQL queries	▪ Database configuration information ▪ Scripts to maintain standard data in the system's databases ▪ Scripts to maintain the data structure for the system's databases
System Infrastructure Support	▪ Configuration Management • Provide release management processes • Support change management • Perform configuration identification, control, and status reporting • Provide baseline management ▪ System and Data Administration • Maintain servers and configuration • Establish and maintain connectivity between sites • Lead performance improvement initiatives	▪ Configuration management plan ▪ Configuration status reports ▪ Release notes ▪ Performance test plan ▪ Performance test results ▪ System configuration information
Quality Management	▪ Product and process audits ▪ Monitor compliance with Team Noridian plans ▪ Review deliverables and work products	▪ Audit schedule and goals ▪ Audit reports ▪ Quality Assurance reports

Figure 8-29. iVision360 Supporting Activities and Artifacts. Team Noridian iVision360 supporting activities cut across project phases, facilitating a successful new MMIS implementation.

Team Noridian's iVision360 ISDM is a complete methodology that addresses each of the RFP-defined MMIS project phases and tasks. Our detailed analysis and planning have resulted in a comprehensive management approach and work plan to achieve the goals and objectives of the RFP. In addition, Team Noridian is proposing the early release of Provider Enrollment and Management prior to the final release of the new MMIS. The Early Provider Release is provided approximately one year prior to the production release of the full MMIS capability.

The Early Provider Release will enable early outreach and training with providers. It will include functionality to enable providers to manage their information through the Web Portal. It will also enable the Provider Management services contractor to begin to improve the quality of provider data. With this release, the system of record for provider data will continue to be the legacy system with updates provided from the Early Provider Release.

The following section describes our approach to analyzing and designing the eCAMS to meet the requirements of the RFP.

8.3.1 Analysis and Design Activities

Team Noridian's analysis and design methodology provides transparency, visibility and collaboration using a proven iVision360 development methodology that is unique to Medicaid system analysis, design and development. iVision360 keeps the customer at the center and provides early system visibility avoiding paper or conceptual aspects to analysis, design and development.

RFP Section 6.3.1, Requirements a through f, and a and b

Design and Development Solution Advantage

Team Noridian's collaborative design methodology leverages our highly configurable and scalable system to provide an efficient, less costly approach to system design and development for the Department.

- System is used in real-time in collaboration with Department during requirements and design to enhance the decision making process
- Flexible architecture which is table driven and rules based to make it easier to modify and configure the system
- Requirements and design result in easy to understand supporting documentation to reduce the learning curve and approval process
- Provides for general and detailed design resulting in all functionality on an integrated platform meeting or exceeding all functional requirements identified in the RFP
- Design can quickly be adapted to incorporate Federal and Iowa Medicaid Program policies
- Provides for incremental deliverables aligned by business area and sub-area making the review process more efficient for the Department
- Team Noridian has a well-defined, proven methodology to ensure the successful completion of requirements validation and design

Team Noridian recognizes that analysis and design is not only the key to establishing a common understanding and agreement with the Department on all critical components of the implementation, but also forms a solid foundation for efficient development and testing. The analysis and design in the iVision360 methodology includes incremental delivery of requirements and design documentation providing a more efficient review of deliverables by the Department. This involves a highly collaborative process using the eCAMS-based MMIS solution as the centerpiece throughout requirements validation and design, resulting in an approved baseline for requirements and design prior to the commencement of development and testing. In this section, we will describe our methodology including the responsibilities of both the Department and of Team Noridian, as well as deliverables, and milestones to accomplish the objectives of the analysis and design:

- Gaining an understanding of the Department and Iowa Medicaid Enterprise Program environment, policies, and business requirements through JAD sessions
- Approach to presenting live demonstrations and system documentation during JAD sessions
- Approach to validating and refining the system requirements through collaborative sessions
- Approach to establishing the approved Requirements Specification Documents (RSD), Architecture and Requirements document and Detailed Systems Design (DSD).

Analysis and design begins with requirements validation and concludes with the completion of the detailed system design. The work completed under the analysis and design is broken down with reference to the Department’s business areas and sub-areas to allow the Department and Team Noridian to plan and execute efficiently by focusing resources on their area of expertise. This approach provides for incremental delivery of the RSD and DSD documentation by business area and sub-area.

The analysis and design activities for the new MMIS project, presented in Figure 8-30, are performed with the support of and monitored by Team Noridian's Project Management Office (PMO). Figure 8-30 also provides the PMO activities, tools, and techniques implemented to manage and control the analysis and design activities and deliverables. The key objectives of the PMO during the analysis and design are to ensure that task activities and deliverables are accomplished within the planned budget and schedule, and to focus on the mitigation of “integration-related” risks and issues that may arise across business areas. Figure 8-30 defines the entry and exit criteria for the analysis and design; and it also includes the project and quality management activities, tools, and techniques.

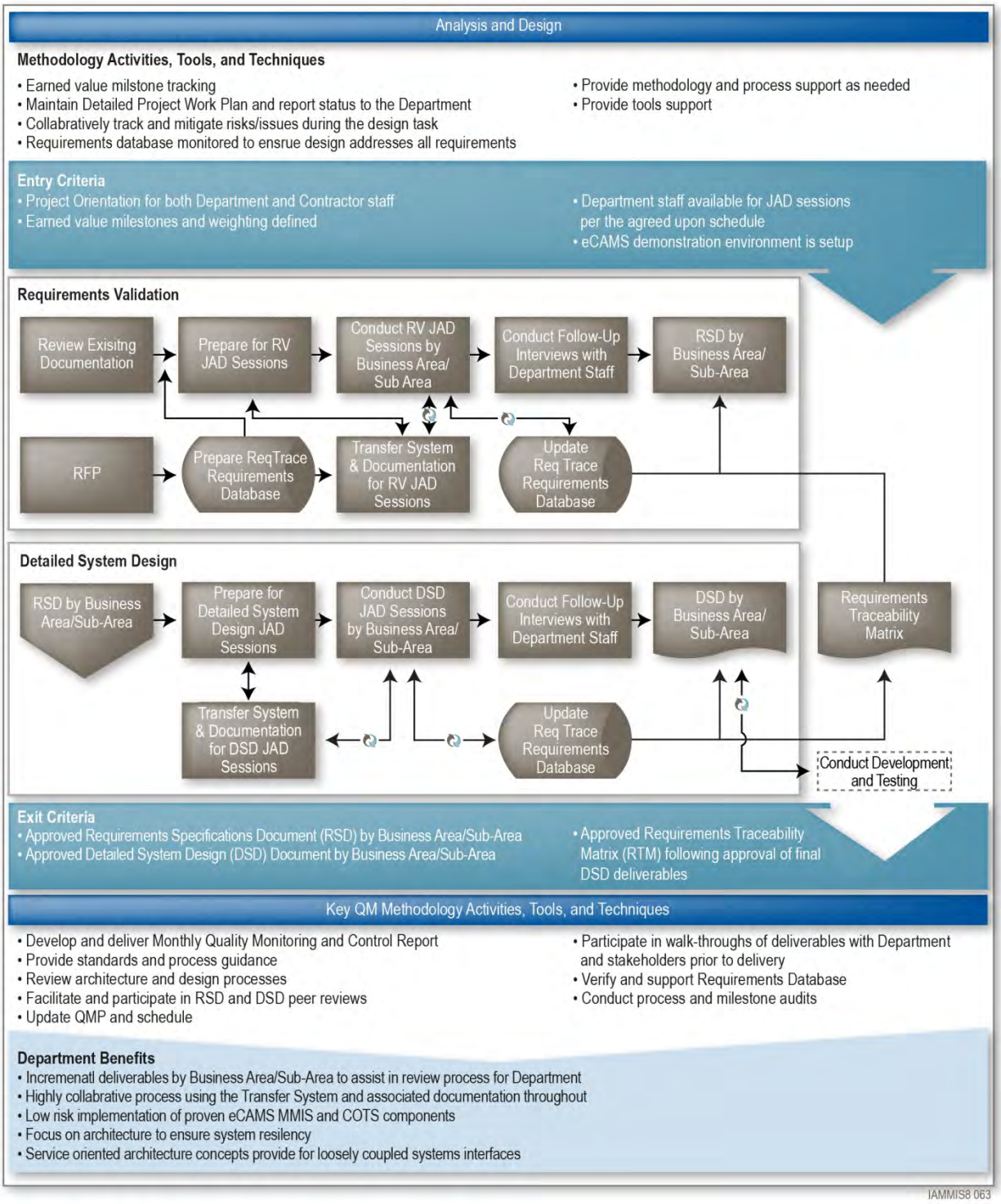

Figure 8-30. Analysis and Design Activities Diagram. Provides a "cue card" to quickly understand the activities and key concepts.

Requirements Validation

Team Noridian's goal is to develop, configure, and modify our solution to meet the RFP requirements and do it in a manner that adds value at every step. We have already started the requirements management process by completely analyzing the full list of business functional (and technical) requirements of the RFP as part of developing our proposed solution and response. Team Noridian has more than a million man-hours of experience in conducting requirements analysis, gap analysis, and requirements management for health care information technology projects for many state and federal customers. In developing the new MMIS solution, we conducted a thorough gap analysis of the requirements from the RFP to fully understand the nature of each requirement and how the requirement would be eventually realized in our solution. We focus on requirements analysis and management because it is a well known fact, demonstrated in countless industry research initiatives, that one of the top three reasons why software projects fail is due to poor or no requirements analysis. Requirements form the baseline from which all successful projects are driven. Given this, the requirements mapping and gap analysis is an extremely important activity. One of the first activities we conducted in responding to the RFP was to customize our standard Capability Maturity Model Integration (CMMI) based requirements management methodology for the new MMIS project. Our goal is to leverage our standard methodology to ensure full coverage for the RFP requirements.

Our methodology consists of two primary steps: (1) establish the requirements database, and (2) perform gap analysis. For the first step, we focused on establishing a baseline of requirements that represents the new MMIS. For the second step, we mapped these requirements to our solution. Team Noridian has conducted this extensive analysis to ensure that there is a complete understanding of each requirement and how every requirement will be eventually realized in the system. We also categorized each requirement using the values identified in Figure 8-31.

Requirement Category	Description
I – Included	Included in the eCAMS solution or COTS component of the solution
C – Customization	System capability is in the eCAMS solution or COTS and configuration is required via table modifications or updates to meet the requirement
M - Modification	System capability is in the eCAMS solution or COTS and software modification is required to meet the requirement
N – New Capability	System capability is not in the eCAMS solution or COTS and requires new functionality via software modification to meet the requirement

Figure 8-31. Requirements Categories. Team Noridian categorizes the requirements to ensure that all requirements are fully understood and realized in the resulting system.

Our project work plan, staffing plans, and overall methodology and approach have been developed based on the result of this analysis. The goal of requirements validation (RV) is to establish a common understanding between Team Noridian and the Department on the meaning and intent of each RFP requirement and each associated response to the requirement. Our requirements validation process will meet the following objectives:

- Validate and refine the requirements specified in this RFP with the Department staff.
- Validate the proposed solution meets Medicaid Information Technology Architecture (MITA) requirements.
- Validate the existing capabilities of the proposed systems/COTS to meet the RFP requirements.
- Verify that the capabilities of the proposed systems modifications will meet the RFP requirements.
- Verify that the capabilities of the proposed systems modifications will meet the RFP requirements.

Once validated, the requirements and associated responses in the approved RSDs will form the baseline of “what” functions the system is required to perform. These functions will be means of measuring that the requirement has been satisfied later during integration and acceptance testing. After requirements validation, the design activities will document the agreements of “how” the system will meet each

validated requirement. Team Noridian will use the RFP requirements and existing documentation as the input to requirements validation. As part of our proposal effort, we conducted a detailed analysis of the RFP requirements and provided a response to each requirement and the degree to which the proposed solution meets those requirements. We will use this analysis as a starting point for RV. Team Noridian will conduct planning activities to prepare for the JAD sessions, including:

- Review existing system and IME documentation to understand the functional requirements of the system and the IME programs
- Prepare the requirements database with pre-loaded RFP requirements and associated proposal responses
- Establish an installation of our proposed solution
- Present the RV approach to Department staff
- Coordinate with Department team counterparts to schedule system demonstrations and JAD sessions

Team Noridian will conduct RV using teams that are aligned by business area similar to the MITA business areas and sub-areas. Each business process area will complete a series of focused JAD sessions. Team Noridian will produce the JAD session agendas for approval by the department prior to the JAD sessions. Team Noridian uses a process that integrates real-time use of the requirements database and the eCAMS solution within the actual JAD sessions. Together, Team Noridian and the Department will review each RFP requirement, review the proposal response to the requirement, and, if needed, enter the proposed modification of the requirement directly in the requirements database during the session. The eCAMS solution will be used to convey how the existing eCAMS solution functionality either meets or partially meets the requirements, where applicable. During the sessions, Team Noridian will document and report the action items to the Project Portal. Our business analysts will also be prepared to ask questions regarding the IME programs, as-is processes, and to-be processes based on the documentation reviews conducted during the RV preparation activities. Our approach allows Team Noridian and the Department to reach a consensus on the meaning of each requirement during the sessions. After each requirement validation session, Team Noridian will produce the session minutes for approval by the Department.

Requirements validation is tightly coupled with the analysis activities for data conversion. In parallel with requirements validation, the conversion team will be conducting data analysis on the source data files. Members from the business area teams will be asked, when required, to attend the conversion analysis sessions, and specific conversion team members will be asked to attend the JAD session to ensure the requirements and business rules between the new MMIS and data conversion are in synchronization.

As each JAD session is completed for each business area, the dedicated team for that business area will begin the iterative development of the RSD for that specific business area. Separate RSDs will be developed and delivered for each business process area, each of which includes their validated requirements.

Our requirements database application is not only used to capture the requirements and the outcome of the JAD sessions, but is also used to trace requirements to their associated work products in design, development, and testing. During RV, we will establish the Requirements Traceability Matrix (RTM) in the requirements database. This will be used throughout DDI to trace requirements to their associated work products. The requirements database has the capability to generate numerous RTM reports based on the needs of Team Noridian and the Department.

As discussed earlier, Team Noridian's methodology and approach is based on having the proposed solution and COTS applications available for demonstrations during requirements validation and detailed design sessions. We refer to the proposed solution during our requirements validation and design sessions to help Department staff visualize how a requirement is currently implemented in the eCAMS solution. By doing so, we are able to more rapidly achieve agreement on how requirements will be realized in the new system and identify if any gaps exist between the requirements and the eCAMS solution, or if any gaps exist between our proposed response to a requirement and the Department’s intent for the requirement.

8.3.1.1 State Responsibilities

RFP Section 6.3.1.1, Requirements a through f

Team Noridian's approach to requirement validation in analysis and design is a highly collaborative effort with close coordination with the Department. There are numerous points during system analysis and design in which it will be necessary for the Department to provide relevant information to Team Noridian and participate collaboratively in the requirement and design activities. While it is Team Noridian's responsibility to validate the requirements and adequately document the design, the Department is responsible for providing requested information on the current Iowa MMIS operations and business requirements; clarifying Department policies, regulations, and procedures; making staff available to participate in the collaborative sessions and interviews; and providing assistance to validate and refine the requirements.

The Department will also be responsible for reviewing and approving new policies and changes to existing policies; attending walkthroughs of the deliverables before they are formally submitted by Team Noridian; and reviewing, commenting, and providing written approvals on all analysis and design deliverables. Figure 8-32 provides specific responsibilities of the Department within our collaborative requirements and design methodology.

Phases	Department Responsibilities
Requirements Validation	▪ Participate in project orientation prior to commencing with requirements validation ▪ Gain an understanding of the system analysis and design methodology ▪ Ensure that Department staff are available for collaborative JAD sessions in accordance with the agreed upon JAD session schedule ▪ Review and approve the agendas to the JAD sessions ▪ Participate in collaborative JAD sessions to validate and refine requirements ▪ Review the scope, purpose and implications of each of the Department's requirements. ▪ Review and provide comments on minutes from JAD sessions ▪ Participate in follow-up interviews, as needed ▪ Participate in walkthroughs of the deliverables before they are formally submitted by Team Noridian ▪ Review and approve the RSDs by business area within 15 days of delivery ▪ Review the initial submittal of the RTM as JAD sessions are completed
Detailed System Design	▪ Ensure that Department staff are available for collaborative JAD sessions in accordance with the agreed upon DSD session schedule ▪ Participate in collaborative JAD sessions to validate the high-level design based on approved requirements ▪ Review and provide comments on minutes from DSD sessions ▪ Participate in follow-up interviews, as needed ▪ Participate in walk-throughs of the deliverables before they are formally submitted by Team Noridian ▪ Review and approve the DSDs by business area ▪ Review and approve the RTM after DSD sessions and documents are completed ▪ Attend and approve backup and recovery demonstrations
Conversion Plan	▪ Provide knowledgeable staff to participate in data conversion activities (e.g., planning, design, documentation, or testing) ▪ Provide existing system documentation and data dictionary for all data required to be converted ▪ Provide source data files to Team Noridian for mapping, development, testing and final conversion of all existing MMIS data ▪ Respond to Team Noridian's inquiries related to the Department's policies and procedures within the work breakdown structure (WBS) schedule to avoid delay of the deliverables ▪ Review, provide feedback, and approve the Conversion Plan ▪ Review, provide feedback, and approve the Data Conversion Test Results ▪ Monitor Team Noridian performance ▪ Coordinate with the incumbent and external agencies where required

Phases	Department Responsibilities
Conversion Design	▪ Assist in identifying source(s) of data and determining the primary source or system of record ▪ Provide, or assist in the process to provide, existing system documentation and data dictionary for data required to be converted ▪ Respond in a timely manner to Team Noridian's inquiries and requests for clarification related to data mapping and system conversion requirements ▪ Provide the layouts, field definitions, field range values, and definitions at the early stages of the project after providing initial documentation, if not previously provided or available from another source ▪ Help Team Noridian understand the primary key of the feed and the relationship to other feeds ▪ Review, provide feedback, and approve data mapping rules.
Conversion Development and Test	▪ Assist in the identification, review, and approval of data cleansing and correction rules ▪ Resolve or coordinate resolution of data correction issues and missing referential values in a timely manner ▪ Provide legacy data from the incumbent within sixty (60) days of the contract award. ▪ Coordinate all communications and additional data gathering between Team Noridian and the current contractor(s)
Parallel and User Acceptance Test	▪ Participate in testing ▪ Monitor the performance of Parallel and User Acceptance Testing ▪ Approve all routines for data conversion before final application to the production version of the system ▪ Report data conversion defects and issues in a timely manner as laid out in the Risk and Issue Management Plan and System Test Plan ▪ Review, provide feedback on, and approve Data Conversion Test Results
Review and Approval	▪ The Department shall review requirement and design documents and specifications regarding changes to the interface, in a timely manner, and provide comments/feedback for correction ▪ The Department shall participate in any discussions to resolve issues and address comments and feedback raised ▪ The Department shall approve all requirement and design documents and specifications regarding changes to the interfaces, upon successful completion of all reviews and corrections of any comments and feedback provided ▪ The Department shall approve all interfaces, after successful testing, before they are implemented
Scope and Requirements	▪ The Department shall provide scope and requirements for each interface indicated in the RFP ▪ The Department shall provide any periodic changes, if any, to the requirements and scope for these interfaces ▪ The Department shall make requests for any new interfaces that may be required and provide the scope and requirements for such new interfaces
Interface Testing and Operations	▪ The Department shall make Department staff available for collaborative sessions in accordance with the agreed-upon Integration test schedule ▪ The Department shall participate in collaborative sessions to schedule and orchestrate testing sessions ▪ The Department shall provide sample data input data files; consume sample outputs produced from the MMIS system; and validate the structure and data ▪ The Department shall provide support for corrective actions to interface files, layouts, and parameters ▪ The Department shall provide credentials and test interfaces for operational readiness through tests to access FTP sites; create and delete submitted files; and verify ability to retrieve posted files ▪ The Department shall provide inputs to the interfaces operational schedule
IT Support	▪ The Department shall provide IT support staff to assist in establishing a network link between Team Noridian's network and the Department's network ▪ The Department shall provide IT support staff to provide ongoing support, help troubleshoot issues, and maintain uptime of the network link between Team Noridian's network and the Department's network

Figure 8-32. Specific Responsibilities of the Department within Our Collaborative Analysis and Design Methodology.

8.3.1.2 Contractor Responsibilities

RFP Section 6.3.1.2

8.3.1.2.1 Review and Analysis of System and Operational Requirements

RFP Section 6.3.1.2, Requirements a through e, and o through q

Team Noridian is ultimately responsible for the RSD, DSD, RTM, Conversion Plan, Test Management Plan, Business Continuity Plan, Disaster Recovery Plan and Configuration Management Plan activities and deliverables under the analysis and design. The RFP has included specific contractor responsibilities to complete this task successfully, including:

- Installing the eCAMS demonstration environment, COTS applications and collaboratively using the eCAMS solution to leverage the existing functionality as a reference throughout requirements validation and design;
- Implementing a proven design and development methodology for modifying and implementing a large MMIS system such as the new MMIS;
- Conducting collaborative sessions, interviews, and walkthroughs to support development of the analysis and design deliverables;
- Preparing and submitting all analysis and design deliverables for review and approval; and
- Working with the Department Project Manager or Department designee.

As discussed in the overview, Team Noridian conducts RV, and DSD using teams that are aligned by business area based on the Department's business areas and sub-areas identified in the RFP. Each business process area will complete a series of focused RV and DSD sessions around those business areas and sub-areas included in Figure 8-33.

The New MMIS Business Areas	Sub-Areas
Member Management	▪ Member Management ▪ Reports
Provider Management	▪ Provider Management ▪ Reports
Operations Management	▪ Claims Receipt ▪ Claims Adjudication ▪ Reference Management ▪ Third Party Liability ▪ Health Insurance Premium Payment (HIPP) Requirements ▪ Reports
Program Management	▪ Program Management Reporting ▪ Federal Reporting ▪ Financial Management ▪ Reports
Program Integrity Management	▪ Program Integrity Management ▪ Reports
Care Management	▪ Managed Care ▪ Managed Care Organization ▪ Primary Care Case Manager (PCCM) and Medical Home and Managed Care Gatekeeper Requirements ▪ Waiver, Facility and Enhanced Department Plan Services Management Requirements ▪ Optional Waiver, Facility and Enhanced Department Plan Services Management ▪ Immunization Registry ▪ Reports
Architecture	▪ Infrastructure - Rules Engines ▪ General Architectural Requirements ▪ HIPAA Transaction Requirements ▪ MITA Technical Requirements ▪ SOA Requirements ▪ Programming Language Requirements ▪ Security and Privacy Requirements ▪ Software Licenses and Maintenance Requirements ▪ Data Quality Control Requirements ▪ Environments Requirements ▪ Web Portal ▪ Workflow Requirements ▪ Electronic Data Management System Requirements ▪ Automatic Letter Generation Requirements
Interfaces	▪ External Interfaces

Figure 8-33. MMIS Requirements Validation, Design, and Development are in Alignment with the MITA Business Areas and the Department business areas.

Where applicable, we have added a sub-area under a business area to include reports. The senior business analyst and their team for each business area will be responsible for the report requirements for that business area. We have learned from experience that if we centralize reports under separate teams that are not integrated with the business areas, there is a higher risk of reports requirements being missed or not being addressed properly and may result in the discovery of potential issues with reports late in the lifecycle. The business area experts on each business area from both the Department and Team Noridian will be the most knowledgeable in the business rules and reporting needs of the Department and should be responsible for identifying reporting and interface requirements within their areas of expertise.

We added an architecture team to oversee the requirements and design modifications associated with common services, including information technology (IT) infrastructure services, interoperability services, security and privacy services, and performance engineering. This team will also be responsible for addressing cross-team touch points and integration.

Business area teams will have a similar structure of resources to accomplish the requirements validation and design of the associated business area; however, due to the complexity of some business areas, the quantity of the resources for each category may differ. The start-up and implementation organizational structure delivered with this proposal provides the specific number of resources for each team. The general structure is as follows:

- Senior Business Analyst
- Business Analyst and/or subject matter expert (SME)
- Programmer
- Tester
- Department designated staff

Team Noridian's iVision360 methodology adopts the Unified Modeling Language (UML) as a method of conveying certain aspects of our system requirements and design. The term “system use case” is from the UML notation. The intent is not to inundate the Department with differing terminology, but rather to articulate complicated concepts using well-defined notations. The following defines a few relevant points regarding terminology:

- **Business Use Case.** A series of steps taken by the Department or Team Noridian staff to accomplish a business process, which may or may not be automated. The draft business use case will be documented by business analysts prior to JAD session and will be updated based on information gathered during the JAD sessions.
- **System Use Case.** A thread of functionality implemented by the system. Requirements are traced to system use cases during RV to ensure that system is built and configured to implement all RFP requirements fully.
- **Actor.** Types of users and other systems that interact with the business or system use case. Please note that the intent is not to identify individually named users as actors but rather groups of users such as administrators and case workers. Actors may also identify external systems such as the eligibility system.

What is a Use Case?

Use cases are functionality descriptions that follow a particular format prescribed by Unified Modelling Language (UML) notation, which is an industry standard for system specification. Team Noridian uses UML as a method of conveying certain aspects of our system requirements and design. Our intent is not to inundate the Department with different terminology, but rather to articulate complicated concepts using well defined, industry standard notations. Relevant items include:

- Actor – Users and systems that interact with, or “use,” the business process or system being documented. Actors are not individually named people but rather groups of people with common interaction requirements. Actors may also identify external systems or processes.
- Business Use Case – A series of steps taken by the Department and FI to accomplish a business process. Requirements are traced to business use cases to ensure it includes all necessary functionality.
- System Use Case – A thread of functionality implemented by the system. Requirements are traced to system use cases to ensure that system is built and configured to fully implement all RFP requirements.

Each business process area will complete a series of focused JAD sessions around their associated lower-level system use cases. In fact, the RSD for each business area will be organized by system use case and we will trace all validated RFP requirements to system use cases in our requirements database called ReqTrace. Team Noridian will generate an RTM from ReqTrace that includes traceability from the validated requirements to the system use cases. Team Noridian's ReqTrace will be used as the repository for the IME system requirements. In preparation for DDI, Team Noridian will enter the IME RFP requirements and the associated proposal response based on the eCAMS solution into ReqTrace. Team Noridian has also mapped each requirement to the business process areas in the repository.

Team Noridian will start RV with over 700 existing system use cases from previous MMIS implementations providing significant time savings in establishing the use cases for RV and design. In most cases the existing system use cases will be used and modified to meet the MMIS requirements. Where new functionality is being developed, new system use cases will also be developed. These system use cases are mapped to requirements in the requirements database. An example of a system use case is provided in Figure 8-34. Business use cases follow a similar structure.

Example Use Case for Provider Enrollment

2.2.1 Use Case – Add Location Details

2.2.1.1 Description
This use case describes the process the applicant follows to add locations, location addresses, subordinate mailing and pay-to addresses, and other location-specific details during the enrollment process.

2.2.1.2 Actors
- Applicant (as defined below)
  - Provider (if allowed by business rules)
  - Enrollment staff member

2.2.1.3 Triggers
- Invoked by the following use cases:
  - [uc Enroll as Individual Provider]
  - [uc Enroll as Group Provider]
  - [uc Enroll as Facility/Agency/Organization/Institution Provider]
  - [uc Enroll as Tribal Health Services Provider]
  - [uc Enroll as Managed Care Organization Provider]

2.2.1.4 Pre-Conditions
- The applicant has received a system-generated application ID after completing the provider's basic information.
- The applicant has an active application that has not yet been submitted for approval.

2.2.1.5 Post-Conditions
- The system stores the location information in the Provider Enrollment Staging Area.

2.2.1.6 Flow of Events
Main Flow
1. The system displays [pg Provider Locations List for Enrollment].
2. The applicant clicks [btn Add] to add location information
   2.1. The system displays [dlg Add Provider Location for Enrollment] with static message "Please remember to enter both Pay To and Mailing addresses for the NPI Base Location and for all Social Services Locations. Also, a Mailing address is required for all NPI Servicing Locations. On approval of the application, the start date of all locations will be set to the approval date."
3. The applicant clicks [de Address Lookup Link].
   3.1. The system invokes [uc CCANC-Address Lookup].
   3.2. The system reloads [dig Add Provider Location for Enrollment] with the address fields populated.

2.2.1.7 Alternative Flows
Alternate Flow: Copy NPI Base location mailing and/or pay-to address.
Condition: At Step 7.1, the applicant has entered an NPI Base Location and wants to copy the base location's mailing and/or pay-to address to the current location's mailing and/or pay-to-address.
1. The applicant clicks [lb Type of Address], selects either "mailing" or "pay-to" from the drop-down list, and enters [de End Date], if needed.
2. The applicant clicks [btn Same As NPI Base Location] and clicks [btn OK].

{remaining steps intentionally truncated}.

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Figure 8-34. Example of a System Use Case. We have more than 700 existing system use cases from previous MMIS projects from which to choose, saving time and effort during Design.

Team Noridian will leverage the pre-populated ReqTrace tool during JAD sessions with the Department to review requirements, revise requirements, enter comments and clarifications and enter a note log. A report will be generated from ReqTrace within one (1) business day of the end of each session. The reports will include all information captured and will be distributed to the participants.

Figure 8-35 shows a screenshot of the JAD session view of ReqTrace, which is displayed during each requirement session.

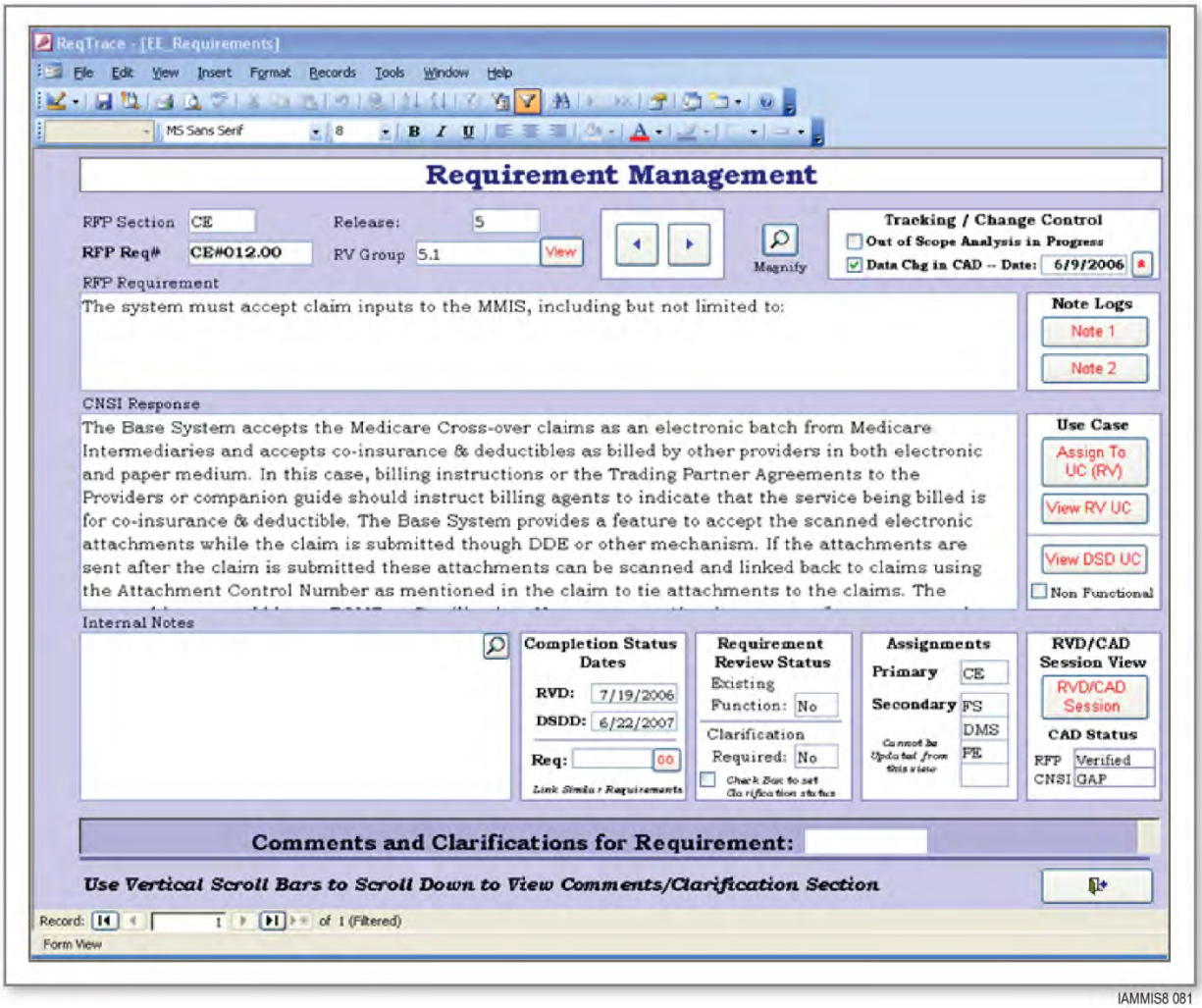

Figure 8-35. JAD Session View of ReqTrace. ReqTrace is used real-time during the Requirements Validation and Design collaborative sessions.

The information captured in ReqTrace during these sessions will ultimately feed the RSDs. Team Noridian will maintain the ReqTrace repository throughout the DDI project lifecycle. ReqTrace will also be used during system design to document information captured during the collaborative design sessions between Team Noridian and the Department.

The requirements maintained in ReqTrace will be the latest requirements that represent the current project scope at any given time. Once the requirements are baselined for a specific DDI period, ReqTrace provides the capability to lock the requirements to provide a read-only view of the requirements. Newly identified requirements will not be entered as approved into ReqTrace until the associated change request is approved through the formal change control process established in the project's governance processes.

Similar to RV, Team Noridian conducts DSD using teams that are aligned by business areas. Each business process area will complete a series of focused JAD sessions around their associated lower-level system use cases. Together, Team Noridian and the Department will review each system use case and associated requirements, architectural diagrams, system flow diagrams, and logical data models during the JAD sessions.

Team Noridian will continue to use a process that integrates real time use of ReqTrace and the eCAMS solution with the actual DSD sessions. Together, Team Noridian and the Department will review each system use case and associated requirements, screen and report layouts, system flow diagrams, business rules, and physical data models.

In addition to the requirements for content of the DSD document as specified in the RFP, we are proposing the use case concept for aligning requirements to detailed design. This structure and approach was accomplished successfully on our other MMIS DDI projects. We propose the additional information, as shown in Figure 8-36, to be included in the DSD above and beyond the DSD content requirements of the RFP.

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Figure 8-36. System Design Document Table of Contents. Team Noridian's design documentation is aligned with the use case concept of the Unified Modeling Language (UML), a proven industry standard.

The RTM is published from ReqTrace at various milestones of the project. During DSD, Team Noridian will maintain the traceability information in ReqTrace. This traceability information will be updated periodically and made available to the Department, thereby eliminating the wait for a deliverable from Team Noridian to receive the latest traceability information. Team Noridian will provide an up to date RTM at the completion of DSD, as required by the RFP. The RTM will be a report describing the RFP requirements and their trace to system use cases. Non-functional requirements that describe supplementary information will also be traced to system components. Eventually as test cases are developed, the RTM will include a trace from RFP requirements and system use cases to test cases.

Using the ReqTrace requirements database, Team Noridian maintains IME requirements and use case traceability. When creating test cases, the testers can draw the information from the ReqTrace and create the traceability link from requirements to test cases. Team Noridian can then maintain traceability and ensure proper test case coverage. Furthermore, when requirements are changed, test cases are flagged which are linked to the change requirements so that the relationship between software, requirements and test cases is synchronized.

As previously described, the use cases will be introduced during requirements validation and further defined and detailed during design. Each use case will then be decomposed into stories. Stories are small components of work that must be developed to support the use case. To understand how use cases, stories, and test cases relate to each other and to the requirements, it is helpful to view the traceability structure of our approach. Figure 8-37 describes how RFP requirements and derived requirements are traced to use cases and how use cases are related to stories.

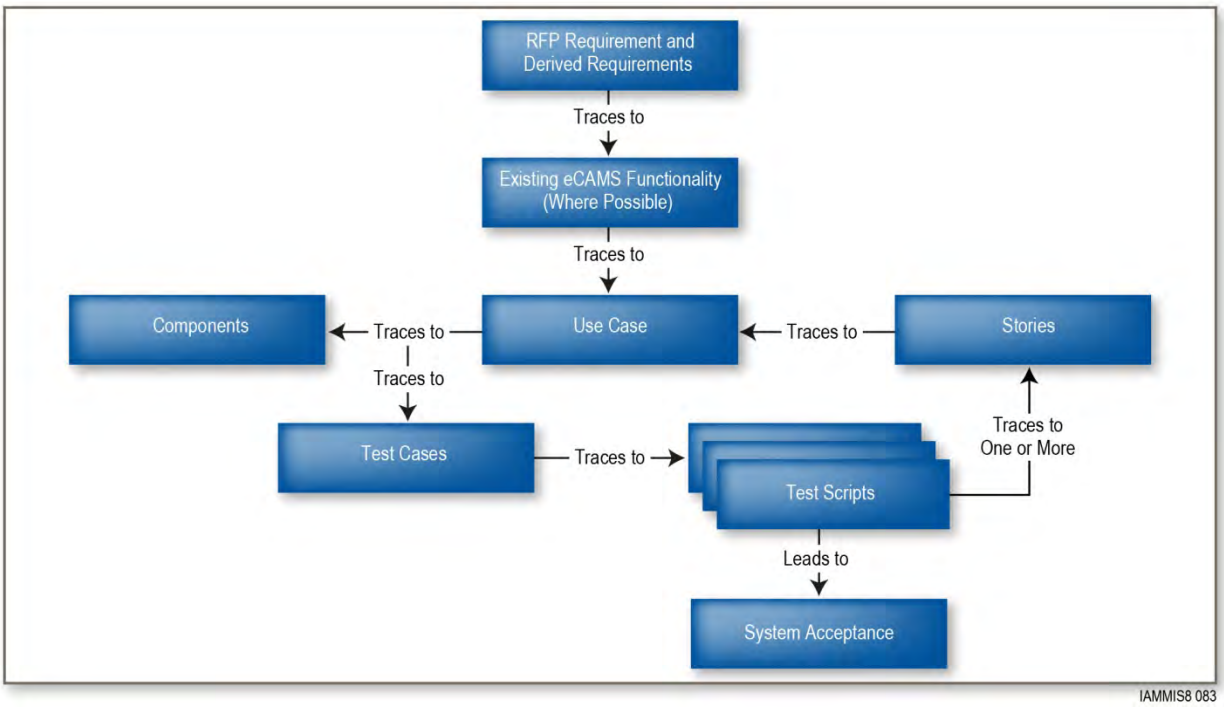

Figure 8-37. Requirements Traceability and Relationships. How we trace RFP requirements and derived requirements to use cases, and how use cases are related to stories.

Figure 8-38 provides an example of an RTM with requirements traced to system use cases and test cases.

Test Case Name	RFP Requirements	Use Case Name
STC-FIN-LG2-LT1-1 - Worker checks data objects for providers and other entities	4.13.2.6, 4.13.2.7, 4.13.2.15, 4.13.2.16, 4.13.2.17,4.13.3.7, 4.13.3.8, 4.13.3.20, 4.13.3.22, 4.13.3.23	2.3.1 Maintain providers or other entities in financials
STC-FIN-LG2-LT1-2 - Provider information into financials interface tables	4.13.2.6, 4.13.2.7, 4.13.2.15, 4.13.2.16, 4.13.2.17,4.13.3.7, 4.13.3.8, 4.13.3.20, 4.13.3.22, 4.13.3.23	2.3.1 Maintain providers or other entities in financials
STC-FIN-LG2-LT1-3 - Provider information into financials base tables	4.13.2.6, 4.13.2.7, 4.13.2.15, 4.13.2.16, 4.13.2.17,4.13.3.7, 4.13.3.8, 4.13.3.20, 4.13.3.22, 4.13.3.23	2.3.1 Maintain providers or other entities in financials
STC-FIN-LG2-LT1-4 - Provider contact information into financials interface tables	4.13.2.6, 4.13.2.7, 4.13.2.15, 4.13.2.16, 4.13.2.17,4.13.3.7, 4.13.3.8, 4.13.3.20, 4.13.3.22, 4.13.3.23	2.3.1 Maintain providers or other entities in financials
STC-FIN-LG2-LT1-5 - Provider contact information into financials base tables	4.13.2.6, 4.13.2.7, 4.13.2.15, 4.13.2.16, 4.13.2.17,4.13.3.7, 4.13.3.8, 4.13.3.20, 4.13.3.22, 4.13.3.23	2.3.1 Maintain providers or other entities in financials
STC-FIN-LG2-LT1-6 - Update provider information into financials base tables	4.13.2.6, 4.13.2.7, 4.13.2.15, 4.13.2.16, 4.13.2.17,4.13.3.7, 4.13.3.8, 4.13.3.20, 4.13.3.22, 4.13.3.23	2.3.1 Maintain providers or other entities in financials
STC-FIN-LG2-LT1-7 - Provider to customer information into financials interface tables	4.13.2.6, 4.13.2.7, 4.13.2.15, 4.13.2.16, 4.13.2.17,4.13.3.7, 4.13.3.8, 4.13.3.20, 4.13.3.22, 4.13.3.23	2.3.1 Maintain providers or other entities in financials
STC-FIN-LG2-LT1-8 - Provider to customer information into financials base tables	4.13.2.6, 4.13.2.7, 4.13.2.15, 4.13.2.16, 4.13.2.17,4.13.3.7, 4.13.3.8, 4.13.3.20, 4.13.3.22, 4.13.3.23	2.3.1 Maintain providers or other entities in financials
STC-FIN-LG2-LT1-9 - COB-TPL Information into financials interface tables	4.13.2.6, 4.13.2.7, 4.13.2.15, 4.13.2.16, 4.13.2.17,4.13.3.7, 4.13.3.8, 4.13.3.20, 4.13.3.22, 4.13.3.23	2.3.1 Maintain providers or other entities in financials
STC-FIN-LG2-LT1-10 - COB-TPL Information into financials base tables	4.13.2.6, 4.13.2.7, 4.13.2.15, 4.13.2.16, 4.13.2.17,4.13.3.7, 4.13.3.8, 4.13.3.20, 4.13.3.22, 4.13.3.23	2.3.1 Maintain providers or other entities in financials
STC-FIN-LG2-LT1-11 - COB-TPL Contact information into financials interface tables	4.13.2.6, 4.13.2.7, 4.13.2.15, 4.13.2.16, 4.13.2.17,4.13.3.7, 4.13.3.8, 4.13.3.20, 4.13.3.22, 4.13.3.23	2.3.1 Maintain providers or other entities in financials

Figure 8-38. Example of an RTM. Team Noridian traces requirements to use cases and test cases to ensure traceability to design and test.

A key element of our successful and proven system is the integration of COTS products and components. We will trace requirements to these components to the GSD in the RTM as we conduct the general system design activities. COTS components are treated as a part of the architecture in a manner similar to custom components. However, the Information System Development Methodology (ISDM) processes may vary for COTS components as needed. For example, COTS solutions typically will have their own relational database structure to support the COTS functionality. Hence, our team will not describe the details of the physical relational database structure for COTS products while it may be necessary to do so for custom components. Regardless of the type of component (i.e., newly developed, COTS, or pre-existing), Team Noridian will maintain ReqTrace to ensure each validated requirement is traced to the design and later to test cases.

8.3.1.2.2 Documenting all Rules

RFP Section 6.3.1.2, Requirement f

Team Noridian defines and documents all rules as we conduct JAD sessions during design. The Detailed System Design Document (DSD) for each business area specifically has sections to document these rules as discussed in our response to RFP Section 6.3.1.2, requirement “r” below. The Operations Management DSD specifically will include the rules related to pricing, edits, and audits while the Care Management DSD will include benefit plan assignment rules.

8.3.1.2.3 Extracting Rules into the Rules Engine

RFP Section 6.3.1.2, Requirement g

Team Noridian experience with the legacy MMIS enables us to propose a low risk approach to extraction of business rules. There are two main types of rule logic items implemented in electronic eCAMS platform:

1. Table Driven Configuration. Table driven configuration rules are the set of tables, mainly in the reference business area, that hold sets of values. Each value is tracked by a start and end date and tightly version controlled in the system. An authorized user can update these tables directly through eCAMS screens. For example, there are tables that store rates. Each rate has a start and end date. These dates control the effective range of that rate. Each rate may be tied to one or more service codes. This relationship also has an effective start and end date. Making these tables viewable and editable to authorized users, as well as through interfaces and uploads, provides a great deal of flexibility to the system and allows for changes to be made without a long development and testing process.

2. Rules Engine Driven Configuration. RuleIT contains rules that are logical statements comprised of conditions. An authorized user can also edit these rules through screens. For example, a RuleIT rule may contain logic that says, for each claim line: use rate Z if the service code is X and the benefit plan is Y. Upon execution, the rule would automatically check the service code on the claim line and the benefit plan for the client that is determined to be applicable for that claim during the correct effective period, usually the date of service. If the service code is X and the benefit plan is Y, the rate of Z is applied to the claim line item. If one of the conditions is not met, the system will move on to the next rule. Rules use common logical statements such as between, less than, greater than, equals, and others. Conditions are combined using the standard logical conjunctions and, and or.

Team Noridian's eCAMS solution uses RuleIT to develop the rules tied to the following business areas:

- Claims adjudication process
- Managed care beneficiary enrollment
- Prior authorization adjudication
- Provider enrollment process
- Account code assignment/fund allocation

For readability, we make the distinction between the first type of rule logic items called configuration items and the second called rules, however, they both provide the tools and functionality to meet the requirements for a rule-driven system.

The relevant business rules will be extracted from the legacy system by our team of knowledgeable analysts (and potentially using software mining tools and processes) will supply the initial configuration of configuration items and the rules engine during the requirements validation and design tasks during the start-up and implementation phase. This process is repeated for each business area team although not all functional areas will have business rules from the legacy MMIS. Traceability of the extracted business rules to requirements validation and detailed system design documents will ensure a successful implementation of extracted business rules.

Team Noridian's functional team will analyze the extracted rules and map them to the existing RFP requirements. Team Noridian will also notify the Department of those extracted business rules where there is no requirement from the RFP to which the extracted rule maps.

Detailed design of the individual requirements will be made during design activities. The requirements within a business area will be categorized into multiple logical groups based on requirements. Each logical group will be further broken down into use case packages and each use case package will contain multiple use cases. Each use case is a business interaction between the system and the user or to another system. The use case will identify the business scenario, the identified actors, possible flows, triggers,

error cases, business rules tied to the use case, and the error conditions. The extracted business rules will be referenced and linked to the use cases so that development team can implement them in the appropriate development cycle.

During configuration and development, links will be maintained between implemented rules and the BRE document. RuleIT contains a documentation tab, which is used to reference the rule extracted out of the BRE process. Reconciliation status reports will be published detailing the traceability between the rules documented in the BRE, requirement document, design document and the test cases.

8.3.1.2.4 Incorporating Existing Rules Into the Rules Engine

RFP Section 6.3.1.2, Requirement h

Using the process described in Section 8.3.1.2.3, Team Noridian will present rules traceability to the Department as a part of JAD sessions. The Department will have an opportunity to review which rules are incorporated into the rules engine initial via the JAD sessions and secondarily during the review and approval of the DSD for each business area.

8.3.1.2.5 Identify and Develop Rules

RFP Section 6.3.1.2, Requirement i and j

All rules are requirements driven with our iVision360 ISDM. Additional rules will be identified as a part of the requirements validation and design process and incorporated into the configuration and development work streams through the DSD approval process. The timeframes for incorporating rules will be defined as a part of the Project Work Plan review and approval process.

8.3.1.2.6 Benefit Plan Approval from the Department

RFP Section 6.3.1.2, Requirement k

Team Noridian presents formats for rules documentation that have been used on previous MMIS implementations; these are explained in response to requirement “r” below. However, each RVD and DSD will have Deliverable Expectation Documents (DXD) where the Department will have the opportunity to review and approve the format for rules documentation. Team Noridian’s approach will be to present the formats we have successful used on previous projects as a part of the DXD.

8.3.1.2.7 Validating and Verifying Capabilities of the New MMIS

RFP Section 6.3.1.2, Requirements l, m, n

During the requirements validation and design process of our iVision360 ISDM, Team Noridian demonstrates the capability of the proposed systems and solutions, COTS solutions, and proposed modifications ability to meet the RFP requirements. This process will be undertaken as per the timeframes defined in the Department approved Project Work Plan.

8.3.1.2.8 Detailed System Design

RFP Section 6.3.1.2, Requirement r

Team Noridian’s approach to Detail System Design (DSD) engages an iterative, collaborative methodology. The starting point for our design approach is our eCAMS transfer system. With eCAMS at the center, we have multiple cycles of design and review within each business area of the system.

Our system design philosophy is consistent with our overall goal for the project; Department satisfaction. This philosophy allows us to use methods and processes that will have an end result that the Department considers successful. We will approach design using dedicated teams that focus on establishing the DSD of the business area, and a separate DSD document will be developed and delivered for each business area.

Our approach begins with a completed RSD for a particular business area. Business analysts and technical staff prepare the latest version of the transfer solution to be utilized collaboratively during JAD sessions with the Department. The overall logistics and approach to preparing for DSD sessions is very similar to

JAD sessions during requirements validation, with the exception that these sessions focus on the detailed physical design of the system and how that design meets the approved requirements. To prepare for the JAD sessions, we will:

- Review the RSDs
- Update the requirements database
- Update the installation of our eCAMS platform with the latest version
- Present the DSD approach to Department staff
- Coordinate with Department team counterparts to schedule system demonstrations and JAD sessions

Team Noridian will continue to use a process that integrates real time use of the requirements database and our eCAMS platform with the actual DSD sessions. Together, Team Noridian and Department will review architectural diagrams, system flow diagrams, and physical data models. The transfer solution will be used to visually convey existing transfer solution functions. This approach allows Team Noridian and the Department to reach a consensus on the system configuration and rules engine population, implementation of COTS products and design, development of missing functionality and interface development and data conversion. The design activities are tightly coupled with the data mapping and design activities for data conversion. In parallel with the design, the conversion team will be conducting data mapping from the source files to the new MMIS database tables. Members from the business area teams will be asked, as required, to attend the conversion mapping sessions, and specific conversion team members will be asked to attend the DSD JAD session to ensure the design and business rules between the business area functionality and data conversion are in sync.

As each JAD sessions are completed for each business area, the dedicated team for that business area will begin the iterative development of the DSD document for that specific business area. Separate DSD documents will be developed and delivered for the business process area, each of which includes their validated requirements.

The RTM will be updated for each business area to reflect traceability of the requirements to the detailed system design components. This will be the formal delivery of the RTM for the design task and will be used as a starting point for the development and testing activities.

Documentation of all Rules

RFP Section 6.3.1.2, Requirement r.1

There are various kinds of business rules Team Noridian will document and maintain for the new MMIS. These rules are as follows:

- **HIPAA Validation Rules.** These rules are executed when data is loaded in MMIS system. Typically these are additional validation or derivation rules. Team Noridian maintains these rules in a series of spreadsheets that accompany the DSD for that business area. These HIPAA validation rules include details description of edits, edit type, X12 element on which this rule is executed, and derivation logic.
- **Adjudication Edits.** Contains all edits/audits for adjudicating various claim types.
- **Adjudication Exhibits.** Contains benefit plan assignment, fund code assignment, aid category assignment and various pricing rules.
- **Screen Validation and Business Rules.** Team Noridian maintains screen validation and business rules for eCAMS web functionality the DSD. These are the system rules define a behavior of a system in a particular condition.

Figures 8-39 and 8-40 provide two examples of rules documentation that is included as a part of the DSD from prior MMIS implementations.

BR No	Seq	Internal Edit No.	VA Edit No.	Rule Type	Entity	Attribute	Rule Name	Meta Data Clds	Business Description	System Description	Business Edit Type	Fatal Edit	eCAMS/ VAMMIS
BR1	1	00233		Java	Submitter	Identifier type	Submitter Identifier Type Missing	757	Identifier Type for Submitter is Mandatory	If a file is submitted with Submitter Identifier Type missing, an error will be raised	Mandatory	No	Both
BR2	2	00003		Java	Submitter	Last Name	Submitter Last Name missing	43	Submitter Last Name is mandatory	If Submitter Last Name is missing on file, the error is raised	Mandatory	No	eCAMS
BR3	7	00004		Java	Submitter	Identifier Type	Derive Submitter Identifier Type	757	Convert Submitter Identifier Type submitted on file	Submitter Identifier Type will be mapped to 7 (MMIS Id)	Derivation	No	eCAMS
BR4	8	00005		Java	Submitter	Primary ID	Submitter Primary ID missing	756	Submitter Primary ID is mandatory	If Submitter Primary ID is missing on file, an error will be raised	Mandatory	No	eCAMS
BR5	1	00227	01015	Java	Billing Provider	Identifier type	Billing Provider Identifier Type Missing	46	Identifier Type for Billing Provider is Mandatory	If a file is submitted with Billing Provider Identifier Type missing, an error will be raised	Mandatory	No	Both
BR6	11	00008	01015	Java	Billing Provider	Primary ID	Billing Provider Primary Id Missing	47	Billing Provider Primary ID is mandatory	Billing Provider Primary Id is mandatory. If missing raise an error	Mandatory	No	Both
BR7	12	00009	01015	Java	Billing Provider	Primary ID	Billing Provider Primary Id Not on File	47	This Error is raised when Billing Provider Id at header is not on Provider file in database.	The error is raised when the Billing Provider Id at header on data file is validated with the database and no match found	Database Validation	No	Both
BR8	16	00010	01475	Java	Billing Provider	Taxonomy Code	Invalid Billing Provider Taxonomy Code	44	Billing Provider Taxonomy does not match with database	Billing Provider Taxonomy on data file is validated against database. If not found, error is raised	Database Validation	No	eCAMS

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Figure 8-39. Example HIPAA Validation Rules. Team Noridian uses existing templates and artifacts to rapidly document business rules.

State of Washington ProviderOne Project
Detailed System Design Document, Part 2
Claims Submission

3.1.9.6 System Rules

Table 47. Professional Claims Submission Page System Rules

Rule No.	Rule Name	Operation Type	Rule Description
1	On Load	System	Render the screen display.
2	Close – On Click	System	When user clicks on this button, the current page is closed and the user is taken back to the previous page.
3	Submit Claim – On Click	System	When user clicks on this button, for the entered claim details were screen level editing is done. Then Dialog with the message "Do you want to submit any Backup Documentation (Q - ?)" appears. If "Ok" is selected dlgBackupDocumentation will be displayed. If "Cancel" is selected "dlgSubmitProfessionalClaimsFinal" is displayed with the TCN allocated.
4	Reset – On Click	System	When user clicks on this button the system default values to page load defaults. [Page Load Defaults – DRUG IDENTIFICATION(+) Drug Unit Price, Unit Code, National Drug Unit Count will be reset to 0, Unit, 1 respectively All other fields will be empty / no selections made]
5	Other Claim Info – On Click	System	When user clicks this link, it takes user to the page where additional information can be entered. Basic Screen Level Validation like Valid Subscriber ID, Provider NPI, Taxonomy, Client ID, Service Date From, Service Date To and NDC are verified.
6	Delete – On Click	System	When user clicks on this link the system alerts for confirmation of deleting a line. On confirmation the line entry will be deleted
7	Other Svc Info – On Click	System	When user clicks this link, it takes user to the page where additional service line information can be entered. Basic Screen Level Validation like Valid Subscriber ID, Provider NPI, Taxonomy, Client ID, Service Date From, Service Date To and NDC are verified.
8	Add Service Line Item – On Click	System	When user clicks on this button the system validates whether all required basic line information are entered and displays the line data as a table row in Previously Entered Line Item Information table section.

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Figure 8-40. Example of eCAMS Web Functionality Rule. Team Noridian's standard DSD template includes sections to document business logic to be applied to eCAMS web screens.

Systems Standards Manual

RFP Section 6.3.1.2, Requirement r.2

Team Noridian's approach involves the development of multiple DSDs – one for each business area. In addition, we have added an architecture team that will focus on establishing the system framework, implement COTS products for use by business area team, and promote technical standards. The architecture team consists of team members that have a broad, system level expertise and their role is two-fold:

- Address architecture, system level, and non-functional requirements of the RFP
- Provide system architecture expertise to business area teams and support knowledge transfer with the Department.

Team Noridian's architecture team's DSD will include an appendix that provides standards, naming conventions, practices for development and configuration of the solution. The architecture DSD will also include data model standards and data element naming conventions.

System Files and Processing Architecture

RFP Section 6.3.1.2, Requirement r.3

Team Noridian's architecture team's DSD will contain the system-level data model listing all system files and their description. System files in our architecture are tables in the Oracle relational database management system that are used to manage the system (i.e., not business area information). Team Noridian maintains the system data model in the Computer Associate's ERwin data modeling tool. All system file (i.e., table) information is maintained in ERwin. We have standardized the processes for changing data structures and a central data modeling team maintains system file information centrally at our product development facility. ERwin's reporting and exporting features are used to publish system file information that will be documented in the architecture team's DSD.

The processing architecture of the system is contained across our set of DSD's for each business area. Again, the architecture team's DSD provides the overall system level processing architecture that applies to the system as whole. Each business area DSD subsequently provides further details of the process architecture that is relevant for that business area. For example, the operations management business area will document claims processing and adjudication architecture, amongst other information related to operations management.

Documenting Rules Engine Rules

RFP Section 6.3.1.2, Requirement r.4

Team Noridian maintains details of all rules engine rules. The information is maintained in an edit rule repository document and it contains the following information: description of the edit, internal and external error mapping, adjustment reason, edit logic, aid category, and other information. Team Noridian prepare edit pricing sheets to use as an aid in the discussions of edit and pricing rules during the sessions. Figure 8-41 provides an example of an edit sheet from existing implementation of MMIS.

New MMIS Error: 00453
ECAMS Error: 00090
Description: INVALID/MISSING THRU DATE OF SERVICE
Category: Validation
Applies: All
Adjustment Reason:
Remittance Remarks:

Edit Logic: One of the following set of conditions is true:

1) Institutional claim and
2) Statement Thru date in the Header is equal zeroes

or

1) Institutional claim and
2) Statement Thru date in the Header is not a valid date
   Month must be 01 - 12
   Day must be valid for month

or

1) Non Institutional claim and
2) Service line Thru date is equal zeroes

or

1) Non Institutional claim and
2) Service line Thru date is not a valid date
   Month must be 01 - 12
   Day must be valid for month

Legacy logic: SERVICE (FROM) DATE IS INVALID OR MISSING

Comments:

How Accomplished: Rules Engine

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Figure 8-41. Example of Validation Edit Sheet. Provides mechanism in non-technical terms for Team Noridian and the Department to review and agree upon edit logic.

General Narrative of Entire System

RFP Section 6.3.1.2, Requirement r.5

Architecture team's DSD will provide a general narrative of the entire system and the flow data through the system. This DSD address system-wide components such as the enterprise service bus (ESB) framework and where each system component fits within the system architecture.

Detailed Description and Diagram of System Architecture

RFP Section 6.3.1.2, Requirement r.6

Architecture team's DSD will provide a detailed description and diagram of system architecture. A high level description of each system component will be provided with details related to how the components interact and operate as a system. System architecture diagrams will also be presented in the architect team's DSD. These diagrams will provide a context of the system and various viewpoints of the architecture.

The MMIS context diagram is shown in Figure 8-42. This diagram shows the scope of the MMIS, its major external interfaces, and how the MMIS integrated into other State of Washington programs, such as Case Management and Eligibility.

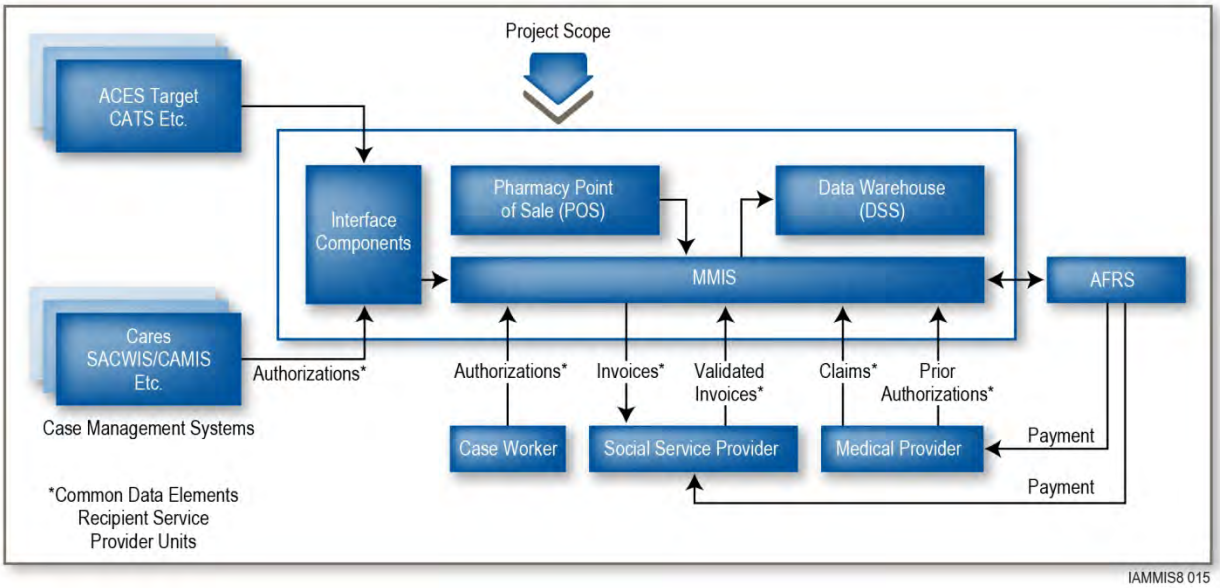

Figure 8-42. MMIS Context Diagram from Washington MMIS (ProviderOne).

Figure 8-43 breaks down the MMIS Context Diagram to the next level and shows the conceptual architecture for the ProviderOne system in the state of Washington, with a focus on the eCAMS solution.

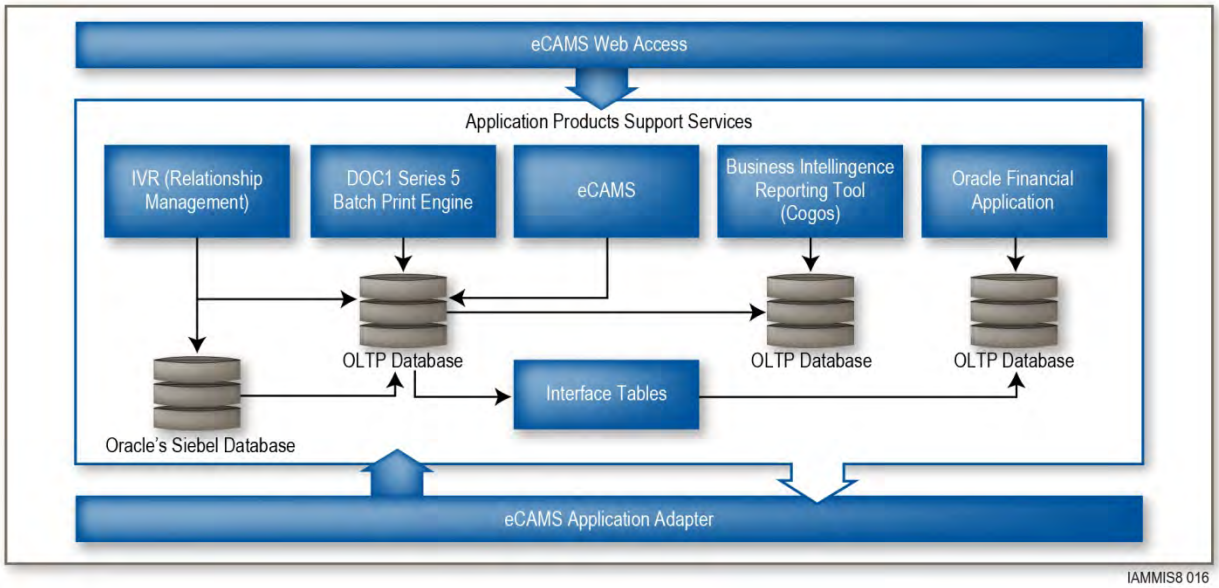

Figure 8-43. Conceptual Architecture for Washington MMIS (ProviderOne). The architecture as portrayed here is understandable to both technical and nontechnical readers.

General and Detailed Narratives of Functions, Processes, and Features

RFP Section 6.3.1.2, Requirement r.7

Team Noridian's iVision360 ISDM provides for the documentation of functions, processes, and features within DSDs for each business process area. Team Noridian uses the UML use cases and associated diagrams (i.e., sequence, collaboration) to describe functions, processes, and features. This information is maintained in an integrated fashion with business rules and data requirements. As discussed in our response to RFP Section 6.3.1.2, requirement "r.6", architecture DSD focuses on system level requirements and system architecture. However, the architecture team also has responsibility for implementing the Web Portal and hence functions, processes, and features for Web Portal will also be addressed in the architecture team's DSD.

Security Design

RFP Section 6.3.1.2, Requirement r.8

Architecture team's DSD will provide describe the systems security design at the system level. Each business area DSD provides further details, if necessary, of the security design that is relevant for that business area.

The new MMIS security architecture is based on role-based access control (RBAC), where individual users are mapped to roles. The new MMIS provides hierarchical security starting at the domain level and then drills down to application pages, data rows, and the column level through roles and profiles. Our solution allows access to be defined at an individual element level. A specific set of permissions may be assigned to each distinct combination of user, role, profile, and domain. The application security business process area provides the following functionalities:

- Management of domains
- Management of application users in the system
- Management of roles and profiles
- Column level security control
- Password validation/expiration
- Application audit log

Each role is defined with specific access structures and authentications that determine access and eligibility to create and modify records.

Within the new MMIS, the roles and profiles determine the security policy for the user. The profiles are the privileges given to the user (for the user ID) and are a logical grouping of roles. The privileges are defined by the change, add, read, and delete (CARD) rules for the pages and fields in the pages. The roles define these privileges at a field level, allowing the administrator to control the security at the most fundamental level. The system also allows the creation of profiles that map to business roles. The system enforces the minimum access rights when a user is associated with multiple roles. That is, one role may provide change and read (CR) access to a page, while another may provide read (R) access to the same page. If a user is associated with both roles, the system assumes that the user has read (R) access to the page. The new MMIS supports four access levels, which are available for the system's Web page and the associated data:

- **No Access.** No access to a page. This determines whether a Web page is visible or not for a specific user, role, or profile.
- **Read-only Access**. Provides read-only access to the contents of the Web page.
- **Control Access.** Addresses specific data to be shown on the Web page and characteristics on that page. Control access also addresses the buttons and options on a page, such as those that enable adding, approving, and deleting records.
- **Full Access.** Full access to the Web page and its data elements.

The user's access to new MMIS application functions and associated data is controlled down to the lowest level of functionality (specific actions on an individual Web page and specific data to be shown on that page). Security administrators can define page and page element/field access privileges at the user role level. Administrator can also associate a business process area with a user.

Flow Diagram

RFP Section 6.3.1.2, Requirement r.9

Each business area team will document flow diagrams in the DSD relevant to that business area. Business Process diagram will depict the interaction between external as well as internal system components. Figure 8-44 provides an example of a flow diagram from a previous MMIS implementation.

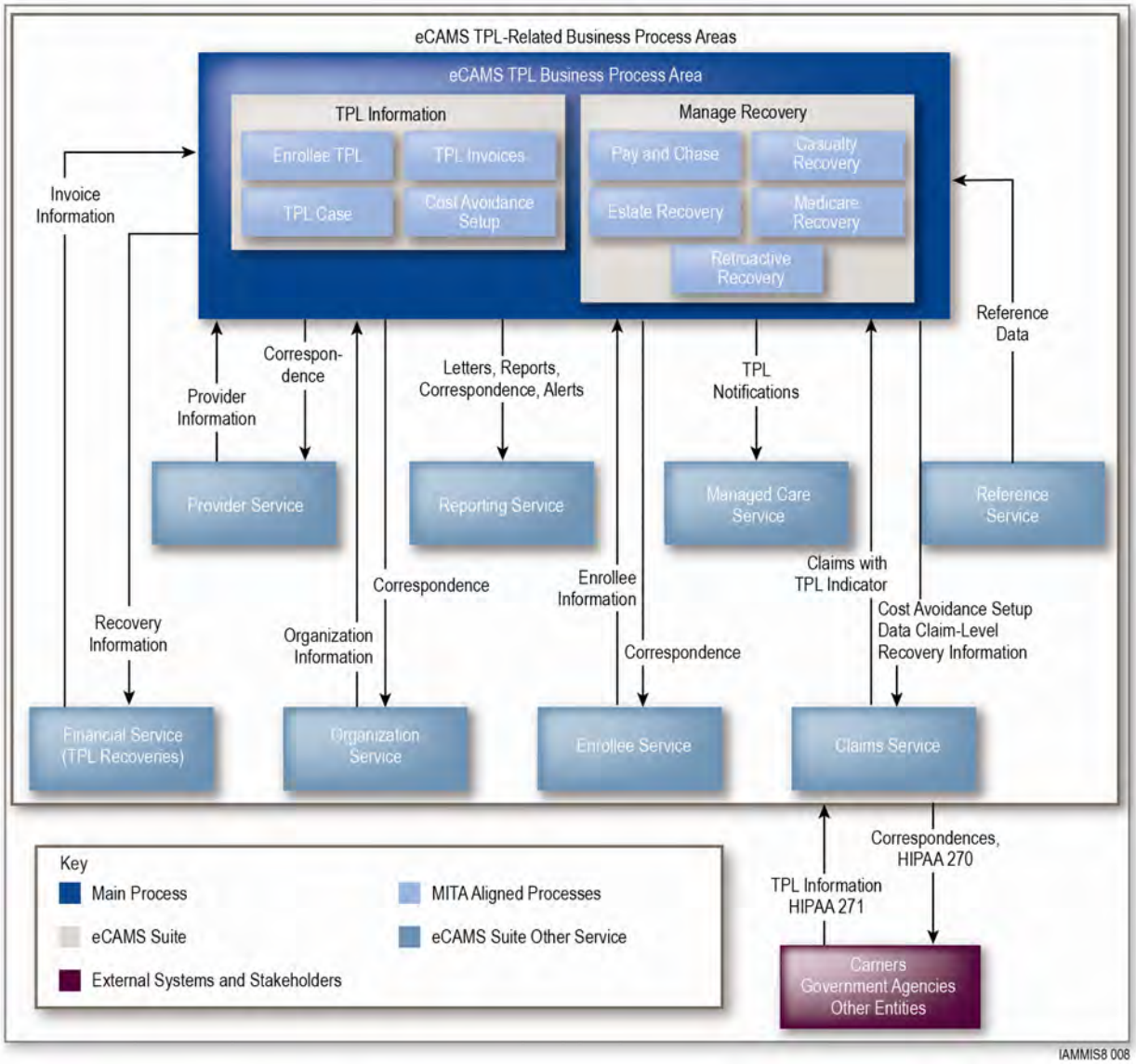

Figure 8-44. Business Process Diagram from existing MMIS implementation. Team Noridian uses flow diagrams and other types of drawings to fully describe system components in the business area DSD.

Listing Inputs and Outputs by Module

RFP Section 6.3.1.2, Requirement r.10

Each business area DSD will include a listing of inputs and outputs.

Listing of Each File or Data Table

RFP Section 6.3.1.2, Requirement r.11

Team Noridian's architecture team's DSD will contain the data model information relevant to the business area. Team Noridian maintains the data model in the Computer Associate's ERwin data modeling tool. All table and column-level information is maintained in ERwin. We have standardized the processes for changing data structures and a central data modeling team maintains the database schema information centrally at our product development facility. ERwin's reporting and exporting features are used to publish table information that will be documented in the business area team's DSD.

Listing and Description of Reports

RFP Section 6.3.1.2, Requirement r.12

As part of our DSD for each business area, Teams Noridian will document report specifications that presents a description of the functional design of each report. This document describes the software components (e.g., Web page, page dialog, process logic) of reports in terms of its data characteristics, interface parameters, and rules. Each program area's DSD will contain a listing of all reports and a narrative description of each report, the purpose of the report, definition of all fields in the report, definitions of all user-defined report-specific code descriptions, and instructions for generating reports or other outputs. Figure 8-45 provides a description of the information we capture for each report.

Description	Definition
Report Number	Sequential number to uniquely identify each report
Report Identifier	The specific alpha-numeric report ID used to identify a federal or state report (e.g., CC_DSM_00000101OD). This field is marked as N/A if this information is not present in the legacy system, since not all reports have it.
Report Owner	Usually the person who requests the report. This person will be responsible for design and content. Must have name of individual, with phone number and e-mail address.
Business Unit	The business unit that owns the report. Must have name of the unit with primary business unit contact phone number.
Description/ Purpose	This defines the operational function the report support, why the report is used, and what processes benefit from its production.
Distributed To	If the report requires security (e.g., reports that identify Protected Recipients), the limitations of access need to be specified. If specific individual information is not currently available, then a description of the distribution list by roles or groups is required. If there are no security limitations for viewing the report, then put "All."

Figure 8-45. Standard Report Description. Team Noridian has a library of templates and artifacts to rapidly define report specification for new reports.

Figure 8-46 provides an example of a completed report specification that is included in the DSD for each business area.

State of Washington ProviderOne Project
Detailed System Design Document, Part 2
Reports, Operational and Management Reports

1.1.1 Report Name

Prior Auth Monthly Pend Detail (Closed Cases) by Org & Service Type Report

1.1.1.1 Description

Table 1. Report Description

Description	Definition
Report Number	5
Report Identifier	N/A or TBD
Report Owner	
Business Unit	MACSC/Authorization, 360-725-1076 (Dianne Baum) Medical Benefits & Clinical Review, 360-725-1567 (Dan Dowler)
Description/Purpose	This report displays: • The count of authorizations having the various statuses made at the 1st or 2nd level review. • The list of authorizations that were auto-denied within the reporting period.
Distributed To	
Run Frequency	Monthly
Run Period	1st to last day of the month
Data Currency	More than 7 days old
Report Source	PA subsystem
Report Output	XLS
Report Access Mode	RAP - OpenEDMS
Restricted Data?	No
Expected Output Volume	Between 10 and 500 pages
Requirements Traceability	RFP requirement(s) 4.11.2
Comments	N/A

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Figure 8-46. Report Specification Example from ProviderOne. Each report identified for the MMIS includes a report description that follows the standard guideline.

Detailed Screen and Report Layouts and Description

RFP Section 6.3.1.2, Requirement r.13 and r.14

As described in our response above, Team Noridian documents report details in the DSD for each business area. Each business area team will develop detailed screen and report layouts for each system component and module within the business area. The information will also contain report descriptions for reports implemented in each system component and module within the business area.

Context Sensitive Help

RFP Section 6.3.1.2, Requirement r.15

Team Noridian has prepared several sets of documentation for users on our current MMIS projects. This set of documents includes user, operations, and maintenance manuals (both hard copy and electronic/online) and online help for the system and each business area/system component. It also includes online tutorials and desk reference guides. Team Noridian will produce the set of documentation required for each group of users (e.g., providers, system administrators) to enable them to successfully operate and perform their required tasks. We will use standard templates as a basis for creating user documentation. User documentation will be available online and accessible for continual reference by the Department and its designated staff.

An example showing our online help user manual from the ProviderOne system (Washington MMIS) is provided in Figure 8-47. In this figure, the help Table of Contents is displayed on the left of the screen and provides ready access to all business areas. Each business area contains multiple, lower level topics. For example, the user has selected the “Overview” topic of ProviderOne. This includes the subtopics: Welcome, Overview, Help for Help, and Getting Help from Your Help Desk. The user has further selected the Welcome topic, which includes a brief introduction to the user explaining the various methods that the user may obtain help using the MMIS. The online help format provides the user with a search capability and a glossary of terms.

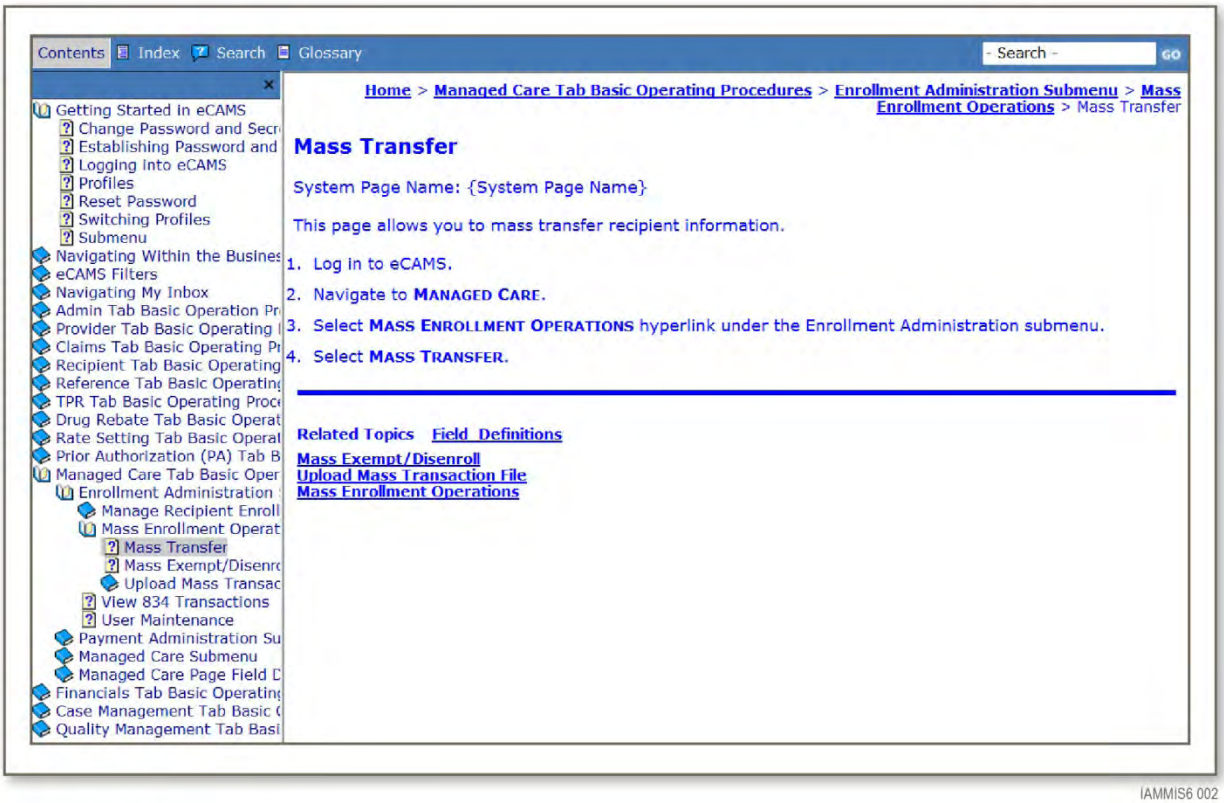

Figure 8-47. Online Help from ProviderOne. The online help provides the user with a readily accessible table of contents, search capability, and glossary of terms.

The principle behind the online help is to present an online description of each page and make it context sensitive. Online help describes the following:

- Purpose of the page.
- Tasks related to the page.
- Link to the user manual for the page's business process area.
- Related topic link, if appropriate.
- Each field on the page. (If a button or field is common to numerous pages, they are discussed in the user manual or discussed in the getting started portion of the online help and not shown here.)
- Notes that include business rules the user navigate through the page.

The online help provides an integrated and easy-to-understand set of reference information that enables users to be productivity with the system. From previous MMIS development experience, Team Noridian has found that the best way to produce the user documentation and online help is incrementally — as the associated software is designed and developed. This includes conducting peer reviews on the user manual at the end of each development iteration in conjunction with the software design and code peer reviews. Parallel peer reviews ensure that the user documentation and online help are always "in sync" with the software, and they provide the opportunity to influence the style, format, and content of the final delivered user documentation earlier.

Hardware and Software Detail

RFP Section 6.3.1.2, Requirement r.16

Hardware and software details will be provided in the architecture team's DSD. Team Nordian has already defined the hardware and software required for the new MMIS. This information and any modifications will be added to the architecture team's DSD for project life cycle support.

High Level and Detailed Data Models and Entity Relationship Diagram

RFP Section 6.3.1.2, Requirement r.17, r.18, and r.19

Team Noridian's solution is based on a relational database model using the ERwin tool. File and record layouts are presented as entities and attributes using relationship naming conventions. The ERwin model includes physical information such as data type, constraints, and referential integrity. Our rich data models that present over 1,500 entities that are organized by business areas.

Team Noridian will provide a database schema design that will be managed using ERwin. ERwin provides the capability to specify the metadata and layout for each table and column (e.g., NULL option and data type). It has the capability to record narrative definitions for tables and columns.

This information collectively is referred to as metadata and is vital to users and administrators. Team Noridian will create a metadata report from ERwin to be used as content for ultimately publishing the information to end users. This information is the complete data dictionary for the system. The source of each element (i.e., column) in the data model will be included in the narrative definition of the column. The data dictionary generated through this process is voluminous and detailed. We have found that including the information in DSD's is often not productive as there is so much information that our customers have not found the information useful. Hence, as a value added feature, the data dictionary information is provided online via system functionality in eCAMS, as shown in Figure 8-48. The eCAMS functional provides users the capability to browse the data dictionary and perform searches. As data elements are added or modified during operations, Team Noridian will re-generate the metadata report and publish the update. In addition, Team Noridian will publish the data dictionary on the Project Portal for Department access. Each business area DSD will include entity relationship diagrams (ERD) and references to where the information is available on the Project Portal. Figure 8-49 provides an example of the ERD diagram used on previous MMIS implementation.

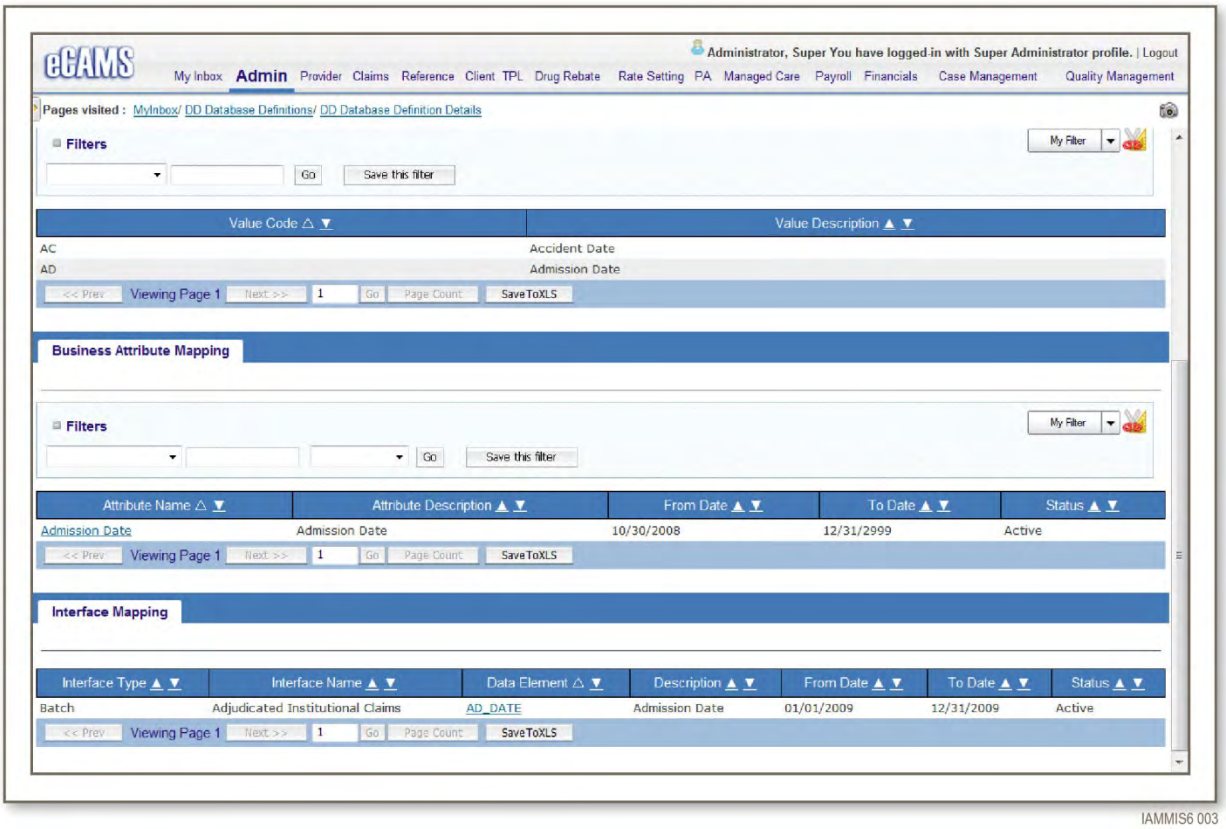

Figure 8-48. eCAMS Online Data Dictionary Capability. The eCAMS data dictionary is available on line for end users to find information about the data elements in the system.

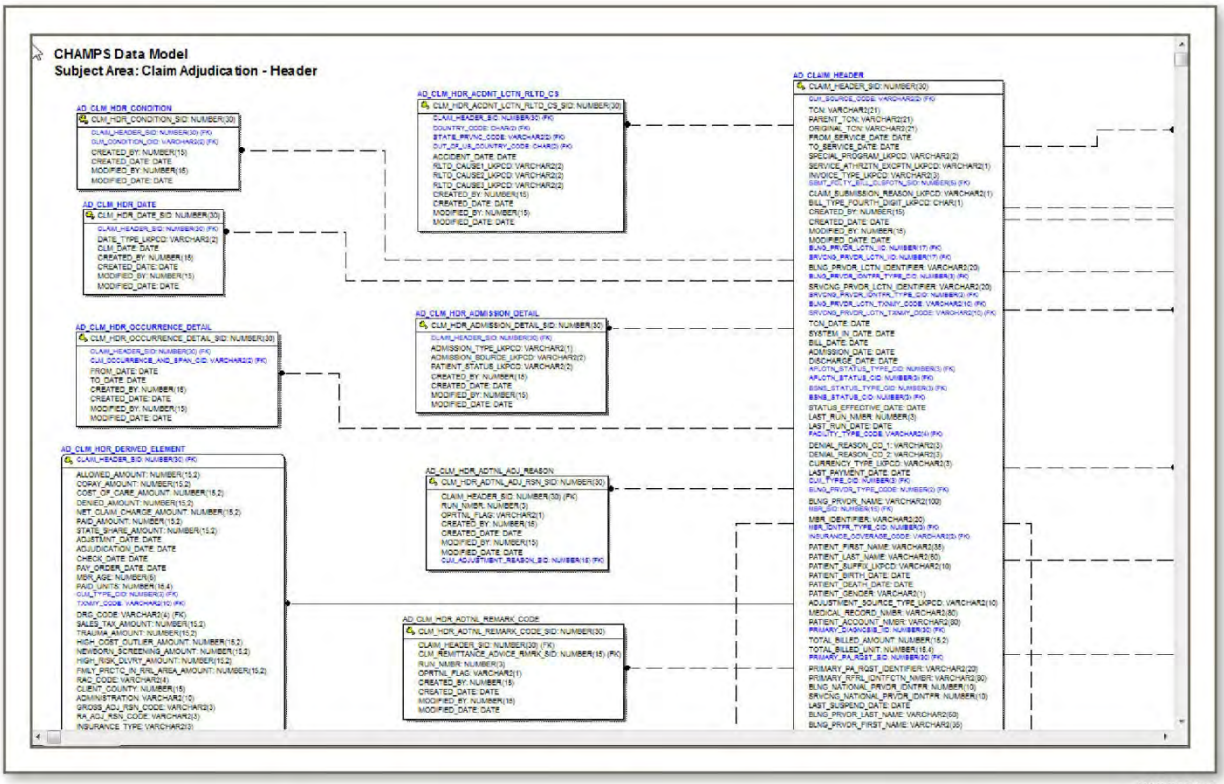

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Figure 8-49. Example ER Diagram from ProviderOne. Team Noridian uses ERwin to develop data models and produce ER diagrams.

Use Cases

RFP Section 6.3.1.2, Requirement r.20

Team Noridian will start the project with over 700 existing system use cases from previous MMIS implementations providing significant time savings in establishing the use cases during requirements validation and design. In most cases the existing system use cases will be used and modified to meet the RFP requirements. Where new functionality is being developed, new system use cases will be developed. An example of a system use case is provided in Figure 8-50.

Similarly to RV, Team Noridian conducts DSD using teams that are aligned by business areas and sub-area. Each business process area will complete a series of focused DSD sessions around their associated lower-level system use cases. Together, Team Noridian and the Department will review each system use case and associated requirements, architectural diagrams, system flow diagrams, and logical data models during the DSD sessions.

Example Use Case for Provider Enrollment

2.2.1 Use Case – Add Location Details

2.2.1.1 Description
This use case describes the process the applicant follows to add locations, location addresses, subordinate mailing and pay-to addresses, and other location-specific details during the enrollment process.

2.2.1.2 Actors
- Applicant (as defined below)
  - Provider (if allowed by business rules)
  - Enrollment staff member

2.2.1.3 Triggers
- Invoked by the following use cases:
  - [uc Enroll as Individual Provider]
  - [uc Enroll as Group Provider]
  - [uc Enroll as Facility/Agency/Organization/Institution Provider]
  - [uc Enroll as Tribal Health Services Provider]
  - [uc Enroll as Managed Care Organization Provider]

2.2.1.4 Pre-Conditions
- The applicant has received a system-generated application ID after completing the provider's basic information.
- The applicant has an active application that has not yet been submitted for approval.

2.2.1.5 Post-Conditions
- The system stores the location information in the Provider Enrollment Staging Area.

2.2.1.6 Flow of Events
Main Flow
1. The system displays [pg Provider Locations List for Enrollment].
2. The applicant clicks [btn Add] to add location information
   2.1. The system displays [dlg Add Provider Location for Enrollment] with static message "Please remember to enter both Pay To and Mailing addresses for the NPI Base Location and for all Social Services Locations. Also, a Mailing address is required for all NPI Servicing Locations. On approval of the application, the start date of all locations will be set to the approval date."
3. The applicant clicks [de Address Lookup Link].
   3.1. The system invokes [uc CCANC-Address Lookup].
   3.2. The system reloads [dig Add Provider Location for Enrollment] with the address fields populated.

2.2.1.7 Alternative Flows
Alternate Flow: Copy NPI Base location mailing and/or pay-to address.
Condition: At Step 7.1, the applicant has entered an NPI Base Location and wants to copy the base location's mailing and/or pay-to address to the current location's mailing and/or pay-to-address.
1. The applicant clicks [lb Type of Address], selects either "mailing" or "pay-to" from the drop-down list, and enters [de End Date], if needed.
2. The applicant clicks [btn Same As NPI Base Location] and clicks [btn OK].

{remaining steps intentionally truncated}.

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Figure 8-50. Example of a System Use Case. We have more than 700 existing system use cases from previous MMIS projects from which to choose, saving time and effort during Design.

Batch Flow Charts

RFP Section 6.3.1.2, Requirement r.21

Team Noridian provides high level flow chart each and every background job. Background job is a process which runs at certain interval without any human intervention. This Flow chart represents an algorithm or process; also describe the detailed logic of a background job. During the review, flowcharts also help highlight and remove unnecessary steps in a process. By showing processes visually rather than just explaining, people seem to understand better and make fewer mistakes.

Program Descriptions and Logic

RFP Section 6.3.1.2, Requirement r.22

Team Noridian provides detail descriptions for each component in MMIS. These descriptions contains following information:

- Description: contains business purpose of the component, special condition and use case reference.
- Screen Design: contains mockup screen design.
- Processing constraints: defines any type of constrains on the components. For example if component is available to certain user then that will be describe is this section.
- Data specification: contains implementation details for each filed. This is more intended for technical staff of department. This contains inputs for each filed, Field validation, type of field, range of allowed value for a field and any important note for a technical team.
- System rules: contains all the business rule**s** for a component. This section also defines the behavior of a component in certain event.

Figure 8-51 provides an example of a component specification and Figure 8-52 provides an example of a data specification from a previous a MMIS project.

State of Washington ProviderOne Project
Detailed System Design Document, Part 2
Client, Hospice/Nursing Home & IMR/Restrictions

3.1.7 Add Hospice Information

3.1.7.1 Description

Table 13. Add Hospice Information Description

Description	Definition
Component Alias	Add Hospice Information
Component Object Name	dlgAddHospiceSegment
Description	This screen is the means by which the Hospice benefit period is added from the 5-day notice.
Special Requirements	None
Comments	None
Use Case References	Use Case - Update Hospice Data

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Figure 8-51. Example Component Specification. Team Noridian provides detailed documentation of all aspects of the system design.

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Detailed System Design Document, Part 2
Claims Submission

Screen Field Name	Field Type	Table Name	Data Element (Column) Name	Display Format	Data Base Format	Req'd	Initial Value	Valid Range of Values	Field Edits	New/ Old	Developer Notes
Relinquished Care Date	Text Box	IG_CLM_HDR_STNL_INFO	META_DATA_VALUE	MM/DD/CCYY	Varchar 2(4000)	N	N/A	Valid Date	Valid Date Value – Cannot be greater than receipt date of the claim	N	Relinquished Care Date
Last Menstrual Period	Text Box	IG_CLM_HDR_STNL_INFO	META_DATA_VALUE	MM/DD/CCYY	Varchar 2(4000)	N	N/A	Valid Date	Valid Date Value – Cannot be greater than receipt date of the claim	N	Last Menstrual Period
Onset of Current Illness	Text Box	IG_CLM_HDR_STNL_INFO	META_DATA_VALUE	MM/DD/CCYY	Varchar 2(4000)	N	N/A	Valid Date	Valid Date Value – Cannot be greater than receipt date of the claim	N	Onset of Current Illness
Disability Begin Date	Text Box	IG_CLM_HDR_STNL_INFO	META_DATA_VALUE	MM/DD/CCYY	Varchar 2(4000)	N	N/A	Valid Date	Valid Date Value – Cannot be greater than receipt date of the claim	N	Disability Begin Date

IAMMIS6 010

Figure 8-52. Data Specification for a web screen from existing MMIS implementation. Team Noridian provides detailed documentation of all aspects of the system design.

Final Layouts of Inputs and Outputs

RFP Section 6.3.1.2, Requirement r.23, r.24, and r.25

As part of our detailed design documentation, Teams Noridian will generate interface design document. Figures 8-53, 8-54, and 8-55 provide an example of the interface design documents. The information captured includes:

- Detail Description: This section describe the business purpose of each interface.
- Interface specification parameter description: includes the owner, contact information of the owner, type of data, system, direction of data flow, and other information.
- Interface Data Element specification: This section defines layout of interface. This includes data element, description of data element, data type, and starting position.
- Interface Mapping and transformation specification: This section describes how data will be mapped to database. This section includes database column name, table name, data type, default value, null allowed, key and developer notes.

State of Washington ProviderOne Project
Interfaces Architecture Design Document, Part 2
Logical Group 5, OFM Interfaces

3.1.1.3 Interface 189 – Chart of Accounts from AFRS

This is a real-time interface (asynchronous) Message Queue to finalize the newly entered or modified chart of account segment values in AFRS, which is also replicated in Oracle Financials to perform the data synchronization.

AFRS sends the chart of accounts segments values (from independent AFRS edit tables) to the Interface subsystem. The Interface subsystem parses the data after retrieving the message and inserts it into the Oracle Financials WAMMIS_FLEX_VALUES staging table.

The Oracle Financials concurrent program will be scheduled to run 24 hours a day, seven days a week to read the data from WAMMIS_FLEX_VALUES and populate Oracle Financials Account Code Segment Value tables.

3.1.1.4 Interface 108 – Vendor (Provider) Updates/Additions to AFRS

The ProviderOne system sends AFRS a file requesting an AFRS Statewide Vendor Number for each of the newly enrolled Providers. The file also includes updated Provider vendor-related data to AFRS when relevant changes are made in ProviderOne to the information that is sent through this interface. This interface is real-time (asynchronous).

3.1.1.5 Interface 129 – Vendor (Provider) Information from AFRS

AFRS sends an interface file to the ProviderOne system with updates to the Vendor (Provider) information. The information includes updates to the provider subsystem of the AFRS Statewide Vendor Number, the Electronic Funds Transfer (EFT) Status, and the EFT banking information from AFRS. If the Provider exists in the ProviderOne System, the Statewide Vendor Number and/or the EFT status/appropriate banking information is updated for the Provider. If the Provider does not exist in the ProviderOne System, a Non-valid Provider error will be logged. This interface is real-time (asynchronous).

IAMMIS8 011

Figure 8-53. Example of Interface Design Document. CNSI's final layouts for inputs, outputs, and files are provided in the updated DSDs.

State of Washington ProviderOne Project
Interfaces Architecture Design Document, Part 2
Logical Group 5, OFM Interfaces

3.2 OFM Interface Specifications

3.2.1 Interface 54 - Financial Transaction Details from AFRS

3.2.1.1 Subsystem Use Case Reference

[*uc FIN AFRS Payment Wrap to Financial Inbound Interface*]

3.2.1.2 Interface Specification Parameters

Table 10 describes the interface parameters for Interface 54 – *Financial Transaction Details from AFRS.*

Table 10. Interface Specification Parameter Description for Interface 54

Organization\Agency	OFM
System	AFRS
Type of Data	Financial Transaction Details
Interface Name (or Alias)	Financial Transaction Details from AFRS
Interface Index	54
DSHS Standard Interface Type	15 - MQ (Point-to-Point)
Direction of Data Flow	Inbound
Location	DSHS
Contact	AFRS Help Desk, afrshelpdesk@ofm.wa.gov 360-664-7725
Back-Up Contact	AFRS Help Desk, afrshelpdesk@ofm.wa.gov 360-664-7725
Technical Contact	DIS Help Desk, 360-753-2454
Average Data Volume	Peak volumes: 200000 per month. About 10000 a day. (Only Phase 1 volume. This needs to be revisited for Phase 2.) Spike – 60000/week

IAMMIS6 009

Figure 8-54. Example Interface DSD. CNSI's final layouts for inputs, outputs, and files are provided in the updated DSDs.

State of Washington ProviderOne Project
Interfaces Architecture Design Document, Part 2
Logical Group 5, OFM Interfaces

3.2.1.5 Interface Data Mapping and Transformation Specifications

This section describes the data mapping and transformation specifications for Interface 54 – *Financial Transaction Details from AFRS.*

3.2.1.5.1 Mapping and Transformations – Header Record for Interface 54

Table 14. Interface Data Mapping and Transformation Specifications – Header Record for Interface 54

Data Field (Column) Name from the Interface File Definition	ProviderOne Table Name	ProviderOne Data Element (Column) Name	Data Type	Default Value	Nulls Allowed	Key	Developers Notes
DATA_TYPE	OFIN_PYMT_BATCH_IN_HDR	DATA_TYPE	VARCHAR2(1)	N/A	N	N/A	A constant record indicator and must contain 'A' in all records
BATCH_AGENCY	OFIN_PYMT_BATCH_IN_HDR	BATCH_AGENCY	VARCHAR2(4)	N/A	N	N/A	Indicates the agency submitting the batch.
BATCH_YR	OFIN_PYMT_BATCH_IN_HDR	BATCH_YR	VARCHAR2(2)	N/A	N	N/A	Year the batch is created.
BATCH_MO	OFIN_PYMT_BATCH_IN_HDR	BATCH_MO	VARCHAR2(2)	N/A	N	N/A	Month the batch is created.
BATCH_DAY	OFIN_PYMT_BATCH_IN_HDR	BATCH_DAY	VARCHAR2(2)	N/A	N	N/A	Day the batch is created.
BATCH_TYPE	OFIN_PYMT_BATCH_IN_HDR	BATCH_TYPE	VARCHAR2(2)	N/A	N	N/A	Type of source documents and/or identifies the section and/or location where the batch originated.
BATCH_NO	OFIN_PYMT_BATCH_IN_HDR	BATCH_NO	VARCHAR2(3)	N/A	N	N/A	Batch interfacing; begin the batch numbering with 001 and increment successive batches.
BATCH_SEQ_NO	OFIN_PYMT_BATCH_IN_HDR	BATCH_SEQ_NO	VARCHAR2(5)	N/A	N	N/A	Transaction sequence number. For batch header record, this field will be all zeroes.

IAMMIS6 004

Figure 8-55. Example of Data Mapping for Interfaces. CNSI's final layouts for inputs, outputs, and files are provided in the updated DSDs.

Object Model

RFP Section 6.3.1.2, Requirement r.26

Team Noridian will provide UML class diagrams in DSDs for each business areas. This will act a blue print for implementation and represents the static structure of MMIS. Class Diagram represents attribute of a class as well as method or behavior of class. Class diagram also represents the type of relationship between different classes in domain model.

Site Map

RFP Section 6.3.1.2, Requirement r.27

Team Noridian's entire solution is web-centric and our DSD's document web navigation for the functionality in each business area.

API Documentation

RFP Section 6.3.1.2, Requirement r.28

Team Noridian will provide Java doc information for each class. This Java documentation will have description for each class. It will also contain descriptions for each method, IN and OUT parameters, and details about exception handling. The API documentation will be provided in HTML format from the Project Portal.

Data Element Dictionary

RFP Section 6.3.1.2, Requirement r.29

For every screen in MMIS, Team Noridian maintains the Data Element Dictionary (DED). The DED provides definitions and descriptions of elements, table and column mapping, field type, data display format, valid values, and field edits. Figure 8-56 describes a comprehensive data element dictionary from a previous MMIS implementation which can be easily tailored. In addition, Team Noridian provides access to the DED online via system functionality in eCAMS. The eCAMS functional provides users the capability to browse the data dictionary and perform searches. As data elements are added or modified during operations, Team Noridian will re-generate the metadata report and publish the update.

State of Washington ProviderOne Project
Detailed System Design Document, Part 2
Claims Submission

Screen Field Name	Field Type	Table Name	Data Element (Column) Name	Display Format	Data Base Format	Req'd	Initial Value	Valid Range of Values	Field Edits	New/ Old	Developer Notes
Relinquished Care Date	Text Box	IG_CLM_HDR_STNL_INFO	META_DATA_VALUE	MM/DD/CCYY	Varchar 2(4000)	N	N/A	Valid Date	Valid Date Value – Cannot be greater than receipt date of the claim	N	Relinquished Care Date
Last Menstrual Period	Text Box	IG_CLM_HDR_STNL_INFO	META_DATA_VALUE	MM/DD/CCYY	Varchar 2(4000)	N	N/A	Valid Date	Valid Date Value – Cannot be greater than receipt date of the claim	N	Last Menstrual Period
Onset of Current Illness	Text Box	IG_CLM_HDR_STNL_INFO	META_DATA_VALUE	MM/DD/CCYY	Varchar 2(4000)	N	N/A	Valid Date	Valid Date Value – Cannot be greater than receipt date of the claim	N	Onset of Current Illness
Disability Begin Date	Text Box	IG_CLM_HDR_STNL_INFO	META_DATA_VALUE	MM/DD/CCYY	Varchar 2(4000)	N	N/A	Valid Date	Valid Date Value – Cannot be greater than receipt date of the claim	N	Disability Begin Date

IAMMIS6 010

Figure 8-56. Data Element Dictionary Example. Team Noridian maintains detailed information about tables and columns of the system database.

Glossary

RFP Section 6.3.1.2, Requirement r.30

Each DSD will contain a glossary of terms specific to MMIS and the business area within scope of the DSD.

Requirements Traceability Matrix (RTM) Update

RFP Section 6.3.1.2, Requirement r.31

The requirements maintained in ReqTrace will be the latest requirements that represent the current project scope at any given time. Once the requirements are baselined, ReqTrace provides the capability to lock

the requirements to provide a read-only view of the requirements. Newly identified requirements will not be entered as approved into ReqTrace until the associated change request is approved through the formal change control process established in the project's governance processes. As design is conducted, Team Noridian will maintain the traceability information contained in ReqTrace. The RTM is an output from the database and can be generated at anytime to assess the quality of the traceability information.

8.3.1.2.9 Conversion Plan

RFP Section 6.3.1.2, Requirement s (1 through 22)

Team Noridian understands that data conversion is a critical activity and an integral part of the system implementation process. While it is a separate and important task, Team Noridian integrates data conversion activities with other tasks in the Team Noridian iVision360 approach. As detailed previously under Requirements Validation, the data conversion team will work closely with the business process area teams, and will attend requirements validation and collaborative design sessions to ensure a common understanding and thoroughly capture the data conversion requirements. All data conversion activities will be conducted in parallel with the IME business process area teams. The data conversion effort will run in parallel with design and development. Details of how Team Noridian ensures interdependencies between the efforts are addressed further in our approach and in the draft Detailed Project Work Plan.

Team Noridian also understands the need to convert legacy data into the new MMIS and has experience converting both current and historical data into MMIS production systems and data warehouses. This understanding is well represented in Team Noridian 's implementation of eCAMS in the state of Michigan, where converted Beneficiary and Eligibility data included data as old as 2001, as well as some active provider and enrollee data as far back as the 1970s.

In addition, Team Noridian has experience interacting with owners of legacy systems, including Medicaid administrations, incumbent vendors, and third party commercial entities to facilitate the conversion and issue resolution process. For example, in the state of Washington MMIS conversion, Team Noridian managed the process and performed conversion of legacy data from various sources, including the incumbent vendor, other state agencies, such as the Office of Financial Management, and external sources, such as CMS. In the state of Michigan, Team Noridian managed the process and converted data from different systems, including multiple state Medicaid systems and external companies, such as Ingenix for claims and encounter data, MPRO for prior authorizations, and HTC for paper claims and attachment images.

Figure 8-57 describes Team Noridian's overall approach to the data conversion.

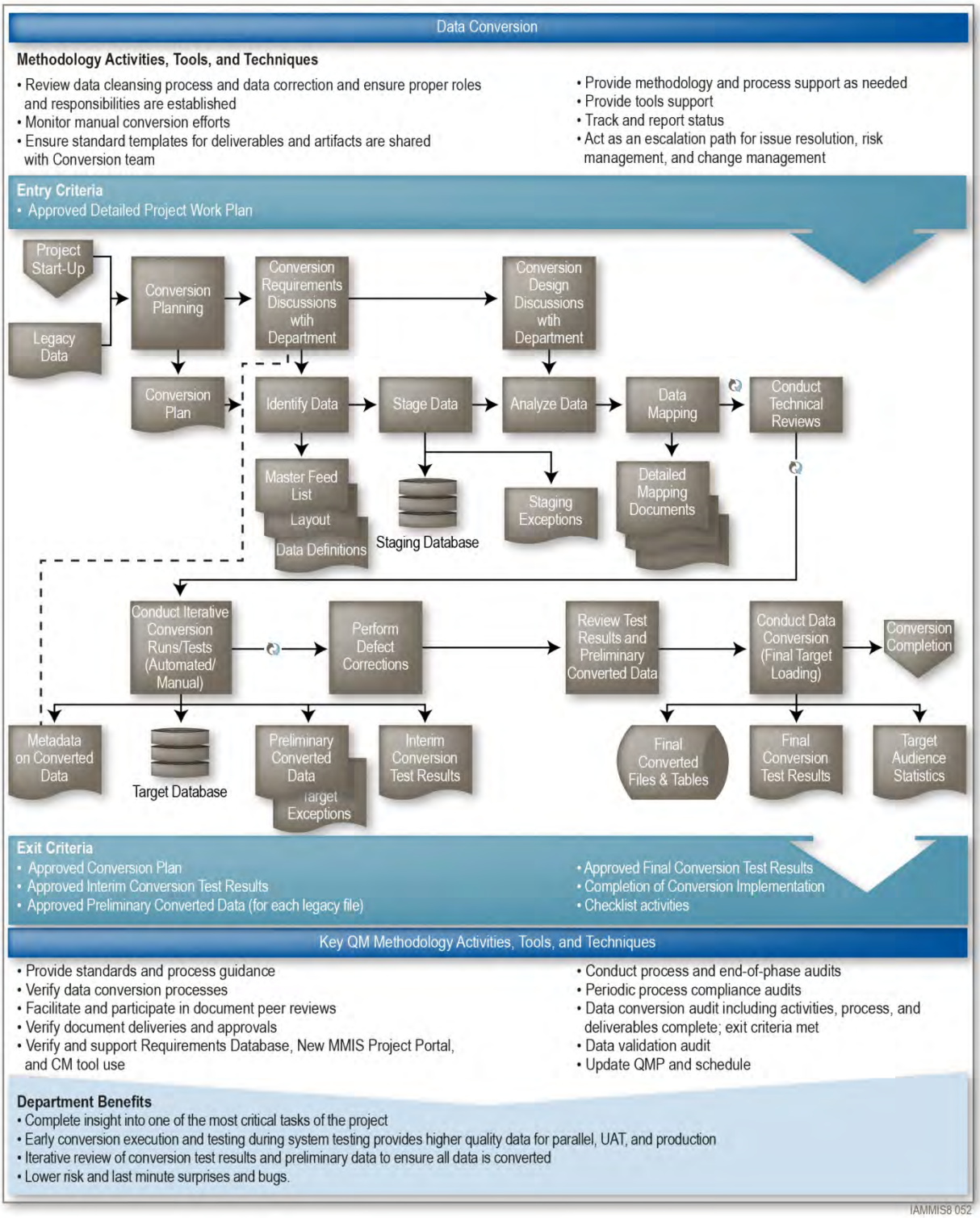

Figure 8.57. Team Noridian's Data Conversion Task Overview. The data conversion diagram provides a "cue card" to understand the key data conversion concepts quickly.

Team Noridian understands that data conversion is a critical activity and an integral part of the construction process. To ensure that conversion activities are integrated and consistent with the overall

approach, the conversion team will be integrated with the business area teams and will jointly attend requirements validation sessions and collaborative design sessions to ensure a common understanding and clear identification of conversion requirements. All data conversion activities will be conducted in parallel with the IME business area teams.

Team Noridian will follow iVision360 approach which will allow any data issues to be identified very early and will allow for backup plan development if necessary. Data conversion is one of the first activities to be started during a DDI project and the only dependency to beginning work is the establishment of the overall project work plan.

Conversion planning will occur early in the project and continue throughout the entire project life cycle. During requirements verification, the conversion team will update the Conversion Plan and submit this to the state for approval within fifteen (15) days of completion of requirements verification.

Team Noridian will conduct the following conversion planning activities:

- Establish conversion processes, including associated stages, tasks, activities, ownership, and deliverables with interdependencies with other development methodology processes for the overall system
- Develop conversion procedures describing how each task and activity will be performed and verified
- Establish conversion tools leveraging experience on similar conversion efforts in other states
- Develop descriptions for creating and maintaining the master list of legacy data files, which will identify data in the legacy source environments and will contain important information such as:
- Source of the data (e.g., legacy feed, legacy program data, external data source, future data entry, or manual data conversion)
- Flow of the data
- Data format and storage (i.e., flat positional data, structured extract, and unstructured extract)
- Establish conversion plans for manual data including a strategy and detailed process for how this manual data will be converted
- Establish the migration strategy for documents, images, and other files to be converted into Team Noridian's OnBase solution, where historical images are stored during conversion
- Establish the conversion execution plan describing how the tasks and activities will be carried out
- Develop the conversion test strategy
- Establish and publish the proposed conversion production timeline including day-by-day cutover activities

Team Noridian will develop a detailed Conversion Plan. Team Noridian will work with the Department to develop and deliver a Conversion Plan that will include the following:

- Conversion processes, including associated stages, tasks, activities, ownership, and deliverables with interdependencies with other development methodology processes for the rest of the system.
- Conversion procedures describing how each task and activity will be performed.
- The use of conversion tools. Team Noridian will leverage our experience and tools based on similar conversion efforts in other states.
- A description of how the master list of legacy data files is created and maintained. This master list will identify data in the legacy source environment, which contains important information such as:
    - Source of data (e.g., legacy feed, legacy program data, non-legacy external data source, future data entry, or manual data conversion)
    - Flow of data
    - Format (i.e., flat positional data, structured extract, and unstructured extract) and storage.
- Manual conversion plans with a strategy and detailed process on how manual data will be converted.
- Data conversion execution strategy describing how the tasks and activities will be carried out.

- Data conversion contingency planning and procedures.
- Issue management, notification processes, and resolution for data conversion.

The order of conversion is critical, which is why planning for conversion will require consideration as to what data will serve as a foundation to convert other data. At a high level, conversion will be implemented in three phases or tiers:

- **Reference data set conversion.** This layer represents the reference data that stores all codes and setups used in the master and transaction layers. Examples include the data dictionary lookup codes and descriptions.
- **Master data set conversion.** This layer represents the master data that enables transaction processing. Examples include procedure codes, diagnosis codes, or drug codes.
- Non-transactional data sets conversion – This layer represents data sets that are required to support transaction, such as claims and service authorizations. Examples include provider and enrollees.
- **Transactional data set conversion.** This layer represents the transaction data that drives the new MMIS. Examples include claims and service authorizations.

8.3.1.2.4 Interface Plan

RFP Section 6.3.1.2, Requirement t (1 through 6)

Team Noridian recognizes the Department's need for reliable, flexible, and secure access among partners and stakeholders, enabling improved data sharing and better business process integration. By understanding this need and building from the extensive experience of implementing interfaces in the MMIS solutions for the states of Iowa, Maine, Michigan, and Washington, Team Noridian is able to offer an integrated solution, incorporating reliable and flexible interface data exchanges and efficient interface management tools. This structured solution will allow the Department to manage business partner relationships while promoting the availability of healthcare to the citizens of Iowa.

Figure 8-58. Interface Plan Outline. Team Noridian has a tremendous head start in interface planning given our IME experience and that approximately 246 interfaces are already implemented in our system.

Team Noridian has invaluable and extensive experience in planning interface implementation gained from developing a complete interface solution from the ground up, one that has been successfully applied to multiple customers. Team Noridian has analyzed extensively all the external interfaces given in IME Resource Library and has concluded that we already have most of those 246 interfaces in our system. Team Noridian's interface plan will take our existing interfaces into consideration.

Figure 8-58 provides an outline of our interface plan that we will use for the new MMIS.

The strategy for Interfaces will be similar to the strategy for conversion. The Interface team is led by the Interface Manager and will consist of a programmers, business analysts and testers. The programmers along with the business analyst will be working with the various sub system groups and attend the iteration meetings for those business areas. They will attend only those iterations where the interfaces for those business areas are discussed.

In addition, the Interfaces team along with their team lead and business analyst will attend the Interface specific Iterations as shown in our draft plan. Team Noridian will use our iVision360 approach in validating requirements, identifying gaps, verifying further developments through demonstrations. Through this approach, the development is rapid, and identification of any issues or problems occurs very early allowing us to come up with any risk mitigations, workarounds and contingency plans as necessary.

8.3.1.2.5 Test Management Plan

RFP Section 6.3.1.2, Requirements u and v

The Test Management Plan (TMP) describes the test management processes followed for the Iowa Medicaid Enterprise System Services project. It details the strategies used to successfully complete multiple design, development, and implementation testing for new MMIS. In addition, the plan describes the founding principles and strategies of the test program, including an overview of the testing processes used in all test phases. This test plan will be updated for each system release. Any variance in the test process during a test phase is documented in the test plan specific to that test phase.

Team Noridian has developed an extensive foundation of test plans, manual and automated test case libraries, and test processes to build quality into the testing process. This foundation was designed to be scalable and tailored to support any project. The test management plan detail the test approach and process in their respective test phases. For the new MMIS project, the TMP serves as the foundation plan that the other test phase plans will refer to for common testing processes, tools, guidelines, and reports.

Team Noridian will develop the Test Management Plan which includes the following items:

- Test and Evaluation Master Plan Overview
- Test Policies
- Test Responsibilities
- Test Organization
- Test Orientation and Training
- Test Process Description
    - Test Process
    - Testing Types
    - Test Design
    - Test Case Automation
    - Test Deliverables
    - Test Tools
    - Test Environments
    - Assumptions and Limitations
- Communication
    - Process Documentation and Reporting
    - Coordinating with Stakeholders
    - Coordinating with Interested Parties

8.3.1.2.6 Business Continuity Plan

RFP Section 6.3.1.2, Requirement w

Team Noridian has knowledgeable staff that can create an actionable Business Continuity Plan (BCP). In fact, our preparedness has been tested in real-world situations. In the spring of 2009, a 500-year flood occurred in Fargo, West Fargo, and surrounding North Dakota communities.

> "During the month of March 2009, numerous communities in ND and MN were impacted by historic flooding, especially Fargo. NAS ... responded. Throughout this difficult period, NAS monitored its performance and staffing levels to ensure that the Centers for Medicare & Medicaid Services (CMS) requirements were met, as well as maintaining its excellent level of customer service through the duration of the flooding."
>
> CMS Report of Contractor Performance
> Legacy Medicare Contract, FY 2009

While floodwaters did affect the community, the water levels posed no significant threat to the Noridian facilities. However, the BCP was activated due to the fact that the city of Fargo was placed in a lock-down mode during the flood, directly impacting employee availability. As part of that plan, our Business Impact Analysis (BIA) and Business Unit Plans were used to move staff to alternate locations to continue performing work. Because of good planning and appropriate execution of our BCP, our customers experienced no service interruptions. In April and May of 2009, during the H1N1 potential pandemic, Noridian executed its existing Pandemic Plan, which is part of the overall BCP. The Pandemic Plan was activated as the World Health Organization (WHO) raised the overall Pandemic Level around the world. Our response was measured, and addressed the overall health and safety of our employees.

Team Noridian's corporate experience proves that our approach and methodology for business continuity planning are sound and that we have the knowledge and experience to provide the Department with a reliable plan for disaster recovery and business continuity.

Team Noridian has an established business continuity planning methodology that addresses the people, processes, and technology considerations of business continuity and recovery. Team Noridian combines business impact analysis, business process management, and systems engineering in developing its business continuity plans. A key component of the BCP is the business impact analysis (BIA). The BIA survey is conducted annually to identify and prioritize critical business functions and applications, realizing that certain business processes are more critical to the operation than others. Business impact analysis includes both impact analysis and risk analysis. This analysis is performed for each of the core business processes in the operation.

Impact analysis is used to identify the criticality of operations and key resources required to maintain the minimum acceptable levels of output for each core business process. Resources include people, facilities, and technical components of the Team Noridian solution. The goal of impact analysis is to identify a priority order of business processes so that in the case of a crisis, attention and resources are being focused on the most critical processes first and foremost. Team Noridian will use our experience and will consult with the Department when evaluating and prioritizing business functions to ensure the IME's priorities and interests are integrated into the planning process.

During risk analysis, Team Noridian evaluates multiple risk categories, including natural hazards, technical hazards, and human-caused hazards. Figure 8-59 lists some possible risks to business continuity. During the risk analysis, Team Noridian evaluates each individual business process and it's dependency on technology and systems to identify potential system failures, while determining if there is a possible manual workaround in the event of a system failure.

Natural Hazards	Technological Hazards	Human-Caused Hazards
▪ Flood ▪ Fire ▪ Earthquake ▪ Hurricane ▪ Tornado ▪ Severe weather ▪ Public health emergencies, e.g., Pandemic Flu	▪ Material spill ▪ Airplane crash ▪ Power outage ▪ IT failure ▪ Supply-chain failure ▪ Communication outage ▪ Loss of data integrity ▪ Physical loss of data in a disaster ▪ Errors introduced into the system ▪ Corruption of data or systems	▪ Terrorism ▪ Labor strike ▪ Sabotage ▪ Regulatory action ▪ Civil disobedience ▪ Unauthorized disclosures ▪ Theft ▪ Fraud ▪ Interception of data during transmission ▪ Compromised system security as a result of system access by an unauthorized person ▪ Unauthorized access of protected data and information by someone other than the owner of the protected data and information ▪ Unauthorized access of protected data and information by employees ▪ Unauthorized requests for protected data and information ▪ Unauthorized access through hardcopy files or reports ▪ Unauthorized transfer of protected data and information through third parties

Figure 8-59. Risk Examples to Business Continuity. Team Noridian's Business Continuity Plan accounts for many possible risks, including natural disasters.

The completion of the risk analysis generates a risk assessment report which becomes a part of the BCP. The impact and risk analysis is conducted at least annually, but is also triggered when there are significant changes to the system, regulatory changes, and other events that affect the BPC plan. Along with each risk that is identified, appropriate safeguards associated with each risk are ascertained.

After the impact and risk analysis are performed, Team Noridian begins the planning process for the BCP. The planning methodology is based on industry-accepted guidance in the form of the Computer Security Act, OMB guidance, NIST publications, Federal Continuity Directives, FEMA guidance, and Homeland Security Presidential Directives. Our real-world experience to be able to execute the methodology comes from decades in the health care industry working in complex claims processing environments where safeguarding sensitive information and assuring access to services is critical. The BCP planning process is cyclical, and is comprised of the following phases:

- Develop plan
- Test process and procedures
- Train on the process and procedures
- Execute plan
- Evaluate plan

The planning process addresses preventive measures for risks and threats to mitigate potential service interruptions. It is not enough to have plans of preventative measures, however. As part of the BCP, a contingency plan is created for each critical business unit. Examples of content in business unit contingency plans include:

- Management calling tree that is updated quarterly and provided to the Department for approval
- Inventory of the critical business unit processes for continued production at the minimal acceptable output levels
- Key personnel required for running essential functions, and organizational and reporting relationships to be implemented during continuation of operations of essential functions
- Resource requirements including facilities, personnel, contact information, and vital records
- Physical building locations for primary functions and backup locations for the business unit
- Key vendors that are part of essential functions
- Manual procedures for system down time
- Backup and redundancy requirements for the business unit (includes major computer equipment and software, operating systems used, system software, and backup file locations)

Also within the contingency plan are the triggers for activation of the contingency plan. This allows for a systematic and documented approach to what events will warrant the activation of the contingency plan. When a contingency plan is activated, a calling tree is used to notify and activate the business resumption team to begin work to restore operations to an acceptable level. The business resumption team is made up of key resources such as management and senior staff that have extensive business knowledge. The team is also large enough to handle the unavailability of some members who may be directly impacted by the triggering event. It is the responsibility of the business resumption team to begin the execution of the contingency plan.

In the event of an emergency due to disaster, component failure, or security or privacy breach, systems in the primary data center may be rendered unavailable for normal processing. In one of these events, it may be necessary to exercise BCP or backup system procedures for some time. Each of our disaster recovery and backup environments follow the same strict security and privacy processes and controls as the primary systems. Access to these systems uses the same technology and provides the same protections as during normal operations. Therefore, we are able to maintain access to necessary electronic protected health information (ePHI) in the event of an emergency, and are further able to enforce the same level of

protection for that ePHI during emergency operations. Plans for access and securing ePHI will be contained within the BCP as a supplement to the contingency plans.

Having a BCP with contingency plans is an important aspect of operating any business. However, merely creating the plans and having them on file is not enough. It is critical to keep the plans updated. Team Noridian's cyclical planning methodology establishes a formal process to maintain the BCP. Business and systems management are responsible for developing and maintaining the plan for their respective operations based on information in the BIA. Business continuity plans must be reviewed and updated at least annually, as well as upon major changes such as changes in business processes, business unit or team member responsibilities. Management is also responsible for conducting BCP training to their staff annually. Team Noridian will submit the updated BCP to the IME for approval on an annual basis. Within the BCP, Team Noridian will address the required maintenance of updating disaster recovery plans and procedures as a subset of business continuity planning.

As part of the development of the BCP for this contract, Team Noridian will develop plans for the replacement of personnel by working with our human resources department. The plans will include:

- Replacement in the event of loss of personnel before or after signing this contract
- Replacement in the event of inability by personnel to meet performance standards
- Allocation of additional resources in the event of Team Noridian's inability to meet performance standards
- Replacement and addition of personnel with specific qualifications
- The time frames necessary for replacement
- Team Noridian's capability of providing replacements and additions with comparable experience
- Methods for ensuring timely productivity from replacements and additions
- How established tasks will continue to be performed by staff when disaster strikes - focusing on the use of our contingency plans.

8.3.1.2.7 Disaster Recovery Plan

RFP Section 6.3.1.2, Requirements x and y

Team Noridian's Disaster Recovery Plan (DRP) will enable Team Noridian to survive a disaster and reestablish normal business operations. To accomplish this purpose, Team Noridian must be able to assure that critical operations can resume within a reasonable timeframe.

If there is a disaster, our first priority is to prevent loss of life and safeguard personnel during any disruption. Our second priority is to safeguard the assets with which we are entrusted and maintain the integrity of the systems involved. Team Noridian uses guidance from industry-standard references in developing our DRP, as shown in Figure 8-60, coupled with our own experience and our customer's requirements.

National Institute of Standards and Technology (NIST)	Homeland Security Presidential Directive (HSPD)	Federal Acts and Directives
▪ Special Publication (SP) 800-34, Contingency Planning Guide for Information Technology Systems ▪ SP 800-37, Guide for the Security Certification and Accreditation of Federal Information Systems ▪ SP 800-53, Recommended Security Controls for Federal Information Systems	▪ HSPD 7, Critical Infrastructure Identification, Prioritization, and Protection ▪ HSPD 20, National Continuity Policy, May 2007 ▪ HSPD 21, Public Health and Medical Preparedness, October 2007	▪ The Computer Security Act of 1987 ▪ Office of Management and Budget (OMB) Circular A-130, Management of Federal Information Resources, Appendix III, November 2000 ▪ Federal Continuity Directive 1, Federal Executive Branch National Continuity Program and Requirements, February 2008 ▪ Federal Continuity Directive 2, Federal Executive Branch Mission Essential Function and Primary Mission Essential Function Identification and Submission Process, February 2008 ▪ Federal Emergency Management Agency (FEMA) National Response Framework, January 2008

Figure 8-60. Industry-Standard References for DRP. Team Noridian follows multiple federal directives, acts, and NIST requirements when defining our DRP.

Team Noridian's DRP is a part of our overall Business Continuity Plan that addresses recovery of the core business functions and processes. The disaster recovery will focus on the recovery of systems, hardware, and technology infrastructure. Team Noridian's solution includes backup copies of our systems for storage at an offsite location. Along with this, Team Noridian has proposed equipment and software that will be able to be placed in a state data center as a disaster recovery site. Team Noridian's DRP will be submitted to the Department to be integrated within the current IME DRP. We will execute a test of our disaster plan annually and provide a copy of the results to the IME as well as plans of action to address any findings.

Backup Facilities and Backup of Data, Systems, and Documents

RFP Section 6.3.1.2, Requirements x.1, and x.2.i through x.2.iv

Team Noridian recognizes we will be responsible for providing adequate hardware that will be placed in a state data center for use as disaster recovery hardware. As part of this proposal response, we have proposed sufficient equipment that can be placed in the state's data center for disaster recovery purposes. Team Noridian will be responsible for providing an alternate business site for our operations. In the case of a site disaster that would render the current IME building uninhabitable, Team Noridian is prepared to obtain rental space in the form of conference rooms around the Des Moines metro area. The first priority for space will be the systems staff as they are critical to ensuring the MMIS and supporting systems are fully functional in the state data center. A second space will be procured for adjudicators who will be able to work remotely on Team Noridian computers connected to the alternate state data center. Team Noridian will ship computers and IT staff to Des Moines for setup if a disaster is declared. For mailroom operations, Team Noridian will utilize the capacity of our corporate mailroom facility in Fargo, ND, as it is equipped with the needed scanners and software as well as the mail opening equipment. Team Noridian will have our alternate business site operational within 72 hours of a disaster being declared. We are prepared to work with the Iowa Information Technology Enterprise (ITE) to establish network connectivity to the data center. Team Noridian's solution is web-based, allowing for easier access to the data center as replacement computers can be located on a wide-area network (WAN).

In the case of a widespread disaster in the Des Moines area, such as a flood or tornado, Team Noridian is prepared to supplement staff with additional staff from our Noridian operations in Fargo, ND. These staff will be able to assist in the case where the permanent Des Moines staff becomes unavailable due to a disaster. This supplemental staff will work with remaining Des Moines staff to keep output of core business processes at the acceptable levels.

Team Noridian's typical backup strategy uses disk-based backups to remote sites, which provides quicker and more resilient recovery mechanisms than a traditional tape backup solution. Team Noridian's solution for the IME will utilize the State's DR data center for backup location with tapes and disk. As part of our commitment to the IME, we will provide complete backup requirements for the Team Noridian systems. These backup requirements are updated regularly to ensure they are always accurate. The types of items documented for backup and redundancy requirements include:

- Robust backup procedures for databases, log files, application software, application object and component files, directory structures, and configuration files
- Disaster recovery and restart procedures
- Configuration Management Plan (details the hardware, software, data, and configuration components that comprise the production environment and are used to restore the system to be production-ready)
- Hardware backup for all essential computer systems
- Operating system software, libraries, documentation, and configuration files
- Procedure and user manuals
- Offsite storage location (including retention) for onsite and offsite backups, schedule backups and offsite pickups

Team Noridian believes maintaining extensive backup procedures are fundamental in assuring the Disaster Recovery Plan can be successfully executed. Offsite storage is an integral part of recovery within the DRP. Team Noridian will have the necessary data and procedures available at an offsite storage facility in the event of a disaster to ensure recovery can begin as quickly as possible. Team Noridian will work with the Department during the start-up and implementation phase to gain approval for our offsite storage location and associated procedures for updating offsite materials. Team Noridian will implement the DRP and provide a copy to the Department prior to the operations phase.

Database Backup and Recovery. Application databases have standard backup and recovery features available for all databases. We will perform online full backups weekly to external disk-based storage systems. We will also use perform daily incremental backups to external disk-based storage systems.

Non-Database File Backup and Recovery. The production environment consists of more than just the database. Team Noridian will use file-based backup and restore services to back up non-database related files. This is also a disk-based backup rooted in traditional, accepted backup schedules and processes.

Operations and User Documentation. System and user documentation is kept in the SharePoint portal. The SharePoint portal is also backed-up on a nightly basis. A copy of data stored in the SharePoint portal is also kept offsite. The Disaster Recovery Plan will contain detailed information that describes the SharePoint environment and how it can be recovered in the event of a disaster.

Computer Software and Operating Programs. Team Noridian stores all software programs in the test and production facility in a software repository. This will ensure we have ready access to all software versions that are deployed in production.

Team Noridian's database architecture creates and maintains checkpoints. In the event of a disaster, the architecture has the ability to recover and restart transactions from the last checkpoint. The DRP will contain detailed information that describes our checkpoint and restart capabilities.

Contents of the Disaster Recovery Plan

RFP Section 6.3.1.2, Requirements y.1 through y.7

The Disaster Recovery Plan (DRP) focuses on backup and recovery of information technology. It addresses recovery of all data processing and business operations. The DRP can only be activated within the Crisis Management Plan, which provides the authority for activating these plans. Team Noridian's DRP will specify responsibilities for both Team Noridian and IME staff so that in the case of a disaster, roles are clearly defined for recovery. The DRP will also satisfy all requirements for federal certification.

Team Noridian is aware that the IME must resume day-to-day activities within three business days of a disaster. Our DRP will be built around the same expectation. Since Team Noridian is responsible for the new MMIS, it is critical that Team Noridian's DRP be robust and detailed to restore the IME to a state of acceptable operations. Team Noridian's DRP will contain detailed responses to the following:

- **Checkpoint and Restart Capabilities.** Team Noridian's architecture creates and maintains checkpoints for processing claims in the MMIS and has the ability to recover and restart transactions from the last checkpoint.
- **Retention and Storage of Backup Files and Software.** Team Noridian will document the expectation for retention of backup files and software.
- **Hardware Backup.** As part of this proposal, Team Noridian has proposed hardware for the state data center to act as DR.
- **Network Backup for Voice and Data.** The new MMIS is web-based allowing for access via a standard internet browser allowing for flexibility in requirements for network configuration in DR situations.

- **Contractor Voice and Data Telecommunications Equipment.** Team Noridian will document expectations for our own voice and data needs.
- **Uninterruptible Power Source (UPS).** Team Noridian's standard is to allow a minimum of 30 minutes of run time for all systems. For alternate power sources in Team Noridian's data centers, the use of generators provides the minimum of 24 hours of run time.

Our DRP will address the continued processing of transactions in the case of a disaster. This will include documenting backup procedures and support in case of loss of connectivity. The DRP contains detailed file backup plans and procedures. Those files will be stored at an offsite facility that is responsible for securing the data against unauthorized access or disclosure, as well as fire, sabotage, and environmental considerations. Maintenance of system documentation and source code will also be stored at the offsite facility. Finally, the DRP will contain all backup processing capabilities at remote sites to assist in day-to-day operations of the IME in case of a disaster.

Maintenance of the Disaster Recovery Plan

RFP Section 6.3.1.2, Requirements x.2.v and y.8

Our DRP planning process is cyclical, and we will leverage existing plans and start with an updated risk impact analysis. All deliverables from the risk impact analysis process are updated to reflect system technology, as well as changes in some of the operational processes. The deliverables from the risk impact analysis are inputs to the development and updating of the DRP. All applicable state and federal statutes and laws will also be reviewed to make sure the plans are compliant with contract requirements. Reviews will occur and are documented according to a pre-determined schedule, which is at least annually. In addition, a number of other events will require a review, which may invoke another planning cycle. Examples where reviews will be conducted include:

- **Risk Assessment.** The plans should be reviewed every time a risk assessment is completed for the organization. This can happen when there are significant changes to the system, regulatory changes, and other events that impact the plans.
- **Health Care Industry Trends.** Major health care industry initiatives should initiate a plan review. Examples could include patient consent laws, interoperability standards for Health Information Exchanges (HIE), and general trends in business continuity planning techniques.
- **Regulatory Requirements.** New federal and state regulatory requirements may require a review of the plans.
- **Event Occurrence.** A review is performed following a response to an event, whether or not the Crises Management, Business Continuity, or Disaster Recovery Plan was executed. If the plans were activated, the review should take into account the history of the plan itself, how it worked, and why it was activated. If the plans were not activated, the review should examine why and whether this was an appropriate decision.
- **Test/Execution Results.** The plans are modified, as needed, based on test results or plan execution results.
- **Changes to Crisis Management Plan or Business Continuity Plan.** Related plans that may affect each other when they are updated include the Crisis Management Plan, BCP, and DRP.

The DRP and backup plan will be submitted to the Department for approval each time a plan change is made, and initially, prior to implementation. Annual test results reports are also submitted to the Department for review and approval. Approved copies of the DRP will be made available to the Department.

8.3.1.2.8 Configuration Management Plan

RFP Section 6.3.1.2, Requirements z and cc

The essence of change control and management of application development is configuration management. Configuration management requires controlling data items through change management processes and

configuration control functions and auditing to confirm that the control processes are working effectively. The behavior of information technology authorized users and their type of access (e.g., read, write) is documented in the Configuration Management Plan. Configuration management policies and procedures will be developed specifically for the new MMIS based on the State-approved policies and procedures to support its unique environment, criticality, and sensitive data.

The configuration management process is embodied in rules, procedures, techniques, methodology, and resources that:

- Identify and document the functional and physical characteristics of Configuration Items (CIs), which are the basic units of configuration management
- Establish configuration baselines for the control of CIs
- Control the changes to CIs and their related documentation
- Record and report information needed to manage CIs effectively, including the implementation status of approved changes
- Audit the CIs to verify conformance to technical documentation

Team Noridian will develop the Configuration Management Plan which includes the following items:

- Overview of Configuration Management
- Configuration Management Policies
- Configuration Management Process Overview
- Configuration Management Responsibilities
- Configuration Management Organization
- Configuration Management Orientation and Training
- Configuration Management Costs and Schedules
- Configuration Management Process Description
- Configuration Management Process Evaluation
- Communication
    - Process Documentation and Reporting
    - Coordinating with Stakeholders
    - Coordinating with Interested Parties

8.3.1.2.9 Hardware, Software, and Communications

RFP Section 6.3.1.2 aa

Team Noridian has reviewed the Department's supported versions of the Microsoft Operating System, Microsoft Office Suite, Internet Explorer, and technologies for data interchange and we have designed our solution and selected tools that are be compatible.

8.3.1.2.10 Planned System Environments

RFP Section 6.3.1.2 bb

Team Noridian has planned the implementation and configuration of the development and test environments in our Project Work Plan. Team Noridian will provide the following environments for the new MMIS.

- Development
- Unit Test
- System Test
- Integration Test
- User Acceptance Test
- Training/Knowledge Transfer
- Business Scenario Test

- Regression Test
- Trading Partner (EDI) Test
- Conversion Test
- Load and Stress Test
- Production (Parallel, Pilot and Beta)

The environments listed above will contain all of the functional components that make up the new MMIS. Test data will be created as required to facilitate the test processes. The environments will be created during the start-up and implementation phase as indicated by the master project plan. The environments will also be maintained during the operations phase of the project. We describe the environments and our approach to installing, configuring, and testing them in Tab 9, Section 9.2.10 of our proposal.

8.3.1.3 Deliverables

RFP Section 6.3.1.3, Requirements a through l

Team Noridian has planned every deliverable in our Project Work Plan and our PMO will perform monitoring of our performance to ensure that each deliverable is provided based on the dates established in the approved WBS and Project Work Plan. To support this phase, Team Noridian will develop the deliverables listed in Figure 8-61.

Deliverable	Agree to Meet?	Section that Describes Approach
The architectural and system requirements	Yes	Tab 8, Section 8.3.1
The results of the JAD sessions	Yes	Tab 8, Section 8.3.1
Methodology document for the development of the MMIS and POS systems	Yes	Tab 8, Section 8.3.1
Requirements Specification Document (RSD)	Yes	Tab 8, Section 8.3.1
Requirements Traceability Matrix (RTM)	Yes	Tab 8, Section 8.3.1
Detailed System Design (DSD)	Yes	Tab 8, Section 8.3.1
Conversion Plan	Yes	Tab 8, Section 8.3.1
Interface Plan	Yes	Tab 8, Section 8.3.1
Test Management Plan	Yes	Tab 8, Section 8.3.1
Business Continuity Plan	Yes	Tab 8, Section 8.3.1
Disaster Recovery Plan (DRP)	Yes	Tab 8, Section 8.3.1
Configuration Management Plan.	Yes	Tab 8, Section 8.3.1

Figure 8-61. Analysis and Design Phase Deliverables. Team Noridian develops all deliverables using its documented deliverable creation and review standards and will deliver them in accordance with our detailed project work plan.

8.3.1.4 Performance Standards

RFP Section 6.3.1.4, Requirements a through c

Satisfactory completion of JAD sessions

Team Noridian has specific expertise in conducting JAD sessions for Requirements Validation and System Design. The number of JAD sessions and durations established in the Project Work Plan is based on metrics and performance data from previous MMIS projects. With supporting PMO processes in place, Team Noridian will complete JAD sessions within the timeframe approved by the Department.

Accurate analysis and design deliverables within agreed upon time frames

Team Noridian's iVision360 ISDM processes results in accurate RVD and DSD documents due to the collaborative nature and the frequent "touch points" it fosters. Our functional manager will monitor traceability activities.

The requirements traceability matrix will be updated within a short period after each JAD session. The bi-weekly sessions keeps the focus on design and helps the management to identify potential delays in completing design in a timely fashion and allows for contingency plans and risk mitigation plans to meet agreed upon schedules with a high quality product.

Must meet measurement accuracy of 99 Percent

Team Noridian's Quality Monitoring and Control unit will measure defects against analysis and design deliverables and produce reports for PMO reporting. Our team will achieve 99 percent accuracy of these deliverables. Accuracy will be measured using checklists similar to the one provided in Figure 8-62.

Team Noridian's RVD Attribute Checklist	
Attribute	**Definition**
Fitness for Use	Features: The total set of product features and quality characteristics that meet the Department's needs under the environment for which the product is to be used. Freedom from defects: The degree to which the product is free from deficiencies that prevent the product from operating as specified.
Correct	Individual requirement: Each requirement is an accurate and precise description of a feature or process of the product. For each output, the range of acceptable input values will be defined. Requirements Validation Document: For an RVD to be correct it should accurately and precisely identify the individual conditions and limitations of situations that the desired capability will encounter and it must also define the capability's proper response to those situations.
Unambiguous (clear)	Individual requirement: Every requirement has only one interpretation. As a minimum, this requires that each characteristic of the final product be described using a single unique term. Requirements Validation Document: The RVD should be unambiguous both to those who create it and to those who use it. However, these groups often do not have the same background and therefore do not tend to describe requirements the same way. Representations that improve the requirements specification for the developer may be counterproductive in that they diminish understanding to the user and vice versa.
Complete	Individual requirement: The stated requirement is complete and does not need further amplification. Requirements Validation Document: An RVD is complete if, and only if, it includes the following elements: All significant requirements, whether relating to functionality, performance, design constraints, attributes, or external interfaces. In particular any external requirements imposed should be acknowledged and treated. Full labels and references to all figures, tables, and diagrams in the RVD and definition of all terms and units of measure.

Figure 8-62. Example Partial Checklist for Requirements Validation Document. Team Noridian's quality management processes provides for the measurement and analysis of metrics such as deliverable accuracy.

8.3.2 Development Activities

RFP Section 6.3.2

Team Noridian has proven experience running data conversions for multiple state MMIS projects. We have developed techniques for discovering sources of legacy data, mapping the legacy data to the new MMIS, and handling data gaps and quality issues. Team Noridian combines functional knowledge with technical expertise to achieve the most complete and accurate MMIS data conversion.

We understand that conversion is a highly iterative process. We have built processes and tools to manage the process of analyzing and cleaning legacy data. We also realize that the Department may have significant knowledge of legacy data – both documented and undocumented. Team Noridian will also leverage current experience gained from working with the IME.

Team Noridian understands that data conversion is a critical activity and an integral part of the system implementation process. While it is a separate and important task, Team Noridian integrates data conversion activities with other tasks in the Team Noridian iVision360 approach. The data conversion team will work closely with the business process area teams, and will attend requirements validation and collaborative design sessions to ensure a common understanding and thoroughly capture the data conversion requirements. All data conversion activities will be conducted in parallel with the new MMIS business process area teams. The data conversion effort will run in parallel with design, development, and testing. Details of how Team Noridian ensures interdependencies between the efforts are addressed further in our approach and in the draft Detailed Project Work Plan.

Team Noridian also understands the need to convert legacy data into the new MMIS and has experience converting both current and historical data into MMIS production systems and data warehouses. This understanding is well represented in Team Noridian's implementations in other states, which included very large data sets extracted from a variety of legacy system platforms. Team Noridian's approach to conversion planning is the critical step that provides the roadmap for the conversion effort by identifying all the sources of conversion data and laying out a plan to design, implement, and test the conversions.

Team Noridian's focus on low-risk and efficient conversion processes has been instrumental in its success in converting legacy data to provide increased accuracy and transparency for Medicaid systems in multiple states.

- Experience converting current and historical Medicaid and Pharmacy data for states, including Maine, Washington and Michigan
- Conversion strategies that integrate conversion design and testing with other DDI efforts to reduce risk
- Flexible architecture provides the opportunity to leverage interfaces and services to share data between subsystems, reducing time and effort for conversion development and testing

Once the conversion plan is in place, the conversion tasks begin the process of designing, developing, and testing the conversion. The mapping effort is the most critical activity as it will define how the data is converted into the new system. It must be emphasized that the conversion team cannot perform this mapping in a vacuum. It must be a highly integrated process with the application development and state teams. The application development team understands the target system and the existing system given current support for the Department. With a thorough understanding of both the source system data and target system structure, we minimize the risks typically involved in data conversion. This, coupled with active participation of the Department, will provide the required foundation to produce error-free conversion. The conversion team’s job is to bridge the gap between the two systems and make the transition seamless from a data standpoint. Wherever possible, the conversion team will use documentation from existing legacy systems to aid in the mapping effort. In addition, the conversion team will work with the state to fill in any gaps in the documentation.

Once the mapping process is complete, the exception reporting process becomes critical to identify exceptions to the rules. It is natural that many nuances in the data will only be revealed once the legacy data is in the hands of the conversion team and the conversion programs are being developed. The exception reporting process is designed to identify the gaps and misalignments in the converted data so that action can be taken. Since the conversion process is highly iterative, the exception reporting process becomes attached to conversion at all points forward. The conversion is not truly complete until the exceptions reports report clean data.

Once the conversion programs are developed, the conversion testing phase will begin. The key tool in conversion testing is the validation report. The validation report compares the actual conversion results to the expected conversion results and identifies discrepancies in the conversion. The report becomes critical in identifying data to be cleansed or conversion rule changes needed. The validation will be first performed at a unit conversion level and is scalable to full module and system level conversion tests that are done in later phases of testing.

Application level testing efforts are also critical to the conversion testing activities. The system users will play a key role in validating that the conversion has resulted in proper application function. This can be executed as part of conversion UAT as well as during functional UAT to ensure that conversion is working as per the conversion design and within the requirements of the application. Because all data elements may not be easily validated through front end screens, additional validation will be performed on the data when it is extracted and loaded to the data warehouse.

When the final production conversion occurs, it will rely on the foundation built in the prior phases. The conversion programs will run and the results will be measured by exception reports and validation reports. Once the counts, exceptions, and validations are all reconciled, the conversion will be declared complete.

After the completion of the conversion, a final report will be issued which will detail all counts, exceptions, and validations by module.

Team Noridian's data conversion task will ensure that:

- Data conversion does not pose a risk to the implementation.
- Converted data does not impede application functionality or performance.
- Conversion is an integral part of the project from the beginning.
- Conversion data is available to support application testing as it will yield more valuable testing with realistic data.
- Management has complete visibility of the progress of conversion and any issues.
- Conversion is complete meaning that 100 percent of all required data is converted and accounted for.
- Conversion is accurate meaning that 100 percent of all required data meets the business rules of the new system and relates correctly to other data within the system.

Team Noridian's data conversion approach has evolved over several decades and the lessons learned through multiple implementations. This approach will bring a great value to the Department in ensuring that the objectives of the Department are met; thereby successfully implementing the system. Figure 8-63 below provides a quick overview of the major tasks within the overall data conversion strategy identified for IME.

Data Conversion Approach	Key Factors and Outcomes
The Conversion Plan process will be used to fully scope the conversion effort.	Conversion scope will be identified early in the project and risks will be minimized.
The conversion mapping process will identify the transformations from the legacy system to the new system and will define how the data fits in the new system and how it relates to other data.	The conversion mapping will clearly identify how the data will fit into the system.
Team Noridian's conversion exception reporting process ensures that all conversion exceptions are identified and tracked to closure	Users and management will have visibility of the conversion exceptions and will be able to take corrective action.
Team Noridian's conversion validation process compares the actual results to the expected results and identifies any discrepancies.	Corrective action can be taken if discrepancies in the conversion results are found.
Team Noridian's conversion process is iterative by design, which means preliminary conversion can easily be run for testing purposes.	The quality of testing the conversion and the application will both be improved.
Our past experience with MMIS conversions has allowed us to develop a successful conversion strategy. Team Noridian has experience with multiple MMIS conversions and understands the need to integrate conversion into the project as a key function from the beginning.	Conversion risks to the implementation will be minimized.
Team Noridian's conversion testing process will validate conversion results against the conversion mappings and transformations. Any discrepancies will be reported.	Corrective action can be taken if discrepancies in the conversion results are found.
A combination of weekly status reporting including a summary of all conversion count and exception reports for any conversion runs in the current week and a list of all outstanding issues.	Management will be aware of the status and issues in conversion.
Team Noridian's conversion counts and exceptions reporting process ensures that all conversion counts are captured and all exceptions are identified and tracked to closure. Team Noridian's conversion testing process will validate conversion results against the conversion mappings and transformations. Any discrepancies will be reported. The conversion manager will provide an analysis of the test results including any associated impacts and action plans.	Users and management will have visibility of the conversion exceptions and validation issues and will be able to take corrective action.
Team Noridian's conversion testing process will validate conversion results against the conversion mappings and transformations. Any discrepancies will be reported. The conversion manager will provide an analysis of the test results including any associated impacts and action plans. This testing process is designed to be iterative and can be started from early on. It can be repeated as part of unit testing, system testing, and UAT, and is scalable from the smallest unit of conversion up to the full conversion.	Corrective action can be taken if discrepancies in the conversion results are found.

Figure 8-63. Data Conversion Strategy. The various tasks and expected outcomes of Team Noridian's approach to data conversion.

8.3.2.1 Data Conversion Task

RFP Section 6.3.2.1, Requirements a through f

Team Noridian understands that the Department requires a sound conversion strategy and approach that will convert all historical and active data including all imaged documents. Team Noridian's conversion approach is very robust and proven. It has delivered mission critical data in our proposed solution implementations in the states of Maine, Washington, and Michigan. Team Noridian's approach to data conversion starts early in the project life cycle and as we showed earlier in Figure 8-59, it describes the overall approach to data conversion. The approach will meet all the objectives that are outlined in the RFP in the following areas:

- Data Integrity
- Data Quality
- Data Verification
- Data Loads for Testing and Production
- Data Conversion Life Cycle

Team Noridian managed the process and performed conversion of legacy data from various sources, including other state agencies such as the Office of Financial Management, and external sources such as CMS. In the state of Michigan, Team Noridian managed the process and converted data from different systems, including multiple state Medicaid systems and external companies, such as Ingenix for claims and encounter data, MPRO for prior authorizations, and HTC for paper claims and attachment images.

The following sections provide a detailed description of the approach to planning, performing, managing, and assuring the quality of the conversion task.

Entrance Criteria

Data conversion and associated planning is one of the first activities to be started during a DDI project and the only dependency to beginning work is the establishment of the overall project work plan.

Conversion Management

The Project Management Office (PMO) will provide tools and processes for common project governance functions including risk management, issue management, defect management, and change management. The PMO will oversee the project schedule and ensure that conversion tasks are accurately represented in the Detailed Project Work Plan. The PMO will also oversee the processes and plans developed by the conversion team, such as the Conversion Plan, to ensure completeness, reasonableness, and compliance with project standards and processes. The conversion team will report status to the PMO using the reporting mechanisms and the PMO will monitor the performance of the team against project objectives and schedules.

Issues that cannot be resolved collaboratively between the conversion team and the Department members (those who are points of contact for conversion) will be escalated to the PMO using the issue management tools and processes for resolution.

Conversion Planning

Team Noridian understands that data conversion is a critical activity and an integral part of the Implementation phase. To ensure that conversion activities are integrated and consistent with the overall approach, the conversion team will be integrated with the business area teams and will jointly attend requirements validation sessions and collaborative design sessions to ensure a common understanding and clear identification of conversion requirements. All data conversion activities will be conducted in parallel with the new MMIS business area teams.

Team Noridian will conduct the following conversion planning activities:

- Establish conversion processes including associated stages, tasks, activities, ownership, and deliverables with interdependencies with other development methodology processes for the overall system
- Develop conversion procedures describing how each task and activity will be performed and verified
- Establish conversion tools leveraging experience on similar conversion efforts in other states
- Develop descriptions for creating and maintaining the master list of legacy data files, which will identify data in the legacy source environments and will contain important information such as:
    - Source of the data (e.g., legacy feed, legacy program data, external data source, future data entry, or manual data conversion)
    - Flow of the data
    - Data format and storage (i.e., flat positional data, structured extract, and unstructured extract)
- Establish conversion plans for manual data including a strategy and detailed process for how this manual data will be converted
- Establish the migration strategy for documents, images, and other files to be converted into Team Noridian's OnBase solution, where historical images are stored during conversion
- Establish the conversion execution plan describing how the tasks and activities will be carried out
- Develop the conversion test strategy
- Establish and publish the proposed conversion production timeline including day-by-day cutover activities

Conversion planning will occur early in the project and continue throughout the entire project life cycle. During requirements verification, the conversion team will update the Conversion Plan and submit this to the state for approval within 10 days of completion of requirements verification.

The order of conversion is critical, which is why planning for conversion will require consideration as to what data will serve as a foundation to convert other data. At a high level, conversion will be implemented in three phases or tiers:

- Reference data set conversion. This layer represents the reference data that stores all codes and setups used in the master and transaction layers. Examples include the data dictionary lookup codes and descriptions.
- Master data set conversion. This layer represents the master data that enables transaction processing. Examples include procedure codes, diagnosis codes, or drug codes.
- Non-transactional data sets conversion. This layer represents data sets that are required to support transaction, such as claims and service authorizations. Examples include provider and enrollees.
- Transactional data set conversion. This layer represents the transaction data that drives the new MMIS. Examples include claims and service authorizations.

Data Conversion Specifications and Mapping

The data conversion specifications and mapping activity must begin with a thorough analysis of the data conversion requirements. This analysis will be conducted in parallel and integrated with the new MMIS business area requirements validation sessions. This data conversion analysis will begin with data identification. Data identification shall include the development of a list of input and output files, the development and collaborative review of the legacy feed list, and a review of the legacy data dictionary and layouts. Once data identification is completed for each business area, Team Noridian's data conversion team will develop the data staging model and analysis, including the following:

- Development of data modeling staging schemas
- Preparation of staging data and staging exception reports
- Identification of all data requirements and source data
- Assessment of staged data

- Identification of unique key fields
- Identification of key relationships in and out of the feed
- Establishment of the subsystem loading order

Since the eCAMS data model is the foundation of a CMS certified MMIS solution, the target data model is mature and stable. After the data staging model and analysis are complete, our data conversion team will conduct a high-level gap analysis on the data model, including a gap analysis of key entities and relationships with other entities. The resulting analysis will be shared with the Department in order for the Department to assist in developing the data cleansing rules.

Team Noridian will leverage as much automation as possible to resolve data errors and deficiencies without sacrificing data quality, accuracy, or security. Based on experience, Team Noridian has enhanced the traditional data cleansing approach to clearly call out the responsibilities of each entity to provide the highest quality and most efficient result. This has now evolved as part of Team Noridian's methodology, iVision360.

In iVision360, data errors are first reviewed to determine if any fix is required. No fix may be needed for missing data that is not required. Following that, all data issues requiring resolution are sorted into two categories, data cleansing or data correction.

Based on Team Noridian's experience, many missing or incorrect data issues can be resolved with data cleansing. Data cleansing will be used to resolve errors in the following instances:

- A rule-based solution is available to format, default, transform, or correlate data (e.g., formatting a telephone number from XXX-XXX-XXXX to (XXX) XXX-XXXX)
- The rule-based solution does not have the potential to create a privacy issue
- The rule-based solution does not have the potential to create over or under payment scenarios in the new MMIS (e.g., defaulting share-of-cost information to zero when it should be present)
- The rule-based solution does not have the potential to provide incorrect access to care information, (e.g., information that may result in wrongly denying access to care in a point of sale (POS) transaction)
- The rule-based solution will not result in providing incorrect reporting information to federal or state agencies, or on any report tied to a contractual service level agreement (SLA)

A rule-based solution does not necessarily mean an automated solution. Team Noridian uses the following two criteria to determine if a data-cleansing rule will be automated:

- An established threshold of the minimum number of exceptions to warrant the development and testing of an automated solution
- Impact assessment of the effort and timing to perform the cleansing manually

Data correction generally involves data that is missing, corrupted, or tracked inconsistently in a legacy system, and cannot be derived based on rules or from other available data. Data correction is required when:

- The errors or issues do not have a rule-based solution
- The rule-based solution has the potential to create privacy issues or may result in inaccuracies in payment, access to care, or mandated reporting

Team Noridian will perform data cleansing as outlined in the conversion plan, but it will be required that the Department or owners of external sources perform or validate data correction activities.

In addition, critical risk-mitigation activities for data cleansing and correction include:

- Active participation by the Department to review the exception reports and provide input into establishing additional rules in an iterative manner
- Testing of the converted data running a known quality set of claims (called "golden claims") to validate payment considerations or eligibility considerations. These claims will be identified in the

conversion planning process so that they can be used in the development and unit testing of conversion programs.
- Storing the legacy data in raw format (for contingency planning) in order to perform comparison or applying patches

Once the data conversion analysis is complete for each of the business areas in the three phases, Team Noridian's data conversion team will work collaboratively with the Department on tasks to develop the conversion specifications and mapping documentation, including:

- Conducting legacy data definition
- Finalizing the target table sequential hierarchy for customizations to the base eCAMS data model
- Performing target mapping
- Conducting a structured walk-through with the Department
- Finalizing the conversion specifications and mapping

Collaboration will begin during requirements verification and will focus on identifying data sources and points of contact in addition to gathering documentation and files from legacy sources. Formal collaborative meetings and joint application development (JAD) sessions will begin as teams complete their General System Design (GSD) collaborative sessions, and are designed to leverage the information gathered during the GSD meetings.

The conversion specifications and mapping provide the design specifications for the conversion programs and include:

- Current system data to new system data maps, including:
  - Field definition and data range definition of the legacy field
  - Applicability to new system
  - Mapping to target entity
  - Cleansing and business rules
  - New MMIS data maps from the legacy system data
- Image conversion processes
- Conversion program specifications
- Conversion programs and processes
- Planning information to help facilitate conversion testing

Data Conversion Program Development

Team Noridian will write conversion programs using proven tools and will leverage eCAMS standard prebuilt data libraries and scripts for rapid and error free data conversion activities. All converted data will be tracked and validated to ensure 100 percent conversion of the source data. The tools used in the data conversion process are shown in **Error! Reference source not found.**8-64.

Tool Type	Definition	Toolset
Extraction, Transformation, and Loading (ETL)	The ETL tool will be relied upon to assist in documentation, reporting, and translation efforts.	WebSphere DataStage ETL integrator
Data Store	A number of data stores may be used throughout the data conversion efforts as holding areas for analysis, transformation, testing, and implementation.	Oracle
Scripting Language	To supplement the ETL, several scripting languages will be used during data conversion.	Oracle Procedural Language/ Structured Query Language (PL/SQL) Java Others as necessary
Configuration Management	The configuration management solution ensures that code is managed securely, releases include the	Subversion

Tool Type	Definition	Toolset
	correct version of the code, resources share access to the same code, and code is baselined at the appropriate stages of the project.	
Defect Tracking	Logging, managing, and reporting of defects found during conversion testing is performed using an industry standard defect tracking tool that is common across the DDI phase of the project.	Bugzilla

Figure 8-64. Data Conversion Toolset. The tools selected by Team Noridian for the new MMIS conversion are industry-leading products that Team Noridian has used successfully on past MMIS conversion efforts in Washington, Michigan, and Maine.

Data Conversion Execution and Testing

The Team Noridian data conversion team will work closely with the test team and the Department to develop a detailed Data Conversion Test Plan that clearly describes our approach to data conversion, execution, and testing. The test plan will include our approach to iterative and repeated execution and testing of conversion processes, and the approach to ensure that errors are detected, corrected, and retested.

The repeated execution and testing of data conversion processes includes multiple iterations of data transformation, target loading, and data conversion verification. The data transformation step includes the processes for transforming the data, identifying data quality gaps and problems, and generating target loading exception reports.

The target-loading step encompasses subsystem independent conversion, a mechanism to re-convert and apply patches, historical data conversion, and business process area integration. The data conversion verification step includes internal data verification, documentation of queries used and results, data verification performed by the test team, and documented results by the test team.

Execution of data conversion will aim for the following:

- Repeatable conversion. Automatically clear the data created by the previous conversion instance for the specific business process area. This approach enables Team Noridian to conduct independent business area conversions and later integrate with the larger system.
- Scalable conversion. Accommodate current needs and at the same time manage the scope to allow flexibility for rule changes.
- Exception handling. Quantify errors in terms of input and output record statistics. Statistics for the number of records converted, number of errors, and new system inserts will be provided to the Department for each test execution and the production execution.
- Capturing and documenting the errors. Develop potential solutions, business rules, fixes, and retest. The exceptions for each iteration will be documented and will be available for later retrieval for any future research.
- Integrating with configuration and test management. Defects identified during testing will be logged in Bugzilla and assigned to the conversion team for resolution. These defects will follow the same process for analysis, correction, retest, and regression testing, as outlined in the System Test Plan.
- Identifying data elements that are not required by the target system as they are either obsolete or were derivative fields in the legacy MMIS.

Testing the converted data is an important activity of data conversion. Manual and automated converted data will be tested. During data conversion testing, Team Noridian will validate that:

- The entire set of mapping rules defined in the mapping specifications document are incorporated
- The converted data follows the data structure model of the new MMIS
- All the fields mapped from the current MMIS are converted correctly in the new MMIS
- All the constraints of the new MMIS are fulfilled

- The correct number of records are created in the new MMIS
- The cleaned data is incorporated correctly in the conversion process
- The source and new MMIS records reconcile

Third Party and Commercial Off-the-Shelf (COTS) Conversion

In order to meet the goals of the Department to provide the highest quality services and solution for the new MMIS, Team Noridian employs a suite of industry-leading products to provide value-add services. This approach results in a loosely coupled, federated solution where data can easily be shared between components even if they do not reside on the same servers, platforms, or in the same physical location. The conversion planning and execution processes take into consideration where conversion efforts can be shared between systems when two systems require the same data to provide services.

The typical example is where a "downstream" system can obtain cleanly converted data from an "upstream" system. The upstream system is usually the system of record for that data in the new MMIS. Often the downstream system will be receiving new or updated records in production through an interface that can be modified to accept all of the newly converted records, to reduce coding, testing, and support. This process also allows Team Noridian to assign any internal identification (IDs) before passing the record to a downstream system, providing additional integrity to the data.

Figure 8-65 shows an example of how Team Noridian will provide member records to several downstream COTS and third party systems requiring member information records.

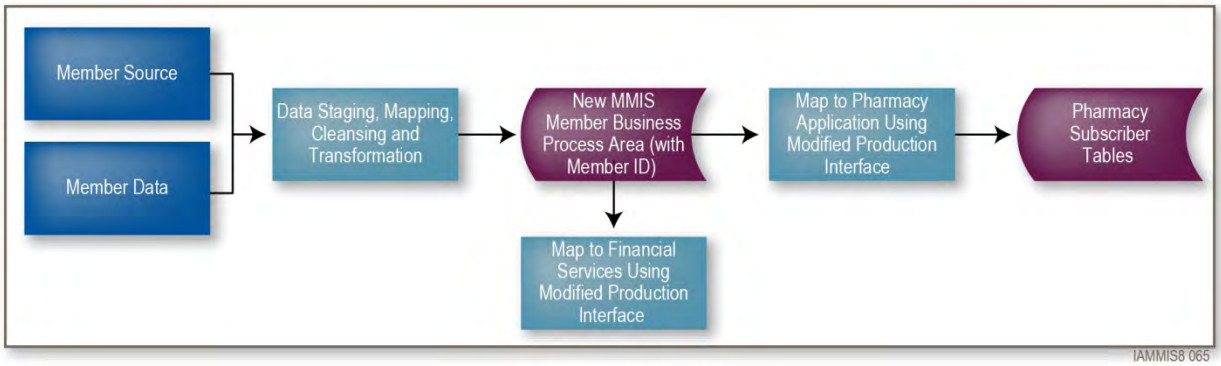

Figure 8-65. Third Party and COTS Conversion. The process to convert enrollee records to the COTS financial and third party pharmacy systems shows how Team Noridian leverages an integrated conversion approach to perform conversion with quality and efficiency.

Examples of data conversion files that will be converted to eCAMS and then converted to downstream systems include provider, enrollee, eligibility, and Third Party Liability (TPL) data.

Examples of data conversion files that may be converted directly from the legacy source to the third party or COTS system include pharmacy historical claims, drug rebate invoice history, garnishments, or customer relationship management (CRM) records.

Image Conversion

Data conversion of images, including pictures, x-rays, e-mails, historical reports, or correspondence, will be converted using a migration strategy that is different from the full data conversion process described above. This process involves the following:

- Establishing the sources of all images and files to convert to the EDMS solution
- Developing file structures and indexes
- Migrating the files to the EDMS solution
- Assigning new MMIS image identifiers to map to new MMIS converted data

- Analyzing file data to map any image identifiers to new MMIS data including mapping to third party products, such as CRM as appropriate
- Reviewing reports of any files that have missing or incomplete information

Exit Criteria

The exit criteria for conversion will include approved versions of all of the required deliverables for conversion. In addition, while conversion has minimal requirements to begin, the criteria to determine that conversion has been completed successfully are critical to the success of the production application and services to be provided with the new MMIS. Because of this, exit criteria will be well defined and the project will create detailed tasks and checklists to document and ensure that these have been met.

There will be exit criteria defined for each phase of conversion. The conversion UAT exit criteria must be satisfied before the production conversion can begin. After the production conversion completes, the exit criteria will be re-evaluated for production to finalize the conversion process.

Quality Management

The Quality Monitoring and Control unit will actively participate in the conversion effort. Based on the Conversion Plan, the quality team will develop Quality Management (QM) Plan tasks to verify and validate key conversion deliverables and activities, and will manage the QM Plan and schedule throughout conversion. These activities may be formal ones, such as a planned audit at the end of a phase of work, or informal ones, such as spot checks for compliance. Formal activities will be communicated to the conversion team in advance, including the requirements for each review or audit, to ensure that the conversion team has adequate time to prepare the materials or data for review.

In addition, the quality team will provide guidance to the conversion team regarding standards and processes for data conversion validation and testing activities, and will review these plans for completeness and compliance with overall project standards and processes in these areas. The quality team will also provide QM related tools and support for these tools to the conversion team.

8.3.2.1.1 State Responsibilities

RFP Section 6.3.2.1.1, Requirements a and b

Team Noridian's Data Conversion Plan for new MMIS, as outlined in Section 8.3.1.2.3 Conversion Plan above, provides an open and highly integrated approach. Team Noridian’s approach to collaboration between the contractor and Department teams is integrated throughout our methodology. Examples include:

- **Involve the Department staff in data model mapping.** A fundamental tenet of information technology systems is that if you understand the data model, you will understand the system. To that end, Team Noridian will involve the Department staff in mapping activities of the data conversion task.
- **Review and approve deliverables.** Team Noridian will work with the Department, as outlined in this proposal, to develop the Conversion Plan and expected formats and content for other deliverables. Team Noridian will also hold planned walk-through of key deliverables with the Department in order to explain the content and provide an understanding of the deliverable it is being asked to review and approve. In our experience, the deliverable walk-through process is highly beneficial to avoid customer confusion on what had been approved and subsequently leading to issues, discrepancies, or change requests later in the project.
- **Describe the eCAMS data model.** Team Noridian will provide descriptions and walk-through of the eCAMS data model to provide a deeper understanding of the transfer system.
- **Review analysis of legacy data.** Team Noridian will present an understanding of the legacy data (and how the data will need to be transformed for the transfer) to provide another level of understanding to the Department staff.

Team Noridian will also rely on the Department to act as a liaison with the incumbent and external partners that will provide data or documentation required for the conversion effort.

Data cleansing and correction is an area where the Department will need to be actively engaged with Team Noridian to ensure that data is converted correctly and that the production system can correctly determine eligibility, calculate payments, and report data to internal and external entities.

Team Noridian defines data cleansing and data correction responsibilities as follows. Data cleansing is performed where a rule-based solution can be documented and developed to convert the data into the new MMIS. In addition, the rule-based solution cannot have the potential to create privacy issues or may result in incorrect payment, access to care, or mandated reporting. Where a data cleansing solution is available, Team Noridian, often with input from the Department, will document the rule-based solution and appropriate validation rules. The Department will provide feedback and approval on data cleansing rules.

Data correction generally involves data that is missing, corrupted, or tracked inconsistently in a legacy system, and cannot be derived based on rules or from other available data. Data correction is required when there is no rule-based solution that can be defined or any rule-based solution has the potential to create privacy issues or incorrect payments, access to care, or mandated reporting.

Because data correction cannot be performed in a rules-based manner without affecting services to providers, enrollees, or external entities, it is necessary for the data to be corrected by a responsible party who has accurate information with which to correct the problem. When data correction activities are required, Team Noridian will document the need for data correction and expected format of the result, as well as the critical timeline for resolution.

A detailed explanation of the Department's responsibilities by stage of conversion is provided in Figure 8-66.

Subtask	Department Responsibility
Conversion Plan	▪ Provide knowledgeable staff to participate in data conversion activities (e.g., planning, design, documentation, or testing). ▪ Provide existing system documentation and data dictionary for all data required to be converted. ▪ Provide source data files to Team Noridian for mapping, development, testing and final conversion of all existing new MMIS data. ▪ Respond to Team Noridian's inquiries related to the Department's policies and procedures within the work breakdown structure (WBS) schedule to avoid delay of the deliverables. ▪ Review, provide feedback, and approve the Conversion Plan. ▪ Review, provide feedback, and approve the Data Conversion Test Results. ▪ Monitor Team Noridian performance. ▪ Coordinate with the incumbent and external agencies where required.
Conversion Design	▪ Assist in identifying source(s) of data and determining the primary source or system of record ▪ Provide, or assist in the process to provide, existing system documentation and data dictionary for data required to be converted. ▪ Respond in a timely manner to Team Noridian's inquiries and requests for clarification related to data mapping and system conversion requirements ▪ Provide the layouts, field definitions, field range values, and definitions at the early stages of the project after providing initial documentation, if not previously provided or available from another source. ▪ Help Team Noridian understand the primary key of the feed and the relationship to other feeds. ▪ Review, provide feedback, and approve data mapping rules.
Conversion Development and Test	▪ Assist in the identification, review, and approval of data cleansing and correction rules. ▪ Resolve or coordinate resolution of data correction issues and missing referential values in a timely manner. ▪ Provide legacy data from the incumbent within 60 days of the contract award. ▪ Coordinate all communications and additional data gathering between Team Noridian and the current contractor(s).
Parallel and User Acceptance Test	▪ Participate in testing. ▪ Monitor the performance of Parallel and User Acceptance Testing. ▪ Approve all routines for data conversion before final application to the production version of the system. ▪ Report data conversion defects and issues in a timely manner as laid out in the Risk and Issue Management Plan and System Test Plan. ▪ Review, provide feedback on, and approve Data Conversion Test Results.

Figure 8-66. Department Responsibilities during Data Conversion. This table maps the specific responsibilities of the Department to different conversion activities.

Team Noridian will submit the documents for the Department implementation team in accordance with the specified 10 business days of review period and is accounted for in Team Noridian's project WBS and the schedule. Since conversion will be an integral part of the project from the beginning, the conversion team will be able to submit early drafts of conversion requirements to aid in defining the conversion effort.

8.3.2.1.2 Contractor Responsibilities

RFP Section 6.3.2.1.2, Requirements a through h

Team Noridian understands that data conversion is a key success factor for successful implementation of new MMIS. Team Noridian's data conversion approach will accurately convert all required data elements from legacy MMIS to new MMIS. Our approach includes the following major activities:

- **Plan and Manage Conversion.** Team Noridian will develop the detailed Conversion Plan, which establishes the processes, roles, responsibilities, verification mechanisms and expected outcomes for conversion. Throughout the conversion period, Team Noridian's conversion task manager will coordinate between the functional, development, test, incumbent, and Department teams to ensure a complete and accurate data conversion.
- **Identify and Analyze Data and Sources.** Team Noridian will develop and review the legacy feed list and review the legacy data dictionary and layouts. In addition, Team Noridian will participate in requirements verification sessions and review the SFP requirements to identify the data needed to support the new MMIS and the source of record for this data.
- **Stage Data.** Data feeds will be staged in the staging area for further processing. Staging exceptions and staging profiling analysis results will be produced and analyzed to determine the resolution for the exception.
- **Verify Data.** Basic checks will be performed to ensure that the source files are structurally correct and complete. Team Noridian will then identify data cleansing and any data correction activities that need to be performed manually.
- **Data Mapping.** Data will be mapped field-by-field from the legacy source to the new MMIS. Data mapping activities will result in the Data Conversion Specifications and Mapping Document.
- **Data Cleansing and Correction.** Team Noridian will document the data cleansing and data correction rules as we perform data mapping.
- **Data Transformation.** Team Noridian will transform the data based on the specifications and produce exception reports. The above steps will be conducted iteratively until all of the business domains are converted. Team Noridian expects that transactional data, such as claims and service authorizations, will be partially transformed in data sets, while some business domains will be transformed completely in one pass.
- **Testing and Verification.** The verification process is an iterative one. As a value-add in the iVision360 approach, Team Noridian converts and tests data during Development and System Test. In addition, preliminary converted data is loaded for parallel testing and full conversion data for UAT.
- **Final Target Loading.** Final target loading is the process that will be started from scratch on a production schema with proven data conversion procedures. Target audit statistics will be collected and verified against source data statistics and expectations.

Team Noridian understands the business need to capture the information that is captured on paper, and through its proposed solution, automates various aspects of the current paper processes. Our conversion approach includes not only the current electronic data but also includes the data sources such as imaged documents and the meta /index data that identifies the scanned images. eCAMS will associate the imaged paper information to the electronic data records such as claims, providers, members, cases, and prior authorizations.

As part of Team Noridian's data source identification described in the Conversion Plan above, Team Noridian will review all data sources and define the list of data elements from each source that will

require to be converted to new MMIS. Subsequent to identifying the data elements for each data source, Team Noridian will work with the Department to establish the conversion business rules for every data element in the mapping documents.

Team Noridian will submit the following deliverables for review and approval within the timeframe determined by the Department:

Final Conversion Plan

The Conversion Plan will be the first deliverable of the conversion process. The plan document will describe the conversion approach in detail. The Conversion Plan will serve as a roadmap for the conversion effort as well as an early scope definition.

The Conversion Plan will contain the following sections:

- Conversion approach
- Conversion workflow
- Automated conversion
- Manual conversion
- Team Staffing Plan
- Conversion schedule including all phases of development, testing, and production conversion.
- Scope of conversion including identification of all sources and targets. This will include all files, databases, and images.
- Conversion data validation methodology and corrective process definitions.
- Actual results vs. expected results
- Correction process methodology
- Conversion testing methodology
- Data cleansing approach
- Management approach
- Metrics
- Completeness
- Accuracy
- Detailed contingency plans
- Mappings
- Source to target elements
- Transformations
- Default values
- Validation conditions
- Exception handling
- Conversion programs
- Conversion exception reports

Since Team Noridian has performed multiple MMIS conversions with the eCAMS data model, the library of previous conversion plans for the eCAMS target model will be utilized as a starting point. The plan will then be customized to the scope of the new MMIS conversion and to reflect the legacy data sources for conversion.

Conversion Checklist

Conversion checklists will be developed for each subsystem level conversion. The checklists ensure that all steps in the conversion are defined, scheduled, validated, and completed.

The checklists will include:

- Listings of source files, databases, and images
- Listings of target files, databases, and images
- Conversion program names and locations
- Expected source record counts
- Expected target record counts
- Expected exception record counts

Since Team Noridian has performed multiple MMIS conversions with the eCAMS data model, the library of previous conversion checklists for the eCAMS target model will be utilized as a starting point. The checklists will then be customized to the scope of the new MMIS conversion and to reflect the legacy data sources for conversion.

Data Reconciliation Procedures

Data reconciliation procedures will be developed for each subsystem level conversion. The conversion mappings will serve as the foundation for the data reconciliation procedures. The mappings will define the source to target mappings and transformations for the subsystem conversion.

The reconciliation procedures will consist of automated scripts to query the source and target data and measure the completeness and accuracy of the conversion.

The reconciliation procedures will include:

- Conversion mapping references
- Reconciliation script descriptions and locations
- Reconciliation process documents
- Reconciliation process flow
- Exit criteria
- Exception handling process

Since Team Noridian has performed multiple MMIS conversions with the eCAMS data model, the library of previous conversion reconciliation procedures for the eCAMS target model will be utilized as a starting point. The procedures will then be customized to the scope of the new MMIS conversion and to reflect the legacy data sources for conversion.

Convert and Reconcile Data

Conversion is an extremely iterative process. Therefore, the conversion process is designed to be repeatable and contains certain core components that are executed as a part of each conversion run regardless of the phase or scope of the conversion. For example, a conversion run may consist of converting one table for a subsystem or an entire subsystem or the entire system but it will still consist of these basic steps:

1. Obtain the source data
2. Configure the conversion run parameters
3. Execute the conversion programs
4. Run the conversion validation reports
5. Run the reconciliation procedures
6. Establish thresholds for moving on to the next step in the conversion process. For example, it may not make sense to run the conversion validation reports if the conversion programs cannot complete without execution errors. However, there may be acceptable levels of validation errors that will allow execution of the reconciliation procedures.

The convert and reconcile data deliverable will include:

- Conversion program listings
- Conversion execution run results
- Conversion validation results
- Conversion reconciliation results

The above results will be published for each conversion run.

Since Team Noridian has performed multiple MMIS conversions with the eCAMS data model, the library of previous conversion programs for the eCAMS target model will be utilized as a starting point. The programs will then be customized to the scope of the new MMIS conversion and to reflect the legacy data sources for conversion.

Conversion Testing

Conversion testing will be conducted for each subsystem conversion. Team Noridian will use a combination of automated scripts and application verification to conduct conversion testing. The scripts will be used to compare actual conversion results versus the expected results. In addition, conversion data will be tested through the application to ensure proper integration between the conversion data and the application. The conversion data will be verified through application screens, reports, and data extracts .

The conversion testing will include:

- Conversion test execution
- Conversion test results
- Actual vs. expected results comparison
- Screen shots
- Report samples
- Extract examples

The above results will be published for each conversion run.

Since Team Noridian has performed multiple MMIS conversions with the eCAMS data model, the library of previous conversion test scripts for the eCAMS target model will be utilized as a starting point. The scripts will then be customized to the scope of the new MMIS conversion and to reflect the legacy data sources for conversion.

Conversion Reports

Conversion reports will be used to measure the progress of conversion. The reports will measure all aspects of conversion including at the subsystem level:

- Completeness. Completeness is measured by comparing source record counts to target record counts taking into account all filters and transformations. Completeness statistics will be compiled at the subsystem and table level. Conversion percentages will be reported at all of these levels.
- Accuracy. Accuracy statistics measure the conversion compliance with the conversion rules. Converted records will be compared at the column levels with the expected target values based on transformation rules. Any variances will be reported on the accuracy report.
- Exceptions. Listing of all rows and columns failing the conversion validation rules including counts and percentages.
- Performance. Performance of each subsystem and component level conversion.
- Data Reconciliation. Automated scripts will be used to compare source and target data and identify discrepancies in counts and content.

The conversion reports will include:

- Completeness report
- Accuracy report
- Exception report
- Performance report
- Data reconciliation report

Since Team Noridian has performed multiple MMIS conversions with the eCAMS data model, the library of previous conversion reports for the eCAMS target model will be utilized as a starting point. The conversion reports will then be customized to the scope of the new MMIS conversion and to reflect the legacy data sources for conversion.

UAT of Converted Data

The Conversion UAT process will be a comprehensive test of conversion of all subsystems. Each conversion will be executed in order. In order to produce the highest quality conversion UAT, legacy source extracts will be synchronized to the greatest extent possible. This will simulate the production conversion and will minimize referential integrity issues. Since production conversion is often performed in a limited time window, performance will be critical for the conversion. Performance metrics will be captured during the UAT conversion to measure the execution time for each subsystem and component conversion. Reports will be captured from each conversion and made available to the Department for review. The UAT of converted data will include:

- Conversion UAT execution
- Conversion exception reports
- Completeness reports
- Accuracy reports
- Performance metrics
- Conversion UAT will be complete when all report results satisfy the UAT exit criteria

8.3.2.1.3 Deliverables

RFP Section 6.3.2.1.3, Requirements a through f

To support this phase, Team Noridian will develop the deliverables listed in Figure 8-67.

Deliverable	Agree to Meet?	Section that Describes Approach
Final Conversion Plan	Yes	Tab 8, Section 8.3.2.1 Data Conversion Task
Data Conversion Checklists	Yes	Tab 8, Section 8.3.2.1 Data Conversion Task
Data Reconciliation Procedures	Yes	Tab 8, Section 8.3.2.1 Data Conversion Task
Conversion Test Results	Yes	Tab 8, Section 8.3.2.1 Data Conversion Task
Conversion Reports	Yes	Tab 8, Section 8.3.2.1 Data Conversion Task
UAT Test Results	Yes	Tab 8, Section 8.3.2.1 Data Conversion Task

Figure 8-67. Development Activities Deliverables. Team Noridian develops all deliverables using its documented deliverable creation and review standards and procedures and will deliver them in accordance with our detailed project work plan.

8.3.2.1.4 Performance Standards

RFP Section 6.3.2.1.4, Requirement a

Team Noridian will involve the Department during all the stages of the data conversion process. As described previously in this section, the final conversion will be completed after the approval of the Department. The Department will have the ability to review the data sources and final converted data set.

Team Noridian will provide evidence to the Department, through a combination of conversion reports, test results and staged demonstration, that 100 percent of all appropriate data has been successfully converted.

8.3.2.2 Configuration and Rules Engine

RFP Section 6.3.2.2

Our past experience in managing MMIS implementations, and the operational experience from Iowa, has helped us hone and fine tune our process and methodology to ensure that delivered solution addresses and meets the expectations of the Department and fulfills the objectives set forth. Team Noridian pioneered the use of a Business Rules Engine and a configurable system in the world of MMIS. The configurable eCAMS platform is currently operational in the States of Washington and Michigan, and was recently certified by CMS, using their new certification toolkit.

Team Noridian has broad and deep experience in state MMIS implementations and in configuring and integrating rules engine with transactional systems. It was our innovation that led to the separation of rules logic from application code for Medicaid implementations which is now the norm and expected part of the MMIS system architecture.

Team Noridian's infrastructure solution addresses challenges related to the higher volumes of recipients, providers, and new programs anticipate d for the future as well as issues related to performance, maintenance, and availability. Our solution architecture is fully scalable, both horizontally and vertically, and it is intrinsically designed for high availability. We use real-time operational metrics from production implementations for capacity planning that enable Team Noridian to provide a low-risk, cost-effective infrastructure for managing and operating the new MMIS. In addition, we leverage virtualization technologies to logically partition physical servers leading to a lower total cost of ownership.

8.3.2.2.1 State Responsibilities

RFP Section 6.3.2.2.1, Requirements a and b

Team Noridian understands and acknowledges the Department's responsibilities included in the RFP. Team Noridian understands the success of the project depends on the each party fulfilling their prescribed responsibilities as specified here. Team Noridian will work with the implementation team assigned by the Department to capture and develop any design and implementation requirements that relate to configuration of software and application and the population of the Rules Engine.

Team Noridian understand the need for the implementation team to review all deliverables and work plans, and any screen modifications and prototypes. Team Noridian will factor the standard timeframe of 15 business days, which will be required for these reviews while making submission to the Department.

8.3.2.2.2 Contractor Responsibilities

RFP Section 6.3.2.2.2

Team Noridian currently operates and manages the implementation of eCAMS in the states of Washington and Michigan, which provides an extensive body of knowledge, including but not limited to processes, procedures and guides. Also, Team Noridian today is an important member of the current IME, and provides operational support in Core Services. Team Noridian will leverage this knowledge base during its implementation phase of this contract to ensure that it addresses the requirements of the Department.

Demonstrating all Hardware, Software, and Communication Linkages are Functional

RFP Section 6.3.2.2.2, Requirement a

As Team Noridian performs the task of establishing the system environment and infrastructure, we will keep the Department informed at each major step. Our plan is to demonstrate linkages of hardware, software and network communication are functional during Readiness Checkpoints, before each major Test Phase. Our plans also include a 90, 60 and 30 day readiness checks, prior to Go-Live. Hence, Team

Noridian will have many opportunities to demonstrate to the Department that linkages of hardware, software and network communication are functional.

Team Noridian's proposed architecture for IME, is based on the current MMIS implementation in the State of Washington. The core of the new MMIS will be based on the tested and proven eCAMS platform. The eCAMS platform is also implemented in the State of Michigan. The platform is flexible and supports integration of COTS products that are additionally required to fully address the requirements of a typical MMIS.

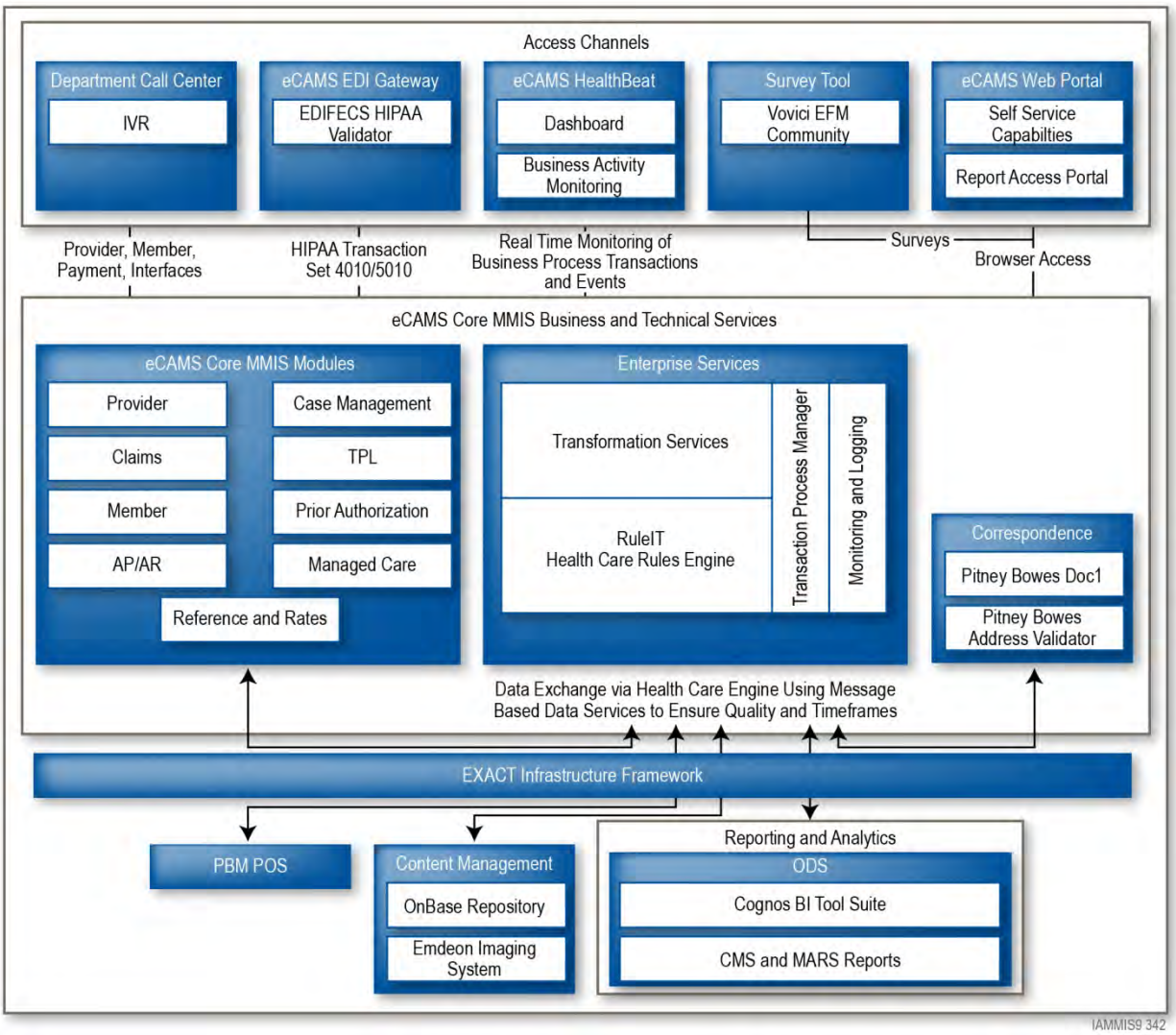

Figure 8-68 provides a conceptual overview of eCAMS, integrated COTS products and other building blocks that constitute the new MMIS.

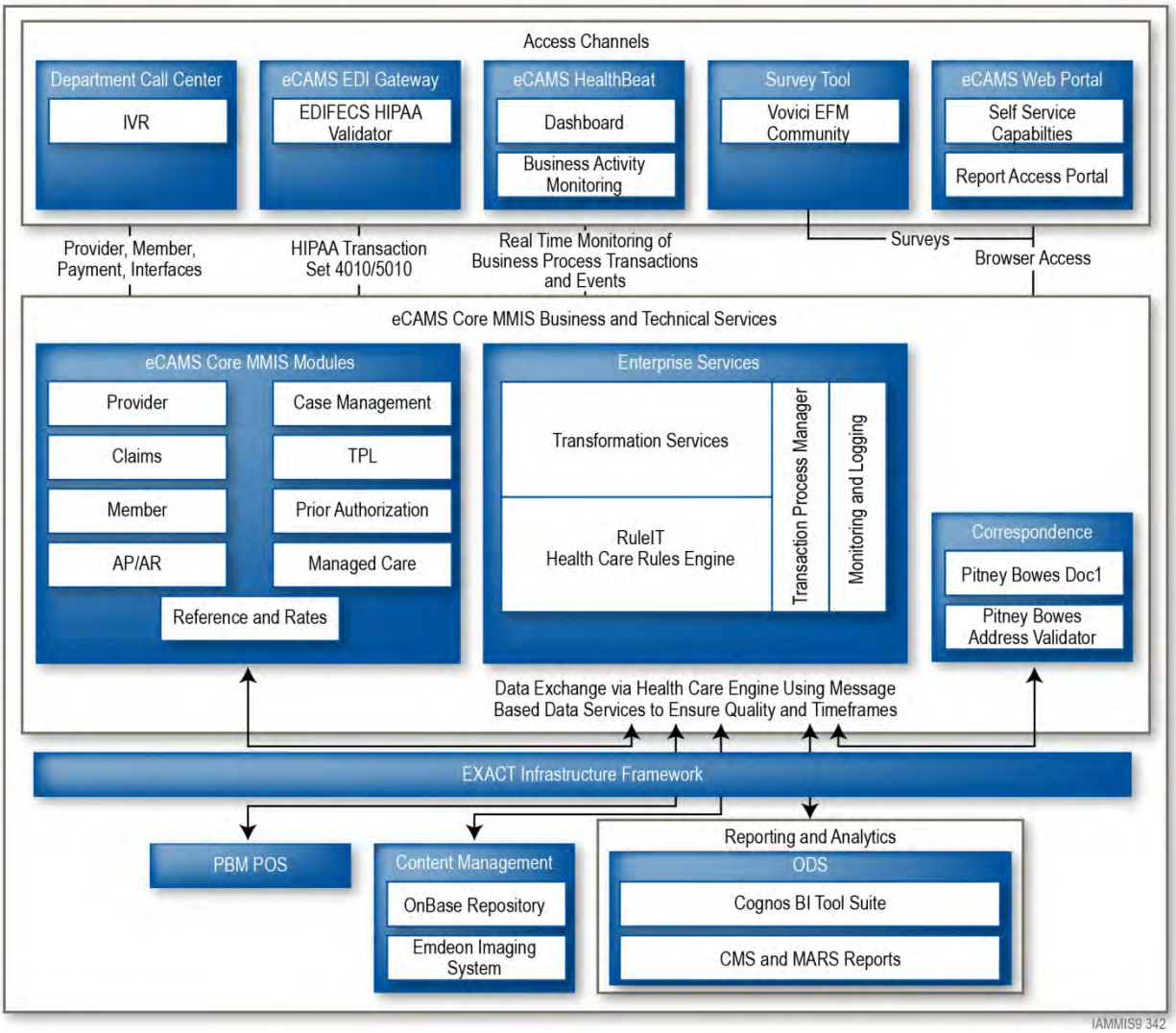

Figure 8-68. Conceptual Overview of the new MMIS and its build blocks. The new MMIS proposed is flexible and configurable to fully address the needs of the Department.

Team Noridian has already performed an analysis of the required infrastructure components as part of this proposal effort. Team Noridian has partnered with Oracle to provide a robust hardware platform for development, testing, production, and disaster recovery environments. The architecture for the new MMIS requires a flexible hardware platform to support Web, application, and database infrastructure running on UNIX as well as Windows operating systems. The infrastructure components must support the functional, data, performance, and security requirements for the new MMIS. The hardware platform must also support vertical and horizontal hardware scaling for future growth and performance requirements.

The proposed hardware will specifically address and handle the transaction volume, traffic and to fully meet all the performance levels indicated in the service level metrics in this RFP. Team Noridian has used transaction traffic metrics from operational systems that closely resemble volumes for the State of Iowa. The operational metrics enable Team Noridian to create hardware and software specifications that are realistic. These metrics were derived using data collected from production systems running in states of Washington, Michigan and Maine. Based on our experience running a modern production system in multiple states, we have provided the most accurate hardware and software specification that meet the volume requirements stated in the RFP.

Ensuring the Solution Meets Design Criteria

RFP Section 6.3.2.2.2, Requirement b

One of the key tasks during the analysis and design activities allows the Department and Team Noridian to validate, understand and accept the requirements as specified in the RFP and the also verify and validate the solution provided as per the RFP. Team Noridian will use a requirement traceability tool, ReqTrace to record these requirements and response, and manage them. ReqTrace allows the Department and Team Noridian to determine how these requirements are addressed, by providing a crosswalk of these requirements with design and test results.

The screenshot in Figure 8-69 below shows the requirements validation functionality of the ReqTrace tool. Reqtrace is used from the very first stage of the project, beginning with the validation of the requirements and response, and tracking all changes to these.

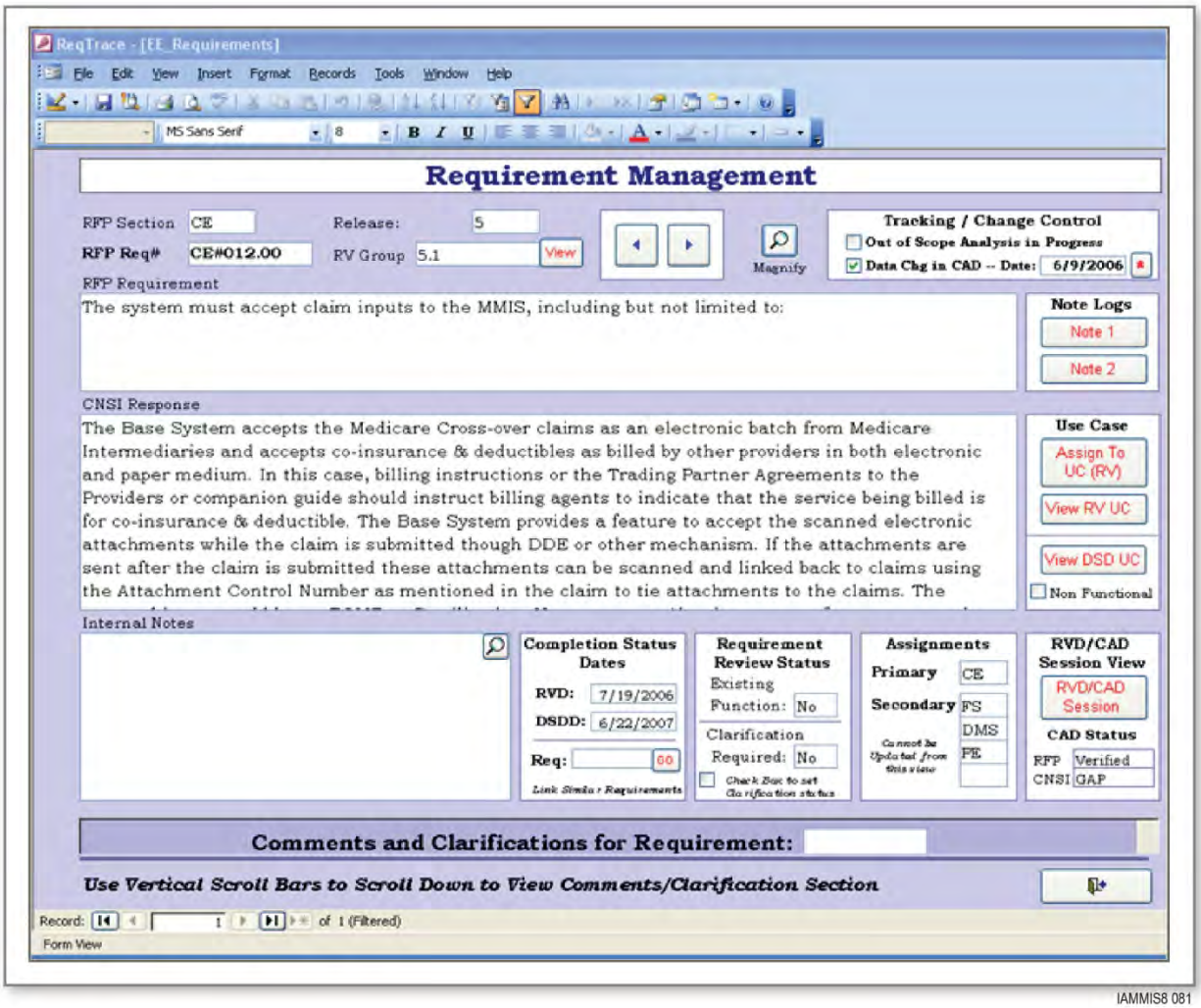

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Figure 8-69. RV Session View of ReqTrace. ReqTrace is used real-time during the Requirements Validation and Design collaborative sessions.

Another mechanism for ensuring the developed solution meets design criteria is through our iVision360 ISDM's iteration-based approach. During iteration, the Department will be able to review the functionality being scoped and planned for that iteration, verify them against the requirement in the RFP. At the end of

the iteration, the Department will be able to review and accept the demonstration of the developed component. And finally, UAT will provide the Department an opportunity to validate the system.

Enhancing the New MMIS According to Specifications from the Systems Design Task

RFP Section 6.3.2.2.2, Requirement c

As indicated in the previous response, Team Noridian's iVision360 ISDM will result in a set of specifications to enhance or modify our core solution. The initial JAD sessions will help identify the gaps in between the legacy system and the new MMIS, as per the requirements in this RFP. These gaps will be further reviewed, scoped and designed during the development phase, using the iterative development process. Figure 8-70. Analysis and Design Activities. The Department will be involved during these activities to provide specifications as required.Figure 8-70 is a graphical representation of the activities during analysis and design. The Department will be involved at all stages during these activities, to provide the required specifications.

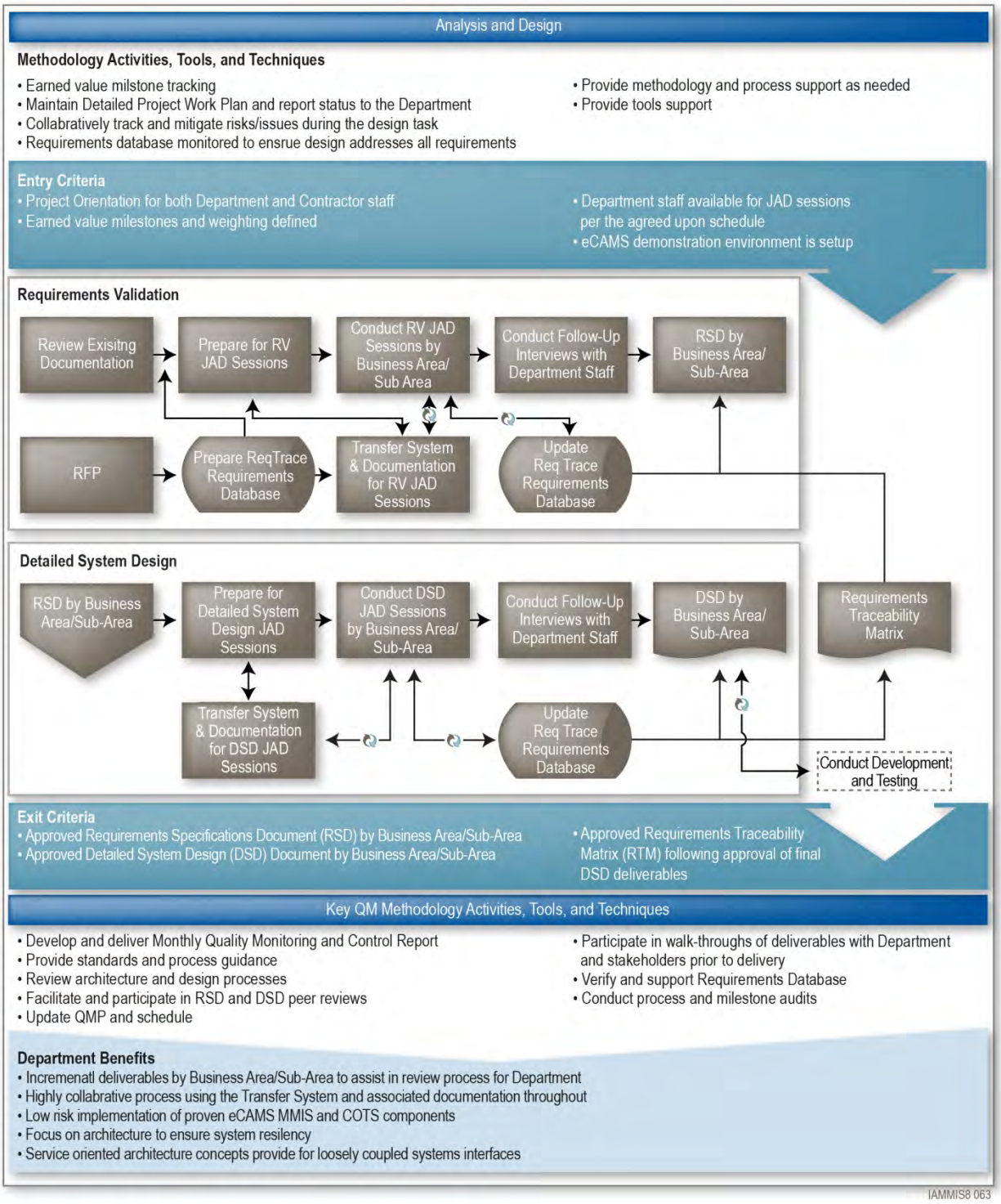

Figure 8-70. Analysis and Design Activities. The Department will be involved during these activities to provide specifications as required.

Providing Walk-Through and System Demonstrations

RFP Section 6.3.2.2.2, Requirement d

Team Noridian will provide staged walk-through and demonstrations of the different business areas or modules during the JAD sessions as part of the Analysis and Design activities, and again during the iteration sessions planned as part of the Development activities.

During these staged walk-through and demonstrations of the different business process areas, the Department will be able to evaluate the functionality available, and its usability as designed for the new MMIS.

Presenting Standard Output Reports

RFP Section 6.3.2.2.2, Requirement e

The primary reporting tool in Team Noridian's solution is IBM's Cognos Business Intelligence suite, including access to reports for casual users and powerful ad hoc query and report creation tools for more advanced users. The OnBase document management system provides a secure report repository, report management, and report access tool. Cognos has the ability to generate multiple output formats, including text, HTML, CSV, Microsoft Excel, Adobe PDF, and XML. It also includes the ability to develop graphs and charts, either within the Cognos report designer or by using an external application such as Excel.

Reports for eCAMS are generated either directly from the online database or from the Operational Data Store (ODS). In most implementations, the daily reports are generated from online database and the other reports from the ODS. This is done to ensure that reports do not access large volumes of data in the online system and impact its performance. All access to reports is provided through the list of Web pages within the MMIS called the Report Access Portal (RAP). The RAP allows access to Cognos as well as OnBase.

Team Noridian will present all the standard reports in the Analysis and Design Phase, during the iteration sessions planned for each business process area. The Department will have the ability to verify the format, columns, sort order and search criteria where applicable, and provide approvals for these reports.

Demonstrating Functionality of All Interfaces

RFP Section 6.3.2.2.2, Requirement f

Team Noridian's new MMIS uses the EXACT SOA infrastructure framework to automate the management, monitoring, and reporting of interface performance. The ability to create interfaces and publish them as services, monitor performance, provide alerts, execute escalation procedures, and when appropriate, automate error handling and exception resolution, are out-of-the-box capabilities of EXACT. Engaging EXACT's Integration Services, comprising of its ESB, Mediation and translation services, and Service Registry, as well as EXACT's orchestration, rules, and Extract Transform Load services, Team Noridian is capable of rapidly developing and deploying interfaces and associated business processes, based on each interface's requirements.

Within EXACT, individual interfaces are built as services. With this approach, the operational and functional description for each interface as well as information relating to the integrated system and unique characteristics of an interface are defined within the metadata wrapper associated with each interface. This metadata, or abstract, defining each interface is published to EXACT's Service Register, which uses the Universal Description, Discovery and Integration (UDDI) standard to store and register services.

The business process for each interface is determined by its specific requirements. The process is built using EXACT's orchestration services, which leverages and enhances the capabilities of the ActiveVOS BPEL/BPMN engine used by EXACT. The definition of an interface's business process is also stored in the Service Registry.

Due to Team Noridian's extensive experience implementing replacement MMISs, including implementations of eCAMS in the Medicaid enterprises for the states of Maine, Michigan, and Washington, eCAMS's library of pre-built interfaces, the eCAMS Integration Services Repository (ISR), contains a majority of the interfaces required for the Department's external interface partners. To leverage existing assets in order to reduce the Departments implementation costs and accelerate integration, Team Noridian's interface implementation plan calls for the re-use of the eCAMS pre-built interfaces.

The pertinent indemnifying and defining information for these interfaces are stored in the ISR. As part of its automated interface management and monitoring service, Team Noridian has designed a service which synchronizes the eCAMS ISR and EXACT Services Register according to a predefined schedule or upon the occurrence of a trigger event. After synchronization, the EXACT Service Registry is updated, thus maintaining a current catalog of all Department internal and external interfaces in the Service Registry.

EXACT's interface synchronization service also pushes all audit trail information for each interface to the eCAMS HealthBeat Dashboard. The Department can access real-time information relating to a particular interface or defined class of interfaces or generate reports that provide current status and historical information for all interfaces.

Team Noridian's approach to managing and monitoring interfaces provides:

- A single source of truth for all Department interfaces via EXACT's Service Registry;
- Access to the complete audit trail, including error logs, for all interfaces through eCAMS HealthBeat Dashboard; and
- An up to date catalog of the operational and functional definitions for all interfaces in the Service Registry.

Team Noridian's approach to interface management and monitoring provides all of the tools necessary to demonstrate the functionality of all interfaces. For example, the definition of how an interface should function is stored in the EXACT Service Registry. Running test data through an interface will produce an audit trail from which the expected results and actual results of the interface's performance can be compared. By demonstrating that an interface functioned in accordance with its functional definition, Team Noridian is able to fully comply with the above requirement. From an ongoing operational stand point, the managing, monitoring, and reporting of an interface's performance is automated through EXACT and the status of interface performance is stored in the Service Registry and accessible via eCAMS HealthBeat Web portal.

Populating the Rules Engine

RFP Section 6.3.2.2.2, Requirement g

Team Noridian takes a two-pronged approach to implementation of business rules within eCAMS — table-driven and rules-engine-driven.

Team Noridian uses a table-driven approach for data sets or control data (e.g., Reference and Limits). We maintain these value sets within the eCAMS database using eCAMS screens as shown in Figure 8-71. Some of these value sets can run into the hundreds, we can maintain them more easily within the database structure and allow additions and modifications, without having to write them as rules. However, they do eventually control flow, determine rate, or set limit, which makes them de facto rules.

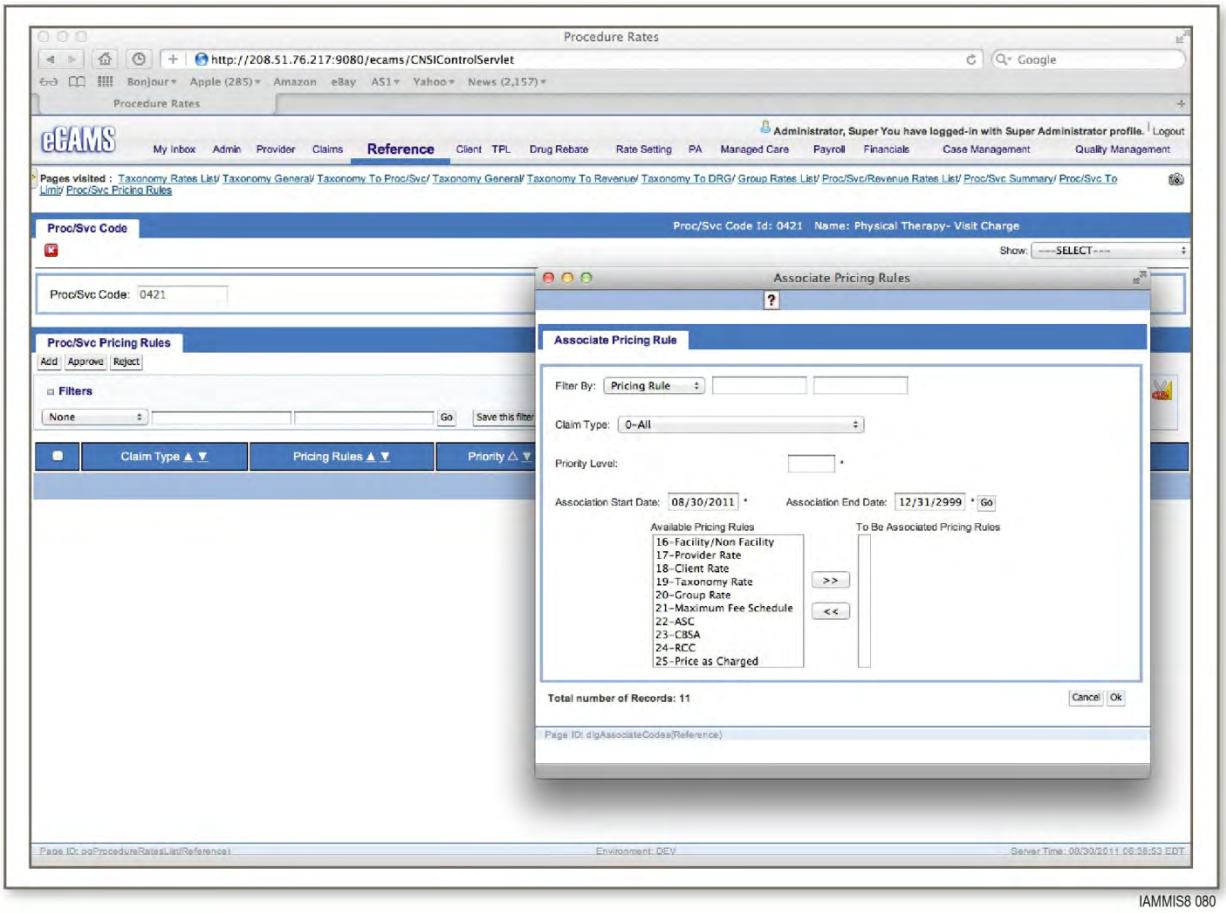

Figure 8-71. eCAMS Rate Setting Screen. Using screens like this, Authorized Users can set rates, limits, association and many other configurable rules.

The rules-driven approach is implemented using the RuleIT rules engine. Rules are developed for each business process area and are hosted in a separate repository for performance reasons. These rules may be anything from simple validation edits to complex processing flows that must route decisions down different streams of rules based on decisions points. Rules are developed using the RuleIT Composer, as shown in Figure 8-72, and executed at run time. RuleIT contains rules that are logical statements that consist of conditions (if…then…else) and corresponding actions. Rules use common logic such as between, less than, greater than, equals, and others. Conditions are combined using the standard logical conjunctions *and* and *or*.

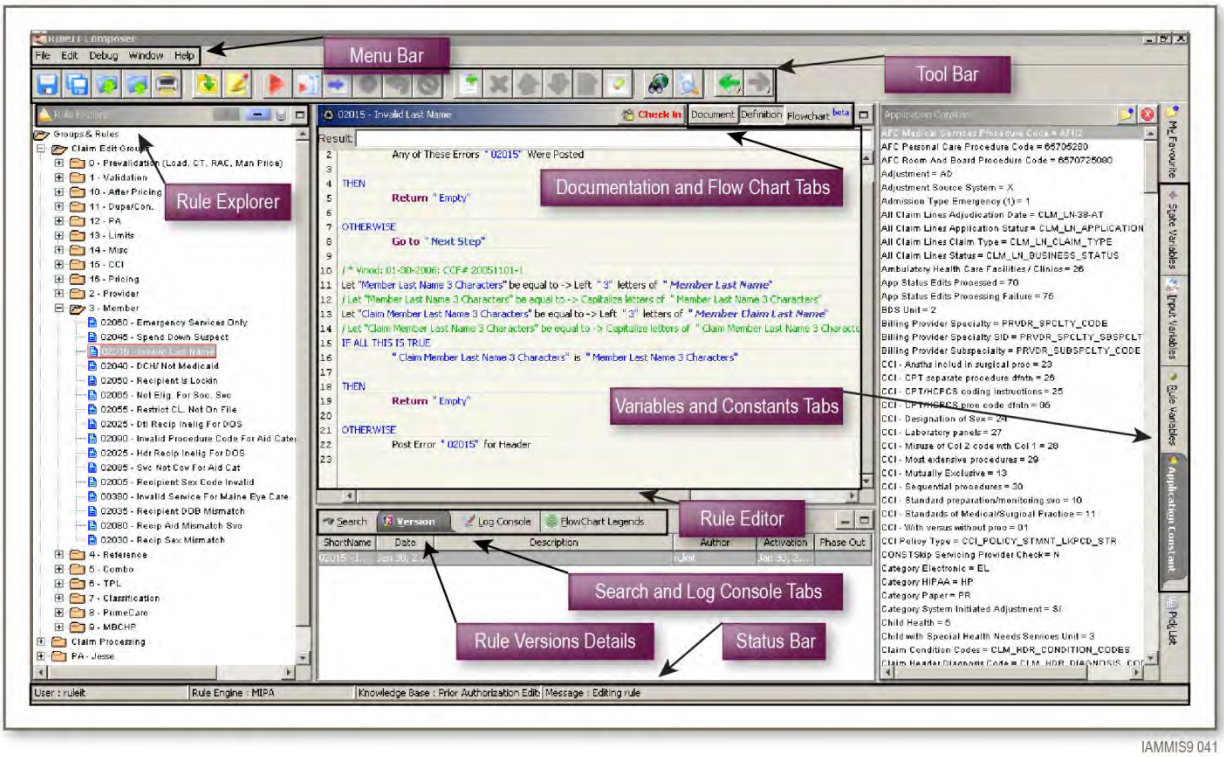

Figure 8-72. RuleIT Composer. The RuleIT Composer is used to create edits, validations rules and flows to manage execution within the rules engine.

A more detailed discussion about this is available in Tab 9, Section 9.2.1, Rules Engine System Requirements.

Business rules are populated using the eCAMS screens or the RuleIT rules engine. Team Noridian will seed the initial set of rules using the eCAMS standard rule-set. These rules are typically generic and utility rules, Medicaid specific rules and CMS and other Federal mandated rules. During the Implementation Phase, additional rules, specific to IME, are created and or modifications are made to these standard rule-set to meet the requirements of the Department and business policies. Rules are created in the development environment and moved into higher environments of test and acceptance, before finally being applied into the Production environment.

Updating the CMP

RFP Section 6.3.2.2.2, Requirement h

Team Noridian will continue to monitor the factors that may affect the contents of the CMP. Team Noridian will evaluate these and make updates to the CMP, at least once a year. The CMP with these , changes will be forwarded to the Department for review and approval. Once approved by the Department, these modifications will be implemented within the project, relating to configuration. The CMP will be maintained and updated by Team Noridian, as mentioned here, during the course of the contract.

8.3.2.2.3 Deliverables

RFP Section 6.3.2.2.3, Requirements a through f

Team Noridian will develop the deliverables listed in Figure 8-73 for the configuration and rules engine.

Deliverable	Agree to Meet?	Section that Describes Approach
Updated CMP	Yes	Tab 8, Section 8.3.1 Analysis and Design Activities
Documentation of all rules in the rules engine.	Yes	Tab 9, Section 9.2.1 Rules Engine Requirements
Updated use cases.	Yes	Tab 8, Section 8.3.1 Analysis and Design Activities
Standard output reports.	Yes	Tab 8, Section 8.3.1 Analysis and Design Activities
Updated interface plan.	Yes	Tab 8, Section 8.3.1 Analysis and Design Activities
MMIS and POS Documentation and users documentation manuals.	Yes	Tab 8, Section 8.3.1 Analysis and Design Activities

Figure 8-73. Configuration and Rules Engine Deliverables. Team Noridian develops all deliverables using its documented deliverable creation and review standards and procedures and will deliver them in accordance with our detailed project work plan.

8.3.2.2.4 Performance Standards

RFP Section 6.3.2.2.4, Requirements a and b

Team Noridian will implement and deploy all hardware, software and communication linkages and test them to ensure that they are functional and working. Team Noridian will present the findings and demo the equipment where appropriate to ensure that the Department requirements are addressed. Team Noridian will involve the Department at all major steps to ensure that all parties and stakeholders are aware of the progress being made.

Team Noridian will update the business rules in eCAMS, after seeking the approval of the Department. As specified in this RFP, the Department will approve the rules after review. This ensures that the rules created are in accordance with the Department's requirements.

Testing Module Solution Advantage

Team Noridian's collaborative development and testing model involves stakeholders in a meaningful manner and leverages our highly configurable and scalable transfer system to provide an efficient, less costly approach to development and testing for the Department.

- Allows for early testing, demonstration checkpoints, and frequent feedback from the Department to further validate our implementation of the new MMIS solution
- Leverages re-utilization of test materials from previous MMIS projects and phases, saving time and effort on test preparation
- Integrates business analyst, testing, and development teams to ensure focus from all perspectives
- Provides incremental delivery of test plans and results for a more efficient review process for the Department
- Begins with a CMS certified transfer system that is table-driven and rules-based, resulting in decreased development and testing costs
- Provides reduced development and testing necessary to support requirements of HIPAA, including exchange of electronic data interchange (EDI) formats in multiple versions

8.3.2.3 Testing Tasks

RFP Section 6.3.2.3

This section details Team Noridian's approach for completing in-depth, process-driven, and fully-documented testing of the new MMIS using Team Noridian's iVision360 ISDM methodology. We will discuss our overall approach to testing, responsibilities of the Department, responsibilities of Team Noridian, and deliverables and milestones required to successfully complete and testing tasks.

Our development approach is a highly-collaborative process that provides for modification and configuration to our transfer solution, testing, and closure of planned functionality through iterations incorporating frequent feedback and acknowledgement of completion from the Department. Similar to our requirements validation and design approach, our approach to testing includes the use of dedicated cross-functional teams tightly coupled by business process area. Each team is led by a senior business analyst. The senior business analysts and other business analyst staff will ensure that the requirements and design for the team are being implemented in the developed functionality, and verified by testing as iteration is completed.

We have honed and improved our development and test methodology through the multiple MMIS implementations and have discovered the optimal path to successful start-up and implementation. Our proposed testing approach, outlined herein, represents the distillation of our experiences and offers the

most efficient development and testing cycle with the least amount of risk to the Department. The approach provides multiple test points where both the Department and Team Noridian can verify the resulting developed MMIS solution meets the requirements, design, and expectations. As part of Team Noridian's development cycle, the development team performs unit testing. A key differentiator in our iVision360 process is the addition of independent unit testing, completed by the testing team, as part of the development iteration cycles. It offers Team Noridian testers the opportunity to perform early requirements validation and provide feedback to development while validating their own understanding of the new MMIS so that their test cases are comprehensive and accurate. Early testing can often uncover different interpretations of requirements and design, which, through the early involvement of the Department and Team Noridian's test team, can be avoided and ensure future development and testing phases are built from a common understanding.

Team Noridian's is proposing the early release of provider enrollment and management prior to the final release of the new MMIS. The early provider release is provided approximately one year prior to the production release of the full MMIS capability. The early provider release will enable early outreach and training with providers. This early release will include functionality to enable providers to manage their information through the Web Portal. It will also enable the provider management services contractor to begin to improve the quality of provider data. Our test program ensures that early provider release undergoes a systematic test process as discussed in this section. The early provider release will also be tested through the test cycles and processes. By doing conducting the test program for the early provider release, it will also provide Team Noridian and the Department an opportunity to fine tune testing prior to the MMIS release.

Our approach demonstrates how we will reuse test materials (e.g., plans, test cases) from the test libraries compiled from previous MMIS projects, providing a solid test framework from which to build the IAMMS test program. We will also demonstrate how our tenet of testing as early, and as often, building from one test phase to another, will culminate in the successful validation of the new MMIS design, requirements, and the expectations of the Department.

A successful test program must be built on a solid foundation of tried and true testing principles and processes and that starts with planning. Team Noridian has developed an extensive test foundation of test plans, manual and automated test case libraries, and test processes to build quality into the testing process itself. These plans and processes conform to the IEEE 829 Specification for Software Testing Artifacts. This foundation was designed to be scalable and tailored to support any project and is currently successfully practiced in Washington and Michigan MMIS projects. Team Noridian will customize these artifacts to meet the specific requirements of the Iowa MMIS.

As there are multiple phases of testing through the DDI phase, Team Noridian will be preparing multiple test plans for the MMIS project. Each phase of testing has a specific purpose and focus. As each successive layer of testing is completed, the focus of testing narrows to more specific goals and requirements. This is depicted in Figure 8-74.

The testing activities within each test phase are similar. The generic process used throughout the new MMIS project is documented in the following sections. Variances within the process for a specific phase of construction and test or component of the new MMIS will be documented in the appropriate test plan and furthers descriptions of the activities included in the following sections.

Testing involves development and execution of test cases. The test process is divided into five steps:

- Test planning
- Constructing Tests cases
- Conducting Test
- Test Tracking
- Summarizing and Reviewing Test Results
- Exiting test

A workflow, starting with a test planning step of the test process, is provided in Figure 8-75. Test plans are created for formal test phases during this step are reviewed and approved by the Department. An approved test plan is an entry criterion for the next process step, constructing test. During the constructing test step, test case creation, test case review, and test case approval by the testing manager take place. Review of test cases to be executed in a test phase is one of the entry criterions for the conducting test step. Test case execution and the defect identification process take place during the conducting test step.

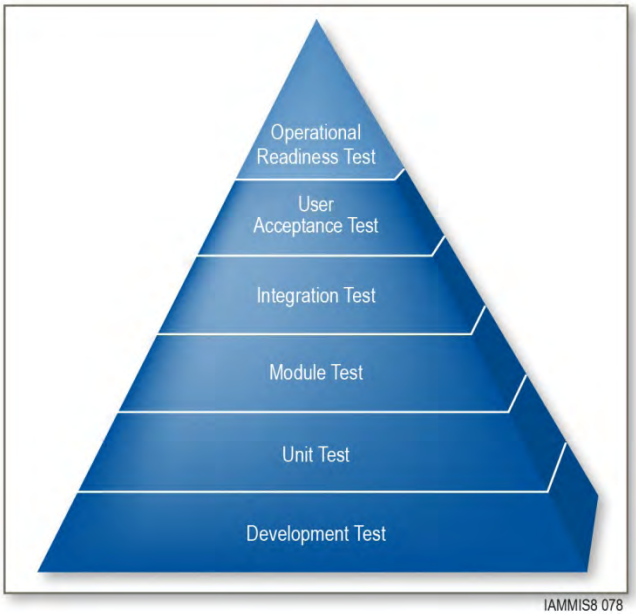

Figure 8-74. MMIS Testing Phases. At the base of the pyramid, the vast bulk of the new MMIS requirements is implemented by development and verified through testing during unit test; with each successive test phase, the number of requirements tested narrows as testing becomes more focused.

For any discrepancy identified during this step, if confirmed to be a defect that can be reproduced, a defect record is created. Summarizing and reviewing the result is the process step that involves both the test team and the Department participating in the review. If there are outstanding issues identified after summarizing the results, retest, and regression testing are planned. Testing ends once all of the exit criteria are met.

Regressions tests are a set of tests used for comprehensive retesting of software to validate that all functionality and features have maintained their integrity. Regression testing is defined as “the testing of preexisting features to ensure that they continue to work properly after code changes to address defects.” The amount of regression testing required to validate the code change depends on the changes made to the code and the impact analysis conducted.

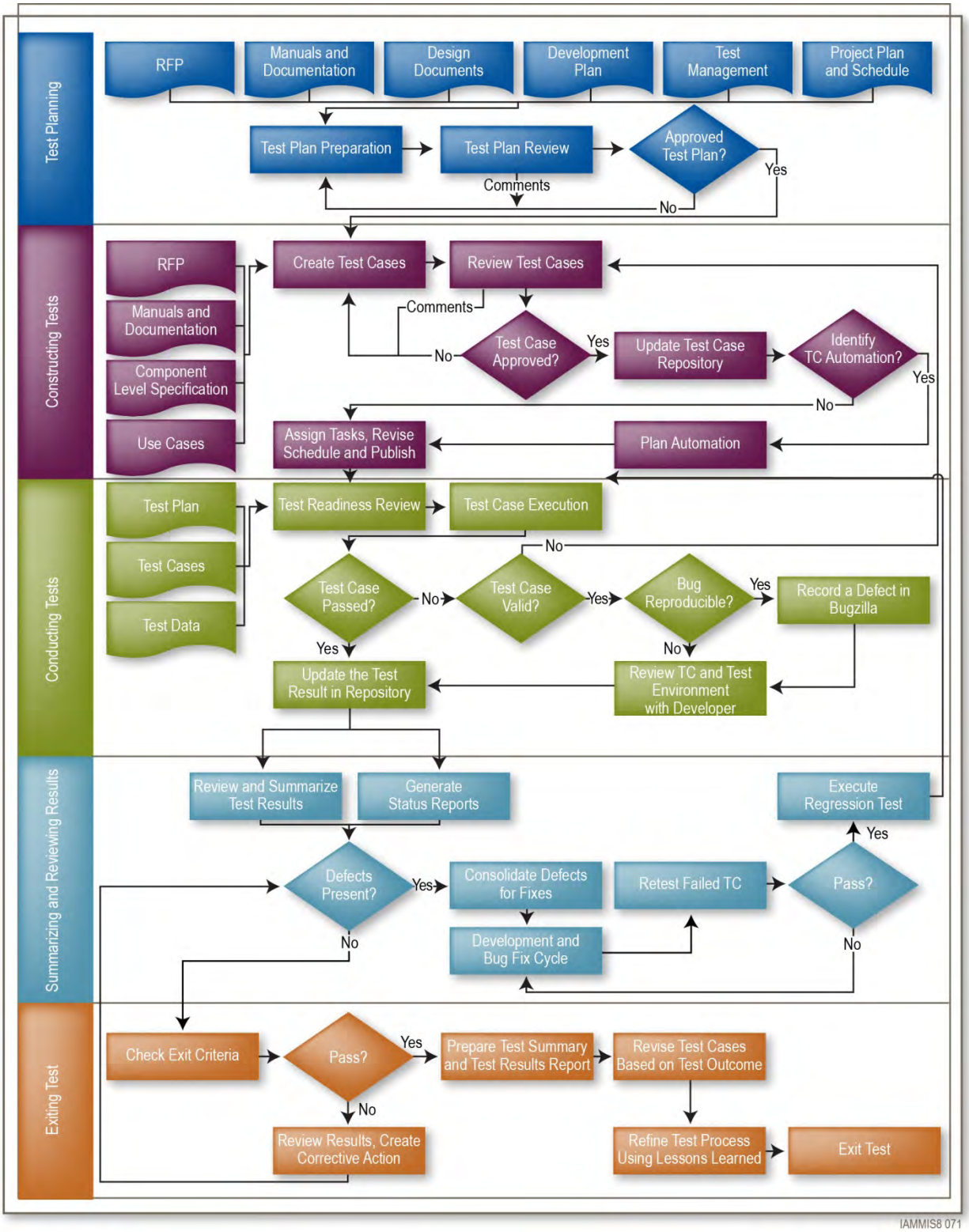

Figure 8-75. Overview of Team Noridian's Test Process – Planning and Construction. Team Noridian's testing process is well defined, uses proven tools, and is supported by experienced staff.

8.3.2.3.1 State Responsibilities

RFP Section 6.3.2.3.1, Requirements a through e

Team Noridian's approach to configuration, integration, and testing is a highly collaborative effort with close coordination between the Department and Team Noridian. There will be numerous points during test in which it will be necessary for the Department to provide support for resolution or clarification on information and issues; participate in meetings; attend deliverable walk-through; provide input on policies and associated policy changes; participate in test planning; review defect reports and test results; and review, comment, and provide written approvals on all development and test task.

A detailed explanation of the Department's responsibilities during testing is provided in Figure 8-76.

Subtask	Department Responsibility
Test Plan	▪ Participate and approve the procurement planning for infrastructure and environments ▪ Work with Team Noridian to establish communication links between Team Noridian facilities and the Department ▪ Attend walk-throughs and review and approve the system test plan for each testing phase ▪ Maintain the Department's UAT plan and results for eventual CMS review during on-site certification review
Testing	▪ Participate in iterative demonstrations and approve closure of each development iteration ▪ Provide timely support for resolution of requests for clarification or information, issues, and changes in requirements as needed ▪ Coordinate the change control process to provide direction on all change requests including prioritization of requests and written approval decisions
Test Results	▪ Attend walk-throughs and review and approve test results ▪ Approve new MMIS for implementation

Figure 8-76. Department Responsibilities during Testing. Team Noridian focuses on establishing clear roles and responsibilities.

8.3.2.3.2 Contractor Responsibilities

RFP Section 6.3.2.3.2

Team Noridian acknowledges and accepts the following requirements as specified in the RFP and further described below in the next sections:

- Establish Environment
- Test Plans
- Test Cases and Scripts
- Test Results

Establish Test Environment

RFP Section 6.3.2.3.2.1, Requirements a and b

Team Noridian will establish separate and distinct test environments and procedures to support the different testing phases of the project. Procurement planning for the environments will be approved by the Department during project initiation and noted as milestones on the project work plan provided by Team Noridian. All procedures and policies for each test environment will be included in the applicable test plan. The test environments include:

- **Unit Test.** Complete iterative unit testing; may be located in the development environment.
- **Conversion Test.** Complete data conversion testing; a mirror image of the future production data repository, including reports and financial records, to be used to load converted data to validate the data migration functions correctly.
- **System Test (Module).** Complete module testing; may be located in the development environment.
- **Integration Test.** Complete end-to-end MMIS testing using converted data.
- **User Acceptance Test.** Complete full MMIS testing and validation for CMS certification using converted data. Team Noridian will provide processes to refresh this environment from production at the Departments request so that users may mimic production activities to ensure the MMIS performs as expected.

- **Load and Stress Test.** Verify the new MMIS meets all performance standards for response time and is able to process production level claims volumes; requires converted data.
- **Parallel Test.** Verify the new MMIS is adjudicating and paying claims similarly to the legacy MMIS systems; requires converted data for claims history and production claim files.

As the Department has requested a phased design, development, test, and implementation approach, each phase will require separate environments. Figure 8-77 depicts the environments necessary to support a single phase. As the task phases progress from development to test to implementation, additional environments will be deployed, until the full range of environments become operational. Post implementation, the environments may be tasked to support a maintenance development and test environment. Additionally, environments may be temporarily re-tasked for emergent releases or multiple concurrent maintenance releases, as deemed necessary by the project team.

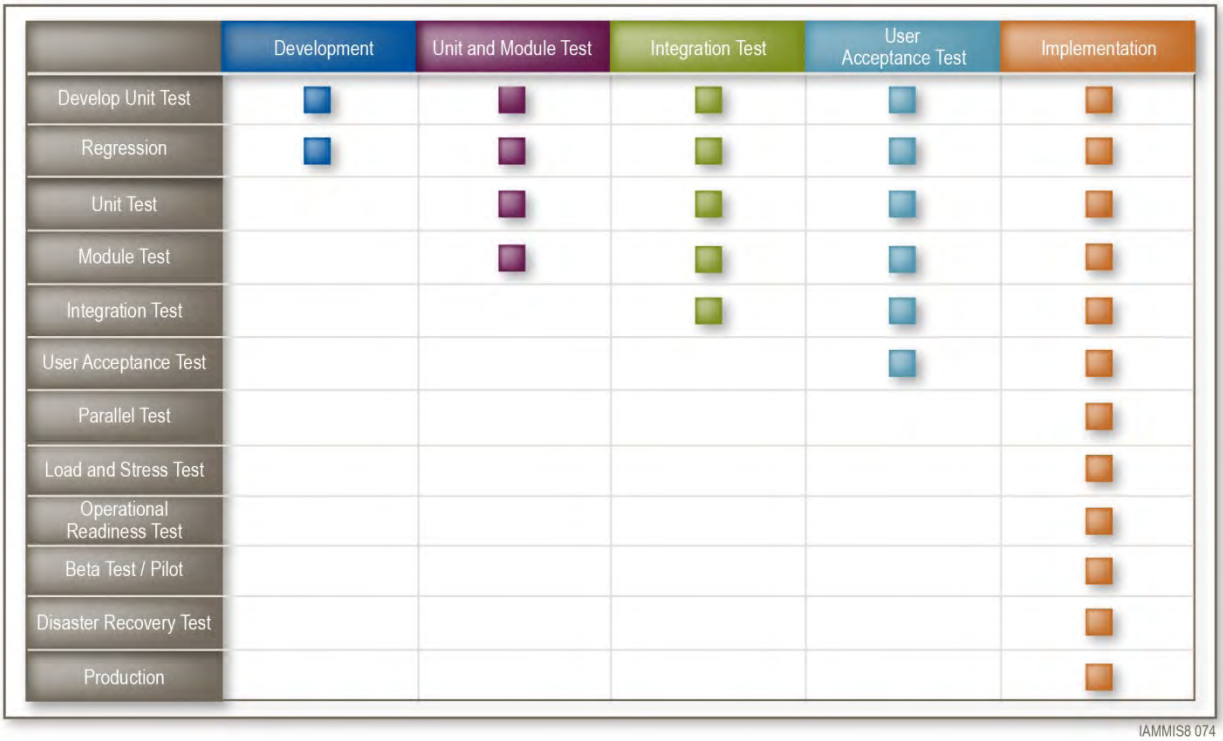

Figure 8-77. Separate and Distinct Test Environments. As the task phases progress from development to test to implementation, additional environments will be deployed, until the full range of environments become operational.

As a pre-requisite to completing any test phase, the environment must be prepared by the Team Noridian's system infrastructure staff, including system and database administration staff, data conversion teams, and configuration management specialists. Having prepared the environment and prior to the start of test execution, Team Noridian development and test team members will perform an environment readiness review to ensure the environment has been properly installed, configured, and populated with valid testing data. Some key points of verification are listed below:

- eCAMS and required COTS software installed
- Reference data is available
- Partial converted data available, or data conforming to final specification created by testing teams, is available depending on the test phase (all phases)
- Interface connectivity is verified (i.e., integration test, UAT, ORT)
- Data synchronized between separate interfaced systems verified for each interface (integration)

- Batch scheduler configured as agreed per the test plan
- All claim input methods verified to be operating correctly
- Printing facilities online
- Imaging system online

The environment readiness review is a key part of the each test phase readiness review that will be executed prior to test commencement. This very same process will also be executed for every environment set up for the new MMIS, including the production environment itself.

Test Plans

RFP Sections 6.3.2.3.2.1.1, Requirements a and b; Requirements a through q

Test plans describe the systematic approach that is followed during each test phase. The first step in every test phase is a test planning activity. Our view is that the test plan is the basis for communicating the test process for all parties involved in each test phase. The test plan provides background information on the software being tested, the test objective, and specific tests to be performed. It provides specific information about the testing process and procedures that need to be followed for each test phase.

Team Noridian test plans will address the processes and procedures for unit, module, rules, integration (End-to-End), and ORT (parallel, load and stress test, beta, disaster recovery and business continuity test). Prior to submission of the test plan for the Departments approval, Team Noridian will establish the expectations of for each plan and obtain concurrence on the scope and content. This approach has shown to eliminate unrealized expectations and reduce the time to obtain approval from the Department.

Team Noridian's iVision360 methodology includes a standard test plan that has been refined over time through our experience and lessons learned on our previous MMIS projects. Figure 8-78 provides the test plan table of contents for the new MMIS project.

All of the test plan content required by the RFP is captured in Team Noridian's standard test plan; however, the terminology may not exactly match. For this reason, we are including Figure 8-79 to provide a mapping of the RFP test plan deliverable requirements to the section of Team Noridian's standard test plan.

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Figure 8-78. Team Noridian's Standard Test Plan Table of Contents. Team Noridian's test plan captures the required information to plan and schedule each phase of testing.

RFP Deliverable Requirement	Team Noridian Content Section
Plan for use of regression testing during all testing phases of the system.	Section 3.5: Plans for Regression Testing
Plan and schedule for each business process area and associated system modules and subsystems as well as for the integrated testing.	Section 2: Approach to Testing for each Test Phase Section 7: Test Schedules
Plan for analyzing difference between the legacy MMIS and the Louisiana Replacement MMIS during parallel testing and how those differences will be reported.	Section 2: Approach to Testing for each Test Phase Section 4: Test Execution and Reporting
Plan for identifying and documenting test situations and expected test results.	Section 4: Test Execution and Reporting
An organization plan showing contractor personnel responsible for testing.	Section 1.1: Organization Plan Section 1.2: Roles and Responsibilities
Plan for managing the testing effort, including strategies for dealing with delays in the testing effort, back-up plan, back-up personnel, and related issues.	Section 3.6: Strategies for Delays and Contingency Plan
Procedures for tracking, documenting, and correcting deficiencies discovered during each phase of testing.	Section 4.4: Defect Creation and Resolution Process
Strategy and methodology for dealing with the situation where unit tests, Module tests, Rules test, Integration tests, Load and Stress tests, user acceptance tests, parallel tests, or operations readiness tests failed to produce the desired results.	Section 3.6: Strategies for Delays and Contingency Plan Section 4.5: Test Reporting and Results
Plan for updating system or user documentation based on test results.	Section 3.7: Plan for Updating System or User Documentation Based on Test Results
Procedures for notifying the Department of problems discovered in testing, progress, adherence to the test schedule, and so forth.	Section 4.5: Test Reporting and Results
A plan for documenting and reporting test results to the Department for review including test scenarios used, anticipated and actual outcomes, and discrepancies identified.	Section 4.5: Test Reporting and Results
Specific procedures for backing up, restoring, and refreshing all permanent data stores in the test environments.	Section 6.1: Back-up, Restore, and Refresh Procedures
Migration procedures describing the steps needed to move or copy software from system test libraries to the test environments.	Section 6.2: Back-up, Restore, and Refresh Procedures
Migration procedures describing the steps needed to move or copy software from the User Acceptance test environment to production.	Section 6.2: Back-up, Restore, and Refresh Procedures

Figure 8-79. Mapping of RFP test plan requirements to Team Noridian's standard test plan. Team Noridian's test plan is based on standards to enable repeat of past successes and process improvement from lessons learned.

Test Cases and Script

RFP Section 6.3.2.3.2.1.2

A test case is a set of test inputs, execution conditions, and expected results developed for a particular test objective. Test case construction begins with review of the established test objectives and the detailed system design (DSD) document, which details the use case and use case stories with its business rules and database field information, created during the iterative design and development. Test construction is an important step to ensure that all required test cases are identified and all system functionality requirements are tested. Test construction uses the requirements and use cases developed as the source for generating test cases. A use case provides high level details of the requirements to be addressed to perform a given task. Each use case corresponds to one or more test cases. All test cases undergo review as need arises. During review, each test case is examined in detail to ensure that the test steps, input conditions, output, and validation points are correct. The review may include the following Team members:

- Testing Manager
- Programmer / Analysts
- Business Analysts
- Testers

If a test case does not pass review, the responsible tester updates the test case to reflect the changes noted during the review. The test case is once again reviewed to ensure that the modifications are correct.

When a DSD document contains use cases that require multiple cooperating systems, those use cases are reserved for the system test phase and tested up to the boundary of the component during unit testing.

Using ReqTrace, Team Noridian maintains the new MMIS requirements and use case traceability. The test cases are further integrated into ReqTrace where the test case management occurs. When creating test cases with ReqTrace, the testers can draw the information from ReqTrace and create the traceability link from requirements to test cases. The Team can then maintain traceability and ensure proper test case coverage. Furthermore, when requirements are changed, test cases are flagged and are linked to the change requirements so that the relationship between software, requirements, and test cases is constantly synchronized.

A test process must be repeatable. This must be considered throughout the test case construction phase. During iterative design and development, test case refinement and detailing continues as the code develops. Test case construction is completed when all requirements can be validated through test cases. Traceability reports helps to determine whether all the requirements are mapped to test cases to complete validation. When mapping is complete, test case construction is also complete.

Test case design is focused on verifying the requirements and determining if the requirements are met. The use cases are the starting point for test case design. Use cases are broken down into manageable and testable test cases so that clear steps are available to validate all test conditions required. This approach, using use cases as a source for test cases, covers all of the requirements that need to be delivered to the Department.

Each test case must meet the following guidelines and goals:

- Test cases must be traceable to the requirements: The test case clearly shows the requirement or requirements that the test case addresses
- Test cases must provide clear test instructions: Instructions are clear and precise
- Test cases must identify clear prerequisite test conditions: The prerequisite conditions required to successfully execute the test cases and to validate the requirement are defined
- Test cases must be written to be tester independent: Any tester can read and execute the test case.
- Test cases must provide explicit input and output definition: The input data required to satisfy the output to be achieved is explicitly stated
- Test cases must clearly state the expected results: The expected results of the test, and the actual result of the test after it has been executed, are stated so that the two results can be easily compared
- Test cases must identify boundary conditions: The test conditions used to test the system with extreme values in the valid range
- Test case must identify any required external interfaces: The test case clearly identifies and tests all of the interfaces associated with the test case
- Test cases must include negative testing: Tests the conditions which the application should not accept and validate the output
- Determine data requirements: Identify the data requirements for the test cycle. Establish internal test data for test cycles until the converted data is made available for system testing. Test cases must also:
    - Be reusable at various phases
    - Have unique identifiers
    - Be maintainable for the lifetime of the software
    - Provide a clear list of the environment and profile in which test cases are executed
    - Follow the test case naming convention: <Test Phase>-<Business Area>-<TC Number>-<Description>

A good test program reuses common building blocks wherever possible. This also applies to test cases. Test cases developed for the unit test phases may become the building blocks for Module and Integration test cases by combining multiple unit test cases in a chain across multiple systems. Furthermore, test cases used in unit, module and integration testing may be reused for acceptance testing and regression testing.

The sample test case template to be used by all test personnel for the new MMIS project is shown in Figure 8-80.

Team Noridian

CREATED BY	LAST TESTED BY
CREATE DATE	DATE OF LAST TEST
TEST SCRIPT TITLE	TEST CASE CONTROL
QUALIFICATION TECHNIQUE	TEST TYPE
TEST LEVEL (UNIT, MODULE, INTEGRATION, USER ACCEPTANCE)	
COMPONENTS TESTED	
TEST SETUP	
DESCRIPTION OF TEST INPUT DATA	
DESCRIPTION OF TEST OUTPUT	
INTERCASE DEPENDENCIES	
TEST CASE OVERVIEW	

Total Steps	0
% Tested Steps	0%
Total Passed (P)	0
Total Failed (F)	0
Total Not Testable (NT)	0
% of Completion	0%

Test Step #	Scenario Description	Expected Results	Pass/ Fail/NT	IR #	Actual Results/Comments	Automated Y/N

Revisions		
Date	Name	Summary of Revision

Reference Documents

IAMMIS8 068

Figure 8-80. Test Case Template. Team Noridian has pre-built templates for use cases to rapidly implement our test program.

Conducting Tests

The objective of this step is to determine whether the new MMIS project meets RFP requirements and performs as per the documented design specifications. Test execution is started after completing the construction of test cases and identifying the data to be used for that test phase. Additionally, a Test Readiness Review (TRR) is held prior to the start of each formal test phase to verify that all entry criteria documented in the test plan for the test phase have been successfully met.

The primary goals of a Test Readiness Review (TRR) are to:

- Confirm that test entrance criteria has been met and exceptions have been communicated to the stakeholders
- Verify that all critical components for a successful test cycle are in place
- Test cases (manual and automated) are complete
- Environment/Infrastructure is installed and available
- Test data is ready
- Risks, issues, and mitigation strategies are in place

The concept of establishing pre-requisites (entry criteria) and post conditions (exit criteria) is extremely important in managing complex testing involved in MMIS systems. The entry/exit criteria are documented to ensure clear understanding where hand-offs occur so that the sending organization can verify completeness before handing over and the receiving unit can validate 'readiness' to initiate the testing process. This is a contributing factor to the success of any testing project. Each build moving from the development environment into the test environment will be verified via a suite of basic repository migration (installation) verification scripts that will be developed. Additionally, configured components will not be permitted to enter the next planned phase of testing or move into production until the agreed upon exit criteria has been met.

Entrance criteria are those factors that must be present, at a minimum, in order to start an activity. The common set of entry and exit criteria that will be used on the new MMIS project are shown below. Department-driven activities may expand or reduce the list.

Key Entry/Exit Criteria per Test Level

These sections describe the specific entry and exit criteria for the different test levels involved in the new MMIS.

- Unit Test
  - Entry Criteria
    - Unit Test Plan delivered and approved
    - Business and Technical Requirements & Design are approved by stakeholders
    - Approval of Unit test plan by the Department
  - Exit Criteria
    - 100% of the unit test requirements have been tested
    - All agreed defects have been resolved
- Module Test
  - Entry Criteria
    - Module Test Plan has been reviewed and approved
    - Unit testing completed and final results delivered and approved
    - All planned test cases have been created and documented
    - Required converted test data is in place (except for that which will be created from other test cases)
  - Exit Criteria
    - 100% of the planned Module Test scripts have been executed
    - All discovered defects logged into Bugzilla
    - No known Severity 1 or Severity 2 defects

- Integration Test
  - Entry Criteria
    - Integration Test Plan has been reviewed and approved
    - Results from each Module Test entering Integration test have been delivered and approved
    - Integration Test environment (including required interfaces) has been configured, verified, and is available to begin
    - All planned test cases have been created and documented
    - Required converted test data is in place (except for that which will be created from other test cases)
  - Exit Criteria
    - 100% of the planned Integration Test cases have been executed
    - All discovered defects logged into Bugzilla
    - No known Severity 1 or Severity 2 defects

Test Results

RFP Section 6.3.2.3.2.1.3

Team Noridian will incrementally deliver the test results weekly throughout the execution of each test activity. As test cases and results contain traceability to requirements and use cases, Team Noridian will deliver a summary of which use cases and requirements have been delivered with each set of results. Team Noridian will work with the Department to determine the approved delivery mechanism, schedule, and format which best suits the need of the Department.

A sample summary report to be included with incremental results is shown in Figure 8-81.

Test Case Name	RFP Requirements	Use Case Name
STC-FIN-LG2-LT1-1 - DHCS Worker checks data objects for providers and other entities	4.13.2.6, 4.13.2.7, 4.13.2.15, 4.13.2.16, 4.13.2.17,4.13.3.7, 4.13.3.8, 4.13.3.20, 4.13.3.22, 4.13.3.23	2.3.1 Maintain providers or other entities in financials
STC-FIN-LG2-LT1-2 - Provider information into financials interface tables	4.13.2.6, 4.13.2.7, 4.13.2.15, 4.13.2.16, 4.13.2.17,4.13.3.7, 4.13.3.8, 4.13.3.20, 4.13.3.22, 4.13.3.23	2.3.1 Maintain providers or other entities in financials
STC-FIN-LG2-LT1-3 - Provider information into financials base tables	4.13.2.6, 4.13.2.7, 4.13.2.15, 4.13.2.16, 4.13.2.17,4.13.3.7, 4.13.3.8, 4.13.3.20, 4.13.3.22, 4.13.3.23	2.3.1 Maintain providers or other entities in financials
STC-FIN-LG2-LT1-4 - Provider contact information into financials interface tables	4.13.2.6, 4.13.2.7, 4.13.2.15, 4.13.2.16, 4.13.2.17,4.13.3.7, 4.13.3.8, 4.13.3.20, 4.13.3.22, 4.13.3.23	2.3.1 Maintain providers or other entities in financials
STC-FIN-LG2-LT1-5 - Provider contact information into financials base tables	4.13.2.6, 4.13.2.7, 4.13.2.15, 4.13.2.16, 4.13.2.17,4.13.3.7, 4.13.3.8, 4.13.3.20, 4.13.3.22, 4.13.3.23	2.3.1 Maintain providers or other entities in financials

Figure 8-81. Incremental Result Delivery Report. Detailed test results reporting ensures the Department and other stakeholders have visibility into our progress.

Test Tracking

RFP Section 6.3.2.3.2.1.4, Requirements a through e

The testing manager is responsible for producing the weekly test phase summary report and for distributing this report to the development team leads, test team, and project management staff. The test phase summary report summarizes activities that have taken place during the test phase. In addition to the test phase summary report, Team Noridian will deliver an updated Requirements Traceability Matrix on a weekly basis.

The test phase summary report is generated once testing begins. The reporting period of the report is one calendar week (i.e., Saturday through Friday). The reporting period dates are documented in the report. The cut-off time for statistics to be included in a given weekly report is 4:00 p.m. on Friday. Any statistics received after 4:00 p.m. on Friday are included in the following week's report. These reports are distributed by 4:00 p.m. on Monday.

The report contains two sections. The first section provides information for the current week being reported. The last row of the section always reflects the previous week's activity and the row above represents the current week's activity. Presenting the report in this manner, with historical weekly information, may assist management in identifying patterns, if any, regarding weekly activity that may be used to make decisions regarding the project. The second section of the summary report provides cumulative (i.e., to-date) summary statistics. The last row of the section always reflects the cumulative total as of the previous week's activity. The row above represents the current week's cumulative total. The last two rows help determine the progress made in the testing phase for the current week.

The metrics available in both sections are reported by business area and functional area with clear identification of the risks associated with a particular area. Figure 8-82 contains the description of fields in the test phase summary report and a sample report generated from our system is provided in Figure 8-83. Both figures together address the minimum information required by the RFP for automated tracking tool reports.

Weekly Summary Report Fields	
Field	**Description**
# Test Cases (TCs) Retested	Number of test cases retested in the reporting period
# TCs Executed	Number of test cases newly executed during the week. (This does not include the retested test count)
# Defects Opened	Number of new test defects opened for a given module in the reporting period
# Defects Closed	Number of new test defects tested and closed for a given module in the reporting period
# Defects Pending Build	Number of defects for which development has completed repairs and the test team is awaiting delivery in order to retest
# Defects Delivered Retesting	Number of test defects delivered for retesting in the reporting period
Testing Process Summary	
Total # TCs	Number of test cases estimated for completion of testing of a module
# TCs Executed	Number of test cases executed by module
# TCs Passed	Number of test cases that have fully met the criteria of pass (i.e. no F1, F2, F3 defects opened against them)
# TCs Failed	Number of test cases which failed testing a module and have defects associated (F1, F2, or F3) which prevent the test case from passing
# Open Defects	Number of defects which are currently open for a given module
# Closed Defects	Number of closed defects which have been resolved and tested for a given module

Figure 8-82. Weekly Test Summary Report Field Definitions. Team Noridian's test tracking approach is based on proven, results-oriented experience in implementing Medicaid and Medicare systems.

Test Phase Summary Report

Project Name: IA-MMIS
Test Manager
Business Process Manager:
Reporting Period:
Build Release# Under Test:
Test Phase: System Integration

Weekly Summary Report

Business Areas/Functional Areas	# TCs Retested	# TCs Executed	# Defects Opened	# Defects Closed	# Defects Pending Build	# Defects Delivered to Retesting
Provider Enrollment						
Provider Relations						
Total						
Previous Week's Total						

To-Date Summary Report

Business Areas/Functional Areas	# TCs Retested	# TCs Executed	# Defects Opened	# Defects Closed	# Defects Pending Build	# Defects Delivered to Retesting
Provider Enrollment						
Provider Relations						
Total						
Previous Week's Total						

Risks Identified

Issues

Comments

IAMMIS8 086

Figure 8-83. Sample Summary Report. Team Noridian's automated test tracking tools provides out of the box reports to manage test activities and to track results.

The Bugzilla tool used for defect management provides a rich set of query and reporting tools that provides Team Noridian and the Department with a limitless set of reporting options. These reports may also be exported to Microsoft Excel® so that the data can be further manipulated and studied. Defect reports to be produced may include the following:

- Weekly open defect report
- Weekly closed defect report
- All open defect report
- Severity 1 and 2 aging report
- Rejected defect report
- Weekly defects re-worked report

Two aspects of testing will require close monitoring. The first is the progress of testing, where Team Noridian will not only track the progress of the testing effort by phase, but also track performance metrics of the testing team. The second is a measure of the quality of software, which is derived from the defect tracking system.

Using the information provided through test case progress tracking, the following key process metrics may be derived:

- Test Execution Rates: How many test cases can be executed by the testing team? This measure will allow the test team and project management to more accurately predict test completion
- Test Case Pass Rates: How many test cases are being passed each week? Comparing pass rates to execution rates provides an indicator on the quality of the software. This may be measured over the entire scope of the project or within individual business areas. Individual measurements may provide indicators to the testing manager where progress by the development and testing team is weak

Using the data collected by these measures, graphs will be created to indicate trends. A number of sample trend graphs have been included in Figure 8-84 as examples of how the data may be presented.

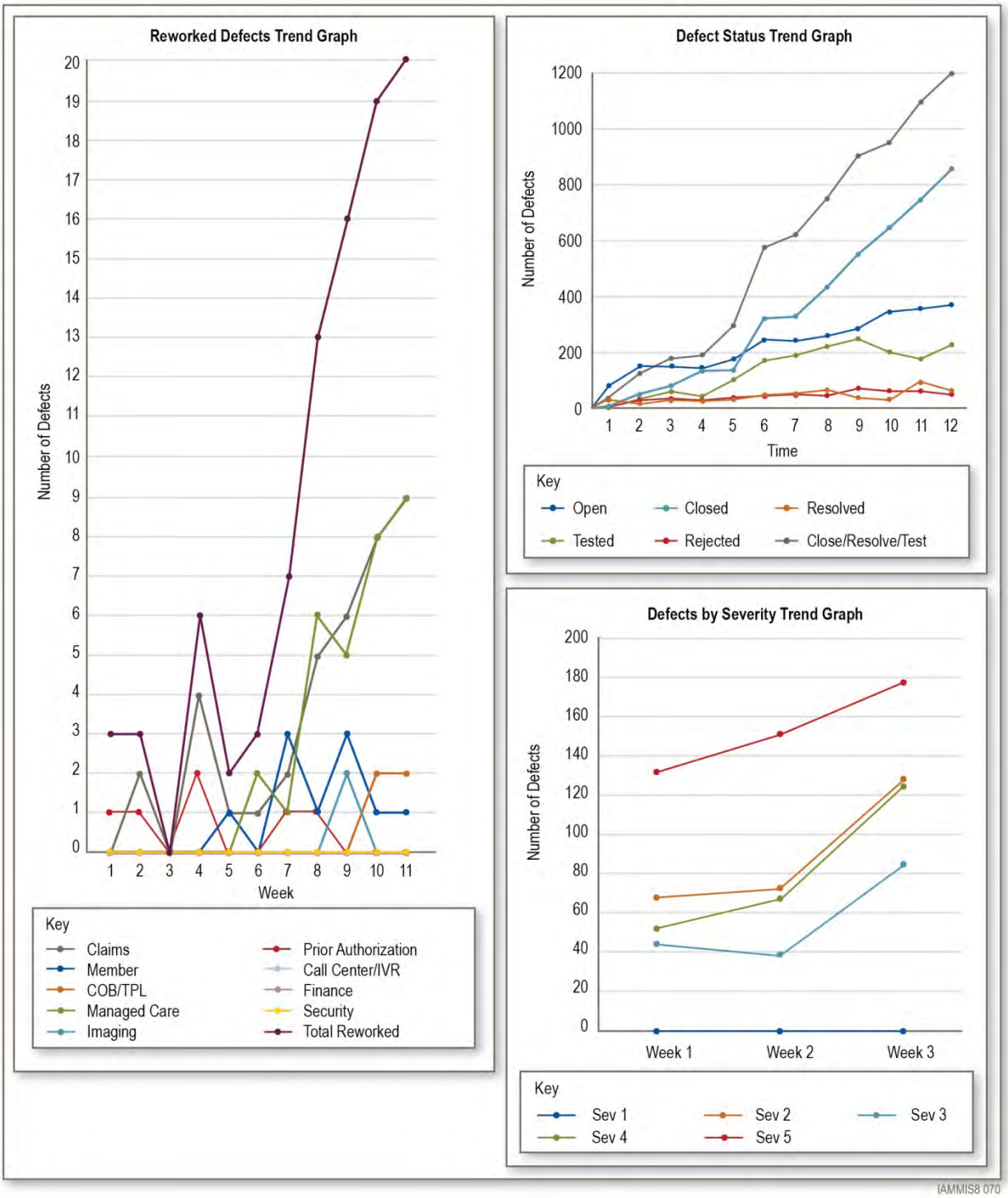


Figure 8-84.Test Status Metrics. Compelling reports and graphs places the focus on analyzing results at the appropriate management level.

Final Testing Reports

RFP Section 6.3.2.3.2.1.5, Requirements a through d

After the completion of all test cases in the test phase, a test result summary is prepared, reviewed, and sent to the Department to illustrate that the test execution has been completed successfully. This includes the test cases, actual results, and expected results. Test results are clearly identifiable and provide information that helps to facilitate the review process.

Each test result undergoes two reviews:

- Team Noridian review
- Department review

Team Noridian reviews all results deliverables of formal testing prior to delivery to Department for their internal review. The two goals of the Contractor Team review are as follows:

- Ensure that the results of the test are accurate
- Ensure that all procedures and standards surrounding the process of executing and recording the test results were followed

If any invalid results or errors are identified, Team Noridian works to resolve the situation that may require re-execution of one or more test cases and re-capturing of test results if the nature of the defect requires changes to code or configuration.

Once the test results are approved by the Team Noridian for a test phase, the results are submitted to the Department for their review. The review by the Department determines whether Team Noridian has successfully completed the test phase.

To facilitate acceptance of the test results, Team Noridian will create a test results acceptance criteria document. This project artifact will detail the form and content of the final test results delivery. This will ensure a smooth delivery and assurance to Department that the delivery itself will meet their expectations. An outline of the test results acceptance criteria is included in Figure 8-85.

Criterion # 1	Description of Acceptance Criterion
Summary Test Results Report	▪ Title page ▪ Approvers page ▪ Revision history ▪ Table of contents ▪ Preface (purpose, audience, scope, organization, reference documents) ▪ Executive summary ▪ Description of the test results report ▪ How to read the test results report ▪ Acceptance criteria for approving the test results from master test plan ▪ Test results summary table ▪ Total test cases executed ▪ Total test case passed (P) ▪ Total test cases passed (P1) ▪ Total test cases failed (F3) ▪ Total test cases failed (F2) ▪ Total test cases failed (F1) ▪ Test start date and end date ▪ Tests completed by (list of testers involved) ▪ Defect summary table ▪ Defects opened and closed by severity ▪ Appendix A: Test case result tables that contain the test case # and result (P,P1,F3,F2,F1), one for each area (touch point, end-to-end [E2E], interface and edits and audits), and a summary table at the start (e.g., comprehensive list of all test cases, define better edits and audits) ▪ Defects addressed and change requests
Criterion # 2	▪ Description of Acceptance Criterion

Criterion # 1	Description of Acceptance Criterion
Test Results Evidence	▪ Delivery of test cases and corresponding results on labeled CD-ROM ▪ All test cases to include detailed descriptions of input values used ▪ All test cases have a description of the test case within the name

Figure 8-85. Test Results Acceptance Criteria. Establishing acceptance criteria for deliverables prior to the start of each test phase allows Team Noridian to plan testing efforts to yield results that will satisfy the agreed upon criteria for the deliverable.

For a formal test phase to be completed, the following four major criteria must be met:

- Exit criteria specified in the test plan have been met
- All related test cases have been executed
- No severity 1 or 2 defects remain
- Team Noridian team review of test results has been completed
- Approval to exit the test may not be given, if any test case fails with Severity 1 or 2 defects.

Testing Activities

RFP Section 6.3.2.3.2.1.6, Requirements a through g

Our approach also demonstrates a proven, efficient solution to accomplishing the objectives of the development and testing task including the installation, modification, and implementation of a CMS-Certified MMIS and performing the following types of testing to ensure the new MMIS is correctly performing all required functionality:

- Unit Test
- Rules Test
- Module Test
- Integration Test
- User Acceptance Test
- Operational Readiness Test (Parallel Test, Load and Stress Test, Disaster Recovery and Business Continuity Test)

Team Noridian will demonstrate through the different types of tests that we are ready to perform all required functions for the new MMIS and the Department can successfully participate in UAT. Figure 8-86 demonstrates the entire test phases from Unit to Operational Readiness Test.

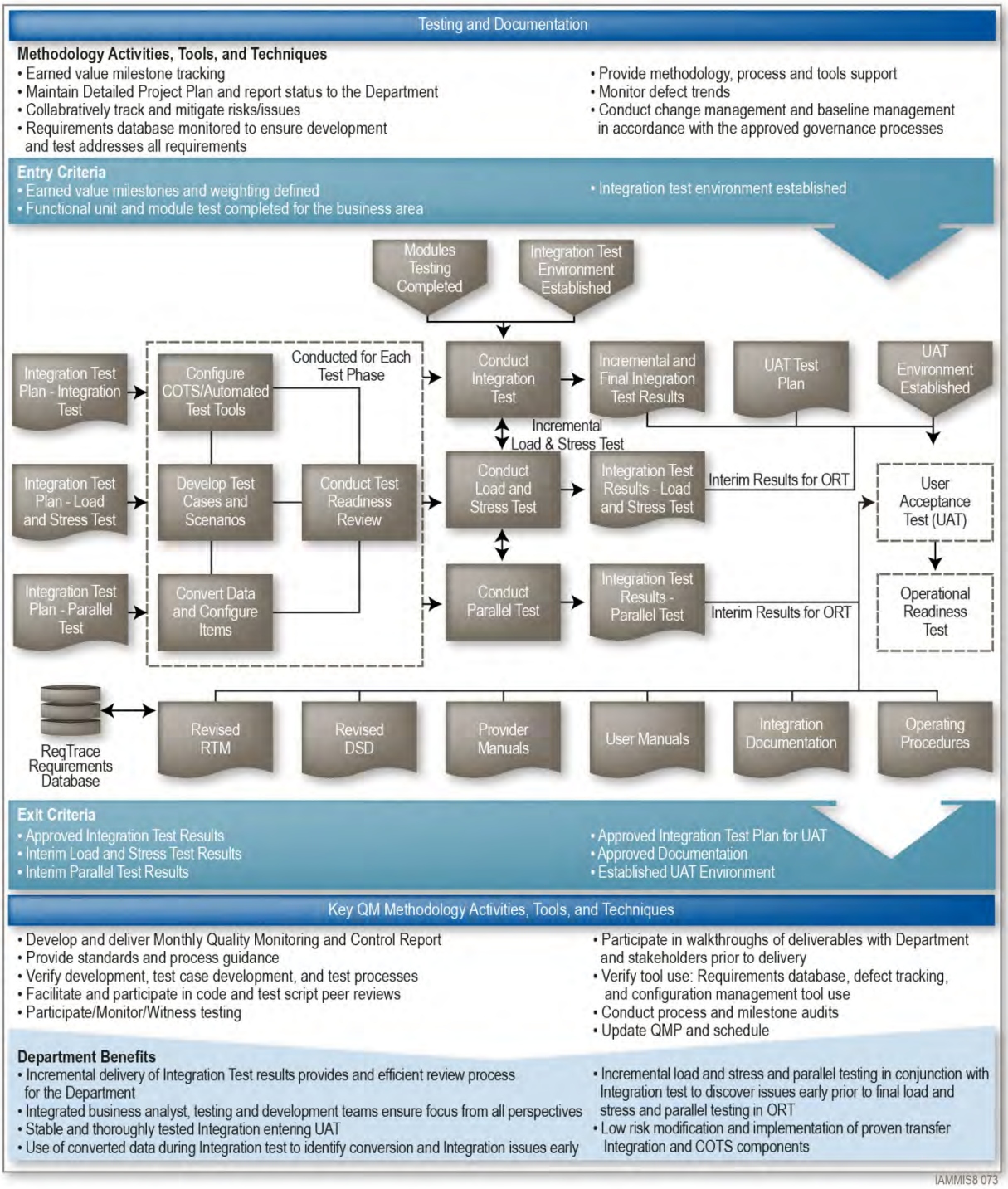


Figure 8-86. Testing and documenting the new MMIS. The testing and documentation task diagram provides a "cue card" to quickly understand the task's key concepts.

In accordance with the Department requirements, a staged release of components will be implemented. Unless otherwise noted, each of these releases will follow similar development and testing task processes. Team Noridian's Project Work Plan (submitted in Tab 6 of this proposal) details the activities and timelines for development and testing of each of the following releases:

- Early provider release
- New MMIS

Unit Testing. The input to development for a given business area is the DSD for that business area. Our approach to development and unit testing is an iterative, highly collaborative, structured approach. As shown in Figure 8-87, the development for each business area begins with iteration planning and the development of an Iteration Plan. The developers and analysts assigned to a business area will decompose the detailed specifications into smaller user stories and plan the completion of those user stories over a series of iterations. For example, in the Reference business area, we can find a requirement to maintain the procedure codes. This functionality will be decomposed to smaller user stories like adding, updating and inactivating the procedure codes. This not only provides a plan to help organize resources to complete and review the development, but it also provides a mechanism during the iterations to monitor progress. These iterations will form the "pulse" of the development progress and will provide the opportunity for Team Noridian and the Department to discover potential issues and delays and to develop corrective action and mitigation plans.

Development and unit testing is conducted in iterations. Once the initial iteration plan is developed for a specific business area, the iterative cycle begins according to the plan. The iterations are a highly collaborative process between developers, analysts, testers, and designated Department staff. Each iteration begins with a kickoff to review the iteration plan and come to an agreement on the user stories that will be developed for that iteration. The iterative cycle then proceeds through development. Before delivering the code to the test team, developers will conduct test through which all the individual units of the source code like the methods, classes and subroutines are verified to determine whether they are in good shape before handing in over to the test team. A development unit checklist will be provided by the development team when they release the code for the iteration that demonstrates the testing they have completed. Once the code has been delivered to the Team Noridian Test team, thorough unit testing is conducted through a combination of manual unit test cases to verify the entire user story is working as per design. For example unit testing of "Adding a Procedure code" user story involves verifying its functionality, associated business rules, page layout, field validations, associated error or alert messages pertaining to the boundary of that user story. An iterative cycle concludes with a demonstration of the functionality and an acknowledgement from the Department that the functionality meets the planned user stories, requirements, and design for that iteration.

Team Noridian will monitor the progress of the development of subsequent iteration through collaborative iteration kickoff and planning meetings. These meetings address the status of tasks that were planned for the previous iteration, tasks that are planned for the next iteration, and any potential roadblocks that may get in the way.

Team Noridian favors an incremental delivery of test results by business areas, followed by a final result deliverable. This will also allow the Department to conduct the review and approval process incrementally. The proposed delivery schedule of the unit test results for each business area is included in our Project Work Plan submitted with this proposal.

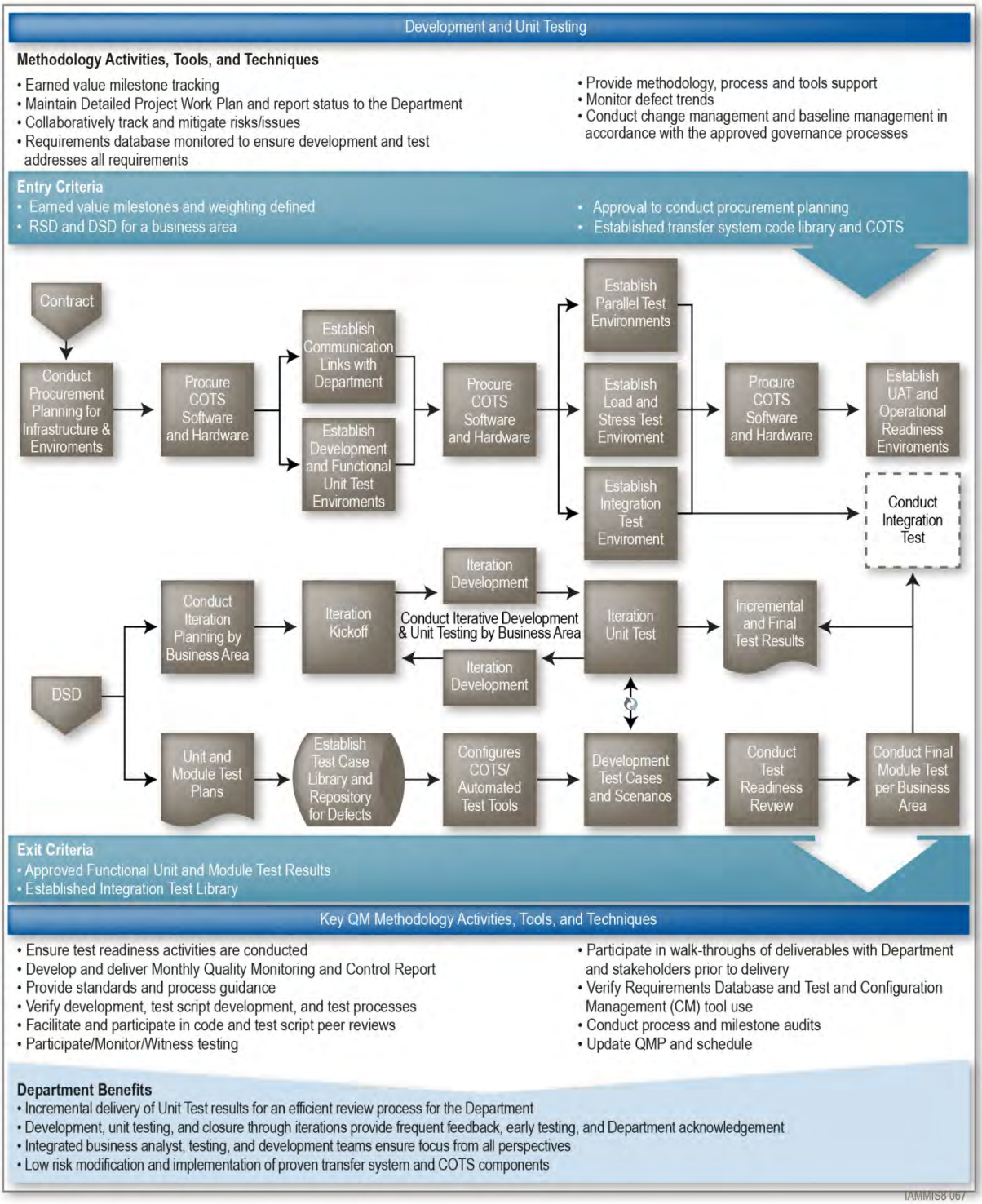


Figure 8-87. Overview of Development and Testing. The development and unit test task diagram provides a "cue card" to quickly understand the key concepts.

Rules Testing. During the iterative testing cycle, Team Noridian will perform Rules testing which focuses on the verification of the Rules or Edits Logic of all the different business process areas populated in the eCAMS rules engine. Test cases will be created to test and validate the rules and edits logic populated either through table driven approach or rules engine driven approach.

The table driven approach is primarily used for Reference Rates and Limits. For example, Rates have dates associated with them defining the period of time that the rate is effective. Each rate may be tied to one or more service codes. Making these tables viewable and editable to authorized users, as well as through interfaces and uploads, provides considerable flexibility to the system and allows for making changes without a long development and testing process. It also simplifies testing as a verifying one rate for one procedure code for an effective period, validates that all other procedure codes for the same time frame and rate are also correct.

Rules-driven approach is implemented using the rules engine. Rules are developed for each business process area. These rules may be anything from simple validation edits to complex processing flows that must route decisions down different streams of code based on decisions points. For this testing, multiple tests will be required to test each branch of the decision tree and the code associated with it.

Rules testing can begin as early as unit testing and will continue through Integration testing. User Acceptance testing and ORT will also, by definition continue to test rules through the claims adjudication testing.

Module Testing. During the iterative testing cycle, unit testing has been performed where many of the requirements has been verified and tested in a limited fashion though user stories. Module testing expands on this testing by testing the business functionality within and across the entirety of the module expanding the scope of test cases. This will include limited integration with other business areas through the use of common data base tables and procedures. During Modules testing, interface testing will be limited to testing the ability to create outbound interface files, and process manufactured inbound interface files.

The processes used to complete module testing are documented as part of the Modules Test plan, reviewed and approved by the Department prior to each module test phase. Prior to the start of Module testing, a test readiness review is completed to ensure that all the processes leading up to testing have occurred and that all necessary materials needed to complete testing have been developed by Team Noridian and approved by the Department. Team Noridian will validate and track the requirements which have been successfully tested and passed and provide a final test results at the completion of each Module test for review and approval by the Department.

Integration Testing. Following our central tenet of testing early and often, significant portions of the system will have completed testing through module testing. As progress is made through each layer of the test program, the scope of testing becomes more focused on specific objectives. No longer focusing at the module component level, which was completed as part of module testing, Integration testing will concentrate on testing the system as a whole, End-2-End functionalities, crossing component boundaries through the exercise of business processes using a combination of created and converted business data.

Integration testing will begin when module testing is completed in accordance with the agreed upon module test exit criteria for a business area. Many of the business areas and associated modules will complete testing in a staggered fashion. Integration test will encompass testing within an individual module (end-to-end within the module) and then expand to cover across modules and, finally, expand to the breadth of the system including external interfaces. Team Noridian will establish an Integration test plan that logically groups business areas and associated modules so that integration testing can begin to test meaningful integration points while other functionality, such as Program Management, are still completing module testing.

Prior to conducting integration testing, the environment must be prepared by the new MMIS infrastructure team, which includes system and database administration staff, data conversion staff, and configuration management specialists. Having prepared the environment and prior to the start of test execution development and test team members will perform an environment readiness review to ensure the environment has been properly installed, configured, and populated with valid testing data.

Team Noridian will ensure that a combination of a subset of converted data, tester created data, reference values such as system parameters, system lists, reference tables, edits, dispositions, and security tables have been established prior to integration test. We will load the latest versions of the new MMIS software and associated COTS products and deliver system test results incrementally throughout integration testing and final integration test results at the conclusion of all integration testing.

In addition to integration testing, our approach is to conduct load and stress tests incrementally beginning with interim testing during the integration test phase. The load and stress tests continue into the UAT phase with a final load and stress testing event that verify the operational requirements of the new MMIS solution have been met. Load testing measures the ability of the system to accommodate the load of current and future enrollee and provider populations and the transaction volumes over the life of the contract, and stress tests are designed to verify service level agreement (SLA) requirements that specify the need for the system to complete user-initiated operations and return control to the user within a specified period. This measurement is commonly referred to as response time. The processes and methods used for load and stress testing based on representative samplings of actual or estimated production transactions will be documented in the ORT test plan developed by Team Noridian and approved by the Department.

Parallel testing begins as early as the unit test phase when data from the legacy system is identified for conversion, and extends through system test as we execute “mini” parallel tests focused on verifying key transactions. This continues through Integration testing. For example, for claims adjudication, Team Noridian examines account coding, adjudication result, calculated payments and adjustments when comparing the legacy system to the replacement MMIS. By re-adjudicating converted historical claims on the replacement MMIS, we can identify and repair any obstacles which might hamper our progress through parallel test. Team Noridian has implemented this approach successfully with the state of Washington and Michigan MMIS projects, where individual and batch claims were processed and compared to legacy system results for adjudication result, payment, and account coding.

User Acceptance Testing. At the conclusion of Integration testing by meeting all the exit criteria mentioned in the Integration test plan, and a successful test readiness review leads to the kickoff of User Acceptance Testing. The purpose of the user acceptance test is to provide assurance that the new MMIS is operational and functions according to Department’s requirements and that manual and automated functions and interfaces are in place and functioning properly. UAT is designed to ensure that all MMIS functions are tested by users, including but not limited to, proper functioning of edits, audits, and business rules; the accuracy of claim records payment and file maintenance; and the format and content of all system outputs, including outputs from reporting functions. UAT also offers the opportunity to test user manuals, forms, procedures and business processes.

UAT will include testing of all core functions, both manual and automated, and will verify the MMIS systems are functioning per the Departments requirements. UAT will be executed in a strictly controlled environment, using a defined set of test cases requiring converted production data. Test cases and results will also be strictly controlled and stored for later review by CMS. Changes to either the environment or test cases will be reviewed and approved by the department prior to modifications being completed.

Based on the test scenarios provided by the Department, Team Noridian will develop detailed UAT cases following the test case creation standards and guidelines provided in the UAT Test Plan. Wherever possible, Team Noridian will re-use or modify test cases developed during other test phases. Team Noridian will ensure that traceability to use cases and requirements are included for all UAT cases to aid in future regression test analysis for operations and maintenance.

Throughout execution, Team Noridian will provide weekly reports of testing progress following the standard reporting conventions used through previous test plans and phases. Once all test cases for the acceptance test task have met the acceptance criteria for exiting the test, a final assembly of all test results will be created to demonstrate to Department that the test has been completed successfully.

Conversion Testing. Team Noridian's data conversion test approach uses a state-of-art automation framework and based on using predefined Microsoft Excel data conversion mapping templates. Data conversion mapping describes the source to target mapping rules to move the legacy data into the eCAMS database format. Team Noridian's automated testing framework eliminates the opportunity for human error in data conversion testing by creating automated testing scripts to validate the data conversion process was completed successfully.

The plan for data conversion testing will be included as part of the conversion plan, executed by Team Noridian's test team, and the results provided to the Department for review and approval. Team Noridian recognizes the value of testing using converted data to ensure that the testing activities and results reflect true to life examples of the operating MMIS. This will assist in the Departments review and approval of testing results.

Data Certification Letter

RFP Section 6.3.2.3.2.1.7

Preparation for UAT is vitally important given the number of resources from the Department, business services contractors, Team Noridian, and other contractors that will be involved during this event. Documentation, software, processes, and systems must be ready prior to the beginning of UAT. Team Noridian's testing process provides the necessary checkpoints and visibility to verify readiness for UAT. The thoroughness of our process gives us confidence in certifying readiness for UAT. Team Noridian will provide a letter to the Department certifying that all data, user manuals, testing facilities, and security accesses necessary to perform UAT.

The following provides an overview of the entry and exit criteria for UAT and our UAT related processes.

Entry Criteria

- UAT Test Plan has been reviewed and approved
- Results from each Integration test have been delivered and approved
- All requirements have been addressed through test scenarios and test scripts and is reflected in the RTM
- The MMIS systems successfully meet the requirements of the Contract
- User Acceptance Test environment (including required interfaces) has been configured, verified, and is available to begin testing
- All planned test cases have been created and documented
- Required converted test data is in place (except for that which will be created from other test cases)
- Team Noridian has provided a letter certifying that all data, user manuals, testing facilities and security accesses necessary to perform UAT have been provided

Exit Criteria

- 100% of the planned Integration Test cases have been executed
- All discovered defects logged into Bugzilla
- No known Severity 1 or Severity 2 defects

As each test is executed, the tester collects evidence of the test (i.e., test results). Depending on the nature of the test, evidence may be collected to demonstrate pre-conditions of the test, conditions at each step during the test, and conditions after the test has been completed. This evidence is then compared to the expected results as recorded in each test case document.

When the evidence is compared to the expected result at each validation point within the test case, an assessment of the result is made in terms of pass or fail. Additionally, when the test case is executed to completion or completed as far as permitted by the system, a pass or fail determination is made for the

entire test case. It is possible for a test case to be completed with minor issues detected at one or more points of validation and still obtain an overall assessment of pass.

The testers follow the defect tracking process if the results of the test validation indicate that a correction in the code or requirement is needed. This defect tracking process is documented in the defect management plan. Defects may be opened directly in Bugzilla by the tester.

Additional test cases, scripts, and evidence which may be collected separately (e.g., batch results), will also be manually checked into Subversion along with all other test artifacts.

Sometimes a pass or fail condition cannot be readily determined. The guidelines in Figure 8-88 are provided to assist all parties involved in each test phase to determine pass or fail for each test case.

Guidelines	
Pass (P)	The results of the action comply with the expected results
Pass with constraints (P1)	The results do not completely comply with the expected results but the results are a user inconvenience or other minor inconvenience. A Severity 4 or 5 classification defect report is created. Refer to the Defect Management Plan for severity definitions.
Fail (F#)	F3: The function has failed but there is a workaround such that testing of that business area can continue. A Severity 3 defect is created F2: The function has failed and there is no workaround. A Severity 2 defect is created F1: The action results in a system crash or results in damage to data (e.g., wrong results or a loss of data). A Severity 1 defect is created. Refer to the Defect Management Plan for severity definitions

Figure 8-88. Pass or Fail Guidelines. Provides all stakeholders easily determination of pass or failure results for each test case.

Operational Readiness Testing (ORT)

RFP Section 6.3.2.3.2.1.8, Requirements a through e

The Operational Readiness Test (ORT) is the final step to ensuring the new MMIS is ready to assume production operations. Testing completed up to this point has established the new MMIS has met the documented requirements and design as approved by the Department. This next step is designed to ensure that the system can assume operations successfully, processing production volumes of claims and paying accordingly without loss of service to clients or providers. ORT is also designed to assess the readiness of the operational IME staff to ensure they are able to perform manual operations task as well as automated tasks utilizing the MMIS systems. This includes functions such as customer service, correspondence management, financial operations, operations workflow, electronic documents management, manual claims resolutions, and disaster recovery.

The ORT test plan will be divided into sections, each dedicated to specific goals. These sections will be divided as follows:

- Parallel Test process, procedures and results delivery
- Load and Stress test process, procedures and results delivery
- Operational Readiness test process, procedures and results delivery
- Disaster Recovery and Business Continuity testing process, procedures and results delivery
    - In developing the ORT Plan, Team Noridian will solicit input from the Department as well as the IV&A and Quality Assurance vendors, for specific measures and metrics which should be captured as part of the Operational Readiness Test activities. These measures will be included in the test plans and results captured in the Final ORT results report.

Parallel Test. The parallel test will be conducted by running selected subset of production claims through both the new MMIS and legacy systems to ensure the new MMIS is producing the appropriately comparable results. This testing is a highly structured process using a controlled set of claim transactions

files and data sets selected by the Department. Parallel testing will be conducted through back-end batch processing through a normal flow such that the transactions from these control files are posted and that the transactions show up on the claims system as well as operational reports. Testing will be executed by Team Noridian's start-up and implementation and operational staff concurrently.

During the test planning stage, Team Noridian will select three months claims data as tests to be executed during the parallel test. These three months of testing data will be selected using data previously adjudicated on the legacy system and processed within nine months of the planned production installation date. Team Noridian will create an inventory of the parallel test to be executed and record them in the parallel test plan. Analysis of the claims data sets will yield the set of dependant data needed to complete adjudication and payment of the claims. The claims sets and historical data should be recent to reflect current eligibility to limit the number of discrepancies in the results. Re-tests of the parallel system test may be necessary, should the results indicate that a re-test is required. When this occurs, Team Noridian will follow the project standard defect management system to record and track defects in parallel test to closure prior to completion of the testing phase. In an ideal situation, the test results will be identical and Team Noridian will consider the test a success. Determination of success is determined by comparing the status of the claims after processing in the new system, the payment amount (if paid), and the equivalent error codes, reason and remark codes generated. Team Noridian will develop explanations and rationale for variances in test results. Department staff will also need to be involved to help analyze the results from the legacy MMIS and determine why there may be differing results.

Upon completion of the test phase, a test results report is delivered including results of the final parallel test iteration, any documented discrepancies, and corrective actions implemented (closed defects).

Load and Stress Test. Unlike functional tests that simply pass or fail, Load and Stress test often are repeated against revised configurations until they achieve the best possible performance in excess of the requirements or until the test fails. Load and Stress tests determine the point at which the system can no longer handle any additional load. This type of test also allows the team the opportunity to determine the optimum system configuration and measure maximum output. To design the test to simulate the production system, two classes of metrics will be gathered from the legacy MMIS system. The first group of metrics is functional in nature and describes current user behavior. These metrics will form the basis of functionality to be performed by the performance test scenarios. The second group of metrics describes characteristics of the environment and includes metadata to help design and generate realistic data inputs to the test scenarios. Because the new MMIS solution architecture will be fundamentally different from that of the legacy MMIS, most of the metrics will not have an exact correlation between the systems and will therefore require an informed translation before being applied to the new MMIS load tests. This will occur during the test design phase and involve Team Noridian and Department personnel as part of the collaborative design sessions. Load and Stress testing will verify capacity to process production batch volumes of claims as well as online, web-access using production sized databases. At the successful conclusion of the Load and Stress tests, Team CNSI will produce a test report containing descriptions of the tests run, changes made to the system configuration to complete performance tuning, with the supporting evidence gathered during test that demonstrates the new MMIS system meets the requirements of the RFP and as established during DSD.

Beta Tests. Team Noridian will implement beta tests for system components and features that impact external users. Examples of areas that will undergo beta testing are: web portal and web-based claims submission. Beta testing is limited to end user functionality; meaning it does not address system to system interactions given that system level tests are conducted during other parts of ORT and potentially other test events. Beta tests are most successful when willing and active participants are involved. Hence, Team Noridian will work with the Department and the provider management services contractor to identify and screen end users and providers that are likely candidates for beta testing. Team Noridian will, again working with the Department and provider management services contractor, conduct outreach activities to

involve the candidates and gain their acceptance into the beta program. Beta testing schedules will be objectives driven meaning the schedules will be designed to focus on achieving the desired goals from beta testing (i.e., verify usability, test specific complex interactions, etc). Beta tests will not have the formality of test cases. Instead, beta test users will be asked to focus on particular functional areas. Team Noridian will provide web-based orientation and training for the system under test and provide a web portal to collect feedback from beta test users.

Disaster Recovery and Business Continuity Test. Disaster Recovery and Business continuity planning involves the development of interim measures designed to recover and sustain the critical information technology (IT) services during an emergency, as well as reconstitute the pre-emergency system as soon as practicable. The goal is to ensure that critical and sensitive systems needed to support mission essential functions continue to be operational in the event of major or minor interruptions, or a large-scale disaster. Team Noridian will implement a Disaster Recovery Business Continuity Plan (DRBCP) to ensure that vital services can be recovered and reconstituted in the event that a major event occurs that renders its resources unavailable. In order to accomplish this undertaking, it is necessary the Department identify essential functions (as defined in Federal Preparedness Circular 65) that rely on the new MMIS. Since the new MMIS supports Medicaid, a Federally-identified essential function, it is necessary to examine all essential function components that would adversely impact the Departments Medicaid mission in the event the new MMIS were rendered unavailable for a significant period of time. The ORT Test plan will document how the process and procedures outlined in the DRBCP are verified to be implemented correctly and is operational. Plan testing is a critical element of a viable disaster recovery capability. Testing enables DRBCP plan deficiencies to be identified and addressed. Testing also helps evaluate the ability of the recovery staff to implement the plan quickly and effectively. Testing will engage the MMIS operations disaster recovery team and would be limited to Classroom Exercises conducted in accordance with team member training. Participants in classroom exercises, often called tabletop, walk through the procedures without any actual recovery operations occurring. Classroom exercises are the most basic and least costly of the two types of exercises and should be conducted before performing a functional exercise. The tabletop exercise will take place prior to production implementation as part of the ORT Testing Period. Test results, lessons learned, and improvements based on test results will be documented and reviewed by test participants and other personnel as appropriate and the DRBCP will be updated to reflect changes to procedures based on lessons learned.

Operational Readiness Test Report. Operational Readiness Test will be focused on the ability of the contractor to establish readiness for operations. The plan will outline the processes and the checklists which will be used to record the successful completion of each readiness activity. During ORT operations test personnel will verify the ability of the operations staff to perform day to day activities of processing claims, claims payment, drug rebate, workflow, providing customer service through phone and fax, imaging, prior authorization, daily operational reports, etc. Daily activities will include exercising the production job schedules including claims loading, adjudication, and payment cycles using production claims volumes. At the completion of operational readiness test, all production capabilities will have been exercised and all test checklists completed. Any discrepancies uncovered during testing would be documented, reviewed and a plan of action determined approved by the Department prior to considering the testing completed.

At the completion of all ORT Test activities, Team Noridian will submit a final test report that details the results of all operations readiness testing and assessments, with a statement certifying the new MMIS, in its entirety of software, staffing, support personnel, IT and office facilities and infrastructure (e.g., phones, power, office equipment, etc.), is in place and ready for operations. All measures, provided by the Department and IV&V and QA Services vendors, and documented in the approved ORT Plan will also have been met and documented in the Final test report.

8.3.2.3.3 Deliverables

RFP Section 6.3.2.3.3

The list of deliverables generated by the test team during the various test processes is shown below. These deliverables are sent to the Department during various stages of the testing. Artifacts are internal documents used to accomplish the planned tasks and may be made available to the Department staff as needed. Team Noridian will develop the deliverables listed in Figure 8-89 for operational readiness testing.

Deliverable	Agree to Meet?	Section in Response
Unit Test Plan	Yes	Section 8.3.2.3 Testing Tasks
Rules Test Plan	Yes	Section 8.3.2.3 Testing Tasks
Module Test Plan	Yes	Section 8.3.2.3 Testing Tasks
Integration Test Plan	Yes	Section 8.3.2.3 Testing Tasks
UAT Test Plan	Yes	Section 8.3.2.3 Testing Tasks
ORT Test Plan	Yes	Section 8.3.2.3 Testing Tasks
Unit Test Cases and Scripts	Yes	Section 8.3.2.3 Testing Tasks
Rules Test Cases and Scripts	Yes	Section 8.3.2.3 Testing Tasks
Module Test Cases and Scripts	Yes	Section 8.3.2.3 Testing Tasks
Integration Test Cases and Scripts	Yes	Section 8.3.2.3 Testing Tasks
UAT Test Cases and Scripts	Yes	Section 8.3.2.3 Testing Tasks
ORT Test Cases and Scripts	Yes	Section 8.3.2.3 Testing Tasks
Unit Test Results	Yes	Section 8.3.2.3 Testing Tasks
Rules Test Results	Yes	Section 8.3.2.3 Testing Tasks
Module Test Results	Yes	Section 8.3.2.3 Testing Tasks
Integration Test Results	Yes	Section 8.3.2.3 Testing Tasks
UAT Test Results	Yes	Section 8.3.2.3 Testing Tasks
ORT Test Results	Yes	Section 8.3.2.3 Testing Tasks
Test Tracking (Execution and Defect Tracking)	Yes	Section 8.3.2.3 Testing Tasks
Performance Tuning Document	Yes	Section 8.3.2.3 Testing Tasks
Letter Certifying UAT data has been provided	Yes	Section 8.3.2.3 Testing Tasks
Final Testing Reports	Yes	Section 8.3.2.3 Testing Tasks
Operational Readiness Test Report	Yes	Section 8.3.2.3 Testing Tasks
Update of RTM	Yes	Section 8.3.2.3 Testing Tasks

Figure 8-89. Operational Readiness Testing Deliverables. Team Noridian develops all deliverables using its documented deliverable creation and review standards and procedures and will deliver them in accordance with our detailed project work plan.

8.3.2.3.4 Performance Standards

RFP Section 6.3.2.3.3.1, Requirements a through c

The following performance standards will be used to measure Team Noridian's success with the following deliverables:

- Testing schedules will be updated and maintained in the Project Work Plan as a part of our time management processes.
- All test plans will follow the Institute of Electrical and Electronics Engineers (IEEE) Standard for Software Test Documentation Standard 829-1998
- All project management plans will follow the Institute of Electrical and Electronics Engineers (IEEE) Standard for Software Project Management Plans 1058-1998

- Deliveries of test plans, test scripts, test results and evidence, final test result reports, updated RTM's and DSDs will follows the schedule as provided in the Project Work Plan.

8.3.2.4 Knowledge Transfer Activities

RFP Section 6.3.2.4

The success of a new system implementation is not only measured based on timeliness of system deployment but, more importantly, requires staff knowledgeable in performing daily operational functions. Knowledge transfer is a critical element of a successful implementation. Team Noridian blends knowledgeable staff, proven solutions, and innovative tools to assure all stakeholders are trained timely and effectively.

Noridian has received 100 percent of points allowed for conducting training on system changes since fiscal year 2010.

Knowledge transfer is an essential component of the success of any system implementation. It is even more critical in an environment like the IME that incorporates multiple best-of-breed services contractors. Selection of a contractor having the awareness of the intricacies of ownership of business processes between these contractors and in depth knowledge of the existing operation will be paramount to the success of this implementation. Team Noridian brings this knowledge and will capitalize on existing relationships with the Department and the services contractors to provide knowledge transfer processes and content customized to the uniqueness of the IME environment, supporting the continuation of collaborative positive relationships, ultimately reducing the risk inherent in implementation of the new MMIS.

8.3.2.4.1 State Responsibilities

RFP Section 6.3.2.4.1, Requirements a through c

Team Noridian, through its prime contractor Noridian, has built collaborative relationships with the Department and the IME services contractors throughout our tenure as the IME Core contractor. These relationships will continue to grow throughout all phases of the contract, but will be especially important in establishing a positive tone for exchange of information during the start up and implementation phase. We will rely on our existing knowledge of the workflows and business processes performed by each of the IME services contractors as the foundation for development of knowledge transfer processes and the development of training materials to support knowledge transfer activities.

We will involve the Department and key IME services contactor staff in joint application design (JAD) sessions, in user acceptance testing (UAT), and in operational readiness testing (ORT) to assure the unique needs of the IME are the foundation for system functionality development. We will customize our approaches based on feedback from the Department and other stakeholders to assure that training materials and approaches are successful at the outset, minimizing the need to rework or adapt changes to processes and materials.

Our detailed work plan and project schedules will be refined throughout the beginning of the start up and implementation phase. These materials will provide clear indicators of when knowledge transfer activities are planned for each business area. Any updates to the project schedule resulting from requests of the Department or other project stakeholders will be promptly made to the work plan and schedule to assure that all stakeholders are aware of time frames for knowledge transfer activities. This open communication to all stakeholders will help assure that staff are available for training at the right time to receive training.

Team Noridian will develop detailed system design documents throughout the start up and implementation phase as required by the Department. Our business analysts, documentation specialists, and training specialists will collaborate to use these materials as the foundation for training materials. Training will be packaged into curricula and courses tailored to the unique needs of each business unit. All training materials will be made available through the online Brainshark learning management system

(LMS), providing a location for initial approval of materials by the Department prior to deployment of knowledge transfer to the business units.

8.3.2.4.2 Contractor Responsibilities

RFP Section 6.3.2.4.2

The PMO is the first step in establishing a culture of partnership on the project. The PMO will have oversight of the Quality Control Unit that will be responsible for knowledge transfer and training development. Team Noridian's goal is to foster a culture of collaboration with the Department and the IME services contractors to support cultural change management necessary to prepare users and support staff ability to embrace new functionality. Taking full advantage of new MMIS functionality is essential to allow the Department to achieve the MITA maturity level required of this implementation, while preparing staff to consider ways to improve business processes to achieve ever higher levels of maturity.

We recognize the expertise and experience of users and have adapted our training approach to address differences in system processes required to take advantage of the new MMIS. Our unique knowledge of the legacy system and intimate knowledge of each business workflow allows us to customize knowledge transfer to each business unit's specialized processes, assuring training recipients can identify with the subject matter and that it is presented in a way that will ease the transition from use of existing systems and processes to the use of functionality available in the new MMIS.

Figure 8-90 presents a brief overview of the types of training that to customized to each of the IME contractors to support their areas of responsibility.

IME Components and Responsibilities	Training
DHS Policy Administration Unit ▪ Responsible for Medicaid Policies that govern Medicaid services in each program area	▪ Use of RuleIT rules engine for assessment of current policy and consideration of policy change ▪ Support for facilitating exception to policy ▪ Use of new MMIS for claims and correspondence retrieval and inquiry
Member Services Unit ▪ Member enrollment, inquiry and relations, outreach and education	▪ Access to Medicaid and waiver member eligibility through the new MMIS ▪ Support access to Web portal for distribution of member information ▪ Use of new MMIS for claims and correspondence retrieval and inquiry
Medical Services Unit ▪ Medical support, prior authorization, HIT	▪ Use of RuleIT rules engine to automate approval of approved set of prior authorization requests ▪ Ability to retrieve prior authorization and supporting records for approval ▪ Use of new MMIS for claims and correspondence retrieval and inquiry
Pharmacy Medical & Pharmacy POS Unit ▪ Pharmacy claims processing, pharmacy prior authorization, drug rebates	▪ Interface to receive pharmacy claims file into the MMIS for payment ▪ Receipt of applicable prior authorizations ▪ Use of new MMIS for claims and correspondence retrieval and inquiry
Provider Cost Audit Unit ▪ Rate setting, cost settlement, cost audits	▪ Retrieval of checks and related images ▪ Access to historical data in new MMIS ▪ Updating accounts receivable and accounts payable ▪ Use of new MMIS for claims and correspondence retrieval and inquiry
Provider Services Unit ▪ Provider enrollment, inquiry and relations, outreach and education	▪ Receipt of provider enrollment applications and updates ▪ Maintenance of provider file ▪ Access to Web portal for provider transactions and outreach ▪ Use of new MMIS for claims and correspondence retrieval and inquiry
Revenue Collections Unit ▪ TPL recovery, provider overpayment and withholds, lien recovery	▪ Retrieval of checks and related images ▪ Access to historical data in new MMIS ▪ Updating accounts receivable and accounts payable ▪ Use of new MMIS for claims and correspondence retrieval and inquiry
Program Integrity Unit ▪ Data analytics, SURS, medical value management	▪ Receipt of SURS and related reports ▪ Use of new MMIS for claims and correspondence retrieval and inquiry
Data Warehouse Unit ▪ Reporting	▪ Receipt on claims data ▪ Use of new MMIS for claims and correspondence retrieval and inquiry
Core Unit ▪ Mailroom, claims receipt (EDI), claims processing, MMIS, OnBase	▪ Claims adjudication and adjustment processes ▪ Receipt, imaging and indexing, and retrieval of images

IME Components and Responsibilities	Training
	▪ New MMIS reference file updates ▪ Configuration of new rules to support changes in policy ▪ Use of new MMIS for claims and correspondence retrieval and inquiry

Figure 8-90. Customized Knowledge Transfer. Team Noridian will customize the training curricula to each business unit

Team Noridian will identify required areas of training early, so the Department and each of the IME contractors can focus on specific systems and process impacting each area; therefore, training recipients are not overwhelmed with subject matter not pertaining to their business functions. Curricula will be developed for each business unit, made up of courses breaking knowledge transfer subjects into smaller, easily learned, pieces. The courses included in the curriculum for each area will be tailored to specific job functions. Staff will be enrolled to receive training and given appropriate security access to training materials, through our LMS, based on their job functions. This approach not only prepares enrollees for success by assuring they are given training relevant to their respective areas, but also supports security policies controlling minimum access practices confirming only staff with a "need to know" are provided access to training material.

Team Noridian will develop a knowledge transfer curriculum for delivery to the provider community as well. The development of these materials and the corresponding knowledge transfer activities will coincide with our proposed early roll-out of provider management functionality. The first courses developed in the provider training curriculum will focus on the use of the Web portal for initiating provider enrollment and to perform updates to provider information. This early roll-out will allow the Department, provider services staff, and Iowa Medicaid providers to interact with the new system for limited functionality early in the project, developing an understanding of core system capabilities and while decreasing the scope of training activities conducted in a "big bang" approach prior to full system implementation.

Our knowledge transfer activities will focus on the capabilities of the new MMIS, and also on the use of the Brainshark content creation, content management and LMS. Team Noridian will train the provider services contractor on this user-friendly online tool for delivery and tracking of training to the provider community.

Deployment of training sessions will coincide with the release of system functionality to assure a just in time training approach. We have found delivery of training in proximity to the start of use of the system maximizes knowledge retention and allow trainees opportunity for practical application of knowledge learned. We will conduct knowledge transfer sessions for designated training and testing staff in each IME unit prior to UAT and ORT. Team Noridian's business analysts, testers, training specialists, and technical documentation specialists will collaboratively develop training materials and knowledge transfer curricula targeted to each business area. Using the applicable curriculum, the IME units will be trained on testing protocols, use of existing test cases, development of new test cases, and logging of test results.

Our training approach for provider services and member services staff who support call centers, includes quizzes on common call types. This approach allows staff to prepare during knowledge transfer sessions for how they'll respond to calls. During the early stages of implemenation, Team Noridian staff will monitor calls to offer feedback on the use of the new MMIS in response to provider and member inquiries. Customer satisfaction is measured by the ability of staff to answer inquiries efficiently and accurately; to achieve this goal, staff must have documentation that is well organized and tailored appropriately to the scope of their daily tasks. We will update training materials and system documentation as a result of call monitoring and other feedback to assure content is provided in sufficient detail and appropriately customized to the types of questions most often received.

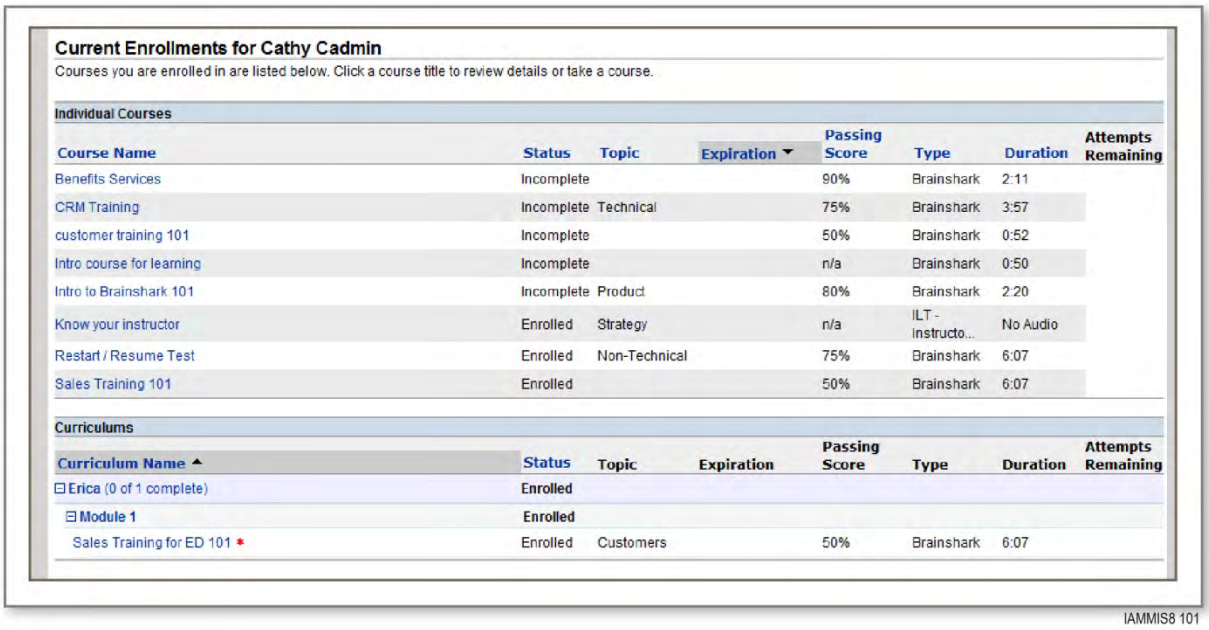
8.3.2.4.3 Staff and Management User Knowledge Transfer

RFP Section 6.3.2.4.3, Requirements a through n

Team Noridian will develop training materials and tutorials that will be available online through the Brainshark content management and LMS. This content will be the basis for training of Team Noridian staff, Department staff, and designated IME services contractor staff. Courses will be developed that are targeted to specific areas of system functionality, and tailored for specific staff roles. Training curricula will be organized to cover logical categories of content, while the courses within each curriculum are tailored to the specific job functions or roles of staff required to support elements of each category. For example, training curricula may be developed to support Department defined areas such as

- System Features and System Interoperability
- Process and Operations
- Reporting
- Document Management and Workflow
- Security
- Authentication and Registration
- System Tutorials and System Navigation
- Rules-Based Engine
- Provider Enrollment and Management
- Claims Processing
- Prior Authorization
- TPL Module
- Member Module
- Web Portal

Courses within a curriculum, such as claims processing, will be tailored for the roles of staff supporting that function. In this example, there may be courses developed for adjudication of specific claims types provided to adjudication staff while other courses such as development of claim edits and audits would be provided to more senior staff performing this type of role. Figure 8-91 shows a staff person may be enrolled in multiple courses from one training curriculum.



Current Enrollments for Cathy Cadmin

Courses you are enrolled in are listed below. Click a course title to review details or take a course.

Individual Courses

Course Name	Status	Topic	Expiration	Passing Score	Type	Duration	Attempts Remaining
Benefits Services	Incomplete			90%	Brainshark	2:11	
CRM Training	Incomplete	Technical		75%	Brainshark	3:57	
customer training 101	Incomplete			50%	Brainshark	0:52	
Intro course for learning	Incomplete			n/a	Brainshark	0:50	
Intro to Brainshark 101	Incomplete	Product		80%	Brainshark	2:20	
Know your instructor	Enrolled	Strategy		n/a	ILT - Instructo...	No Audio	
Restart / Resume Test	Enrolled	Non-Technical		75%	Brainshark	6:07	
Sales Training 101	Enrolled			50%	Brainshark	6:07	

Curriculums

Curriculum Name	Status	Topic	Expiration	Passing Score	Type	Duration	Attempts Remaining
Erica (0 of 1 complete)	Enrolled						
Module 1	Enrolled						
Sales Training for ED 101 *	Enrolled	Customers		50%	Brainshark	6:07	

IAMMIS8 101

Figure 8-91. Knowledge Transfer Curricula and Courses. Staff will be enrolled in courses from multiple curricula based on their job functions.

Tutorials are developed using multiple types of media including static content such as slides or forms, audio recording to provide description of the training content, and video including screen capture technology. Screen capture technology captures a video of interaction with a system. For example, a training specialist may record the process of resolving a claim error; this video can then be inserted into a tutorial allowing the training recipient to watch the actual claim resolution process. Incorporation of video created via screen capture technology enhances the learning experience by associating real situations into training material.

Team Noridian has assessed multiple products available in the market space providing content creation, content management, and LMS functionality. Brainshark has been selected in large part because of its simplicity of use and intuitive user interface. Static content such as power point presentations, enrollment forms, or other types of documentation are uploaded to Brainshark. Video such as screen capture is also loaded into Brainshark. This content can be organized by simply dragging segments of content and dropping them into a new location, thereby reordering the flow of the course. Figure 8-92 depicts the Brainshark screen that is used to organize presentation content. The segments on the left hand side of the screen may represent a slide, a form, or a video, and each can be reorganized in the flow of the presentation. Audio is recorded for each segment of the presentation and is tied to that particular segment so that if material is reordered, the associated audio is automatically moved with the corresponding content.

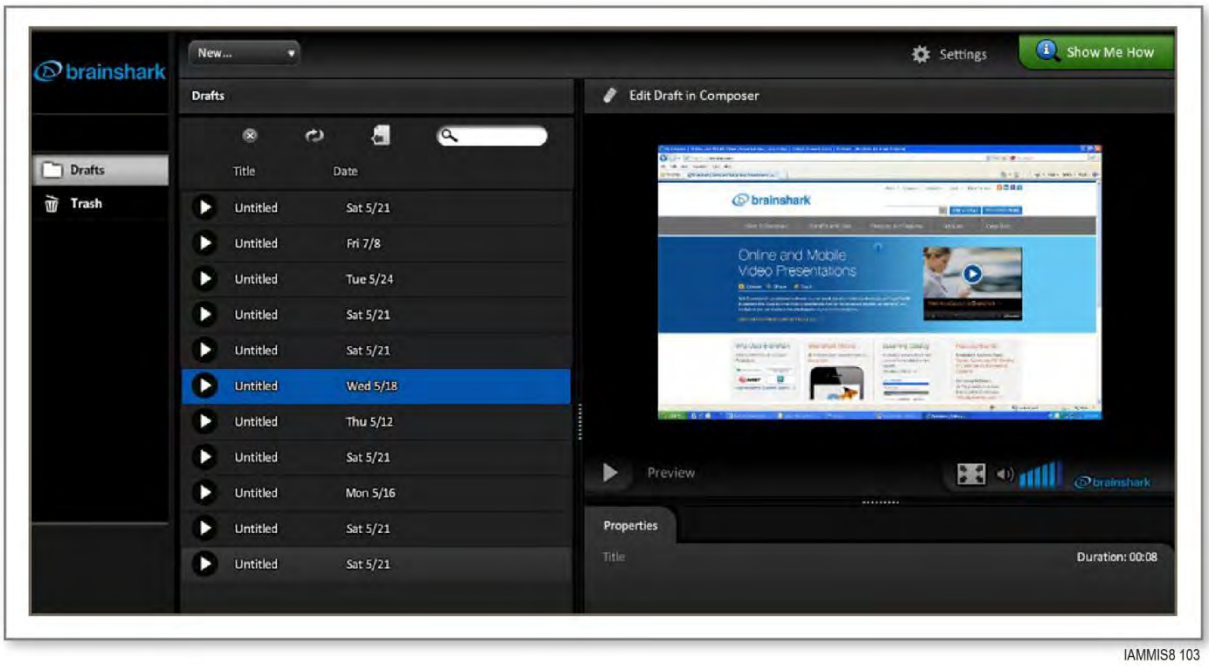


Figure 8-92. Brainshark Content Creation. Content is imported and organized in Brainshark and then audio is added to each screen to support a multi media learning experience for the user.

Brainshark has a learning management component to track recipients of education, tracks scores on quizzes to help assess success of knowledge transfer, and provides surveys of satisfaction with training. All metrics are used to enhance future training as well as identify training module topics that need to be enhanced or sets of staff that need to be re-trained.

Trainees log into Brainshark with a unique user id and password in order to participate in training courses. Brainshark allows trainers and team leads to track the trainee's activity, including which courses have been started, course progress, scores on assessments and quizzes, and how many times the trainee accessed the materials. This functionality provides trainers with information used to monitor success of knowledge transfer. It also enables trainers to control who has access to online training content and when staff have access to certain courses.

The Brainshark home page, accessible through our Web portal, prominently conveys all courses available to the user. Each user has access customized to them based on their unique login/password combination. This allows for tracking and display of the courses they have participated in, common resources (links) they have used, and other colleagues online in Brainshark concurrently.

One of many benefits of using Brainshark as the online learning management system training management tool is the functionality that keeps a record of scores, allowing trainers to monitor training progress. By reviewing the scores of each individual as well as the summary report of all employees who took a particular quiz, they can see where to increase, improve, or focus training to insure a better understanding of the missed issues, as well as determining what training sessions were successful.

8.3.2.4.4 Knowledge Transfer Plan

RFP Section 6.3.2.4.4, Requirements a through l

Team Noridian will develop a Knowledge Transfer Plan during the beginning of the start-up and implementation phase that will be refined as updates are made to the project work plan and schedule. Our knowledge transfer plan will account for training staff from Team Noridian and designated staff

from the Department and the IME services contractors, as well as preparation of materials to conduct provider training.

We will build the training plans to capitalize on our experience in preparing, scheduling, and conducting operational training of health care processes and systems. The plan contains a detailed training schedule that matches the MMIS system phase-in, taking into account the early roll-out of provider management functionality. Training specialists will collaborate with the Department and other units in the course of preparing knowledge transfer sessions to closely monitor workload levels to ensure new MMIS system training will not impact the unit's ability to maintain required productivity and quality levels. We may recommend alternate training reschedules in these instances, if the delay will prevent negative impact to current legacy operations. If rescheduling training courses is not an option based on achievement testing milestones, training specialists will be prepared to divide units into smaller sections to ascertain all designated staff receive the appropriate training while minimizing the time and amount of staff away from operational activities.

Team Noridian will continue to use our established training approach as the foundation to meet our ongoing training needs. This approach is depicted in Figure 8-93. Our experience indicates by continuously following the key steps of our training approach, we will ensure consistency, thoroughness, and quality of the training provided to all Team Noridian, Department, and IME contractor staff, as well as Iowa Medicaid providers, and stakeholders. This approach also allows for updates that reflect the differences in each period of the contract and for the application of lessons learned to improve the training program.

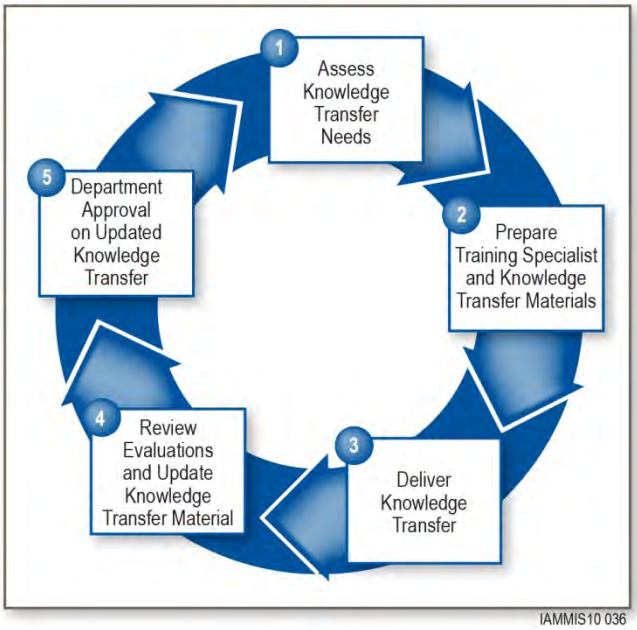


Figure 8-93. Team Noridian Training Lifecycle. Our training program is driven by the continuous assessment of training needs.

1. Assess Knowledge Transfer Needs. The training specialists and business analysts supporting each functional area will analyze each unit's training needs as the new MMIS systems are being implemented in preparation for testing phases. We will identify individual and unit areas of focus based on assessment of functionality and efficiencies of the new MMIS system. Systems testing staff and business analysts will collaborate with the training specialists to determine training needs based on system changes resulting from system updates made during testing; these staff will continue to coordinate during the operations phase to identify knowledge transfer needs to coincide with implementation of system changes required to fulfill new regulations or to address system change management requests (CMRs).

Training specialists will use an established training template as the framework for building training and conducting knowledge transfer. Team Noridian requires all personnel involved in creating training courses, schedules, and materials use this template. The template covers pre-training activities, delivering training activities, and post-training activities. The five steps always followed in training development include identification of the unit training participants and their respective needs, development of corresponding learning objectives, identification of the design for assessment of knowledge transfer objectives, determination of the training method, and identification of the training schedule.

Analysis of training needs focuses on the specific audience in order to develop the materials, ensure appropriate content, level of detail, and to account for the various adult learning styles of the participants. Once staff training needs have been identified, training specialist will work establish the specific learning objectives that must achieved within the training course(s). The learning objectives are the key tasks or actions trainees need to perform within their job function once they complete the training.

2. Prepare Training Specialist and Knowledge Transfer Materials. Using information gathered during the needs analysis and with input from the Department and IME services units, the training specialists will follow the pre-training template to work through the details of the training methodology. They will update, or in some cases develop, the training courses and set the training schedule based on the course(s) to be completed and the number of occurrences of each course. The training schedule will accommodate the complexity of the material. The duration of a training session will increase as the complexity of the material increases. Training staff will develop a training overview for each training course. An example of a course overview based on well-known subject matter is shown in Figure 8-94.

Training Course: HIPAA overview	
Objective:	This course assists the user with understanding the basic rules and regulation of the Health Insurance Portability and Accountability Act (HIPAA).
Training Participants:	Provider Services
Course Length:	1 hour
Delivery Media:	Personal instruction using Brainshark training delivery platform
Prerequisites:	N/A
Proficiency Assessment:	Quizzes on material delivered through the Brainshark LMS
Background:	Congress passed the Health Insurance Portability and Accountability Act (HIPAA) of 1996 landmark law to provide consumers with greater access to health care insurance, to protect the privacy of health care data, and to promote more standardization and efficiency in the health care industry. President Clinton signed HIPAA into law August 21, 2000. HIPAA includes provisions on Health Insurance Reform, Administrative Simplification, and Privacy.
Course Outline: (Course outline customized based on training participants.)	
Supporting Documents: Administrative Simplification Compliance Act (ASCA) ASCA Letter Implementation Guides v4010A1 and v5010	

Figure 8-94. Sample Training Course Overview. Training plans will contain overviews of each course to be conducted. The course overview provides unit trainers with key information as they begin training preparation activities, while offering a picture of the intent of the course.

Course materials for staff training sessions are developed using systems and operational procedure documents as the foundation. Training specialists and technical documentation specialists create systems and operational procedure documentation which serves as the equivalent to textbooks for our training program. These step-by-step instructions and systems descriptions collectively become material used to produce each unit's work manual. These process documents are housed in our online document repository in the SharePoint Project Portal for all Team Noridian, Department, and IME contractor staff to access based on assigned security levels. Team Noridian considers the storage of all process documents in the online document repository a best practice, as it provides all staff with consistent and accurate information and allows for easy access when it is needed. In addition, the use of the online repository assures that anyone accessing a process document is using the most up-to-date information available. The use of SharePoint also allows us to take advantage of its intrinsic version control management capabilities for tracking history of document updates.

Training materials are developed using Brainshark, our content management and LMS tool. Materials in Brainshark are accessible online and available from any location, and are even accessible through mobile

devices. Once training materials are developed, they are reviewed for standards such as consistency in message and format. After internal review has been conducted, training materials are submitted to the Department for review and approval.

The unit trainer will determine the appropriate training environment (classroom, personal computer (PC) stations for call monitoring, WebEx to support remote Department users or providers, etc.), identify any additional resources (speakers, SMEs, etc.), secure appropriate software applications/access to the systems knowledge transfer environments for the trainees, and prepare their training tools and the documentation to be provided to the trainees.

3. Deliver Knowledge Transfer. We utilize a just-in-time training approach, meaning training will be delivered as close as possible to the UAT, ORT, and new MMIS go-live dates to ensure the highest degree of direct application from the classroom to functional work environments. Team Noridian has found this approach to be most effective, for staff and providers, in ensuring comprehension and retention of the training material.

4. Review Evaluations and Update Knowledge Transfer Material. Training specialist rely heavily on trainee feedback to gauge the effectiveness of training, and to identify where improvements are needed. We ask trainees to evaluate the course, materials, and the trainer's abilities. We utilize the following methods to evaluate the success of our training efforts:

- Training evaluation assessing trainee satisfaction provided through Brainshark
- Post-training assessments, or quizzes, provided via interactive knowledge transfer sessions
- Proficiency testing assessed through measurement of staff performance

5. Department Approval on Updated Knowledge Transfer. Department approval will be solicited by Team Noridian on proposed updates to training materials as required by the RFP. Once approval is received, training staff will incorporate approved changes and post updated training materials to the Project Portal and make corresponding updates to online tutorials housed in the Brainshark LMS.

8.3.2.4.5 Provider Knowledge Transfer Documentation and Materials

RFP Section 6.3.2.4.5

Team Noridian's training approach will ensure training is completed to cover new or modified policies, new program regulations, new equipment, and new system procedures which occur as a result of changes to the system. We will schedule this training on a quarterly basis, at a minimum, but will maintain the necessary flexibility to ensure training is timely and occurs prior to implementation of new changes.

Our training approach includes regular collaboration with the Department and quality analysts (QAs) and trainers from each IME unit to identify areas where increased training is needed. Training specialists will conduct periodic audits in collaboration with the Department and the IME units of training courses to offer their feedback for improvements. In addition, during start-up and implementation they will monitor UAT and ORT, and during operations will monitor day-to-day operations and identify areas where staff or provider refresher training may be needed, or suggest topics for which advanced or specialized training should be developed. The benefit of these actions is to enhance staff productivity and accuracy which supports increased customer satisfaction. In turn, these activities reduce provider errors in claim billing and submission, and to prevent and eliminate staff processing errors. This analysis will be the foundation for development of specific instruction and supplemental documentation such as Frequently Asked Questions (FAQs) targeted for specific IME units and provider types.

Brainshark enables the use of multimedia, making it possible for anyone, unencumbered by time, cost or technical barriers, to produce powerful knowledge transfer sessions. This tool allows training specialists to develop materials with only basic tools, like PowerPoint, an internet connection and a phone, to add their voice to static content and create high-impact, video presentations that can be accessed anytime, online or on a mobile device. Brainshark video presentations provide a high impact, low cost means of

communicating important and timely information. The ease of use of Brainshark will allow Team Noridian to create knowledge transfer materials quickly and efficiently; if desired, other IME units will also be able to take advantage of this state-of-the-art training development tool for creation of provider training materials.

Video-based knowledge transfer materials are categorized by curricula and associated courses through the Brainshark LMS. Curricula will be developed for each IME unit and courses will be structured to support the roles of staff in each of these units. Additional curricula will be developed for provider facing knowledge transfer to support areas like submission of claims and prior authorization requests, provider enrollment requests, and use of the Web Portal. Courses will be tailored within these curricula to focus on specific provider types to assure that knowledge transfer is targeted to areas of relevance for providers.

When remote knowledge transfer is preferable to support providers or distributed Department users, WebEx is an efficient way to host a workshop, lecture, discussion, or training session. The facilitators develop the necessary materials and provide a conference call number to the attendees. The attendees call into the workshop and sign in using information previously provided by the facilitator. The materials and information developed by the facilitator is displayed on each participant's desktop through the WebEx site. Brainshark content will also be available and can be supplemented by use of WebEx. The Brainshark LMS will be used for classroom style training while it also allows for a virtual classroom, which reduces the reliance on more traditional classroom-style training environments. This is extremely useful for training staff or providers in remote locations and can be relied upon as a contingency training plan when training rooms are occupied or for some other reason unavailable.

8.3.2.4.6 Develop, Provide, and Maintain Knowledge Transfer Documentation

RFP Section 6.3.2.4.6

Team Noridian will maintain all systems documentation on the Project Portal, which maintains version history of each document. When materials are updated, the new version is uploaded to the Project Portal so that staff will always have the most up-to-date version available online. Previous versions of the material are also stored in version history. Document version control for training materials and knowledge transfer courses will be maintained using our processes for maintenance of general documentation standards fully described in Section 8.4.2.2.1.

Knowledge transfer sessions and supporting training materials are all maintained electronically. Online tutorials available through our LMS are complemented by online help features in each system. Users will have access to training courses and training material online that allow users to refer back to materials. In addition to the persistent access to up-to-date static material, users will also be able to access help messages when performing operational tasks in each system.

Our knowledge transfer database will include pointers to the location of all online tutorials, training curricula and associated courses, systems documentation, and operational procedures. We will provide the Department access to this database and will submit a letter to the Department certifying the database is operational.

8.3.2.4.7 Online Tutorial

RFP Section 6.3.2.4.7, Requirements a through k

All new MMIS tutorials will be available via the Brainshark online LMS. While Team Noridian will conduct training sessions using these materials, providing access to the interactive online materials after training sessions allows staff to go back to a specific course and verify their understanding of a specific element covered in that course.

While online tutorials are very useful in conducting knowledge transfer, the value of providing access to a "real" system is critical to solidifying the learning process. Team Noridian will create a training environment that contains the full functionality deployed in production. The training environment will be logically separated from other environments and will contain data and functionality necessary to provide

an effective hands-on knowledge transfer to users of the new MMIS. The training environment will contain six months of production data. Team Noridian has created procedures and scripts to populate non-production environments with production data using database utilities. Team Noridian will also employ processes to de-identify data to meet HIPAA security guidelines in this non-production environment.

Training environments will be available for all aspects of the new MMIS, not just limited to claims processing. This assures that applicable users will be able to simulate the processing of claims adjudication, adjustments and claims payment, while other users will be able to process prior authorization requests. Users with appropriate access will be able to modify benefit packages and develop edits and audits through modification to business rules. Reporting features will be enabled in the training environment to give users the experience of report generation and the opportunity to see what each report will look like. Lastly, users will be set up with access to training environments in the Web portal and the OnBase EDMS as well as the core eCAMS system.

8.3.2.4.8 Knowledge Transfer Schedule

RFP Section 6.3.2.4.8

Schedules of knowledge transfer sessions will be developed and updated throughout the start-up and implementation phase and will coincide with development of system modules. Team Noridian's iVision360 ISDM is an agile development methodology that staggers the development of system modules. This development approach supports a staggered schedule for UAT and ORT that better supports the continuity of operational activities. Rather than having all UAT activities happening at exactly the same time, as is the case with a waterfall development methodology, an agile development approach decreases the burden on operational staff that will participate in UAT as not all functionality will be tested at exactly the same time.

Team Noridian will log and track the results of all testing activities, making product fixes in the event any issues are detected. All system defects or issues will be resolved prior to ORT. Knowledge transfer sessions will take place in advance of ORT activities to supplement training provided prior to UAT and to accommodate training of any ORT participants that were not a part of UAT. Figure 8-95 provides a graphical depiction of when key knowledge transfer milestones will be achieved with reference to all phases of the overall project schedule. The highlighted phases indicate tasks for which knowledge transfer activities are necessary, and the stars on the figure depict the timeframe in which knowledge transfer activities will take place.

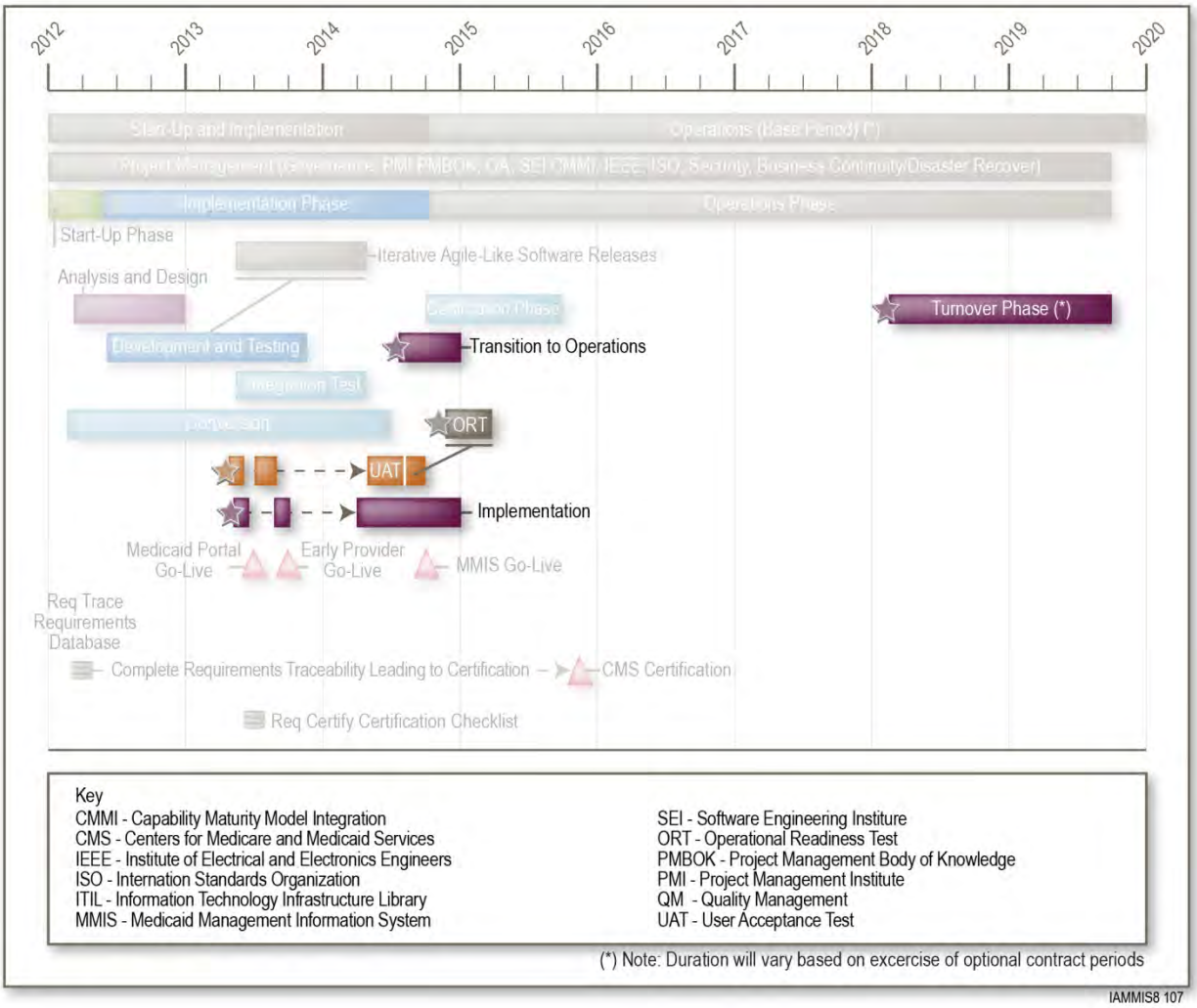


Figure 8-95. Knowledge Transfer Schedule Milestones. The key knowledge transfer milestone dates are depicted with stars and coincide with the start of UAT, the start of ORT, and take place prior to the start of implementation.

The schedule for sessions will published to the Project Portal and will be made available in advance of conducting sessions to support planning of Department and IME contractor staff attendance. When appropriate, multiple sessions will be made available on common subject matter to minimize the impact of having several operational staff away from their day-to-day functions at the same time. Sessions will be scheduled during regular business hours, Monday through Friday, excluding holidays.

Team Noridian's primary office location for the start-up phase of the contract will be in Des Moines. This location is approximately 6.2 miles—a 12-minute car ride—from the IME facility at 100 Army Post Road, Des Moines, Iowa. The temporary space will accommodate all required Team Noridian functions, and provide secure space for the Department's use. Knowledge transfer sessions will be conducted from this facility. The proximity of this location to the IME facility minimizes non-productive time as staff commute between locations for training.

Knowledge transfer curricula and associated courses will be kept up-to-date as system changes take place to assure that any new staff or staff that change roles will have access to training materials that reflect current system functionality.

8.3.2.4.9 Certificate of Completed Knowledge Transfer

RFP Section 6.3.2.4.9

Team Noridian's Knowledge Transfer Plan will be submitted to the Department for approval and any updates to the plan will be submitted for approval as well. The schedule of knowledge transfer sessions is tied to our detailed project work plan and schedule. Any changes to that schedule will be assessed and knowledge transfer sessions will be adjusted accordingly.

Upon completion of all planned knowledge transfer sessions, we will submit a letter to the Department certifying completion of all sessions. The use of our Brainshark LMS will support the ease of creation of a roster of session attendees to provide evidence that knowledge transfer has taken place.

8.3.2.4.10 Prepare Evaluation Tool

RFP Section 6.3.2.4.10

Team Noridian builds assessments into our knowledge transfer materials by incorporating quiz questions into each course. Quiz questions are developed in conjunction with the learning objectives established for each course and are strategically placed within the course to correspond to the placement of specific subject matter. Questions can be structured in various formats such as multiple choice or true/false. Embedding quiz questions into the courses allows trainees to assess their understanding of materials in real time as they are going through training. Figure 8-96 depicts the screen that is used to develop a multiple choice quiz question. Parameters are built for each question that dictate the number of attempts a trainee is allowed to select the correct answer to that specific question. The correct answer and a brief summary of the correct answer is also included with each quiz question. This provides immediate feedback to the trainee to either describe why their answer was incorrect or to affirm the accuracy of their selection.

Quiz questions can be moved throughout the course to either support placement in line with content or to group all questions at the end of a course, depending on the desired training approach.

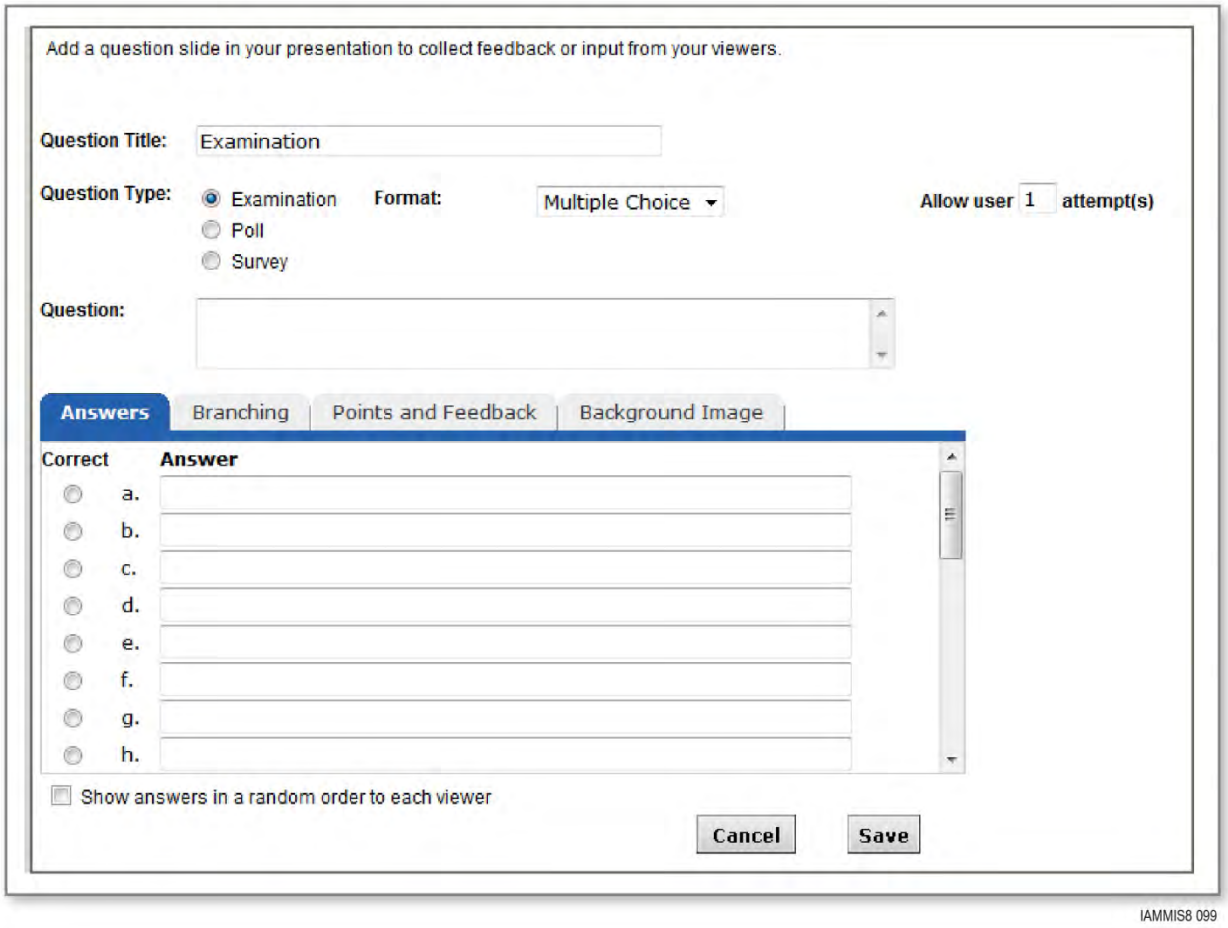


Figure 8-96. Knowledge Transfer Assessment. Quiz questions can be built into each Brainshark course to assess trainee understanding throughout each knowledge transfer session.

Metrics summarizing trainee success are available immediately upon completion of each knowledge transfer session. The results of the responses to quiz questions are assessed at the cessation of knowledge transfer sessions to determine areas of content that may need to be enhanced. This allows training specialists timely feedback so adaptations and updates can be made promptly, assuring a continual process improvement process for updating training materials and associated courses and curricula.

Summary statistics not only include the performance of trainees on the course assessment, but also include summary of the number of trainees having completed each course to date. When knowledge transfer courses are provided to trainees for completion in an individual, self-paced instruction format it may be necessary to send reminders to trainees to complete knowledge transfer courses. Brainshark supports distribution of email reminders to trainees to assure courses are completed prior to various project milestones. For example, if designated staff from a unit are instructed to complete knowledge transfer courses prior to participation in UAT, those staff will be sent reminders of the approaching deadline for completion of the course. Figure 8-97 provides an example of statistics summarizing the number of trainees (students) enrolled in a specific course, the number of trainees that have completed the course, the number of trainees having passed the assessment or quiz questions associated with the course, as well as the date of the last reminder sent to trainees to complete that course. These metrics can be extracted into reports and are assessed by Team Noridian training specialists and can be distributed to the Department or designated staff in the IME units to provide visibility to the status of knowledge transfer sessions.

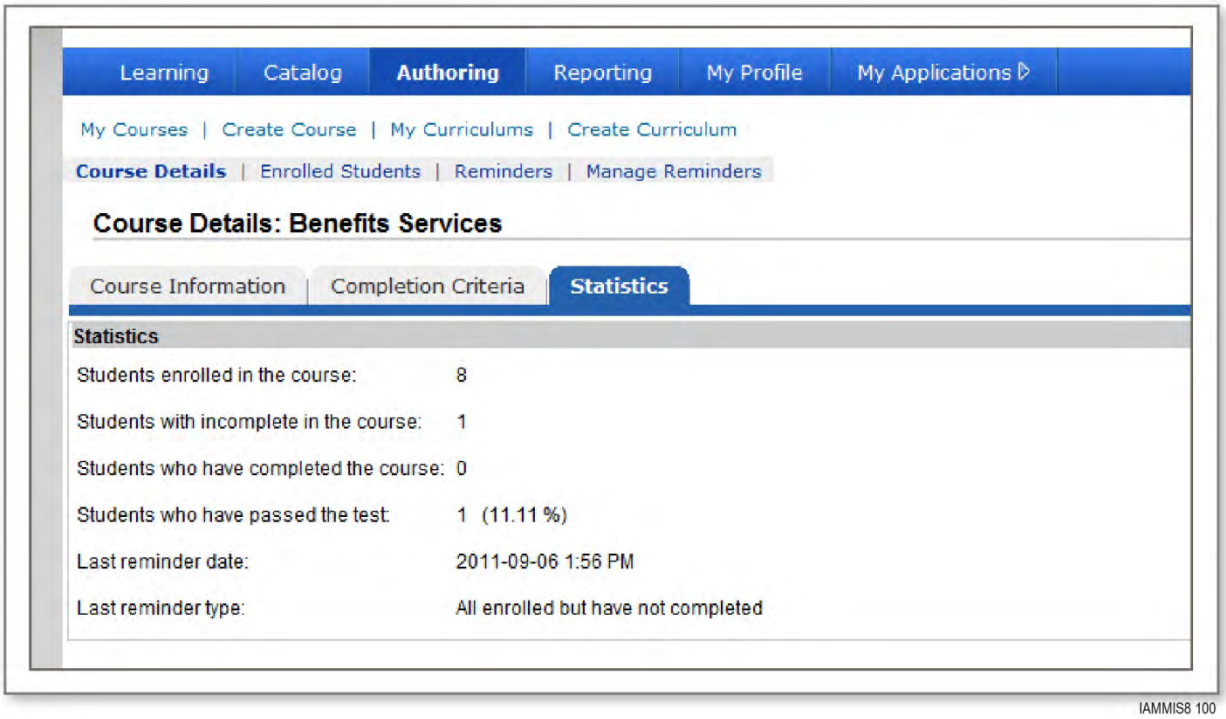


Figure 8-97. Course Attendee Statistics. Key metrics are captured to track trainee participation and success in each knowledge transfer course, supporting immediate tracking and reporting on knowledge transfer progress and efficacy.

Brainshark also facilitates surveys of trainees that provide feedback on the knowledge transfer content and approach. Survey questions will also assess trainee satisfaction with the training specialists delivering training, the value of the training materials, the training setting, and the pace of the course. Statistics are also captured from these trainee satisfaction survey and reports will be generated and regularly assessed to support adaptations to training approaches. Reports of trainee satisfaction will be provided to the Department, supporting Team Noridian's commitment to visibility into the efficacy of knowledge transfer activities as well as reports of adjustments and accommodations made to better support trainees.

8.3.2.4.11 Knowledge Transfer Reports

RFP Section 6.3.2.4.11

Team Noridian will work with the Department and other key stakeholders to identify the target audience and specific attendees to be trained on various curricula and the courses within each curriculum. Lists of trainees can be loaded into Brainshark and then the courses to be completed by each trainee is associated with the trainee, providing a complete list of all courses each trainee will complete throughout the course of the knowledge transfer phase of the project. Figure 8-98 provides a sample list of trainees enrolled in a particular course. Reports can be generated from Brainshark to summarize the curricula, the associated course, and the trainees designated to participate in each course. These reports will be supplemented by the knowledge transfer schedule published to the Project Portal and will be communicated with the Department and the IME contractors to assure each trainee is available to attend knowledge transfer session related to their specific role-based courses.

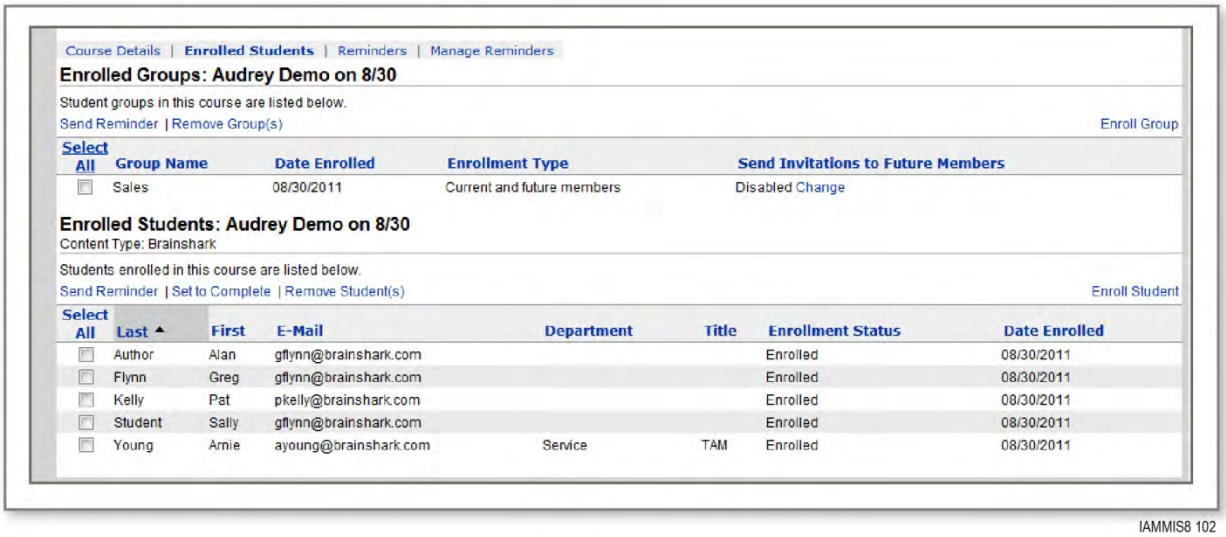


Figure 8-98. Brainshark Enrollees. Reporting can be generated from Brainshark to summarize the trainees enrolled in specific courses, when the trainees were enrolled, and when the course is schedule to take place.

8.3.2.4.12 Deliverables

RFP Section 6.3.2.4.12

Team Noridian has planned every deliverable in our Project Work Plan and our PMO will perform monitoring of our performance to ensure that each deliverable is provided based on the dates established in the approved WBS and Project Work Plan. To support this phase, Team Noridian will develop the deliverables listed in Figure 8-99.

Deliverable	Agree to Meet?	Section that Describes Approach
Knowledge transfer plan and knowledge transfer schedule including train-the-trainer plan and schedule.	Yes	Tab 8, Section 8.3.2.4
Electronic knowledge transfer documentation.	Yes	Tab 8, Section 8.3.2.4
Knowledge transfer database and application software.	Yes	Tab 8, Section 8.3.2.4
Letter certifying the knowledge transfer database is built and software is operational.	Yes	Tab 8, Section 8.3.2.4
Document version control plan.	Yes	Tab 8, Section 8.3.2.4
Knowledge transfer schedule and conduct knowledge transfer.	Yes	Tab 8, Section 8.3.2.4
Letter certifying completion of knowledge transfer.	Yes	Tab 8, Section 8.3.2.4
Evaluation survey tools.	Yes	Tab 8, Section 8.3.2.4
Knowledge transfer reports.	Yes	Tab 8, Section 8.3.2.4

Figure 8-99. Knowledge Transfer Deliverables. Team Noridian develops all deliverables using its documented deliverable creation and review standards and will deliver them in accordance with our detailed project work plan.

8.3.2.4.13 Performance Standards

RFP Section 6.3.2.4.13

Team Noridian will work with the Department throughout the start-up and implementation phase to identify a complete list of all required staff to participate in knowledge transfer activities. Staff will be enrolled in the appropriate courses from applicable curricula. The Brainshark LMS reporting captures knowledge transfer attendees, the courses, they have completed, and the scores they received on any assessments associated with each course. A report of attendees and the courses attended will be provided

to the Department at key points in the start-up and implementation phase, such as the cessation of UAT, the completion of ORT, and again after the implementation. These reports will confirm that Team Noridian has provided training to 100 percent of designated attendees.

8.4 Transition to Operations

RFP Section 6.4

From our experience in multiple MMIS implementations, in Iowa, and in other large enterprise-wide system implementations, our methodology enforces diligence of preparation in multiple ways. We begin preparing for cutover during design/development where we begin to develop cutover steps and checklists as part of the development package. Our risk management methodology directly feeds into the contingency plans that are developed for the implementation. And our conversion strategy, from the start, models conversion activities that will occur at go live in the way we perform conversion to support development, system test, and user acceptance testing. This means that the crucial first experience that a provider, member or stakeholder has with the system will be a positive one. In addition, the proposed Early Provider Release enables a phased approach to building the operations production environment. There will be an initial transition to operations phase at a smaller scale to support the Early Provider Release and another transition later when the full MMIS is implemented.

Team Noridian's implementation approach is systematic and comprehensive to ensure that both the system and stakeholders are ready to successfully execute the implementation and transition to operations. Team Noridian has proposed a phased approach to implementation, starting with an Early Provider Release followed by the rest of the MMIS functionality. By leveraging a phased approach, the Department, provider community, Team Noridian, and the other IME contractors (the Provider Services Contractor in particular) are able to fine tune production processes and tools over a period of time and build momentum toward the final release of the MMIS. This proposed approach is based on our recent and highly successful implementation experience in multiples states.

For example, we deployed the pharmacy point of sale and provider enrollment capability early on the Washington ProviderOne project successfully in October 2008 and August 2009, respectively. The MMIS go live for ProviderOne was in May 2010. Our Michigan CHAMPS project also included early releases for Medicaid Portal, Document Management System, and Provider Enrollment in December 2006, July 2007, and April 2008, respectively. CHAMPS went live in September 2009. Both implementations were virtually flawless in planning and execution, and enthusiastically received by the provider and user communities.

Team Noridian leverages an iterative and Agile based DDI approach to provide the Department early hands-on participation in design, configuration, and development. This methodology supports early adoption by end-users and other stakeholders. Team Noridian leverages this to build momentum that culminates in early releases of functionality. Our phased implementation approach promotes early wins and allows the Department, IME contractors, providers, and other stakeholders (other departments and units who interface with the MMIS) to begin using production tools early in the project.

Team Noridian understands the complexity of implementing large-scale systems like the MMIS and the requirement of having a comprehensive strategy to ensure successful transitions in a phased approach. Team Noridian’s approach includes coordination across the project to accomplish the critical tasks that prepare both the system and stakeholders and support an efficient transition to the operational phase. The key elements for the implementation task include:

- Creating an implementation communication checklist for internal and external communication based on the Communications Management Plan to ensure that all stakeholders have the information required to support the implementation task
- Developing a knowledge transfer plan and materials that provide the foundation for training for all stakeholders

- Providing knowledge transfer for the Department operational staff and the IME contractor personnel to allow them to successfully support the implementation and ongoing operations of the MMIS
- Supporting the provider services contractor to design and implement training programs for the providers and their staff using the system.
- Evaluating and posting feedback and results of the knowledge transfer to ensure that lessons learned and training needs are continually addressed to improve the overall knowledge transfer process
- Documenting the operational procedures and contingency plans for the MMIS
- Converting the final legacy data to the MMIS
- Developing a Transition to Operations Plan and executing against it to deploy the MMIS in phases
- Transitioning operations from legacy to the new MMIS

8.4.1 Activities

RFP Section 6.4.1

The task diagram for the implementation task for the MMIS project is presented in Figure 8-100 and provides more detail on Team Noridian overall approach.

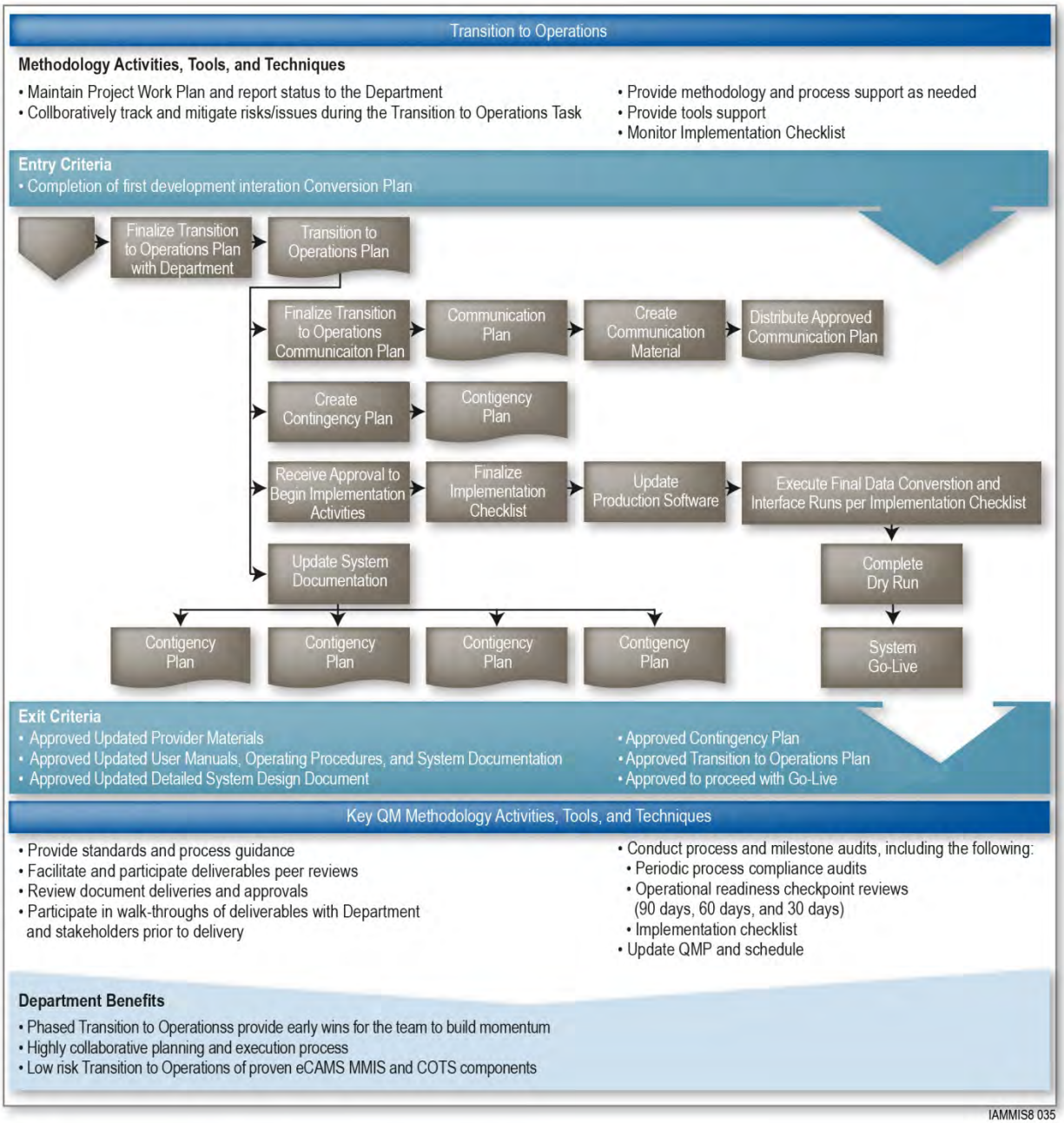


Figure 8-100. Implementation Task Diagram. Our diagram provides a "cue card" to quickly understand the task's key concepts.

Project Management Office

Team Noridian's PMO supports the transition to operations phase of the Core MMIS contract. The PMO is Team Noridian's management control center for each phase of the contract engagement and ensures that all contract, development, quality, and business process operations are performing to the service levels stipulated in the contract. The PMO effectively manages all changes to the infrastructure, processes and contract obligations during its lifecycle. The PMO maintains and owns the methodology and related processes. The PMO also provides training and methodology expertise as needed during the

implementation task to achieve knowledge transfer to the Department staff. The follow activities are provided by the PMO for the transition to operations task:

- Earned value tracking to objectively measure project process through the implementation phase
- Under the direction of the Project Manager for PMO, maintain detailed project work plan and report status to the Department to ensure activities remain on schedule and any risk to schedule delays are proactively mitigated
- Collaboratively track and mitigate risks and issues during the implementation task to allow Team Noridian to proactively work with the Department to identify and address risks and issues thereby keeping the project on schedule and budget
- Provide methodology and process support to Team Noridian, the Department, IME contractors, and other stakeholders to ensure that best practices and process improvements are made as needed to ensure an efficient and effective project
- Provide tools to support Team Noridian, the Department, IME contractors, and other stakeholders as needed to ensure there is an overall understanding of the tools supporting the completion of the project within the defined schedule and budget
- Monitor implementation checklist to track the progress of the detailed implementation tasks required to successfully deploy the MMIS, including Team Noridian, the Department, IME contractors, and other stakeholder tasks

Entry Criteria

The methodology includes specific entry and exit criteria for system implementation, and the project and quality management activities, tools, and techniques. The entry criteria for the transition to operations task are:

- Completion of the Conversion Plan. Conversion is a key component of the transition to operations task and these activities generally do not precede its development. In some ways the development of the Conversion Plan is the first step towards a Transition to Operations Plan.
- Completion of the first iteration of development for each business area. Team Noridian includes transition planning activities in each development iteration. Starting with the first release to test, the development team is developing the scripts and checklists to implement their code. These evolve and become codified into formal checklists and plans as development completes. During integration testing the team has the first opportunity to combine the individual iteration release steps into a formal transition plan, which is further tested and evolved before actual go live.

Transition to Operations Planning

Team Noridian supports implementation by developing, delivering, maintaining, and executing a Transition to Operations Plan, which contains the implementation checklist that includes the key tasks and milestones required for an efficient and effective transition of functionality to the operational phase. In addition, the plan includes the methods, processes, equipment, staffing roles and responsibilities, deliverables, and success criteria that are necessary for the MMIS implementation. The Transition to Operations Plan includes tasks to be performed by the Department, IME contractors, and Team Noridian and it will be delivered for review and approval at least six months prior to each phased implementation.

The Transition to Operations Plan provides the framework of Team Noridian's approach for the production release. The Transition to Operations Plan is developed based on CNSI's experience in implementations of other health care information systems such as the Washington ProviderOne and the Michigan CHAMPS MMIS implementation projects, where we conducted a phased rollout for useable functionality including Provider Portal, enterprise document management system, provider enrollment, and the remaining MMIS system. Noridian has also implemented several health care systems including Medicare implementations where the provider EDI functionality was rolled out early as well as the takeover of Iowa's current MMIS where almost 60 enhancements were rolled out early prior to full

takeover. Team Noridian's experience has brought forward the following key considerations in development of the Transition to Operations Plan:

- **Collaborative Development.** Collaborative development of a transition plan significantly decreases risk. Regardless of how much experience or how many times a single person has implemented a system, collaboration with other resources is key to developing a low-risk implementation plan. With this consideration in mind, Team Noridian leverages the following staff to develop and review the Transition to Operations Plan:
  - System Implementation Manager
  - Account Manager
  - Quality Assurance Manager
  - Data Conversion Manager
  - Interface Manager
  - Testing Manager
  - Functional Manager
  - Business Analysts and Senior Business Analysts
  - Programmer / Analysts
  - Systems Infrastructure Support personnel
  - Database Support personnel
  - Department PMO and other IME Contractors
  - Team Noridian PMO
  - Provider Services Contractor
  - Training Manager and knowledge transfer team
  - Other staff, as appropriate
- **Iterative Development.** Iterative development of the Transition to Operations Plan allows for a more realistic plan then a monolithic single instance implementation plan that becomes obsolete later in the life cycle. This iterative approach is explained in further detail later in this document.
- **Leverages Technology.** Team Noridian's approach leverages technology within the planning process. Predefined and ad hoc reports from the Project Portal containing issues and risks associated with the implementation are used by the Department and Team Noridian to ensure a smooth transition occurs. In addition, Team Noridian updates the detailed project work plan on a bi-weekly basis which enables identification of what-if scenarios within the planning process (e.g., What if this iteration slips? How would it impact the implementation plan from a scheduling perspective?). This information is included in periodic published reports, such as the weekly status report, to provide implementation planning progress along with the risk and identified dependency for Department review and oversight.

Contingency Planning

Having worked with other large complex health care payment systems, Team Noridian knows there are numerous risks associated with the MMIS implementation. There are a number of contingencies depending upon the identified risks. Each major risk has detailed contingency plans developed and in place, ready for execution, prior to implementation. The Contingency Plan, which is delivered as part of the Transition to Operations Plan will be ready to execute in the event that any part of the system does not perform according to specifications. The Contingency Plan could involve leveraging portions or all of the legacy system functionality in the instance of a catastrophic failure, or involve something as simple as adding additional staff to support the Provider Services contractor's possible increase in provider inquiry calls. There could be instances where the Contingency Plan simply calls for delaying the implementation of certain functionality because it is not critical at go-live and the delay helps to reduce risk. For example, in the Washington MMIS implementation, the Contingency Plan called for delaying the implementation

of the Drug Rebate functionality and the implementation of 12 out of about 250 reports. In both cases, there were sound reasons for the decision.

The most important part of operational recovery after a declaration of a system failure is the initial assessment of the impact of the failure. Formal declaration of the failure immediately starts the recovery and continuity processes to bring the business services online per the Business Continuity Plan and service level agreements. While all detailed results are generally not immediately known, the initial assessment provides direction to the Department and Team Noridian regarding what planned or unplanned actions need to be considered for coordination and immediate implementation. Fluid, well-coordinated communications, escalation to the appropriate decision maker, and trained staff are a critical part of operational recovery. In the event that there is a system failure, Team Noridian works collaboratively with the Department to ensure that appropriate steps are taken to regain effective and efficient operations.

System Cutover

Team Noridian confirms that each component of the system is ready to be implemented and receives all necessary Department approvals before beginning the transition to operations. Team Noridian ensures that all components of the release are fully operational no later than the date specified in the implementation schedule and work plan by leveraging Team Noridian's integrated planning, design, and development methodology. Team Noridian also updates and receives Department sign-off for all preceding and related project tasks (e.g., data conversion, UAT, parallel testing, and operational readiness), prior to full implementation of each of the releases.

Team Noridian develops a checklist to manage the cutover activities for each of the releases (Early Provider Release and full MMIS). The checklist at a minimum includes key activities, such as:

- Preparing for operations, including recruiting, hiring, and training staff
- Loading final production code and validating in the production environment
- Conducting final data conversion and validating the files
- Establishing system interface communication channels
- Ending processes on the legacy system and transitioning to the MMIS
- Validating interfaces for production
- Implementing support processes associated with production monitoring; emergency maintenance; and computer and data resource management
- Updating system documentation to reflect the production system

The development of the implementation checklist is a collaborative process with Team Noridian working with the Department, IME contractors and other key stakeholders to ensure all necessary activities are identified and monitored throughout the implementation task. Team Noridian leverages the implementation checklist to facilitate a review of operational readiness at defined checkpoint meetings. The checkpoint meetings are held at defined milestones, which are 30-days, 60-days, and 90-days prior to implementation. These meetings are designed to ensure coordination and communication occurs across the project to support a successful deployment and transition to operations. They also offer an opportunity for risks to be reviewed and mitigated.

In general, all activities are grouped into four categories, namely system readiness (tracked based on UAT progress and documentation readiness), contractor staff readiness to support operations (ensuring that Team Noridian has all the required staff in place and trained if needed to support operations), IME staff readiness (this includes Department and other IME staff who must be adequately trained to use the new MMIS prior to go-live), and provider readiness (which will be ensured by the Provider Services contractor with support from Team Noridian).

Quality Assurance Activities

Team Noridian's QA staff performs the necessary activities throughout the implementation task to ensure high-quality deliverables and processes. The key QA methodology activities, tools, and techniques throughout the implementation task include:

- Provide standards and process guidance
- Facilitate and participate in deliverable peer reviews
- Review document deliveries and approvals
- Participate in walk-throughs of deliverables with Department and stakeholders prior to delivery
- Conduct and support process and milestone audits, including the following:
    - Periodic process compliance audits
    - Operational readiness checkpoint reviews (90 days, 60 days, and 30 days)
- Implementation checklist
- Update Quality Management Plan and schedule of QA activities as needed

Exit Criteria

The implementation task has specific key exit criteria that must be completed prior to the task being complete. These key exit criteria include:

- Approved updated provider materials (these fall mainly under the purview of the Provider Services contractor however Team Noridian develops the necessary online help manuals for all Web Portal provider functions, EDI submitter materials, and assists the Provider Services contractor in developing the manuals as needed)
- Approved updated user manuals
- Approved updated operational procedures
- Approved updated system documentation
- Approved updated DSD document
- Approved Contingency Plan
- Approved Transition to Operations Plan
- Approved certification of knowledge transfer completion
- Approved initiation of go-live deployment via implementation certification letter (including completion of data conversion activities, site preparations, establishment of support systems and help desk, readiness of production environment with all required control mechanisms in place)
- Approved final implementation report

8.4.1.1 State Responsibilities

RFP Section 6.4.1.1, Requirements a through d

As described in 8.3.1, Team Noridian and the Department’s Implementation Team will participate with the Department in the performance of Transition to Operations Planning and execution for the new MMIS. We employ a collaborative approach that integrates team members from the Core MMIS, Department PMO, operations, and other stakeholders to provide a transition strategy and Contingency Plans that cross the federated responsibilities of all of the involved parties. Team Noridian understands that it is critical for the Department to participate in Transition to Operations Planning and will include the Department PMO, Department’s Implementation Team and all other appropriate stakeholders in the planning sessions.

Team Noridian will follow the approved project processes to deliver the Transition to Operations Plan and all other deliverables to the Department for review and approval. Team Noridian uses DXDs to request the Department’s review and approval of the format and content of each deliverable prior to developing the deliverable. In addition, the Department will be involved in the development of transition

planning materials including the schedules, checklists, and assessment report requirements. Early drafts of the deliverables will be provided to the Department in order to expedite the review process.

At the end of transition, Team Noridian will deliver a go final implementation report and an implementation certification letter to the Department for the Department to review and approve the results of transition activities and certify the MMIS is ready for production.

8.4.1.2 Contractor Responsibilities

RFP Section 6.4.1.2

In the following subsections, Team Noridian responds to the specific contractor responsibilities requirements as outlined in this RFP section. We have organized the section to group like requirements together and facilitate the flow of the narrative. In many cases, detailed responses to requirements were provided in other sections of the proposal. In those cases, rather than repeat whole sections, we have highlighted or summarized the information and provided a reference to the applicable section.

8.4.1.2.1 Transition to Operations Plan

RFP Section 6.4.1.2, Requirement a

Team Noridian will develop the Transition to Operations Plan during the start-up and implementation phase of the project. The planning for transition happens in parallel with development activities, as the development team creates the scripts and implementation checklists for each development iteration.

As discussed previously in Section 8.4.1 Activities, this plan provides the framework of Team Noridian's approach for the production releases. Among other items, the plan describes information on methods, processes, equipment, staffing roles and responsibilities, deliverables, and success criteria that are necessary for the MMIS implementation. The Transition to Operations Plan includes tasks to be performed by the Department, IME contractors, and Team Noridian.

An example of the table of contents of our Transition to Operations plan from the Washington MMIS project is shown in Figure 8-101. The format of the plan to be used for the Core MMIS project will be developed based on the Department's requirements and subject to the Department's approval.

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Figure 8-101. Table of Contents. Team Noridian will tailor our established Transition to Operations Plan to fully address all of the Department's requirements.

8.4.1.2.2 Establish a Production Environment

RFP Section 6.4.1.2, Requirement b and f

Establishing and maintaining the hardware and software infrastructure is a significant undertaking for a project of this size. Team Noridian has developed procedures and processes that describe the detailed steps that are followed to implement all required environments. Team Noridian understands that most of these environments will be placed in the Department's data center. Team Noridian will follow Department processes where appropriate to ensure compliance with the Department's data center guidelines.

The steps we follow for establishing all environments include:

- Procurement of the hardware and software
- All hardware and software is installed during the testing phase and installations are verified
- All physical and logical application environments are configured to support the necessary development, test, and production requirements
- Connectivity between the various components of the solution is tested
- Application access is verified from within the IME network
- If the production rollout includes access by external entities, such as the Early Provider release, then that access is also verified
- Firewall and other security tests are completed
- Interface testing is completed
- All the other devices that are part of the solution are tested (printers, fax machines, interactive voice response solution)
- All databases are sized and staged with production data. This activity requires creating an inventory of all databases, and documenting the "initial" configuration of each database that will be part of each implementation
- Network and other layers of infrastructure security are configured to meet the security requirements for adherence to security policies and standards
- If the application access is to be "opened up" to other user groups not part of the acceptance test, then provision is made within the networks and firewalls to authorize entry to those users
- All usernames and passwords are created within the system and all users are informed about the same. This includes multiple systems that are part of the solution
- Any operational reports that are produced by the system are scheduled
- The operations system team is ready, with a clear definition of roles and responsibilities
- All interfaces are scheduled to operate on the established schedule
- All production jobs are loaded into the job scheduler
- All hardware, software, data center, and other facility security procedures have been established and the hardware, software, and facility security manual has been updated

At the point of deployment, Team Noridian will have tested the hardware and software multiple times. The testing will have included unit testing, system testing, UAT, parallel testing, performance, and stress testing. The testing will have involved Team Noridian's start-up and implementation team, the Department, the other IME contractors, and other appropriate stakeholders. Preparing the hardware and software for final deployment will require final configuration of security regarding specific accessibility for specific individuals, as well as verification of the final incremental data conversion, which is discussed later.

A verification of the production environment is a critical part of our implementation checklist for each release and that checklist will contain all of the items specified above, tailored for each release.

8.4.1.2.3 Develop and Maintain a Business Continuity Plan, Backup/Recovery Procedures, and Back-Out Strategy

RFP Section 6.4.1.2, Requirements c, h, and i

As described in detail in 8.3.1.2.6, Business Continuity Plan, Team Noridian has an established business continuity planning methodology that addresses the people, processes, and technology considerations of business continuity and recovery. Team Noridian combines business impact analysis, business process management, and systems engineering in developing its business continuity plans.

A key component of the Business Continuity Plan is the business impact analysis (BIA). The BIA survey is conducted annually to identify and prioritize critical business functions and applications, realizing that certain business processes are more critical to the operation than others. The two parts of the business impact analysis are impact analysis and risk analysis. This analysis is performed for each of the core business processes in the operation.

Impact analysis is used to identify the criticality of operations and key resources required to maintain the minimum acceptable levels of output for each core business process. Resources include people, facilities, and technical components of the Team Noridian solution. The goal of the impact analysis is to identify a priority order of business processes so that in the case of a crisis, attention and resources are being focused on the most critical processes first and foremost. Team Noridian will utilize our experience as well as consult with the Department when evaluating and prioritizing business functions so the IME's priorities and interests are integrated into the planning process.

As part of our commitment to the IME, we will provide complete backup and recovery requirements for the Team Noridian systems. These backup requirements are updated regularly to assure they are always accurate. The types of items documented for backup and redundancy requirements include:

- Robust backup procedures for databases, log files, application software, application object and component files, directory structures, and configuration files
- Disaster recovery and restart procedures
- Configuration Management Plan (this plan will detail the hardware, software, data, and configuration components that comprise the production environment and can be used to restore the system to its production-ready state)
- Hardware backup for all essential computer systems
- Network backup for telecommunications
- Operating system software, libraries, documentation, and configuration files
- Procedure and user manuals
- Off-site storage location (including retention) for onsite and off-site backups, schedule backups and off-site pickups

Team Noridian systems have proven backup procedures, developed while working with other states, which will be part of the system backup and recovery plan. Team Noridian will develop our back out strategy as part of our Contingency Plan and discuss that with the Department during our development of the Transition to Operations Plan. The back out plan may undergo revisions as the DDI cycle progresses for each of the phased implementations and when that occurs, an updated plan will be submitted to the Department for review and approval. The final back out plan will be provided with the final updates to the Transition to Operations Plan.

Please refer to Section 8.3.1.2.6 Business Continuity Plan for an in-depth description of our Business Continuity Plan and backup and recovery procedures.

8.4.1.2.4 Produce and Update all Documentation and Production Schedules

RFP Section 6.4.1.2, Requirements d, e, and g

Team Noridian fully described our approach to documentation in Sections 8.4.2, Post Implementation Activities and Section 8.4.2.5, Deliverables. As described in those sections, Team Noridian uses industry best practices, standards, and tools to streamline document development, delivery, maintenance, and updates as well as, more importantly, to streamline document acceptance by the Department. These processes encompass the development and maintenance of all MMIS related documentation including:

- System documentation
- User documentation
- Provider materials including help for Web Portal functions and EDI information
- Operational procedures
- All DDI artifacts such as requirements and testing documentation
- Hardware, software, and facility manual
- Knowledge transfer materials
- Production schedule
- Report distribution schedule

Our process emphasizes obtaining advance approval of the format, content, and acceptance criteria for each type of documentation. This gives both Team Noridian and the Department a clear and timely understanding of expectations for the documents, encourages involvement of the Department throughout the documentation development process, and ensures that all documents are developed and updated in the state-prescribed formats. As discussed in the above mentioned sections, we develop the documentation on an iterative basis during the start-up and implementation phase with multiple Department walkthroughs and reviews to ensure the documentation is complete and meets all of the Department's standards.

Documentation will be updated on a regular basis during the start-up and implementation phase. Draft and final documentation will also be used to create all training materials used for knowledge transfer before and after the start of operations. Team Noridian staff and Department staff will use system documentation and user documentation during UAT to ensure it is correct and all Department formats and standards are met. This testing is an important part of the development process as all documentation will be updated to incorporate UAT changes and those updates, when approved by the Department, will form the documentation baseline for the start of the operations phase. During the operations phase, we will ensure all documentation is available and current on our Project Portal at all times and updated within the prescribed Department timeframes when a system change occurs.

Part of our production documentation will include the report distribution schedule and production job schedules. These will be discussed and developed with the Department during the UAT process and fully tested and refined throughout UAT and ORT. The finals will be delivered to the Department for review and approval prior to each associated implementation.

Please review the above mentioned sections for a more in-depth discussion or our documentation and deliverable processes.

8.4.1.2.4 Perform Final Data Conversion

RFP Section 6.4.1.2, Requirement j

Team Noridian understands that data conversion is a critical activity and an integral part of the system implementation process. While it is a separate and important task, Team Noridian integrates data conversion activities with other tasks in the Team Noridian iVision360 approach. Throughout the entire start-up and implementation phase, the data conversion team will work closely with the business process area teams, and will attend requirements validation and collaborative design sessions to ensure a common

understanding and thoroughly capture the data conversion requirements. All data conversion activities will be conducted in parallel with the new MMIS business process area teams.

Team Noridian will develop and execute the Data Conversion Plan as described in Section 8.3.2.1 Data Conversion Task. As described in that section, our data conversion approach will ensure that:

- Data conversion does not pose a risk to the implementation.
- Converted data does not impede application functionality or performance.
- Conversion is an integral part of the project from the beginning.
- Conversion data is available to support application testing as it will yield more valuable testing with realistic data.
- Management has complete visibility of the progress of conversion and any issues.
- Conversion is complete meaning that 100% of all required data is converted and accounted for.
- Conversion is accurate meaning that 100% of all required data meets the business rules of the new system and relates correctly to other data within the system.

Conversion checklists will be developed for each subsystem level conversion and are used throughout the ISDM to validate conversions for each business process and through each iteration of testing. The checklists ensure that all steps in the conversion are defined, scheduled, validated, and completed and will be used for our final data conversion activities.

The checklists will include:

- Listings of source files, databases, and images
- Listings of target files, databases, and images
- Conversion program names and locations
- Expected source record counts
- Expected target record counts
- Expected exception record counts

Since Team Noridian has performed multiple MMIS conversions with the eCAMS data model, the library of previous conversion checklists for the eCAMS target model will be utilized as a starting point. The checklists will then be customized to the scope of the new MMIS conversion and to reflect the legacy data sources for conversion.

When the final production conversion occurs, it will rely on the foundation built in all of the prior phases. The conversion programs will run and the results will be measured by exception reports and validation reports. Once the counts, exceptions, and validations are all reconciled, the conversion will be declared complete. After the completion of the conversion, a final report will be issued which will detail all counts, exceptions, and validations by module.

For a complete description of Team Noridian's data conversion approach through the entire ISDM please refer to Section 8.3.2.1 Data Conversion Task.

8.4.1.2.5 Complete Knowledge Transfer Activities

RFP Section 6.4.1.2, Requirement k

Effective training is a key success factor for the Core MMIS implementation, just as it has been in our previous successes. The Department staff, Team Noridian operational staff, the other IME contractor's personnel, and the providers all require training in order to understand the new system and applications being implemented, and to attain a level of proficiency that allows for full operational effectiveness upon completion of the implementation process. Team Noridian outlines our knowledge transfer approach in Section 8.3.2.4, Knowledge Transfer Activities, which focuses on training for four key audiences:

- **Department staff.** Training focuses on the processes and procedures involved in supporting and maintaining the new MMIS upon completion of the start-up and implementation phase and also highlights how the system implements the business rules and policies defined during the start-up and implementation phase.
- **Team Noridian operations staff.** Training centers on the day-to-day business and system support operations on the new MMIS. Sessions are tailored to align to the operational organization, so resources are able to attend courses relevant to their job duties. Training delivery is aligned with the phased released, so staff receives training ahead of the implementation Early Provider release and MMIS release.
- **IME contractor staff.** As with our own staff training, knowledge transfer focuses on the use of the new system as it relates to each of the different unit's business functions. Sessions are tailored to align to the operational organization, so resources are able to attend courses relevant to their job duties. Training delivery is aligned with the phased released, so staff receives training ahead of the implementation Early Provider release and MMIS release.
- **Providers and EDI submitters.** Although we do not provide knowledge transfer for most the provider community, when we train the Provider Services unit's staff, we also ensure they are aware of all impacts to the provider community and assist them in the development of the proper materials that will introduce the providers to the changes they will experience as a result of the new MMIS implementation. This includes the implementation of the Early Provider changes including the Web Portal and online enrollment. We also offer assistance in the training of EDI submitters as we have done throughout our years at the IME.

Team Noridian will schedule and perform knowledge transfer activities during the start-up and implementation phase as different functions are developed, tested, and deployed to the production staging environments to prepare for implementation. As described in Section 8.3.2.4, Knowledge Transfer Activities, knowledge transfer materials are created using the appropriate system and user documentation to create step-by-step instructions for each course and are approved by the Department before the training is delivered. The courses are provided based on a published course schedule. The courses leverage adult-learning techniques and provide the users the opportunity to build knowledge over time with hands-on experience and exposure to the system. Courses build on the user knowledge and teach more complex topics after users have mastered basic skills, such as navigation.

Team Noridian uses post-training assessments to determine the retention level of staff upon training course completion. Post-training assessments offer the trainee and trainer immediate feedback regarding how well the trainer absorbed and is able to relay the material.

Team Noridian will complete all knowledge transfer to the Department, Team Noridian, and the IME contractors' staff prior to implementation and will provide the Department with a letter certifying completion.

8.4.1.2.6 Complete Communications Activities

RFP Section 6.4.1.2, Requirement l

Team Noridian's communications activities covers two broad goals:

- Establish connectivity with interfacing systems and conduct a final interfaces validation (especially of critical interfaces)
- Ensure that the Department and IME end users are notified that the system has been established and that it meets expected performance requirements

The implementation checklist will contain specific items to verify the connectivity and performance requirements of each of the MMIS interfaces to the Department, the IME contractors, the Pharmacy Point of Service (POS) system, and any external interfaces. As discussed in Section 9.3 Current MMIS External Interfaces, Team Noridian's new MMIS uses the EXACT service oriented architecture (SOA) infrastructure framework to automate the management and monitoring of interface performance. The

ability to create interfaces and publish them as services, monitor performance, provide alerts and notifications, and when appropriate, automate error handling and exception resolution, are out-of-the-box capabilities of EXACT and will simplify the development, implementation, and testing of the interfaces during the start-up and implementation phase.

EXACT automatically produces a full audit trail of all service activities for an interface. This information, including error logs, transfer speed information, exception resolution status, and success or failure of any particular transfer is pushed to the eCAMS HealthBeat Dashboard. This provides the Department with the benefit of having a single point of access to not only access important information relating to eCAMS but to monitor and generate reports relating to interface activity and performance as well.

As discussed in Section 8.3.2.3, Testing Tasks, integration testing of the interfaces will begin when module testing is completed in accordance with the agreed upon module test exit criteria for a business area. Many of the business areas and associated modules will complete testing in a staggered fashion. Integration test will encompass testing within an individual module (end-to-end within the module) and then expand to cover across modules and, finally, expand to the breadth of the system including external interfaces. Team Noridian will establish an integration test plan that logically groups business areas and associated modules so that integration testing can begin to test meaningful integration points while other functionality are still completing module testing. In this fashion, interfaces are tested continuously throughout the entire start-up and implementation phase and performance measurements are reviewed and honed on an iterative basis as needed.

The user acceptance test further exercises each of the defined interfaces and provides assurance that the new MMIS is operational and functions according to Department's requirements and that manual and automated functions and interfaces are in place and functioning properly. UAT is designed to ensure that all MMIS functions are tested by users, including but not limited to, proper functioning of edits, audits, and business rules; the accuracy of claim records payment and file maintenance; and the format and content of all system outputs, including outputs from reporting functions. UAT also offers the opportunity to test user manuals, forms, procedures and business processes. At the conclusion of the UAT for each implementation release, all interfaces will have been fully tested and adjusted, as needed to meet all performance requirements. As noted above, we conduct a final verification of these interfaces through the implementation checklist.

8.4.1.2.7 Repeat Testing

RFP Section 6.4.1.2, Requirement n

ORT will be focused on the ability of Team Noridian to establish readiness for operations. The plan will outline the processes and the implementation checklists which will be used to record the successful completion of each readiness activity. During ORT operations test personnel will verify the ability of the operations staff to perform day to day activities of processing claims, claims payment, workflow, providing customer service through phone and fax, imaging, prior authorization, daily operational reports, and all other business functions. Daily activities will include exercising the production job schedules including claims loading, adjudication, and payment cycles using production claims volumes. At the completion of operational readiness test, all production capabilities will have been exercised and all test and implementation checklists completed. Any discrepancies uncovered during testing would be documented, reviewed and a plan of action determined approved by the Department prior to considering the testing completed. Team Noridian will repeat portions of the ORT if requested by the Department to verify system and business functions throughout the ORT and transition to operations tasks.

8.4.1.2.8 Begin Operations

RFP Section 6.4.1.2, Requirements m, o, and p

The Transition to Operations Plan and implementation checklist includes all activities needed to be verified for the start up of operational activities. As described above, the ORT activities provide the

assurance and criteria to monitor that all operational teams are ready to begin their business activities using the new MMIS.

Team Noridian will confirm that each component of the system and all IME units are ready and will obtain all necessary Department written approvals. Except for functions associated with the Early Provider release, all business operations including ancillary operations such as mailroom will begin on the day of the full MMIS release. Team Noridian will deliver an implementation certification letter to the Department which will certify that all systems, processes, and personnel are ready. Once approved, we will commence operations.

8.4.1.3 Correction and Adjustment Activities

RFP Section 6.4.1.3

Whenever the switch is turned on for a new system, the system must be monitored closely to ensure that all processes and functionality supported by the system is working as expected. It may take a few days to a few months to ensure the complete system and interfaces are working as intended and the system performance is adequate for the business needs. This period is typically referred to as stabilization. During stabilization, Team Noridian will monitor the system closely from all aspects (web functionality, adjudication and payment cycles, interfaces, reports, and web services) to ensure that the system meets or exceeds all expectations. Team Noridian will be fully prepared to make corrections and adjustments as identified to ensure that the system is making payments to providers in an accurate and timely manner.

Team Noridian will be responsible for tracking any deficiencies identified and ensuring that they are corrected efficiently. Team Noridian proposes daily meetings with the Department, the IME contractors, and other stakeholders as appropriate (twice a day early morning and late afternoon) to assess the system performance. At the morning meeting, system performance metrics from the previous day will be discussed and any deficiencies that must be addressed with a high priority will be highlighted. At the afternoon meeting, Team Noridian will walk through the plan of action to address the deficiencies and to receive final approval to execute the plan. Team Noridian will inform the Department about any issues within an hour of identifying the issue.

All system issues and changes will be tracked using established processes and tools. Team Noridian will provide a daily tracking report to the Department that shows all issues, plan of action, and due dates.

8.4.1.4 Execution of Contingency Plans

RFP Section 6.4.1.4

This Contingency Plan in Figure 8-102 is from CNSI’s Washington MMIS project. The example presented is an excerpt from an appendix to the Washington MMIS Transition to Operations Plan, which addressed operational contingencies. The plan identifies contingencies that might occur, how we monitored to ensure the system was operating correctly, and the actions to take if the contingency occurred. This plan is applicable to Iowa as it shows how Team Noridian will collaborate with the Department from both a technical and business perspective to identify contingencies before the system goes live so that we are prepared to address them should they occur after go live.

ID	LEAD	SUBSYSTEM	CRITICAL BUSINESS FUNCTION (breakdown if needed)	IMPACT (address impact per breakdown)	PROBABILITY	SEVERITY (1-5)	INDICATORS	TOLERANCE	CNSI ROLE/ACTION	CONTINGENCY	RECOMENDING BODY	COMMUNICATION ONLY OR DECISION MAKER*	COMMENTS
25	Ken Lee (HRSA), David Bellinger (DASA), Nga Nguyen (MHD), Judy Bennett (ADSA)	Claims	Provider Neutral Claim Adjustment Failure-system actually performing individual or mass adjustment instead	Provider neutral adjustments (used for account code fixes - pseudo journal voucher) should result in no impact to payments to providers. Processing errors may result in Accounts Payable/Receivable issues in OFIN.	Low	3	Providers may call reporting odd payments or recoupments.	10 days	3	Claim adjustments would have to be done to reverse the adjustments that impact the provider's payment		HRSA EC	
26	R Fisher	Claims	unmanageable claims processing inventory due to failure within subsystem and inability to adudicate claims (resolve, adjust, void, resurrect, custom claim)	increase in inventory backlog, providers not being correctly or not at all; increase in phone calls; trickle down effect on other Administrations	Low	2	Unanticipated conclusion to claims process; increase volume of claims in locations	1-7 days	4	If severe, no alternate means of processing claims; once fixed add additional staff or authorize overtime to stabilize; may consider disallowing flex time but potential union issue	Claims Management	HRSA EC*	
27	R Fisher	Claims	Work Management Profiles not working	staff trainees process claims without ability of Trainer to review; potential chance of claims not being paid or processed correctly	Med	1	reports or work queue with noticeable lack of claims; phone calls; increase in trouble tickets	1-4 hours	2	notify CNSI if unable to re-assign staff to profile	Claims Operations Manager	HRSA EC	
28	R Fisher	Claims	Work Management Profiles route claims but never releases to pay/deny	claims lost in system; providers not being paid; trickle down effect on rest of Administrations	Low	2	reports show claims hung up in system	1-2 days	2	need to notify CNSI to release claims	Claims Operations Manager	HRSA EC	
29	Denise Davidson/DQCM	Claims/ Managed Care	service based enhancements not generating from submitted encounters	MCO providers will not get paid correctly; contractual issues	High	2	providers vill call	1-7 days	3	need to understand where problem lies: claims or managed care subsystem; *need exceptional payment process if delay is long	OMSD Managers	ESC*	
30	R Fisher	Claims/POS	Claims processed in POS fail to load into ProviderOne for payment.	Providers not being paid correctly or not at all, increase in number of phone calls; trickle down effect with rest of Administrations (HRSA, ADSA, FSA); client access to services at risk	Med	2	Error Report, CNSI notification	1-7 days	2	if fixable prior to next payment cycle, no contingency needed; if not, possible gross adjustment or other exceptional payment process; notify providers and call center staff through broadcast message	Claims/OMSD Managers	ESC*	
31	Ken Lee (HRSA), David Bellinger (DASA), Nga Nguyen (MHD), Judy Bennett (ADSA)	Claims/ Reporting	Account Code Error Report (Claims) Missing	This report (received daily or preferably more often) is necessary to resolve account code errors because it contains claim related information not available in ProviderOne or the data warehouse.	Med	2	Report not available.	before next payment cycle	2	cannot determine what the account coding should be without this report, would have to continue to hold claims until report is produced	Finance/OMSD	HRSA EC	

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Figure 8-102. Sample Operational Contingency Report. Team Noridian has extensive experience in developing Contingency Plans that provide all of the necessary information used to mitigate the risk and execute the contingency should the risk occur.

When an event triggers the need to execute a contingency plan, the assigned owners oversee the execution of the contingency plan and report on the timeline and status to the PMO. The PMO monitors progress of the plan. In the event of an implementation date change, Team Noridian will re-baseline all activities leading up to the date and adjusts durations accordingly. This activity affects almost every area of implementation and operations and has extensive communications planning built into it. This plan is supported with the Data Conversion Plan, Communications Management Plan, and Business Continuity Plan which includes all backup and recovery procedures. The account manager and PMO oversee the execution of any contingency plan.

8.4.1.5 Final Implementation Report

RFP Section 6.4.1.5

We measure readiness and progress for implementation through a series of assessments reports and transition checklists. Assessment reports are used to measure progress of transition activities at certain key times, usually tied to specific go/no-go criteria used to determine if the transition is on track for successful completion. An extract from the 90 Day Readiness Assessment is presented in Figure 8-103.

Assessment Checklists for 90 Days Prior to Go-Live

The Joint DSHS and CNSI project management team (JPM) examines the checklists and the thresholds presented in the metrics to determine if the implementation can:

- Proceed as planned and no mitigation is needed
- Proceed as planned and mitigation is needed
- Suspend the implementation and provide a revised go-live date

For each line item, the JPM would record the assessment result as Pass, Fail or requires Mitigation. The JPM then makes the summary recommendation to the project sponsors.

Each item falls in one of the 4 categories as labeled in the Category column:

1. System implementation Readiness
2. Staff Readiness
3. Provider Readiness
4. Readiness based on Operations Guide checklist (also called Vendor Operations Readiness)

ID	Description	Mitigation	Category	DSHS Input/Own	Pass/ Mitigation/Fail
1	Pre-Production Testing	If pre-production go-live date is delayed, consider to use up schedule contingency where applicable	1	Own	Own
2	Pharmacy MNHCR track (i)	Follow regular mitigation strategy for the bi-weekly metrics	1	Input	Input
3	Post 13 CRs (1)	Follow regular mitigation strategy for the bi-weekly metrics	1	Input	Input
4	OLTP Reports track (i)	Follow regular mitigation strategy for the bi-weekly metrics	1	Input	Input
5	DW and DW Reports Track (i)	Follow regular mitigation strategy for the bi-weekly metrics	1	Input	Input

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Figure 8-103. Sample 90 Day Assessment Report. This is a sample of the Washington MMIS project 90 day assessment report used to accurately monitor the readiness for go live using specific, well defined criteria.

Our comprehensive implementation checklists include the specific tasks required for successful deployment of each release, including:

- Training and knowledge transfer completed
- Communications distributed
- Hardware and software installation for production and other environments
- Network and telephone infrastructure
- Database and application configuration
- Application code release and configuration management for production release
- Disaster recovery and backup process and procedures
- Hardware, software, and facility security procedures in place
- Final interface executions from the legacy MMIS
- Final data conversion and file load into the MMIS

In addition to the specific tasks, the implementation checklist cross references the critical milestones defined in the project work plan to ensure all aspects of the deployment and project activities are coordinated and delivered on time and across each release.

Team Noridian confirms that each release is ready to be implemented only after thorough user acceptance testing and the completion of operations readiness tests. Operational readiness testing is conducted collaboratively with the Department, IME contractors and other stakeholders to ensure that all elements of

the release are reviewed and approved for the deployment of the release. Team Noridian implements each release only after receiving approval from the Department.

An extract from a detailed implementation checklist with the tracking of status, dates complete and actions to be taken is presented in Figure 8-104.

Implementation Checklist
As of Date 4/23/2010, 4:21 PM PST

Section #	No.	Activity	DSHS Input/own	During Claims Freeze	Target Finish	Actual Finish	Progress Notes
3.2.1 - Production Hardware and System Setup	3.2.1.1	Production data center (PDC) physical space, power, environmental and appropriate access conditions is verified. This was completed	N/A	No	08/26/08	08/26/08	
3.2.1 - Production Hardware and System Setup	3.2.1.2	Cherry Street Plaza (CSP) physical space, power, environmental and appropriate access conditions for Imaging, and Call Center/IVR is verified. INI (a CNSI sub-contractor) and Avaya will participate in this infrastructure configuration	DSHS own (CNSI inputs from INI and Avaya)	No	08/03/09	11/12/09	
3.2.1 - Production Hardware and System Setup	3.2.1.3	Office Building 2 (OB2) physical space, power, conditions for Data Warehouse is verified	DSHS own	No	05/01/09	11/12/09	
3.2.1 - Production Hardware and System Setup	3.2.1.4	CNSI OTRS Trouble Ticket System is set up	DSHS input	No	08/03/09	08/03/09	
3.2.1 - Production Hardware and System Setup	3.2.1.5	Pre-Production Testing is completed and the environment is decommissioned	N/A	No	08/28/09	09/04/09	
3.2.1 - Production Hardware and System Setup	3.2.1.6	PDC - eCAMS Websphere Web Servers are set up	N/A	No	10/21/09	09/01/09	
3.2.1 - Production Hardware and System Setup	3.2.1.7	PDC - eCAMS Database Servers and Oracle Financials Database Servers are set up	N/A	No	10/21/09	09/01/09	
3.2.1 - Production Hardware and System Setup	3.2.1.8	PDC - Application Servers are set up	N/A	No	10/21/09	09/01/09	
3.2.1 - Production Hardware and System Setup	3.2.1.9	PDC - Data Conversion Servers are set up	N/A	No	05/29/09	08/01/09	
3.2.1 - Production Hardware and System Setup	3.2.1.10	PDC - EDI Servers (Edifecs and Gentran) are set up	N/A	No	10/21/09	09/01/09	
3.2.1 - Production Hardware and System Setup	3.2.1.11	PDC - Interfaces Server is set up	N/A	No	10/21/09	09/01/09	

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Figure 8-104. Detailed Implementation Checklist. This graphic provides a sample showing the detail used to track detailed implementation steps throughout the transition process.

At the final go live assessment meeting, Team Noridian will formally deliver a final implementation report that includes the results of all prior assessments and all pre-go live checklists and will request Department approval for go live.

8.4.1.6 Implementation Certification

RFP Section 6.4.1.6

Team Noridian will deliver a signed implementation certification specifying system and operational readiness of the new MMIS and Core MMIS operations. The implementation certification will be developed by verifying each component of the implementation certification checklist. Team Noridian will conduct a verification procedure which will include the appropriate staff from the project, the Department, and IME contractor units to ensure all systems, documentation, and processes are in place.

The implementation certification letter will confirm that the following activities have occurred and the system is ready for production:

- Knowledge transfer has been completed and approved by the Department
  - Technical
  - Non-Technical
- Data conversion has been completed and all data has been tested and accepted
- The site is prepared and ready for occupancy and work
- Help desk has been established, processes have been documented, and it is ready to begin support activities
- Support processes such as system and user documentation are in place
- Production source, jobs, and data have been version controlled and are locked down in production libraries
- Databases have been appropriately sized and monitored for performance and are ready for production processing

Team Noridian will establish a verification team for each area of the implementation certification t which will include key members of the appropriate team and Department unit managers who will sign off that the activities are complete.

8.4.1.7 Final Data Conversion and Transfer

RFP Section 6.4.1.7, Requirements a through e

Team Noridian will ensure that all data conversion activities have been completed as required for the new MMIS to become operational. Completeness of data conversion tasks is critical as it also helps to ensure that all system functions are performing in accordance with requirements. For example, the provider and member information must be completely converted, the claim history should be available, and other supporting data should be transferred to the production environment prior to declaring readiness for operations.

During the cutover from the legacy system to the new MMIS, a freeze period will be implemented when the legacy system will be shut down and the final readiness activities for the new MMIS will be completed. This will include conversion of data from the legacy system that came in after the prior round of conversion. Final dispositions must be made on claims suspended in the legacy system at the time of cutover. In previous implementations, all such claims were denied and the providers were instructed to resubmit those claims as soon as the new MMIS was operational. Team Noridian will discuss strategies such as this with the Department during our cutover planning sessions.

Team Noridian will ensure that all required documentation is completed and has been reviewed and approved by the Department. The Department must also certify that UAT has been completed and all identified issues have been addressed to their satisfaction. Team Noridian will ensure that all set up

activities have been completed. This includes setting up users and associating roles and profiles. All interface tests and system performance tests will be completed and documentation indicating completion will be provided to the Department for review and approval.

As part of the system readiness documentation, Team Noridian will create a file transfer plan which must be executed prior to certifying readiness for implementation. This will be an extension of the final data conversion report, and will highlight the source, the target, the transfer mechanism and timing information, as well as contact information for personnel responsible for ensuring completion of the transfer activities. Contingencies will be recorded for each data transfer to indicate the steps that must be taken if the transfer does not go through as planned. This plan will be developed by Team Noridian in collaboration with the Department, the other IME contractors, and any external data sources. Team Noridian will leverage the fact that they are currently the incumbent Core MMIS Contractor to ensure that all transfer activities are completely without any errors.

8.4.1.8 Deliverables

RFP Section 6.4.1.8, Requirements a through i

To support this phase, Team Noridian will develop the deliverables listed in Figure 8-105. All deliverables will be produced in accordance with the deliverable creation and review approach described in Section 8.2.7.8, Contract Deliverable Procedures, and the specified time frames in the project work plan.

Deliverable	Agree to Meet?	Section that Describes Approach
Implementation Report	Yes	▪ 8.4.1.5 Final Implementation Report
Updated Contingency Plan	Yes	▪ 8.4.1.4 Execution of Contingency Plans
Production Schedule	Yes	▪ 8.4.1.2.4 Produce and Update all Documentation and Production Schedules
Backup and Recovery Procedures.	Yes	▪ 8.4.1.2.3 Develop and Maintain a Business Continuity Plan, Backup/Recovery Procedures, and Back-Out Strategy ▪ 8.4.1.4 Execution of Contingency Plans
Hardware, Software, and Facility Security Manual	Yes	▪ 8.4.1.2.2 Establish a Production Environment ▪ 8.4.1.2.4 Produce and Update all Documentation and Production Schedules
Final Implementation Checklist	Yes	▪ 8.4.1 Activities ▪ 8.4.1.5 Final Implementation Report
File Transfer Plan	Yes	▪ 8.4.1.2.4 Perform Final Data Conversion ▪ 8.4.1.7 Final Data Conversion and Transfer
Final Implementation Report	Yes	▪ 8.4.1.5 Final Implementation Report
Implementation Certification Letter	Yes	▪ 8.4.1 Activities ▪ 8.4.1.6 Implementation Certification

Figure 8-105. Transition to Operations Deliverables. Team Noridian will produce the required deliverables in accordance with our deliverable development, review, and approval processes and schedule.

8.4.1.9 Performance Standards

RFP Section 6.4.1.9, Requirements a through i

Team Noridian will submit all required deliverables to the department as scheduled in the project work plan following the approved project deliverable processes. Team Noridian uses a combination of DXDs, collaborative transition planning, and deliverable walkthroughs to ensure we meet the deliverable review and approval dates.

8.4.2 Post Implementation Activities

RFP Section 6.4.2

Team Noridian recognizes that successful transition from the start-up and implementation to operations necessitates a measurable process to monitor and evaluate the cutover results and well written supporting documentation to support ongoing operations of the new system.

Team Noridian will utilize its iVision360 information system development methodology (ISDM) throughout this MMIS and Core MMIS operations project to develop and maintain the new MMIS. iVision360 is how Team Noridian builds and maintains MMIS solutions; it maps every activity and artifact necessary to traverse the ISDM, from initial planning to successful CMS certification and continuing operations. Team Noridian's processes are Capability Maturity Model Integrated (CMMI) Level 2 assessed and Level 3 compliant, and iVision360 is a result of our past experience and lessons learned on previous MMIS projects.

Team Noridian understands that one of the challenges of implementing a new MMIS is successfully transitioning the system from start-up and implementation to operations. The go-live date of a new MMIS is something that is eagerly anticipated by all. Achieving that date is the culmination of a lot of effort, hard work, and planning. The staff has been trained. The system, procedures, and processes have been developed and thoroughly tested. The data has been converted and contingencies have been planned. But despite all of these things, the fact remains that at go-live the new MMIS represents a major change from the legacy MMIS people have become comfortable with through long-term use. The new MMIS is something new, exciting, and a significant improvement over the legacy system. But in the end, it is still different from the users' comfort zone with the legacy system. It is a change and it will take some time for people to get used to the new system.

To help manage this change and facilitate the completion of the transition from the implementation phase to operations phase, Team Noridian has successfully used the concept of a threshold-based stabilization period starting at MMIS go-live. For the new MMIS, this stabilization period provides the mechanism for conducting the post implementation evaluation as it allows Team Noridian to assess and the Department to monitor the technical functionality and business processes and procedures during operations and compare those results with Department approved thresholds. While a similar evaluation may also occur during the Operational Readiness Testing (ORT), the post implementation evaluation measures the system and business processes and procedures during actual operations with more claims and more people and usually for a longer period than ORT. This post implementation evaluation provides both the Department and Team Noridian measurable evidence to help determine when the new MMIS has successfully completed the transition to the post implementation phase.

Starting with new MMIS go live, Team Noridian's analysts, subject matter experts, quality assurance and technical staff from the implementation phase will monitor new MMIS performance metrics against Department approved thresholds and make the results available to the Department on the project portal. They will identify and implement, with Department approval, corrective actions where needed, to help move the metrics to the identified thresholds. They will also perform an assessment of all system software by monitoring its performance to real world operational scenarios, recommending corrective actions and improvements as needed.

It is important to note that even with ORT, achieving the post implementation evaluation thresholds may take some time because the people and the operational conditions may be different from ORT. ORT is beneficial as it measures the readiness of the system, staff, business processes and procedures for go-live. But the post implementation evaluation measures overall readiness of these items, starting at go live, for long term operations in an evolving operational environment. The distinction is important as it takes time for staff to gain confidence in any new system, so the post implementation evaluation usually occurs over several months with periodic reporting of the results to the Department. For this reason, Team Noridian

recommends that a series of interim thresholds be established so that the Department and Team Noridian ensure that satisfactory progress is being made toward achieving the final thresholds and completing the post implementation evaluation.

The following list of thresholds provides a sample of the types of items Team Noridian has used on other MMIS projects.

- 98 percent of claims processed correctly and finalized
- Eight percent of estimated claims in suspense
- $ minimum weekly claims payment
- $ minimum weekly claims payment (nursing home)
- 100 percent of remittance advices printed correctly
- 100 percent of EFT accepted transmissions
- 100 percent success of daily interface transmissions
- 100 percent of successful weekly interface transmissions
- 100 percent of successful monthly interface transmissions
- Web Portal is fully functional and providers have access to all functions (send a claim, submit an enrollment application, update files, send and receive notifications)

The actual list of interim and final thresholds for the new MMIS post implementation evaluation, their associated performance measures, and the method of calculation will be tailored to the Department's needs. The actual list of thresholds for the new MMIS will be part of the Deliverable Expectation Document (DXD) associated with the post implementation evaluation report. Department approval of all thresholds is required.

Team Noridian envisions that reporting of the metrics associated with the approved thresholds will be accomplished through the monthly and quarterly status reports during the post implementation phase, until each threshold has been achieved. Once thresholds have been achieved, Team Noridian will continue to monitor performance, and make Department approved adjustments to maintain thresholds, and, where appropriate, improve performance.

Figure 8-106 summarizes Team Noridian's approach to the post implementation evaluation.

Activity	Objective
Complete ORT	Determine system readiness for go-live
Department approves thresholds for measuring successful completion of transition to operations; include both final thresholds and interim thresholds to establish a success oriented path. Recommend approval be through the DXD for the post implementation evaluation	Establishes criteria for post implementation evaluation; provides metrics for measuring progress
Go-live	Begins post implementation evaluation
Track and report performance	Measure progress toward achieving thresholds
Report progress	Identify if corrective action needed
Take corrective action as approved by Department	Improve progress to support achieving thresholds
Continue tracking , reporting, and corrective action	Achieve thresholds
Achieve thresholds	Post implementation evaluation complete
Monitor post evaluation performance and make Department approved adjustments	Continue to improve system and procedures

Figure 8-106. Post Implementation Evaluation. Team Noridian has successfully conducted post implementation assessments on other MMIS projects. These assessments have been based on the achievement of customer approved thresholds for system and procedure performance. This approach provides both the Department and Team Noridian measurable metrics on the post go live progress toward achieving system stabilization.

In addition to the post implementation assessment, well written and user friendly documentation provides a common understanding on how the system functions, how business operations will be performed in the future to-be environment, how to use the system, and how to maintain the system. This documentation also helps complete the transition from implementation to operations. Documentation also provides a long term foundation for operating the new MMIS after the Department has accepted the post implementation evaluation.

Documentation aids communication, enhances knowledge transfer, preserves historical project information, and satisfies government and legal requirements. Team Noridian understands the need to maintain proper and full documentation to enable users, whether they are from the Department, external sources, the IME professional contractors, or the Team Noridian technical and operations staff to effectively utilize, maintain, and operate the system. This includes internal documentation as well as web-published materials that assist the providers with using the Web Portal. We will assist the Provider Services unit by providing them knowledge transfer and information on the system so they can publish the necessary provider manuals. Team Noridian will provide online help as part of the new MMIS and will also provide documentation to assist the EDI submitters in the correct submission of claims.

Team Noridian fully recognizes that a key element in the success of any project is the quality and usability of the project deliverables. It is also imperative that the deliverable preparation and approval processes do not have an adverse impact on the schedule. For those reasons we use a repeatable deliverable process which emphasizes obtaining advance approval of the format, content, and acceptance criteria for each deliverable. This gives both Team Noridian and the Department a clear and timely understanding of expectations for the deliverable, and encourages involvement of the Department throughout the deliverable development process. We adapt this process to meet the needs of each of our projects, but the element of customer participation throughout the process is fundamental for all projects.

Deliverable Process Solution

Team Noridian's deliverable process supports Department involvement in the deliverable process while ensuring deliverables with the right information are provided to support the new MMIS start-up, implementation and operations.

- Provide highest quality deliverables with 100% deliverable approval rate
- Process leverages lessons learned on other highly successful MMIS implementations and Team Noridian projects
- Team Noridian deliverables are end user focused and easy to read and understand

Figure 8-107 depicts the process that Team Noridian has successfully used on other Medicaid projects.

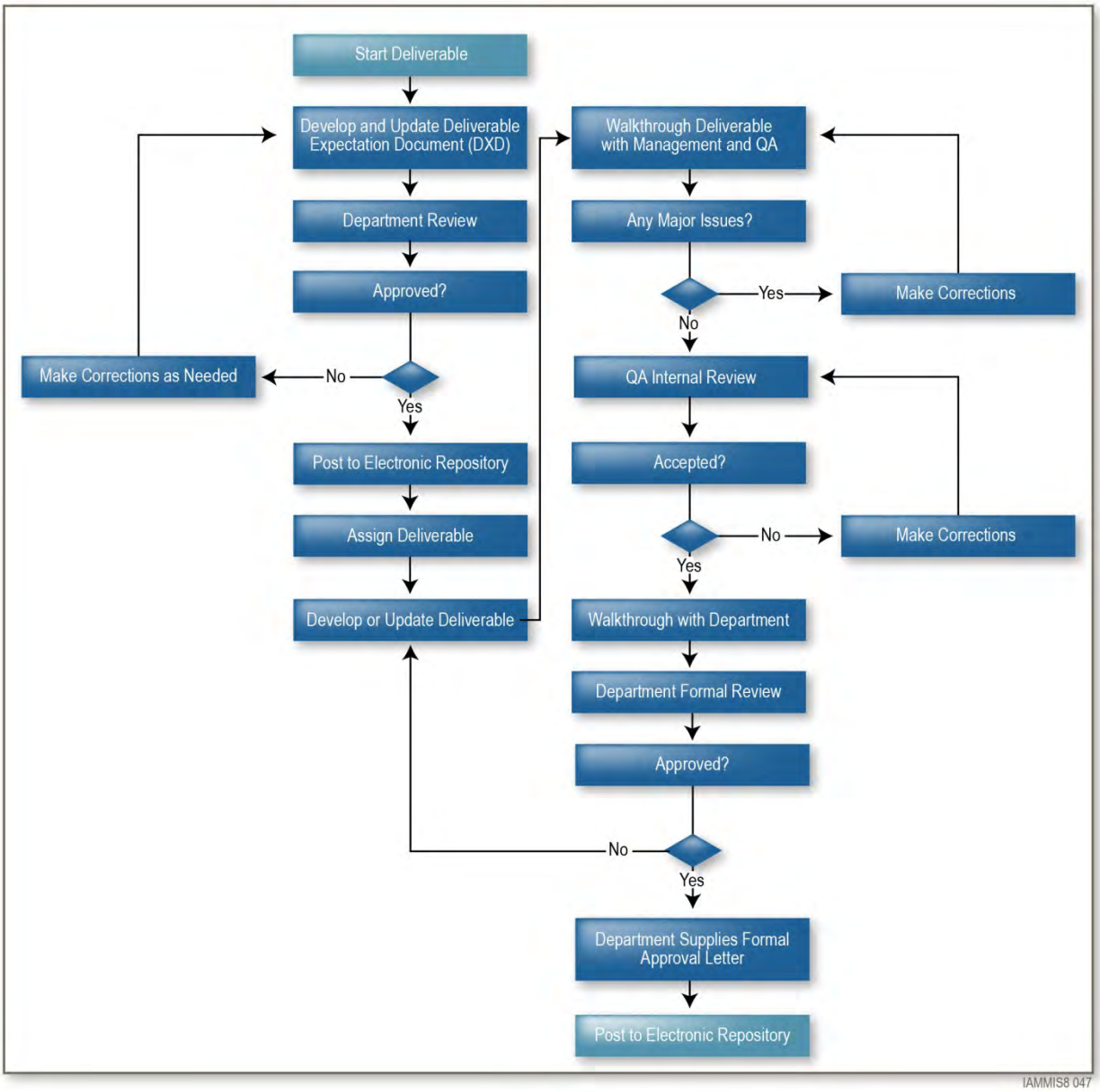

Figure 8-107. New MMIS Documentation Process. Team Noridian's deliverable process for the new MMIS implementation and operations is a comprehensive deliverable process. The process involves the Department, Team Noridian, and other stakeholders associated with the new MMIS project to ensure that delivered documentation meets the Department's business needs.

This clear understanding of expectations, which is established prior to the start of development of the deliverable, is documented in the DXD (designated DXD to avoid confusion with the data element dictionary (DED)) which is prepared for each deliverable approved by the Department. The DXD significantly facilitates the development, review, and ultimate approval of the deliverable by the Department. The DXD provides the basis for the development and acceptance of documentation by identifying the contents to be included in the deliverable so that it includes the information the Department requires to manage the new MMIS project during both implementation and operations.

DXDs apply specifically to deliverable documents and not the actual software application. The software applications, which are themselves deliverables, use the approved detail system design (DSD) as their DXD.

Throughout the software development phase of the project, the Department is provided access to software so that the Department can remain cognizant of the development of the actual software. In addition, the software will be available to the Department during Joint Application Design (JAD) sessions for both requirements and detailed system design to ensure that requirements and designs are properly captured.

Throughout the project life cycle, deliverables which were previously approved may require updates or revisions in subsequent phases of the project (e.g., the DSDs are initially approved during the design, revised during the development and test, and may be updated during the UAT and operations phase). Revisions or updates to approved documents will follow a process similar to that shown in Figure 8-108. The DXD will be updated if needed to reflect content to be changed or if a DXD update is not needed, as in the case of an as-built design change, the deliverable process will begin at "Develop or Update Deliverable" step of the deliverable process.

A key tenet of our documentation methodology is to establish and leverage standardized documentation from our other highly successful MMIS projects so that we can update it to reflect the new MMIS and reuse it, with Department approval. In Section 8.4.2.1, we provide more detail on this approach and the process we propose following to allow the Department to determine if the reuse of existing documentation, updated for the new MMIS, will meet Department business needs.

We will bring the content, document templates, standards, and experience from our other MMIS implementations to the new MMIS project and tailor the documentation to meet the requirements of the RFP and the MMIS Core contractor operations. This tailoring will begin in the analysis and design activities of the implementation phase where, in collaboration with the Department, its subject matter experts, and as requested by the Department, other IME services contractors, Team Noridian will outline the objectives of each piece of documentation on the project so that as Team Noridian develops the documentation over the ISDM we are using consistent materials for associated documentation (e.g., screen shots from design documents are the same ones used for training materials related to the same topic).

Team Noridian understands its responsibility for providing and maintaining accurate, complete, and timely deliverables which provide the information needed by the Department and Team Noridian to conduct and manage both new MMIS start-up and implementation and operations. Our combined experience on other MMIS and health care projects working with the customer to identify the right information for the right document and then working collaboratively with the customer to ensure that information is delivered will be of direct benefit to the Department in the implementation and operation of the new MMIS.

8.4.2.1 System Documentation

RFP Section 6.4.2.1

As mentioned previously, Team Noridian's approach to system documentation is embedded in its iVison360 methodology. While system documentation is considered a single deliverable by both the Department and Team Noridian, the reality is that post implementation system documentation is comprised of the deliverables which will have already been developed and accepted during the implementation phase (e.g., design documents, user manuals, business processes, knowledge transfer materials), used during testing and then updated with modifications that are identified during User Acceptance Testing and operations.

A key piece of our documentation solution is the use of reusable objects developed as part of other MMIS implementations. These objects are maintained in a content database or content vault which contains the objects and a catalog of where the objects are used in the documentation. This approach allows us to develop an object, make it available for use in the entire project, or use objects from other projects as applicable, and when the object changes, whether in response to a change management request (CMR) or correction of a defect, to expeditiously make changes to documentation impacted by the change.

Team Noridian acknowledges that the Department had included many types of methodologies in the RFP. The list is comprehensive and is aligned to ensuring that individuals using system documentation can understand the overall standards, network bandwidth needs, hardware capacity, software needs, and network topology to transfer, operate, and maintain the current MMIS. Team Noridian's system documentation fully supports this objective.

8.4.2.1.1 COTS Systems Documentation

RFP Section 6.4.2.1

For commercial off the shelf (COTS) products incorporated in the new MMIS, Team Noridian will provide the following as they are available from the vendor.

- Product Roadmap
- Product Business Rules and Controls
- Product Graphical User Interface (GUI), Features and Functions
- Product Hardware (Optimal Performance) Specifications
- Product Software Components/ Third-party Components
- Product Training Curricula/Services
- Product Technical Services
- Product Support Services
- Product Definition of Terms/Glossary
- Product Desktop/Browser Specifications
- Product Operating System Specifications
- Product Crosswalk to Documentation Base

8.4.2.1.2 Systems Documentation General Requirements

Section 6.4.2.1, Requirements a through i

The system documentation, beyond the COTS information listed above, are all deliverables from the implementation phase. For this reason it is critical that the deliverable flow depicted in Figure 8-107 be followed and it is important that the Department and Team Noridian put special emphasis on the DXD to identify both the content and methodology to be used to present that content.

Through the use of a stringent document release configuration management process that involves the Team Noridian quality assurance monitoring and control unit, the new MMIS account manager, and the Department, Team Noridian will ensure that system documentation provided by Team Noridian meets the following requirements of the RFP:

- Is current and based on the latest version document approved by the Department
- Is available and updated on electronic media storage and must be maintainable after turnover
- Has all narrative created and maintained in Microsoft Word (compatible with Department version) and be provided to the Department on request on CD-ROM or other designated media
- Has all narrative also maintained in .html or .htm format for online use
- Is organized in a format which facilitates updating and any revisions must be clearly identified
- Includes system, program and application narratives that are understandable by non-technical personnel
- Contains an overview of the system including:
    - A narrative of the entire system
    - A description and flowcharts showing the flow of major processes in the system
    - Multiple sets of hierarchical, multi-level charts that give a high, medium and detail view of the systems for both online and batch processes
    - A description of the operating environment

  - The nomenclature used in the overview must correspond to nomenclature used in module documentation. All modules must be referenced and documentation must be consistent from the overview to the specific modules and between modules.

- Includes module level documentation for each module which contain:
  - Module name and numeric identification
  - Module narrative
  - Module flow, identifying each program, input, output and file
  - Process flows within each module, identifying programs, inputs and outputs, control, process flow, operating procedures and error and recovery procedures
  - Name and description of input documents, example of documents and description of fields or data elements on the document
  - Listing of the edits and audits applied to each input item and the corresponding error messages
  - Narrative and process specifications for each program or module
  - Screen layouts, report layouts and other output definitions, including examples and content definitions
  - A list and description of all control reports
  - File descriptions and record layouts with reference to data element numbers for all files, including intermediate and work files
  - A list of all files by identifying name, showing input and output with cross-reference to program identifications
  - Facsimiles or reproductions of all reports generated by the modules
  - Instructions for requesting reports must be presented with samples of input documents and/or screens
  - Narrative descriptions of each of the reports and an explanation of their use must be presented
  - Definition of all fields in reports, including a detailed explanation of all report item calculations
- Documentation of all rules in the rules engine. The rules engine solution must meet the same federal standards established by CMS related to Medicaid eligibility rules engine to ensure federal enhanced matched rates. This includes both a technical definition of the rule and a business definition of the rule. Additionally, our preference is for a rules engine where it links to policy, state law, and federal law can be established and maintained within the rules engine solution. Each rule has a definition and a documentation tab. Both these can be printed and/or made available through an online viewer. The documentation tab allows links to policy documents and for attaching rules (e.g., policy guidelines, notifications, etc.)
- Desk level procedures. Please see Section 8.4.2.2 below for additional information on desk level procedures.
- List of post office boxes, telephone numbers, facsimile numbers, and any other Department-approved method of accessing the contractor(s) to receive information, including but not limited to, MMIS forms, data, and inquires; and a description of the purpose of each method listed above.
- Team Noridian will maintain a master list of all MMIS manuals on the Project Portal with a hyperlink to the actual manual.
- Program documentation, to include, at a minimum:
  - Program narratives, including process specifications for each, the purpose of each and the relationships between the programs and modules
  - A list of input and output files and reports, including retention
  - File layouts
  - File names and dispositions
  - Specifics of all updates and manipulations
  - Program source listing

- Detailed program logic descriptions and edit logic or decision tables including, at a minimum, the sources of all input data, each process, all editing criteria, all decision points and associated criteria, interactions, and destination links with other programs and all outputs
- Iowa Department of Human Services Iowa Medicaid Enterprise System Services Request for
- Physical file definitions
- File descriptions and record layouts with reference to file names and numbers for all files including intermediate and work files. Data element names, numbers, number of occurrences, length, type, record names, numbers, lengths, file maintenance data, such as number of records, file space and any other data necessary to manage the data or utilize the documentation. Lists by identifying name of all files inputs and outputs with cross-references to the programs in which they are used.

Team Noridian will also make available to the Department the following:

- Master index of all records we maintain pursuant to our records retention responsibilities that shall, for each record, include the name, span of dates covered, and volume and medium.
- Pursuant to the cost reimbursement provisions of the contract, lists of all cost-reimbursed:
  - Purchased or leased equipment and software
  - Print shop supplies, forms, and specifications used within the MMIS
  - Reports for the end-of-contract payments

Team Noridian anticipates that a large part of our system documentation from other MMIS implementations can be readily updated for use on the new MMIS. However, we fully recognize that the approval of the final presentation method and content of each piece of new MMIS system documentation rests solely with the Department. Our premise is that updating existing system documentation will be acceptable to the Department. We recognize that it not possible for the Department to make a blanket acceptance of this premise. We also recognize that it is not possible for the Department to agree to the acceptability of any modified content without that content being reviewed during the deliverable life cycle.

To allow the Department to make an assessment on the validity of our premise on a deliverable by deliverable basis, Team Noridian will conduct a walk-through of the applicable content from other MMIS projects that it proposes to update to meet the DXD for a new MMIS deliverable. Development of the DXD will be based solely on the information needs of the Department, without consideration of how similar information has been provided on other projects. The DXD will be developed to address what needs to be presented to meet the Department's business needs. Once the DXD is approved, the Department and Team Noridian will review documentation from other projects which Team Noridian feels could be updated to meet DXD requirements. This review will be conducted in a walk-through environment, and is focused on how the information was presented for other projects. This focus will allow the Department to determine if the manner of presentation is consistent with and meets Department needs.

If the Department approves the manner the information was presented, Team Noridian will use the same methodology for providing that information by updating the documentation to reflect the new MMIS. If the Department decides the manner of presentation does not meet Department needs, Team Noridian will work with the Department to identify how the information will be presented and will deliver the document so that it fulfills the Department's business needs. While the suggested walkthroughs will occur for each deliverable, Team Noridian recommends that Department approval of the presentation methodology occur for each element of the DXD.

Once the determination on presentation has been made by the Department, the DXD will be updated as needed to reflect any decisions by the Department. This DXD update is in keeping with the concept that the DXD for each deliverable will be used to establish and document the expectations of both the Department and Team Noridian for the deliverable.

8.4.2.1.3 Systems Documentation Classes

Section 6.4.2.1, Requirements 1 through 16

The RFP provides 16 classes of documentation (both system and user) that are applicable to the new MMIS. Figure 8-108 maps these classes of new MMIS documentation to similar documentation that Team Noridian has produced for other MMIS implementations.

System Documentation Requirement	Team Noridian Existing MMIS Document
Architectural Design	Detailed System Design Document
System Functional Design	Detailed System Design Document
Detailed Program Design	Detailed System Design Document
Detail Program Specifications	Detailed System Design Document
Data Descriptions	Detailed System Design Document
Data Element Dictionaries	Detailed System Design Document
Database Descriptions	Detailed System Design Document
Job and Process Scheduling	Detailed System Design Document
Computer Operations Procedures.	Operating Procedures
User and System Documentation.	User Manuals, Detailed System Design Document
Master List of all MMIS manuals	All MMIS manuals will be listed on Team Noridian's Web Portal with links to the actual documents
An assessment of all System Software	Detailed System Design Document (Architecture Business Area)
Infrastructure Documentation (for Successor Contractor)	Detailed System Design Document (Architecture Business Area)
Master List of all Records (Retention)	Records Inventory Report on our Project Portal
Cost Reimbursement Report	Appendix to Detailed System Design Document (Architecture Business Area)
Mail Contact Information	MMIS Operations Manual for Mail Room

Figure 8-108. New MMIS Documentation Classes Mapped to Existing Team Noridian MMIS Documentation. Team Noridian has developed the type of the system documentation information required by the RFP for other MMIS projects. This experience will be used as the foundation for providing similar documentation adapted to the Department's system documentation requirements for the new MMIS.

As a further example of how our existing documentation matches the Iowa requirements for the type of information required in system documentation, we are including Figure 8-109, which provides the table of contents from a sample design document. This provides an example of what Team Noridian has done on other MMIS projects. As has been mentioned several times previously in this section, the DXD and post DXD walk-through of like materials from other projects, will determine how Team Noridian will provide each document so that it best meets Department business needs.

8.4.2.1.4 Service Oriented Architecture Documentation

Section 6.4.2.1, Requirements j and k

In our existing documentation, Team Noridian uses many of the following tools associated with service oriented architecture (SOA):

- Unified Modeling Language (UML) 2.0 with the following structural diagrams:
  - Class diagram
  - Object diagram
  - Module diagram
  - Deployment diagram
- Behavioral diagrams:
  - Use Case diagram

- Sequence diagram
- Collaboration diagram
- Department chart diagram
- Activity diagram

- Three types of model management diagrams:
  - Package diagram
  - Model diagram
  - Module diagram

Note that not every module or service has all of the same diagrams. Our approach involves using the right diagram for the right documentation. For example, collaboration diagrams are rarely used since we have found that sequence diagrams serve the purpose adequately. Some services are fairly straight forward and may only have use case diagrams and not any of the other diagrams.

Our hypothesis is that the Department will find that when we adapt previously used diagrams for this new MMIS will provide the Department with the information the Department and other IME services contractors need to fulfill the objectives of each deliverable. Use of the post DXD approval walk-through where existing documentation is compared with Department needs will provide the opportunity for the Department to validate this premise on a DXD element by DXD element basis and approve the premise or make adjustments to it as required so that the deliverable meets the Department's business needs.

Team Noridian has successfully provided detailed system documentation on other MMIS implementations. This documentation was used by end users and contractors to support CMS certification of these systems and is being used successfully in day-to-day MMIS operations. Our approach for the new MMIS is to leverage—subject to Department approval—this experience and the existing documentation to provide the Department with the highest quality system documentation for use by Department staff and professional services contractors using and operating the new MMIS. We show an example table of contents for the detail system design in Figure 8-109.

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Figure 8-109. Table of Contents for the DSD. This sample table of contents encompasses the standard DSD approach leveraged by Team CNSI on previous large MMIS projects and the contents required by the Department.

8.4.2.2 User Documentation

RFP Section 6.4.2.2

Team Noridian's iVision360 methodology includes a standard user manual, business processes, and MMIS operating procedures that have been refined over time through experience and lessons learned on previous Team Noridian MMIS projects. Figure 8-110 provides the table of contents for our standard user manual which will be reviewed and updated as needed to satisfy the Department's requirements.

Figure 8-111 provides the flow that Team Noridian will utilize to prepare the user documentation for the new MMIS. This work flow does not change the deliverable process as those steps will still be performed for each deliverable. Rather, it shows the timing of the activities associated with preparing user documentation for the new MMIS.

Team Noridian will begin establishing the concept for the user documentation and knowledge transfer materials early in the analysis and design portion of the implementation phase, in conjunction with requirements validation. We will start with the user documentation and training materials developed for the Washington MMIS (WA MMIS) project as the base documents. The DXDs for a user documentation are approved by the Department, Team Noridian and the Department will walk-through the comparable deliverable from other Team Noridian MMIS projects to determine if the material can be reused by updating it to reflect the new MMIS design or if new material needs to be developed to meet the Department's needs. Since we do not envision significant changes in how the user would navigate and use the new MMIS, our premise is that a large portion of the existing material, when updated to reflect new MMIS screens will be reusable. But as with system documentation, validation of that premise will occur using the post DXD walk-through which will compare existing material to DXD requirements.

At the completion of this walk-through, once the reusable objects have been updated to reflect the updated design, we will prepare the user

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Figure 8-110. Table of Contents for User Manuals. Team Noridian's standard user manual table of contents provides the necessary information for the user to operate the system based on business process area and user type.

documentation based on these designs and the approved DXD for the deliverable. Even though we feel most of the effort may associated with modifying existing material, we will follow our standard development methodology of preparing the design specifications incrementally for each business process area. These updated design documents serve as the basis for preparing the user documentation and online help in parallel. Once these are updated, we will start preparation of the associated knowledge transfer materials. Our iterative development and test methodology allows us to develop the user documentation and training material incrementally as well. On our WA MMIS project, the user manuals were used as a base for developing the online tutorial and we will follow the same approach for the new MMIS project.

To help provide consistency of like topics across both system and user documentation and ensure the that user documentation reflects the most current design, Team Noridian will use a content database, making maximum use of reusable objects. This database will use metadata, to the maximum extent possible, to identify the various locations in system documentation and user manuals where the object is used. Once these locations are known and the change is made to the reusable object Team Noridian can expeditiously incorporate the changes in the documents that are impacted.

Using an incremental development methodology also allows the Department and the users to review and comment on the user material early in the document life cycle. This reduces rework later in the ISDM cycle and provides a greater degree of correlation and consistency across the design, the as-built system, and the user materials.

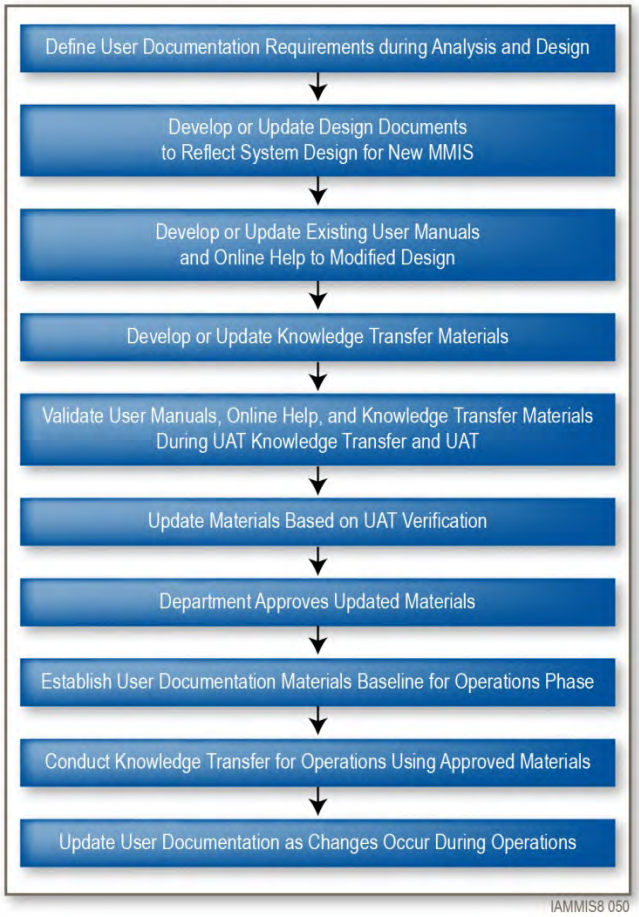

Figure 8-111. New MMIS User Documentation Work Flow. By starting the user documentation work flow early in the implementation phase, Team Noridian will be able to maximize the use of its existing documentation, subject to Department approval of reuse, while ensuring the Department has the information needed to support ongoing operations of the new MMIS. This creates a win-win scenario for the entire new MMIS team.

Team Noridian will be submitting DXDs for the user documentation on the project. These DXDs will be used to help the Department and Team Noridian agree on the format, content, and acceptance criteria of each deliverable and initiate feedback and follow-up if standards have not been met. The Department will also have the opportunity to assess each deliverable during walkthroughs that will occur before formal submittal for review and approval.

Team Noridian will prepare draft user documentation including user manuals, program materials, procedure updates and EDI billing instructions during the analysis and design activities of the implementation phase for use during all testing activities and update that documentation as needed throughout the ISDM. For provider manuals, we understand that currently these are produced by the

Providers Services Unit so we will provide that unit knowledge transfer and information to develop the provider manuals for the new MMIS.

Our base for user documentation will be existing user and provider documentation from our other MMIS implementations which will we adapt to the new MMIS. This ruse is subject to Department approval during the post DXD walk through of existing documentation discussed in section 8.4.2.1 above. Iowa business procedures which also will be updated to obtain maximum benefit from the new MMIS. If existing material is not sufficient for update or reuse to meet the Iowa business needs, then Team Noridian will develop new materials to meet the Department's business needs.

Documentation will be updated on a regular basis during implementation. Draft and final documentation will also be used to create all training materials used for knowledge transfer before and after the start of operations. Team Noridian staff and Department staff will use system documentation and user documentation during UAT to ensure it is correct and all Department formats and standards are met. This testing is an important part of the development process as all documentation will be updated to incorporate UAT changes and those updates, when approved by the Department, will form the documentation baseline for the start of the operations phase. We will ensure all documentation is available and current on our project portal at all times and that during the operations phase, documentation is updated within three business days of Department approval of a system or operational change.

8.4.2.2.1 General Documentation Standards

RFP Section 6.4.2.2, Requirements b, d through h, j through o, and w

Team Noridian’s concept for document management is based on delivering high-quality documents to the Department that meet all its standards and acceptance criteria as defined in the DXD for each deliverable. We use industry best practices, standards, and tools to streamline document development, delivery, maintenance, and updates as well as, more importantly, to streamline document acceptance by the Department. Using standards, repeatable processes, and automated tools ensures that our documents are complete, correct, clear, concise, and well organized—and accepted the first time they are submitted. Team Noridian has a full set of proven documentation, standards, and templates from previous MMIS projects that we hope to leverage, with Department approval, and tailor for the new MMIS in accordance with the Department’s standards. This baseline set, where reuse is approved, will significantly reduce documentation development time during the start-up and implementation period. Team Noridian is familiar with the Department’s current standards for user documentation and our current documentation is easily adaptable to meet those standards. As required, we will create and maintain the documentation in Microsoft Office 2007 (or higher), including Visio, and all documentation will be available via the Project Portal throughout the contract period. We will also supply the documentation to the Department on external media storage when requested.

The overall objective of Team Noridian documentation is to ensure that any user of the new MMIS has the information they need to use and operate the system effectively and comfortably to support their business-related tasks. Team Noridian will produce documents that are written and organized to meet the needs of the user. Our approach and products are designed to enable all user groups, including those not trained in data processing, to be self-reliant and efficient in their use of the system, business operations, activities, and system maintenance once the system is in production.

Team Noridian will provide the initial user materials incrementally, with the Department afforded an opportunity to review and comment on the draft material to ensure we are meeting their standards and the materials are consistent with the requirements of the approved DXD. All documents will be internally reviewed by the Team Noridian quality assurance staff against a standard set of criteria tailored to the particular user role or fit for use and purpose prior to submission to the Department.

As shown in Figure 8-112 these criteria can be grouped into three main categories that ensure that the material and narrative in the document is 1) easy to use, 2) easy to understand, and 3) easy to find.

Document Characteristic	Description
Easy to Use	
Accuracy	Free of mistakes or errors; adherence to facts
Completeness	The inclusion of all necessary parts – and only those parts
Task Orientation	A focus on helping users complete the tasks associated with a product in relation to their jobs
Easy to Understand	
Clarity	Freedom from ambiguity or obscurity
Concreteness	Freedom from abstraction; the inclusion of appropriate examples, scenarios, similes, and analogies
Style	Correctness and appropriateness of writing conventions and choices in words and phrases
Easy to Find	
Organization	A coherent arrangement of parts that make sense to the user
Ease in Searching	Presentation of information in a way that enables users to find specific items quickly and easily
Visual Effectiveness	Attractiveness and enhanced meaning of information through use of layout, illustrations, color, type, icons, and other graphic devices

Figure 8-112. Document Characteristics. All Team Noridian documents will be evaluated against these characteristics.

Team Noridian routinely produces a table of contents and indices for all documentation, including hard copy user manuals and online help. When delivering documents electronically as HyperText Markup Language (HTML) files, the table of contents contains hyperlinks that allow the user to go directly to a topic in the table of contents by selecting the specific table of contents item. We will configure Portable Document Format (PDF) and Microsoft Word files to allow the users to select specific topics in the table of contents. Indices are provided for all hard copy document deliverables; however, Team Noridian uses a search or find option for electronic and online documents.

The content for new MMIS user information is procedure-driven and step-by-step “how-to” procedures explain how to use the system to support specific business processes to allow the Department to obtain maximum benefit of new MMIS functionality. As Team Noridian is not responsible for business transformation associated with the new MMIS we will work with the Department and services contractors to align our user documentation to business processes implemented through business transformation activities by the Department and other vendors.

Team Noridian has developed processes using OnBase, the change management request system, to control documentation changes. All change requests are sent to a queue where they are reviewed to see if documentation updates are needed. Change request workflows are used to track each change and to ensure that the appropriate documentation is developed or updated for the change. Keywords provide the ability to link and track all of the components that may need updates as a result of a change. As mentioned previously we will have a content vault which will link the reusable objects to the deliverables that contain them. Using the content vault to identify which deliverables need to change when a reusable object is updated because of a change to the system or correction of a defect will greatly expedite the process of documentation updates, while at the same time maintaining consistency of content across the documents that use the object. During the operations phase, Team Noridian will automatically notify the units that are affected by the change through updates to the project portal and notify the provide the documentation to units that are affected by the change and in many cases will meet face to face with the units to verbally discuss the changes that were made.

During the start-up and implementation phase, draft and final user documentation will be used for UAT and for knowledge transfer prior to the start of operations. Discrepancies or errors found as a result of the testing or training will be corrected prior to the final implementation date.

Once the operations phase begins, updates to user manuals will be developed in their final format for all changes, corrections, or enhancements to the system prior to Department sign-off of the system change. Team Noridian will be responsible for the production and distribution of all project deliverable updates within the timeframe identified in performance standards. There will be hard copy and soft copy versions available, as needed. Version control will be maintained. Pages will include footnotes that specify the date of any revision. Approved changes will be posted on the project portal within three days of receipt of approval.

Team Noridian will conduct a walk-through of the documentation changes, as necessary and as requested by the Department. All documentation will be maintained on the new MMIS project portal. The MMIS Project Portal will provide the capability to provide an audit trail (history) of the updated documentation along with the primary owner of the document change and the associated date of the change.

8.4.2.2.2 Online Help

RFP Section 6.4.2.2, Requirements a and c

The new MMIS will include an online help feature with a robust search capability with context sensitive help. Online help, which we consider part of the set of user documentation, will be embedded into the software for the new MMIS. The principle behind the online help is to present an online description of each page and make it contact sensitive. Online help describes the following:

- Purpose of the page
- Tasks related to the page
- Link to the user manual for the page's business process area
- Related topic link, if appropriate
- Each field on the page (If a button or field is common to numerous pages, they are discussed in the user manual or discussed in the getting started portion of the online help and not shown here.)
- Notes that include business rules the user navigate through the page

The online help, with the user manuals, form an integrated, easy-to-understand and follow set of references that enable users to find the right assistance quickly.

The new MMIS help system is integrated with the new MMIS user interface on a page-sensitive basis, with links to the appropriate navigational procedures, definitions, and concepts. The help system development process is thus closely integrated with development of the user interface for the application and, as such, its timing coincides with the application development cycle. To achieve this close integration between the help system and application development cycles, all project personnel work in parallel from the same set of design information.

Team Noridian will generate the new MMIS user manuals in the preferred print format from the MMIS web-based help. Each section of the user manual contains screen prints of pages used in the function. This will enable delivering both the web-based and printed versions of the new MMIS User Manuals at the same time. Team Noridian will be responsible for the production and distribution of all user manual updates within the timeframe identified in performance standards. There will be hard copy and soft copy versions available, as needed and the hardcopies will be printed on standard (letter) size paper in three-ring binders with a revision date on each page. We use Microsoft Word to track changes so that they are clearly identified. In addition, the new MMIS project portal maintains a history and versions of each document so we can easily retrieve archived documentation if needed.

8.4.2.2.3 Reports, Screens, and File Information

RFP Section 6.4.2.2, Requirements i, l, and p through u

Each section of the user manual contains screen prints of all screens used in the function and all data elements are identified by name. This cross references to the DED included in the DSD and online data dictionary which assigns a unique data element name for each data element in the new MMIS relational database.

The DSD for each business process area will include a narrative description of each report and an explanation of its use. In addition to the DSD, this information will be included in the user manual to provide the information to help the user in generating the reports. Report narratives and explanation of their use will be documented in the following documents for each business process area:

- DSD Section 3.4: Report Components
- User Manual Section 5.6: Generating Reports

In addition to the documentation in the DSD and user manual, the authorized user can review the report description of each report online in the Report Access Portal. Figure 8-113 provides a sample online report description screen in the Report Access Portal.

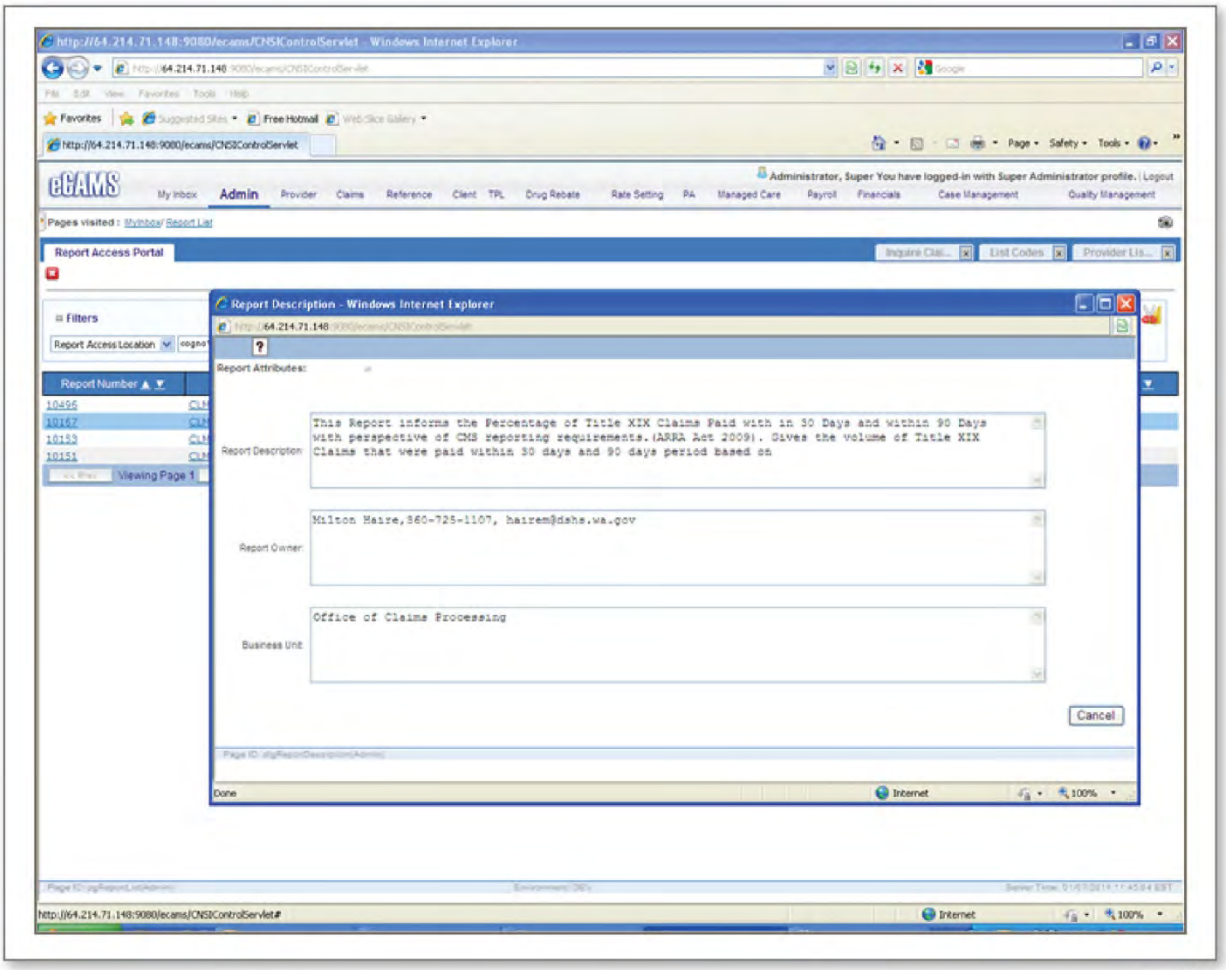

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Figure 8-113. Report Description Screen. A user can view a brief description of each report in the Report Access Portal, including a report description, report owner, and business unit owner.

The DSD for each business process area will include the definition of all fields on each report, including a detailed explanation of all report item calculations and any user-defined, report specific codes. Team Noridian will design the reports during the collaborative detailed system design sessions. We will start with a library of reports from previous MMIS projects. This will be particularly helpful for federal reports, since these reports should be similar from state to state. While we may not be able to generate actual reports for the sessions, our analysts will prepare report layout specifications prior to the sessions, which are a replica of the intended reports to add in the discussions. The report layouts can be changed

and marked up in real time during the sessions. The report layout specification will include calculations on each report, where applicable. In addition to the DSD, this information will be included in the user manual to provide the information to help the user understand the report. Report field definitions and explanation of calculations will be documented in the same sections of the DSD and user manuals noted above. We will also include a copy of one page of each report and the number of pages for each report.

The DSD and the user manual section for each business process area will include instructions for requesting a report with samples of input documents or screens. Some of the canned reports will be generated by the user through the Report Access Portal using prompt screens to define the report parameters, such as "Begin Date" and "End Date". Other reports will be automatically generated on a scheduled basis. Team Noridian will define these reports and will provide the prompt screen in the DSD and user manual where inputs through screen prompts are required.

Descriptions of online error messages for fields incurring edits will be presented with the corresponding resolution of the edit for each business process area. These are currently included in the following sections of the user manual:

- Section 2.3: Navigation, Screens, Functions, Tables, Error Messages for [specific sub-area]
- Section 3: Screen Definitions for [business process area]

Team Noridian's user manuals show step-by-step activities for updating information using narrative instructions, screen illustrations, and dialog boxes. While describing the update process in a specific business functional area, the user manuals will contain information on the edits associated with the update process and how to correct them. System error messages handled by eCAMS are presented in commonly used terminology and are configurable so that they can be tailored to the Department's needs and standards.

All functions in the MMIS are logically grouped by business functional area. Data updates and coding value maintenance for each logical business process area are also consolidated by business process area and presented separately within each business area. Team Noridian will organize the user documentation for the new MMIS to follow the same business functional area approach as the system (e.g., member, provider, and operations). We will consolidate all functions and supporting material by business functional area and produce our user documentation accordingly. This organization will be included in the following user manual sections:

- Section 2.2: Navigation and Flow Charts for [specific business process areas]
- Section 2.3: Navigation, Screens, Functions (including file level maintenance), Tables, Error Messages for [specific sub-area]

We will coordinate the planning, development, and organization of the user documentation with the Department, so that the documentation will meet both the set of requirements and the Department's expectations.

The user manuals will include code values and data element numbers when describing screens for reference to the DED. This information will be included in the following section of the user manuals for each business process area:

- Section 3: Screen Definitions for [business process area]

The DED is provided in both hard format as a part of the system documentation, and in electronic/online format via the MMIS functionality. The same code values displayed and data element number provided in the DED will map directly to the code values and data element numbers in the user manuals. Instructions for entering online updates for each business process area are included in the previously described Sections 2.2 and 2.3 of the user manual.

Team Noridian's user manuals show step-by-step activities for updating information using narrative instructions, screen illustrations, and dialog boxes and clearly depict which data and files are being

changed. Each screen and dialog box in the MMIS is uniquely named for easy identification. For example, the provider list page is called “pgProviderList” and the provider address update dialog box is called “dlgProviderAddressDetails.” These same names that appear at the bottom of the associated screen when viewing the screen in MMIS will be referenced with the screenshot in the user manual.

8.4.2.2.4 Desktop Guide

RFP Section 6.4.2.2, Requirement v

Team Noridian will develop guides as a subset of the user documentation to be available to users at their desktop. The existing MMIS procedures provide a guide for the ongoing management and operation of the MMIS and team Noridian currently produces and maintains them as part of our core contractor responsibilities in Iowa. Team Noridian will update these procedures to allow users to take maximum advantage of functionality in the new MMIS. The user manual documents provide the system users instructions needed to use the MMIS.

Team Noridian will deliver an operational procedure for each business process area impacted by the new MMIS with multiple volumes focused on each of the sub-areas and user type. These procedures will address how the business area can obtain maximum benefit from the new system. Team Noridian recognizes that for some business area, other contractors maintain their own procedures. For those areas, Team Noridian recognizes that the other contractor will most likely use the new MMIS user documentation to update business procedures. Each operating procedure describes the business functions and sub-functions (if applicable) of the business process area, and the business processes within each function or sub-function. It also identifies the tasks within each business process and lists associated materials, such as user manuals and training class narratives.

As with any new MMIS, there will be changes in the way things are performed. Team Noridian will demonstrate the normal day-to-day activities for new MMIS processing to the Department and IME contractor staff. Team Noridian, working together with the Department and other IME contractors, will provide the needed documentation to create operational procedures to take full advantage of the MMIS potential.

8.4.2.3 State Responsibilities

RFP Section 6.4.2.3, Requirements a through c

Team Noridian acknowledges that the system documentation requirements extend past implementation and continue through the life of the project until the system is eventually retired. The complexity of an MMIS implementation necessitates a strong partnership between the Department and Team Noridian for the implementation to be successful. Team Noridian will work closely with the Department's implementation team to transition the new MMIS and all documents listed as deliverables in the RFP that are needed to support new MMIS operations from implementation to operations. During the transition, Team Noridian anticipates that the Department would review and accept any changes made to system documentation since the start of UAT. This acceptance of these changes or the originally accepted documentation if there are no changes to a specific document during UAT will establish the documentation baseline for operations.

During operations, Team Noridian will review deficiencies identified by the Department's implementation team. When required by the Department, a corrective action plan (CAP) will be submitted by Team Noridian for Department approval. As documentation updates are made during operations, and new deliveries occur, the Department will review the delivery for compliance with the DXD. The standard Department review time for these reviews is 10 days.

8.4.2.4 Contractor Responsibilities

RFP Section 6.4.2.4

8.4.2.4.1 Access to Environments

RFP Section 6.4.2.4, Requirement a

During the implementation phase and during operations, Team Noridian will provide the Department evaluation team access to new MMIS. During development, in keeping with the iVision360, releases will be made periodically to a demonstration area so the Department and the evaluation team have access, in the new MMIS interim release environment, to the latest software to review development progress.

During operations, the Department evaluation team will have complete access to both the UAT and production environments to monitor operations. Whether an individual evaluation team member has access to the complete new MMIS or just certain business areas will be determined by the Department and controlled through role-based access control (RBAC), where individual users are mapped to roles.

8.4.2.4.2 Corrective Action Plans

RFP Section 6.4.2.4, Requirements b and d

Team Noridian will work with the Department to establish corrective action plans for addressing deficiencies. When these procedures require that Team Noridian submit a CAP for Department approval, we will do so. Upon approval of the CAP, Team Noridian will execute the plan.

8.4.2.4.3 Post Implementation Evaluation

RFP Section 6.4.2.4, Requirement c

Team Noridian will use the deliverable process described in this section to develop a DXD for the post implementation evaluation. As described in this section, we will deliver for Department approval the post implementation evaluation report.

8.4.2.4.4 CMS Certification Support

RFP Section 6.4.2.4, Requirement e

Team Noridian's approach to certification is discussed in Tab 11. Team Noridian fully recognizes that achieving CMS certification retroactive to day one of the new MMIS is critical to the Department. We recognize that in addition to collecting evidence needed to demonstrate that the system is certifiable on day one of operations, there is also a need for certain federal reports to be produced and included in the certification documentation. Team Noridian's certification manager is responsible for developing the certification folders and collecting the evidence to include in those folders, we will also capture and archive any first run federally mandated reports identified in the new MMIS certification plan for inclusion in the certification documentation.

8.4.2.5 Deliverables

RFP Section 6.4.2.5, Requirements a through d

In Figure 8-114, Team Noridian agrees to meet the deliverables required for the post implementation phase. The figure also provides the location in the proposal that provides additional detail on the deliverable.

Deliverable	Agree to Meet?	Proposal Section
All required CAPS	Yes	8.4.2.4.2 Corrective Action Plans
CMS certification documentation including archived versions of all first-run federally required reports.	Yes	8.4.2.6.2 Certification Standards
System Documentation	Yes	8.4.2.6.3 System and User Documentation
User Documentation	Yes	8.4.2.6.4 Documentation Updates

Figure 8-114. Post Implementation Deliverables. Team Noridian will provide all of the deliverables for the post implementation phase required by the RFP.

8.4.2.6 Performance Standards

RFP Section 6.4.2.6

Team Noridian will meet the performance standards contained in the RFP. Our specific responses to the requirement of RFP Section 6.4.2.6 are contained in Sections 8.3.2.6.1 through 8.3.2.6.4 below.

8.4.2.6.1 CAP Standards

RFP Section 6.4.2.6, a

Team Noridian's quality assurance manager will submit CAPs as described in Section 8.4.2.4.2.

8.4.2.6.2 Certification Standards

RFP Section 6.4.2.6, Requirement b

Team Noridian's certification manager will meet this performance standard as described in Section 8.4.2.4.4 of this tab and in Tab 11.

8.4.2.6.3 System and User Documentation

RFP Section 6.4.2.6, Requirements c and d

Figure 8-115 is a snapshot of the project work plan tasks associated with system documentation and user documentation. As shown in the work plan, Team Noridian, using the deliverable process outlined in this tab, will provide the system documentation and user documentation baseline for new MMIS operations within 60 days prior to the start of the operations phase. Updates to the baseline are discussed in the response to requirements c and d in Section 8.4.2.6.4 which follows.

WBS	Tasks, Subtasks, and Activities	Indicator	Duration	Estimated Start Date	Estimated Finish Date
4.1	**Start-Up Phase**		**657 d**	**Wed 1/11/12**	**Fri 8/15/14**
4.2	**Implementation Phase**		**672 d**	**Wed 1/11/12**	**Mon 9/8/14**
4.3	**Transition to Operations Phase**		**753 d**	**Wed 1/11/12**	**Tue 1/6/15**
4.4	**Post Implementation Activities**		**235 d**	**Wed 5/28/14**	**Fri 5/1/15**
4.4.1	Post Implementation Activities Resources		48 d	Wed 10/1/14	Wed 12/10/14
4.4.2	**System Documentation**		**72 d**	**Wed 5/28/14**	**Mon 9/8/14**
4.4.2.1	**Develop Deliverable Expectations Document (DXD)**		**2 d**	**Wed 5/28/14**	**Thu 5/29/14**
4.4.2.1.1	Develop DXD for System Documentation		2 d	Wed 5/28/14	Thu 5/29/14
4.4.2.2	**Deliverable Expectations Document Review and Approval**		**21 d**	**Fri 5/30/14**	**Fri 6/27/14**
4.4.2.3	**Develop System Documentation**		**59 d**	**Mon 6/16/14**	**Mon 9/8/14**
4.4.2.3.1	Collect and updated available system documentation		15 d	Mon 6/16/14	Mon 7/7/14
4.4.2.3.2	Finalize deliverable		10 d	Tue 7/8/14	Mon 7/21/14
4.4.2.3.3	**Deliverable Review and Approval**		**34 d**	**Tue 7/22/14**	**Mon 9/8/14**
4.4.2.3.3.1	**Conduct Internal Review**		**5 d**	**Tue 7/22/14**	**Mon 7/28/14**
4.4.2.3.3.2	**Department Review**		**29 d**	**Tue 7/29/14**	**Mon 9/8/14**
4.4.2.3.3.2.1	Walkthrough and submit deliverable to Departmer		1 d	Tue 7/29/14	Tue 7/29/14
4.4.2.3.3.2.2	Department review of initial submission		15 d	Wed 7/30/14	Tue 8/19/14
4.4.2.3.3.2.3	Update deliverable based on review		1 d	Wed 8/20/14	Wed 8/20/14
4.4.2.3.3.2.4	Internal quality assurance review		1 d	Thu 8/21/14	Thu 8/21/14
4.4.2.3.3.2.5	Update deliverable based on review		1 d	Fri 8/22/14	Fri 8/22/14
4.4.2.3.3.2.6	Management review/approval for submission to D		1 d	Mon 8/25/14	Mon 8/25/14
4.4.2.3.3.2.7	Walkthrough and submit deliverable to Departmer	Deliverable	1 d	Tue 8/26/14	Tue 8/26/14
4.4.2.3.3.2.8	Department review of final submission		5 d	Wed 8/27/14	Wed 9/3/14
4.4.2.3.3.2.9	Department approves deliverable	Milestone	0 d	Wed 9/3/14	Wed 9/3/14
4.4.2.3.3.2.10	Post documentation		3 d	Thu 9/4/14	Mon 9/8/14
4.4.3	**User Documentation**		**72 d**	**Wed 5/28/14**	**Mon 9/8/14**
4.4.3.1	**Develop Deliverable Expectations Document (DXD)**		**2 d**	**Wed 5/28/14**	**Thu 5/29/14**
4.4.3.1.1	Develop DXD for User Documentation		2 d	Wed 5/28/14	Thu 5/29/14
4.4.3.2	**Deliverable Expectations Document Review and Approval**		**21 d**	**Fri 5/30/14**	**Fri 6/27/14**
4.4.3.3	**Develop User Documentation**		**59 d**	**Mon 6/16/14**	**Mon 9/8/14**
4.4.3.3.1	Collect and updated available user documentation		15 d	Mon 6/16/14	Mon 7/7/14
4.4.3.3.2	Finalize deliverable		10 d	Tue 7/8/14	Mon 7/21/14
4.4.3.3.3	**Deliverable Review and Approval**		**34 d**	**Tue 7/22/14**	**Mon 9/8/14**
4.4.3.3.3.1	**Conduct Internal Review**		**5 d**	**Tue 7/22/14**	**Mon 7/28/14**
4.4.3.3.3.2	**Department Review**		**29 d**	**Tue 7/29/14**	**Mon 9/8/14**
4.4.3.3.3.2.1	Walkthrough and submit deliverable to Departmer		1 d	Tue 7/29/14	Tue 7/29/14
4.4.3.3.3.2.2	Department review of initial submission		15 d	Wed 7/30/14	Tue 8/19/14
4.4.3.3.3.2.3	Update deliverable based on review		1 d	Wed 8/20/14	Wed 8/20/14
4.4.3.3.3.2.4	Internal quality assurance review		1 d	Thu 8/21/14	Thu 8/21/14
4.4.3.3.3.2.5	Update deliverable based on review		1 d	Fri 8/22/14	Fri 8/22/14
4.4.3.3.3.2.6	Management review/approval for submission to D		1 d	Mon 8/25/14	Mon 8/25/14
4.4.3.3.3.2.7	Walkthrough and submit deliverable to Departmer	Deliverable	1 d	Tue 8/26/14	Tue 8/26/14
4.4.3.3.3.2.8	Department review of final submission		5 d	Wed 8/27/14	Wed 9/3/14
4.4.3.3.3.2.9	Department approves deliverable	Milestone	0 d	Wed 9/3/14	Wed 9/3/14
4.4.3.3.3.2.10	Post documentation		3 d	Thu 9/4/14	Mon 9/8/14

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Figure 8-115. System Documentation and User Documentation. While system documentation and user documentation will be developed throughout the implementation phase, Team Noridian will bundle the deliverables that comprise system documentation and user documentation to establish an operations baseline during the transition from the implementation phase to the operations phase.

8.4.2.6.4 Documentation Updates

RFP Section 6.4.2.6, Requirement e

Since Team Noridian's documentation process requires the Department's approval of all Iowa specific changes to documentation as they are made, whether the updates are the result of a discrepancy or an enhancement, Team Noridian will exceed the requirement to provide updates for system documentation

and user documentation on a quarterly basis as the updates will be provided as they are made. For updates to the base products (changes which are not Iowa specific), Team Noridian provides the documentation updates in conjunction with the releases of the base product that contain them prior to UAT of the release.

Team Noridian's approach to providing Iowa specific updates, and base product updates to post implementation documentation as they are made ensures that the Department will always have the most current documentation available.

Upon Department approval of the new MMIS specific updates, or Department approval to install base product releases in production, Team Noridian will make the documents updates available on the project portal within three days of Department approval.

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Tab 9 - MMIS System Requirements

RFP Section 9.2.10

There are several themes that run throughout the Department's technical requirements, including, incorporation and integration of many different technologies; business orientation; collaboration, data and services sharing; modularity; and technology and vendor independence. Familiarity with these concepts is certainly attributed to CMS's Medicaid Information Technology Architecture (MITA) initiative. However, these themes, or goals, are also desired business goals applicable across the heath care spectrum. Team Noridian is part of a health care organization, Noridian Mutual Insurance Company (NMIC), that owns or has a vested interest in companies that participate in a broad cross section of the heath care market ranging from Third Party Administration, Medicare and Medicaid, commercial insurance plans, and other insurance services such as dental, vision, and benefits administration. Team Noridian shares the challenges and associated pain the Department has experienced relating to satisfying the demands of providers, members, and constituents. Across our lines of business, demands are being made to provide:

Team Noridian Advantage

Team Noridian establishes a solid MMIS foundation with proven solutions and delivery experience from industry leaders.

- CMS Certified ProviderOne (based on eCAMS) along with OnBase provides a low-risk implementation that is CMS certifiable for the Department
- Industry leading COTS (OnBase, Emdeon, EDIFECS) glued seamlessly using a robust Enterprise Service Bus (EXACT)
- SOA-based health care administration platform that provides a sustainable solution to meet the Department's ongoing health care IT needs
- Transparency of operations using real time interactive dashboards and business process scorecards
- Out of the box MITA business and technical alignment

- Self-service for members and providers
- Data aggregation from internal and external sources
- Configurable business processes and workflows
- Data analytics and vastly improved reporting
- Integrated processes with state and Federal bodies

Key stakeholders do not want, and business economics cannot support, multiple independent and redundant systems. The ability to collaborate is not a request at this point in time—it is imperative to survival. Medicaid enterprises throughout the country, like the Iowa Medicaid Enterprise (IME), are experiencing these same demands from their providers to provide greater and more meaningful information, faster and better processes for enrollment, payment, and services. From members who demand better and more complete services as well as more flexible ways to access to their medical and related information. At the same time, federal and state Medicaid agencies' budgets have grown tighter and are more closely scrutinized. It is based on our first-hand experience that we recognize and appreciate the technology and business goals that are prevalent throughout the Department's RFP requirements. Team Noridian has faced, and addressed head on, the challenges shared with the Department and other health care payers by developing, deploying, and using the Exchange & Automation of Core Technologies (EXACT) service oriented architecture (SOA) infrastructure in its own heath care processing environment for over the last four years to:

- Build new workflows, applications and self-service capabilities
- Design workflows previously impossible
- Achieve easier access to internal and external data
- Bring our data together so we can mine and share it
- Improve administrative and reduce operational costs
- Implement self service applications that demonstrate measureable cost reductions;
- Satisfy and engage our clients
- Differentiate through innovative collaboration

Team Noridian has also implemented EXACT in the commercial market and for CMS in the Medicare program.

Today's unsettling economic environment affects businesses and federal and state agencies equally. Combined with the demands of provider and member clients, meaningful collaboration among all participates in the health care delivery system is a fundamental necessity for the Department and its provider and member clients.

Team Noridian's new MMIS, while certainly meeting all of the technical requirements set forth in the Department's RFP, also provides an adaptability, scalable, and technology agnostic framework that will enable the Department to mature along the MITA continuum and begin meaningful participation in the emerging collaborative health care consortium at the state and federal level.

The interoperability framework of Team Noridian's new MMIS is the EXACT SOA infrastructure framework. EXACT manages the connectivity and standardizes the exchange of data between the new MMIS and heterogeneous peripheral systems, both internal and external to the Department. EXACT supports the modular design of the new MMIS and promotes a truly interoperable environment by eliminating the technology barriers that often hamper meaningful communication between disparate systems. EXACT delivers the industry-leading infrastructure needed to integrate silo applications and systems into a coherent health care administration delivery platform.

The EXACT SOA framework provides several functions that add tremendous value to the new MMIS for the Department, including:

- Enterprise Service Bus
- Integration Services
- Rules Services

In addition to these important function, by using EXACT as its integration and connectivity framework, Team Noridian delivers to the Department expanded capabilities that support MITA Level 3 standards, and the ability to support the technology and standards that will facilitate the collaboration, sharing, and exchange necessary for Level 4 and 5 maturity.

The main component of the new MMIS is the proven and operational eCAMS health care administration platform, which is certified in the State of Washington and Michigan using the new CMS certification toolkit. eCAMS is built around a service-oriented architecture where the business services (aligned with MITA architecture) are augmented with technical and infrastructure services. The platform provides complete end-to-end business functionality to support both traditional Medicaid delivery models (Fee-for-Service and Managed Care) and evolving delivery models like community care. The platform not only delivers out-of-the-box Federal CMS certification requirements but also leads the industry in its alignment with MITA principles. eCAMS has evolved its user interface and user experience to more positively engage with the provider and member community. eCAMS continues to improve its user experience and add new channels such as smart phones to make the information ever more open and ubiquitous.

One of the foundational aspects of building a platform with eCAMS and not implementing a stand-alone system or application is the de-coupling of business rules and data exchange. eCAMS is built around a service-oriented architecture where the business services (aligned with MITA architecture) are augmented with technical and infrastructure services. eCAMS and the EXACT SOA infrastructure framework bring to the Department a robust health care platform which provides the foundation for its service-oriented architecture (SOA) infrastructure.

Team Noridian understands that security and privacy are critical elements to Medicaid operations. The proposed solution supports a robust privacy and security architecture which consists of multiple components that reinforce privacy and security policies, procedures, and guidelines.

Team Noridian believes that the new MMIS built on these proven components and powered by the eCAMS platform provides the state of Iowa with the necessary tools for business flexibility, improved operational process efficiencies, and a cost effective way of implementing future system changes. The new MMIS will provide a robust platform for the Department to embrace future innovations, policy changes, and break-through in health care delivery. The new MMIS architecture provides a business-driven framework and facilitates a higher level of MITA maturity that is interoperable, standards-based, and flexible.

Our approach in developing the eCAMS's system architecture for the new MMIS has been to continually focus on the larger frame of reference and not focus specifically on individual technologies. Technologies change rapidly. A system that focuses on standards, frames of reference, and core architectural principles is by nature more resilient and sustainable for the long life cycle of an MMIS.

Figure 9-1 shows a more detailed view of the different components showing access channels, backend infrastructure of the proposed solution and their high level interactions between the components.

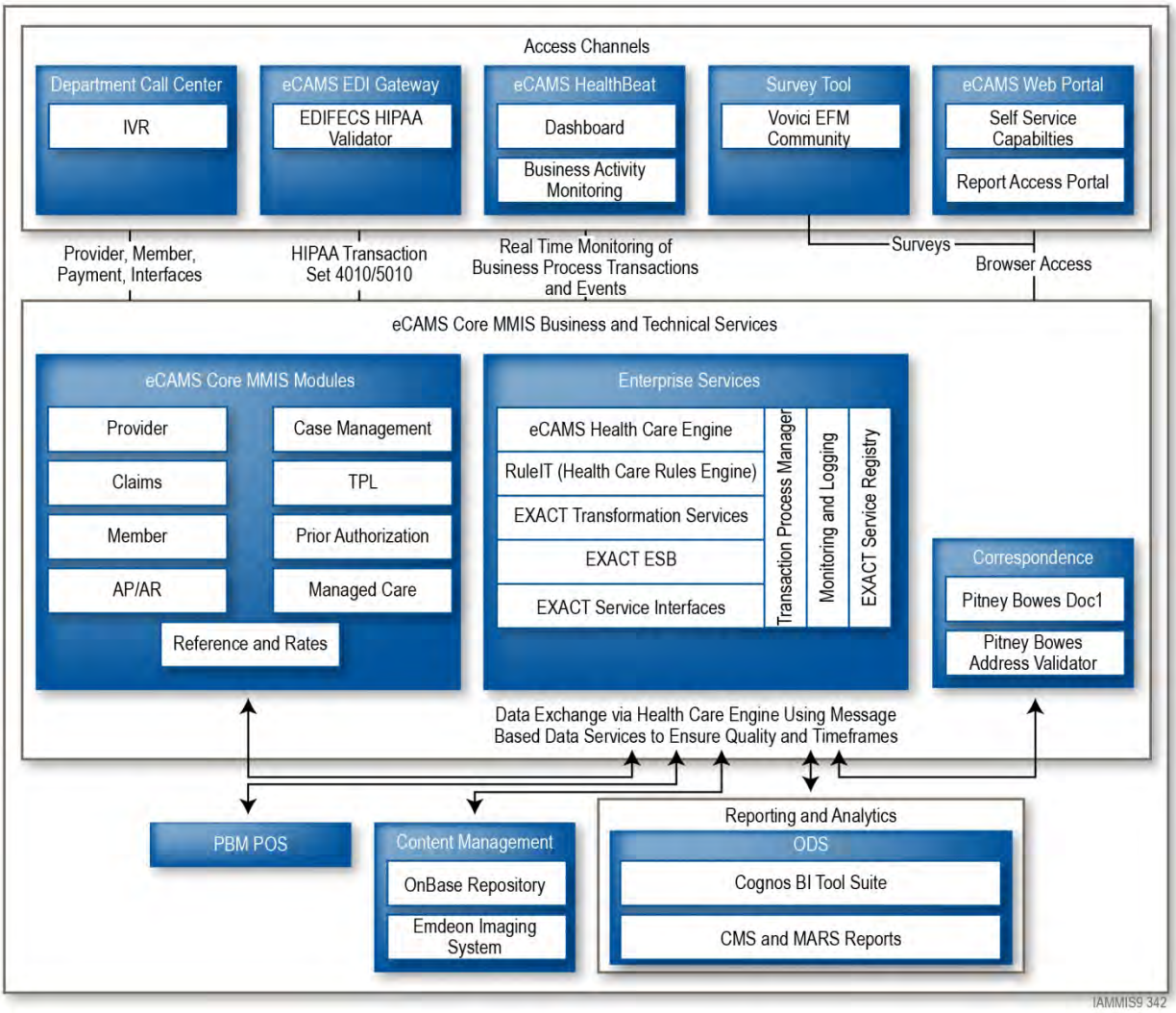

Figure 9-1. Conceptual Overview of the new MMIS and its Building Blocks. The new MMIS publishes and consumes all interfaces through the EXACT framework, extending the power of the eCAMS health care administration platform across the IME.

Figure 9-2 outlines the components of the Team Noridian solution, their function, and how they add value to the state of Iowa's Medicaid Program.

Solution Component	Proposed System (State Implementation)	Functional Area Covered	Key Highlights and Value to State of Iowa's Medicaid Program
eCAMS Health Care Administration Platform	State of Washington	This is the core of the proposed system and addresses the core functional requirements of the business process areas, such as provider, member, and claims. The system is already being upgraded to meet the HIPAA 5010 requirements and is technically ICD10 compliant.	The eCAMS system provides comprehensive coverable of all business process areas and aligns with the Medicaid Information Technology Architecture (MITA) business architecture. eCAMS aligns with both MITA and SOA principles of being highly-configurable and flexible. The system provides visibility of ongoing key business metrics and allows for continuous process improvement. The solution has demonstrated success in improving claims and payment accuracy, as well as the turnaround time for changes – all of which has resulted in cost savings. For example, the implementation of a single claim edit resulted in an annual 6 million dollar savings in the state of Washington.
RuleIT Health Care Rules Engine	COTS State of Washington	RuleIT® provides out-of-the-box CMS-mandated rule sets for claims adjudication and a business dictionary to configure state-specific policies and rules. It is a proven rules engine in a high-volume, high-throughput environment, such as the state of Washington, which processes more than 80 million transactions annually.	A health care focused rules engine provides the infrastructure for the new MMIS to easily adapt to the changing health care delivery landscape. It reduces risks of implementation and transition from a legacy system to the next generation solution. With production implementations in two states, RuleIT comes pre-configured with hundreds of sample business rules for use in Iowa. Through a combination of configuration parameters and rules engine changes, a full 80% of changes can be implemented without the need for programming changes or system releases.
Exchange and Automation of Core Technologies (EXACT) SOA infrastructure framework	COTS State of Iowa (used for process automation)	EXACT will manage the connectivity, and standardize the exchange of data, between the new MMIS modules and heterogeneous systems both internal and external to the Department. EXACT's out-the-box capabilities fully support the automation and management of interface services, including auditing and error tracking, alert and escalation, interface integrity monitoring, and the automation of error and exception resolution, where applicable	EXACT will be a key success factor for Team Noridian by providing an adaptable, scalable, and technology agnostic framework that supports the new MMIS's modular yet interoperable design. With EXACT, many different technologies can be incorporated and integrated with the new MMIS and the Department. EXACT also deliver's "beyond ESB" benefits by providing a framework from which the Department can fully exploit its IT assets and investments and enhance and extend the Department's business process automation.
Pitney Bowes DOC1	COTS State of Washington	A Pitney Bowes product, DOC1, is used to generate on-demand and batch correspondence to providers and members from the system. The system in the state of Washington has already integrated this product with the rest of the system business areas so that users can request the generation of letters to the providers and members in near real time. In addition, the system uses an address validator component that verifies the address of the entity (provider or member) down to the street level, resulting in improved data quality and lower mail rejection.	The use of street-level validation ensures improved data quality, which improves fraud detection and prevention and, in turn, can potentially save the state of Iowa mailing and postage costs. Flexible template-driven letters allow Team Noridian and the Department to rapidly adapt to changing program requirements.
eCAMS Web Portal	State of Washington	This provides a rich interactive user experience to the provider community to interact with the Medicaid program in near real-time. The portal provides both static and dynamic content. It also provides a single point of access into the Medicaid program across the different functional areas, such as pharmacy prior authorizations, provider enrollment, and claim submission. The member portal also provides a self-service model that allows access to both static information (such as benefits definition) and dynamic information (claims processed) to the member community in a secure manner.	eCAMS' complete Web-based self-service portals for provider and member has resulted in cost savings in other implementations, such as reducing paper volume in the state of Michigan, and improved data quality and quicker adoption (provider verification in Michigan for 40,000 providers completed in six months). The Iowa provider community will benefit from using the Web-based self-service screens thereby automating their business processes and larger providers will benefit from availability of real-time checks on claims and payments. The member community will have access to rich information available through highly-interactive user experience.

Solution Component	Proposed System (State Implementation)	Functional Area Covered	Key Highlights and Value to State of Iowa's Medicaid Program
Edifecs EDI Gateway	COTS State of Washington	The gateway allows for management of life cycle of EDI transactions. The system uses industry standard EDIFECS components, such as XEngine and SpecBuilder to handle HIPAA transaction sets processing through the system. eCAMS EDI Gateway publishes standard control reports and metrics to manage and monitor the efficiencies of the EDI processes.	eCAMS has proven to be flexible in support of the operations of multiple concurrent transaction sets (4010/5010), thereby enabling the provider community to transition smoothly into the new HIPAA-mandated transaction sets.
Vovici EFM Community	COTS State of Washington	This tool allows providers and other stakeholders to complete online surveys that are periodically posted to gain feedback on rolled-out initiatives or future planned events. The system is a complete Web-based system and has been integrated with the eCAMS database to allow for reporting and monitoring of feedback.	Team Noridian believes that this tool will be an effective channel for improving provider relationship by eliciting feedback and inputs for ongoing operations management. The state of Iowa will benefit from the inventory of the pre-built survey questions and some standard reporting on provider and stakeholder satisfaction.
eCAMS HealthBeat	New Component	This provides the visibility into performance metrics of the business processes. The system establishes the metrics, the thresholds, and the variances by business process areas. The raw data is fed from all business components (such as eCAMS, EXACT, OnBase) via EXACT to this component. The data is stored in the eCAMS HealthBeat datastore where it is aggregated, consolidated and then processed for reporting, trending and exception handling.	It provides visibility of the ongoing operations to the Department in the form of interactive scorecards. The system also provides early warning signals (using thresholds) and establishes long-term trends using historical data analysis and rule-based correlation techniques.
Oracle/Cognos Operational Data Store	COTS State of Washington	The Operational Data Store is built using the Oracle database and provides a comprehensive framework to address all reporting needs for the Department. The underlying data structures provide powerful reporting and drill down capabilities to the user community. The Department receives an inventory of reports that address the Federal certification needs and facilitates a comprehensive management of the overall program.	Cognos is an industry-leading tool for reporting and advanced analytical processing of data. The Cognos tool provides the Department with a comprehensive reporting and analytical suite of tools. The Department will be able to use an existing inventory of reports and data marts.
OnBase and Transform Document Imaging, Content Management, and Workflow	COTS State of Iowa	The proposed solution provides a series of components that enables a centralized management of unstructured data (e.g., paper attachment, correspondence, and fax) and allows efficient access to facilitate improved operational workflow. The Emdeon Imaging System component provides the tool to capture all incoming paper submissions. The solution allows for OCR and automated document classification. The OnBase Document Management System acts as the centralized content management repository, collecting all unstructured data into a centralized repository. It also provides document-centric templates to automate paper-based workflow. Also, Magnolia Content Management provides the tool and the workflow to generate and publish static information content for the provider, member, and New MMIS portal.	The content management stack of products is seamlessly accessed by the user community (operations staff, provider, members and state) thereby resulting in improved decision making, enhanced automation, and operational efficiency. The products provide built-in process controls and workflow capabilities to improve end-to-end process automation along the lines of MITA principles. The use of a tool familiar to the business units of the IME will allow a more seamless implementation with fewer training needs.

Figure 9-2. Outline of the new MMIS solution components. Team Noridian proposes a solution made up of components proven in the Medicaid industry and that provide benefit for the State of Iowa.

Business and Technical Capabilities

The new MMIS supports a modular yet interoperable relationship within its own environment and is capable of supporting the same throughout the Department and IME IT environment. The new MMIS is a precisely assembled collection of loosely coupled business process-centric services supported by standards-based data repositories, and enhanced decision support and analytical capabilities. The new

MMIS is aligned closely with the Medicaid Information Technology Architecture (MITA) and supports the core principles of business, technical, and information architecture.

Business Architecture

From a system perspective, business architecture articulates the structure of an enterprise in terms of its business processes and business information. The business processes describe the "how" of achieving the goals of the enterprise. In articulating the process and information, the business architecture considers all stakeholders of the enterprise (including providers and members) to ensure that the entire end-to-end flow is captured. The MITA business architecture synthesizes these business processes into business area groups and decomposes each of those process groups into processes. The MITA framework provides a good reference point for determining the maturity and comprehensiveness of the business architecture of any solution. eCAMS, with its SOA designed architecture and the EXACT SOA framework, ensures that there is a very close alignment with the MITA process groups and areas, and also provides tools and services to continuously improve the business process capabilities.

The new MMIS has a portfolio of business and technical services that enable it to support business processes more effectively. The new MMIS' business-driven architecture employs the use case methodology, where business cases drive the overall technical solution. The solution provides the capability to support current and new business processes for successful operations, and is in alignment with the MITA business architecture.

The new MMIS addresses system usage from different stakeholder perspectives by considering the different viewpoints that business users experience from both form and function of the system. The following diagrams show how the proposed solution addresses the business needs of the three key stakeholders of the new MMIS:

- Department's executive and management team
- Provider Community
- Member Community

The executive management view, shown in Figure 9-3, is one of the perspectives used to provide transparency and visibility to the Department about the performance and health of the overall program. This view uses the key performance indicators (KPI) which have been agreed-upon for the project, to evaluate the overall health of the program. The key aspect that the new MMIS shows is the trends of these KPIs to predict and forecast potential issues in a given business process area. This enables a more proactive mode in to be used in managing the program. The business process areas and their associated metrics are also mined to identify cause-and-effect and correlation between these metrics to provide unique perspectives in the different aspects of the program. This is implemented by integrating technology tools and frameworks, such as business activity monitoring (BAM), to achieve improved business processes, enhanced data quality and accessibility, and conversion to standard formats. The view provides the user with timely, accurate, and actionable information on the status, trend, and health of the overall business processes. All this is delivered via eCAMS HealthBeat which provides a rich user interface, interactive graphs, and actionable data sets.

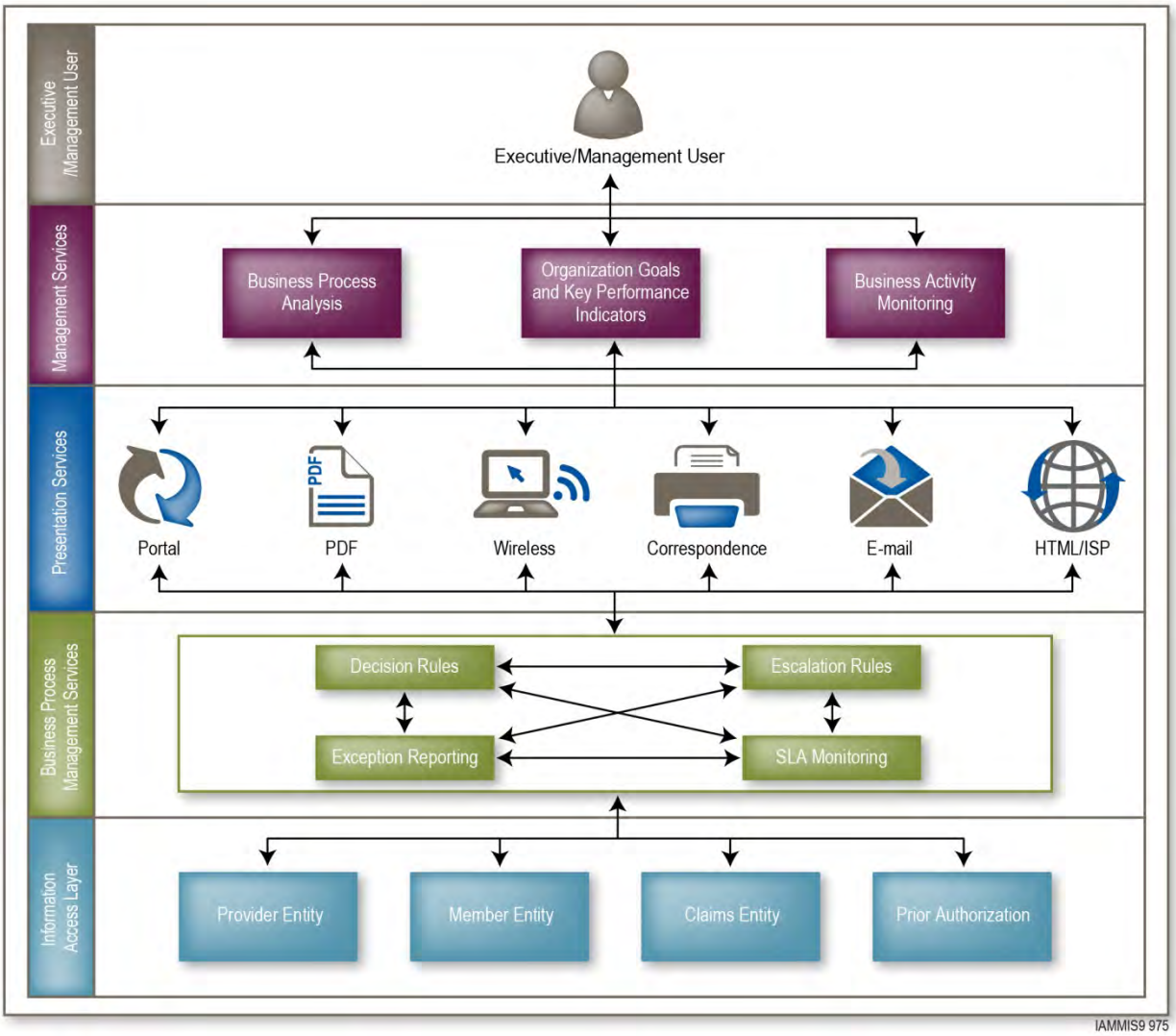

Figure 9-3. Sample of the Business Services. The usage view of the architecture is communicated to the different stakeholders.

The provider stakeholder view shown in Figure 9-4 focuses on the key communication channels that the provider uses to interact with the system and some of the associated business process services that are exposed to the provider.

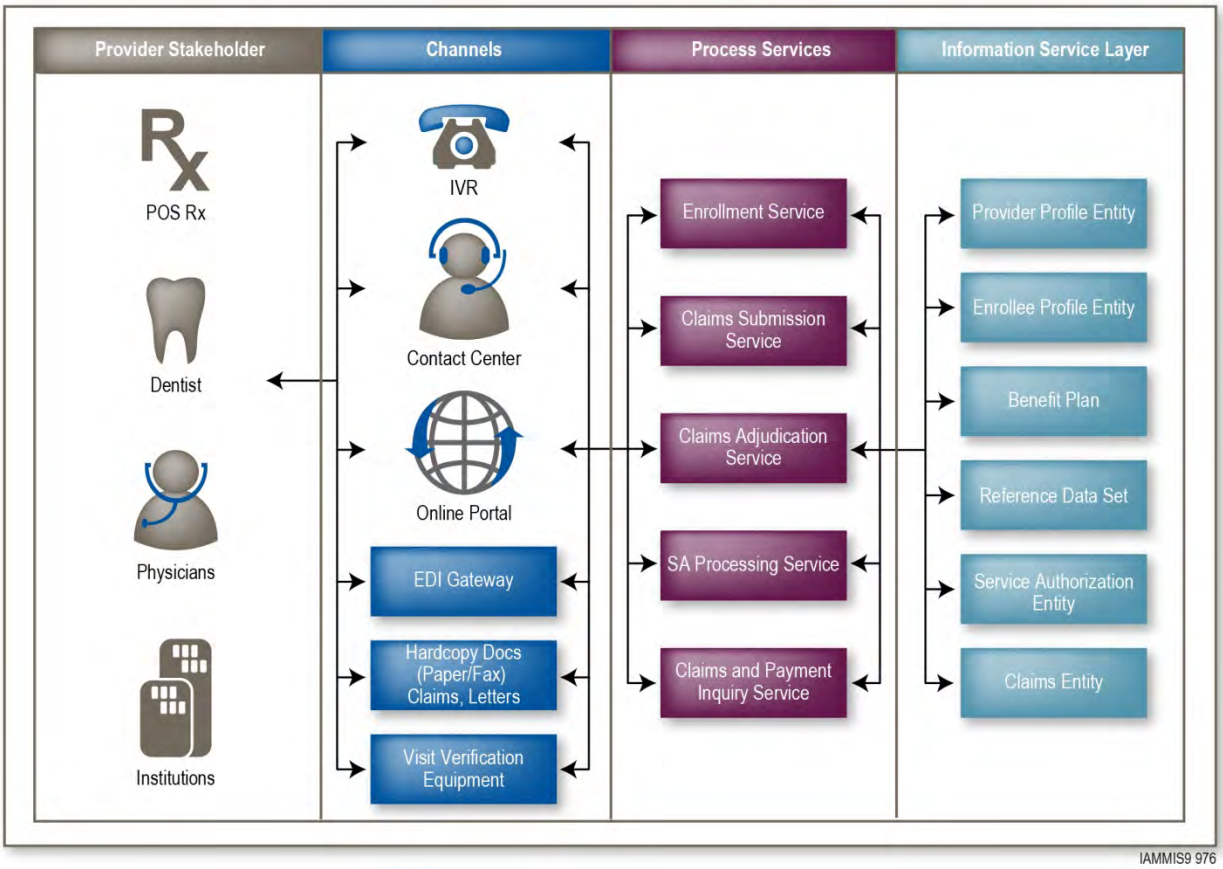

Figure 9-4. Provider Perspective. This shows the different communication channels and the service layer available within the Team Noridian solution. Process and information service layer ensures a consistent data and process rules across different business areas. <<graphic pending update>>

The system supports the following functionalities to make the provider experience more positive:

- Consistency across different communication channels for the same information using standardized process services.
- The process services enable the ability to add new channels of communication with the provider with little system impact. For example, Team Noridian recently extended some of the provider access functions on a smart phone platform. The provider could access the status of their claims or check member eligibility via a smart phone or a similar device.
- The information entity layer masks the complexity of collecting data from the data source or sources and provides an entity-level data view to the provider. For example, a provider looking up their information would get to a see their information in terms of data collected from IVR, or submitted via paper.
- The system tracks key process metrics which are captured across different business processes to ensure quality of service to the trading partner.

The member stakeholder view shown in Figure 9-5 focuses on the key communication channels that the member uses to interact with the system and some of the associated business process services that are exposed to the member. The system supports the following functionalities to make the user experience rich for the member:

- The system provides the member a complete view of their data in the system. The data accessed from the member profile entity shows demographics, TPL information, associated invoices, etc.
- The system provides a rich user interface to show the available benefit plans and services.
- The system also brings the view of a Medicaid Health Record which is built using a set of infrastructure services that are aggregated by the EHR data aggregator service entity.
- The system allows the user to update information such as PCP.

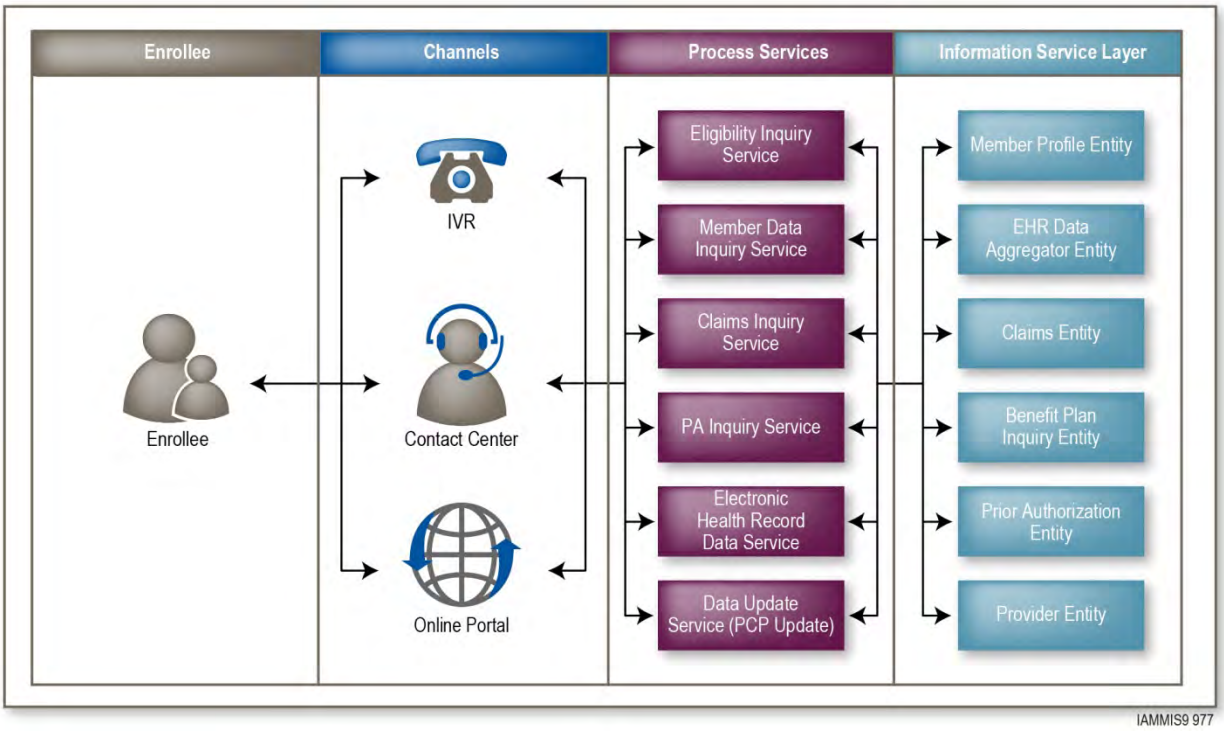

Figure 9-5. Member Perspective. Different information services are available to the member within the Team Noridian system. Rich member self-service options ensure improved customer satisfaction.

The business services available to Team Noridian and the Department are enabled through the EXACT SOA framework, described in the Technical Architecture below.

Information Architecture

The information architecture is the least discussed aspect of the architecture. However, it is one of the most vital elements of an extensible, interoperable infrastructure. The proposed solution not only has robust baseline information architecture but also has the right data management strategy to manage the changes typically associated with the health care regulations and reforms.

The following section outlines key elements of the architecture of the new MMIS system components:

- Conceptual data model (CDM)
- Logical data model (LDM)
- Data standards and dictionary
- Data management strategy

Conceptual Data Model (CDM). The conceptual model of the new MMIS provides a holistic view of the subject entities and their relationships. The model has matured over the multiple iterations and has shown the flexibility to accommodate different business delivery models, like the social service delivery model in the state of Washington. The conceptual model will provide the visibility of the different entities and their relationships.

Logical Data Model (LDM). The new MMIS has a robust data model that addresses the process and data needs of enterprise-wide Medicaid operations. It has evolved over multiple versions, and represents a harmonization of data needs across multiple states. The new MMIS has taken a layered approach to addressing the process and data needs of Medicaid operations. The data model approach balances the normalization needs of a data model with the performance needs of large-volume transaction processing system.

The data model is layered into the Medicaid foundation entities and transactional entities. This approach allows for more coherent data management and provides better data integrity handling at the database layer. The data model is very flexible and provides the business agility to accommodate state policy changes, such as supporting different health care programs like the State Children's Health Insurance Program (SCHIP). The reference and benefits administration data structures allow the business user to create different programs (like a specific program for breast and cervical health) or alter benefits during transition from traditional FFS to CCN, and associate the relevant data sets, such as covered services and specific pricing decision matrices. A unique and innovative data structure associated with the new MMIS model is referred to as the "group model." This group structure uses a flexible approach to associate different code sets into a powerful decision-evaluation framework. The group structure allows the system to link and dynamically define relationships among the following dimensions:

- Service code set (i.e., procedure, diagnosis, and revenue)
- Taxonomy
- Place of service and facility type
- Claim type
- Eligibility code category
- Provider type

These different dimensions give a range of flexibility to customize the business behavior of the solution. For example, to accommodate a new program, the system can set up a group structure that defines the associated service code, applicable taxonomy codes, and allowed place of services for specific eligibility code categories. This framework has been used in production operations to implement changes in state health care programs without a single line of code change. Furthermore, the object-oriented approach taken within the new MMIS design allows for evaluating this flexible criteria tool using a simple API set, which ensures adequate performance and throughput.

In addition, the new MMIS solution strategy for incorporating future modifications is to accommodate additional data elements (specific to state needs) as additional columns, referred to as "opt fields" (optional fields). This reduces the amount of rework on the user interface and avoids additional background processes when changes are initiated, while still allowing for backward compatibility.

Data Standards and Dictionary. The data model of the new MMIS follows industry standards for data elements definition. The system documents the data dictionary by cataloguing the different aspects of attributes, including size and other constraints. The system publishes a standard business data dictionary that shows the definition, the semantics, and element usage across different systems and uses the concept of creating crosswalks between the different definitions of industry standards. The alignment and adoption of industry standards ensure easier reporting from the new MMIS. This standards-based approach allows the proposed solution to leverage industry benchmarks to improve the overall program delivery.

Data Management Strategy. The data management strategy establishes the basic governance processes to handle the complex set of systems and applications interfacing and interoperating with the Medicaid program. This aspect also becomes even more relevant as Iowa shifts from largely traditional fee-for-service model to a more coordinated care model. This is primarily because the inculcation of additional data elements and reuse of existing elements for different purposes is a typical aspect of shifting business models. As part of a successful approach for data management in previous implementations, Team Noridian proposes the following approach for data governance:

- Defining Data Asset Owners: The initial step in the implementation of a data governance program involves defining the owners or custodians of the data assets in the enterprise. Team Noridian will use its existing best practices to establish clear guidelines regarding who is accountable for each aspect of the data, including its accuracy, accessibility, consistency, completeness, and updates.
- Defining Data Access Processes: The second step in the approach is to define the data management processes. Team Noridian will document processes as a part of its design concerning how the data is to be stored, archived, backed up, and protected from mishaps, theft, or attack.
- Defining Data Control Procedures: The third step is to define, and put into place, a set of controls and audit procedures that ensure ongoing compliance with government regulations and industry best practices. Those practices include procedures governing physical transfers, firewalls, encryption, remote working, staff training, and general security, as well as schedules for regular monitoring of the above during the life of the contract.

Technical Architecture

Team Noridian's new MMIS technical architecture facilitates changes and localizes, as much as possible, the effects of such changes on design documents, code, and other system work products. The architecture is designed to enable and facilitate the use or reuse of certain existing components, frameworks, class libraries, legacy, and third-party applications.

Figure 9-6 shows a conceptual block diagram of the high-level components and frameworks, including the touch points within the system. Most of the interfaces and touch points between systems are orchestrated through the EXACT SOA framework. EXACT uses a message-based framework that enables location and technology transparency. Location transparency refers to fact that a service consumer does not need to know where the services he/she is using is located within the Department network because the request and delivery of services is managed and monitored through EXACT. Likewise, technology transparency refers to the fact that function of a service is separated from the technology platform that provides the service's functionality. As a result, service consumers and producers are technology agnostic, not caring what technology platform supports the service or which technology platform will use the service. The technology difference between consumer and producer technology platforms is mitigated by EXACT's managing and monitoring of the relationship between the two.

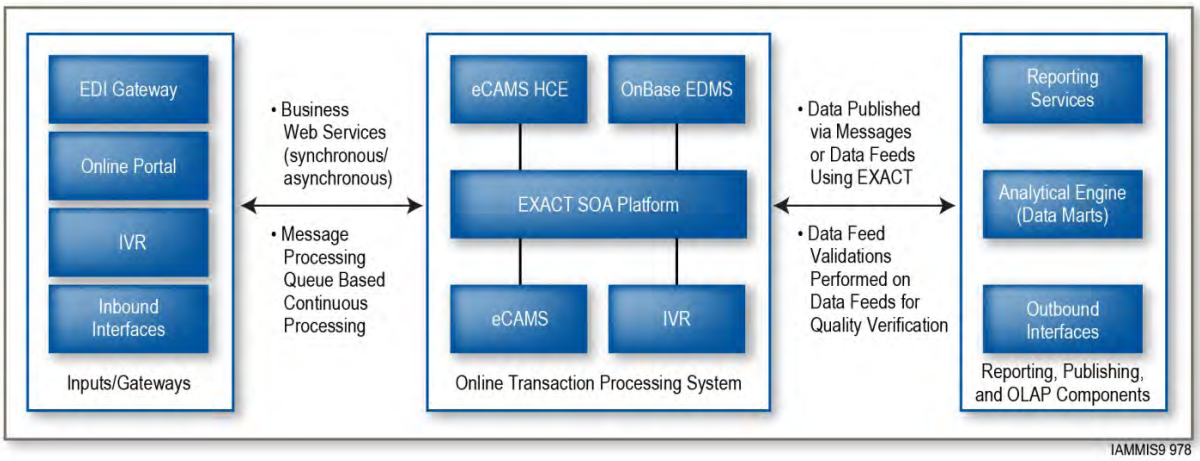

Figure 9-6. High Level Technical Service Overview of the Team Noridian Solution. Use of services based data integration allows for improved flexibility, scalability and technical agility.

The connectivity infrastructure for the new MMIS, EXACT, is a web-based, *n*-tier architecture framework that supports a modular, yet interoperable, environment in which the various assets, including the new MMIS modules, Department IT assets, and external systems share a loosely coupled relationship

managed by EXACT's integration services. The layers of EXACT's architecture represent distinct groupings of functionality, including presentation, business process logic, services, components, data access, and operational services. EXACT's integration services consists of EXACT's ESB, mediation and translation services, and the EXACT service repository. The components layer represent the COTS products and components that form EXACT's technology stack, which includes: business process execution language (BPEL) engine, rules, translation, extract transform load (ETL), reporting, security, scheduling, and integration engines.

EXACT is a brand independent product, meaning that it is not tightly bound to any one specific brand for any of its components. EXACT's modular architecture allows the removal and replacement of one component brand with another. EXACT's services layer represents pre-built services that leverage the functionality of various components and accelerate the development and deployment of new services. For example, in the new MMIS, EXACT's integration services, orchestration, rules, translation, and scheduling services are used to rapidly create and deploy integration interfaces and specific automated business processes for each applicable interface.

EXACT's integration services manage the connectivity and exchange of data between the new MMIS modules and heterogeneous system that are internal and external to the Department. The once silo-based structure of IT assets, which was dictated by the inability for systems to effectively exchange data, is replaced by a modular yet interoperable environment. This is accomplished through EXACT's integration services, comprised of EXACT's:

- **ESB.** EXACT's ESB includes a suite of software services that facilitates, manages, and monitors incoming and outgoing requests and responses for data or services, referred to as messages, between heterogeneous systems. Included in this suite is: EXACT's Message Broker that delivers large amounts of data efficiently and reliable; and EXACT's Services Framework that "service enables" existing systems to leverage new and legacy application in the new MMIS SOA infrastructure.
- **Mediation Services.** EXACT's Mediation services provide run-time support for securing, routing, monitoring and managing Web services between provider and consumer services. EXACT Mediation Services enforces the delivery terms specified by the Web services including the processing requirements and instructions for security, integration, operations and business.
- **Translation Services.** EXACT's translation services use the IBM WebSphere Translation Extender (WTX), which is a dedicated data translation engine for application integration. The translation services accept file documents or electronic messages from sending applications or systems as inputs, parses them using data dictionary like definitions, and transforms them into one or more output messages in the format required by the receiving application or system.
- **Service Registry.** The EXACT Service Registry supports the Universal Description, Discovery and Integration (UDDI) standard. Within EXACT, services and services interfaces are well defined by their associated metadata wrapper. This abstract of services and interfaces is published to the Service Registry and made discoverable by user of services (service consumers) across the enterprise. The Service Registry also maintains a history for each service and interface and stores and publishes data relating to services and interfaces.

In addition to its pre-built solution accelerators and integration services, EXACT also delivers additional benefits that can support the Department's effort to reduce costs and improve operations in areas not directly improved by the new MMIS. These benefits include:

- **Business Process Automation.** Using EXACT's Integration, orchestration, and rules services, the Department can automate manual processes by leverage internal and external data sources and application.
- **Fully Leverage Department IT Assets.** EXACT's enables the Department to use to previously inaccessible legacy and external data source and application.

- **Incremental Improvement.** EXACT's supports incremental improvements to integrated application and legacy systems. By integrating system with EXACT, applications and systems no longer need to maintain a direct relationship with each other. Instead, application and systems are loosely coupled with the relationship between systems and applications maintain and managed by EXACT. This approach eliminates application interdependence, which makes it difficult, if not cost prohibited, to improve a single application because the modification or replace of one application necessities the modification of all related application.
- **Services Reuse and Sharing.** Through EXACT, Services are discoverable and available, based on requirements, to service consumers across the enterprise. Reusing and sharing services creates economies of scale and eliminates the need to reinvent the wheel every time a common service is need by a consumer within the Department.

The EXACT SOA infrastructure framework delivers all of the function common to an ESB with the addition capabilities of supporting the Departments efforts to reduce cost and improve operational efficiency across the enterprise. In addition, EXACT is a fully vetted COTS product that is comprised of loosely coupled, independent components, thereby assuring reliability and flexibility. In addition to creating a modular yet interoperable environment and delivering state of the industry MMIS capabilities, the new MMIS provides the SOA infrastructure to support and facilitate the Departments participation in evolving MITA collaborative initiatives and state and federal exchanges.

There is a clear recognition of the continued existence of multiple systems and COTS products running different technologies in the new MMIS. The proposed solution aligns these technologies and products to deliver the business goals and objectives. eCAMS has already been successfully integrated with many of these COTS products in its previous implementations. The flexible and open design of other components like OnBase can be seamlessly integrated using EXACT, since most of these components support a Web services-based integration architecture.

The following is the list of key technical capabilities and services available with the proposed solution.

- **Flexible, Rules-based Infrastructure.** The system provides a health care-focused rules engine (RuleIT) which can be invoked from any business process to fire specific enterprise or policy rules. The system provides a user-friendly rules viewer and a rules composer to access or document business rules. The system supports version control within these rules to enable tracking of the policy history. The service also supports the ability to configure rules in the system with a future activation date and a phase out date (to allow for time-sensitive policy rules to expire).
- **Configurable Interface Mechanism.** EXACT provides a configurable interface services registry that allows registration, management, monitoring, and tracking of all the different data interfaces running during operations. Leveraging EXACT’s SOA, eCAMS exchanges information freely, while EXACT logs all the interfaces, maintains a history of interface modifications, monitors performance and errors, notifies business and technical owners, and escalates error handling if required. EXACT provides Team Noridian and the Department a single source to track and access current interfaces.
- **Intuitive Decision Matrices.** The system provides a series of decision matrices that can be configured online with a series of user interfaces. The decisions matrices allow for configuration a complex decision grid using multiple variables and value set. An example of decision matrix will be the allowable service decision where provider with specific taxonomy, for given place of service for a given age range and a geographical region can only perform certain procedures.
- **High Performance Transformation Services.** The EXACT transformation services provide transformation services using an extract, transform, and load utility from IBM. These are high-performance, high-throughput services, which can perform bulk loads to move huge amounts of data from one system to another system.

- **Configurable Business Process Wizards.** The system provides a business process wizard service that supports dynamic configuration of business processes using a series of steps from a universe of predefined steps. For example, the provider enrollment business process wizard service enables the configuration of different steps for different provider types without changing any code.
- **Workload Manager Services.** The system provides a workload queue management framework that manages the different workload across process queues. This allows the system to be agile in terms of managing the workload and prioritize tasks between different queues.
- **Event Driven Notification Framework.** The system provides an event-driven notification framework. The system has a notification service that generates system alerts and or email notifications based on system events. These system events are registered in the system and can be either time based (e.g., provider license expiration in 30 days) or data based (e.g., claims paid dollar amount exceeded threshold of $100 million in a single day).
- **Data Auditing and Tracking Service.** The system provides an auditing service that performs the task of managing all changes performed via user action and back-end services. This service ensures that there is complete tracking in the system for changes and action performed by a user.
- **Security Services.** The system provides a series of services such as authentication and authorization to enable control in terms of access into the system and sensitive health data. The security service also enables the ability for a seamless log-on across different components by passing the authentication credentials in a security object.

Proposed Solution Alignment with RFP Requirements

Team Noridian's proposed new MMIS components, outlined earlier in this section, provide a very robust, out-of-the-box functionality to meet the requirements, as outlined in the RFP. Figure 9-7 shows that 80 percent of the requirements are already included in the new MMIS solution or require only configuration changes. This not only reduces the risk of implementation for the Department, but also shows the completeness of the new MMIS in terms of its capabilities.

No.	Requirement Classification	% of Total Requirements
1	Proposed solution meets the requirements as stated	100.00%
2	Proposed solution has existing capability	80.37%
3	Proposed solution (eCAMS) or COTS require software modification is required to meet proposed solution	19.63%

Figure 9-7. Requirement Classification Table. Team Noridian's proposed system minimizes implementation risks since the majority of the requirements are included in the system or require only configuration changes.

Proposed Solution Features and Benefits

Team Noridian's proposed eCAMS solution has realized significant Medicaid operations benefits in the states of Washington and Michigan. Team Noridian is proud to present the features that eCAMS brings to Iowa Medicaid program listed in Figure 9-8.

Feature	Benefit
Product Centric Approach to eCAMS	Team Noridian has approached the implementation of the MMIS solution with a product-centric approach, instead of a typical project-centric approach of proposed solution. Team Noridian centrally maintains the core of the solution, allowing ongoing innovations in the solution base to be made available to all states in a more cost-effective manner. The product approach promotes natural incorporation of best business practices from different states as they are incorporated in the base solution.
Proactive Fraud and Abuse	The eCAMS system provides a powerful framework capable of enforcing billing patterns at the time of claims data capture to prevent fraud in the first place. The system leverages Team Noridian's RuleIT rules engine to configure billing patterns that are enforced by the eCAMS Health Care Engine (HCE). Team Noridian believes that the flexibility of the system to configure additional billing patterns provides a powerful framework to prevent fraud at the time of entry of information in the system.

Feature	Benefit
Comprehensive Program Administration and Management	The proposed solution provides a very powerful framework that allows the Department to manage, configure, track, and evaluate the different programs set up in the system. This framework not only manages the covered lives and associated benefits but provides an ongoing real-time fiscal view of the program. The monitoring framework allows thresholds to be set where if the budget set aside for a program is 80% used, the system sets alerts to the policy group. The program administration allows for powerful reporting by budget, by covered members and by region.
Benefit Plans	Team Noridian provides a framework to use benefit plans as the anchor to establish coverage, define out-of-pocket costs for the members, and to drive the payment processing. This innovative framework allows the Department to set up special waiver programs or new programs for a carved out population with minimal system changes. The system - ahead of its time in the Medicaid arena- allowed the set up of deductibles, co insurances, family out of pocket expenses as a part of the overall administration of benefits.
Claim Edits Knowledge Base	Not only has Team Noridian successfully implemented the rules engine at the heart of claims adjudication, but also has developed an asset in the form of a knowledge base that identifies all federal mandated edits and provides the best practices from different states. These best practices provide an opportunity for states to save money. The prebuilt federal mandated rule set ensures minimal risk to certification and enables faster turnaround time for system impacts and change. Through our experience in Washington and Michigan, we have developed a comprehensive set of claims processing rules we can use to model new rules for the IME. Using our existing knowledge base will reduce the effort of creating claim edit rules during implementation.
Claim Templates	Team Noridian implements a unique model of claim templates to enable the small providers to get more engaged in using the self-service model. The claim templates minimize the data entry for the providers by allowing them to store pre-filled claim forms in form of templates. The billing clerk is then required to only update a handful of fields such the new dates of services and submit the claim. Team Noridian believes that this innovative feature is very powerful in small provider communities and enables them to move from a paper-based billing to an electronic framework.
Provider Self-Correction Model	Team Noridian solution is modular to enable the providers to self-service their claims correction. This further allows the empowerment of the providers to control more of their revenue cycle (time from claim submission to actual payment). The providers are shown claims that are suspended for specific set of edits or policy rules which they can correct and resubmit, or upload additional information to support payment. The system reduces the cost to the provider community for resubmissions and adjustments.
Business Scorecard	Team Noridian has implemented a metrics-driven framework to ensure continuous improvement across the different business process areas. eCAMS HealthBeat provides a rules-based framework for monitoring trends and cause and effect modeling to enable continuous improvement in operational effectiveness.

Figure 9-8. Features and Benefits. Our key features of the eCAMS solutions bring benefits to the Department.

Seven Standards and Conditions

Team Noridian will design, develop, implement and operate the MMIS system to comply with the Seven Conditions and Standards, Medicaid IT Supplement (MITS-11-01-v1.0). The Seven Conditions and Standards guidance can be grouped under a) software engineering discipline and b) preferred operational processes and procedures for building a modern MMIS solution. Team Noridian's eCAMS solution is a mature certified system that provides compliance with the software engineering aspects of the conditions and standards guidance. Team Noridian's established process and procedures and the extensive experience that we have acquired with working with multiple successful MMIS implementations will aid IME in complying with the reminder of the conditions and standards guidance. Figure 9-9 shows our alignment with the Seven Conditions and Standards.

Enhancement Conditions and Standards		Team Noridian Solution Alignment
Modularity Standard	▪ Components are SOA based ▪ Use of Systems Development Lifecycle methodologies ▪ Identification and description of open interfaces ▪ Use of Business Rules Engine ▪ Submission of business rules to a HHS-designated repository	▪ EXACT SOA Framework ▪ eCAMS Health Care Engine ▪ Open source Tool Adoption (Magnolia, Subversion, Bugzilla etc) ▪ RuleIT Rules Engine ▪ Agile /Hybrid SDLC
MITA Condition	▪ MITA Self Assessments ▪ MITA Roadmaps ▪ Concept of Operations (COO) and Business Process Models (BPM)	▪ Work with IME to support MITA self Assessment and create a roadmap to plan improvement in MITA maturity ▪ Supports MITA level 3 in all business areas

Enhancement Conditions and Standards		Team Noridian Solution Alignment
Industry Standards Condition	▪ Identification of industry standards ▪ Incorporation of industry standards in requirements, development, and testing phases ▪ Customization ▪ Transition and retirement plans	▪ eCAMS is a fully certified industry standards compliant solution ▪ Agile /Hybrid SDLC
Leverage Condition	▪ Multi-state efforts ▪ Availability for reuse ▪ Identification of open source, cloud-based and commercial products	▪ EXACT exposes reusable service interfaces ▪ eCAMS , eMIPP
Business Results Condition	▪ Degree of automation ▪ Customer Service ▪ Performance standards and testing	▪ Integrated eCAMS provider portal ▪ eCAMS HealthBeat management dashboard
Reporting Condition	Reporting of data to support oversight, administration, evaluation, integrity, and transparency	▪ eCAMS Report Service ▪ eCAMS HealthBeat dashboard
Interoperability Condition	▪ Seamless coordination and integration with the Exchange ▪ Interaction with the Exchange ▪ Interaction with other entities	EXACT SOA framework

Figure 9-9. Team Noridian's solution alignment with Seven Standards and Conditions. Team Noridian's MMIS solution will be aligned with the CMS guidance specified in the Seven Standards and Conditions.

Modularity Standard

Components are SOA Based. eCAMS is a SOA-based system. It has a portfolio of business and technical services that enable our solution to support business processes more effectively. These services are accessible through multiple channels and are available across business process areas, based on requirements, via the EXACT Integration Services. Business services are more contained within a business process area or related process areas; technical services are common and shared across all or most business process areas. eCAMS aligned with MITA provides services that enable better and more efficient business processes. Through the EXACT framework, these services enable eCAMS to provide access to business process areas, to functions within the overall MMIS application, and to be interfaced via EXACT with external components to facilitate exchange of information from external agencies and entities as may be required.

Use of Systems Development Lifecycle Methodologies. Team Noridian's system design methodology is a subset of the overall SDLC methodology called iVision360. iVision360 is the methodology Team Noridian uses to develop and implement MMIS solutions — it maps every activity and artifact necessary to successfully traverse the life cycle from planning to CMS certification. iVision360 is a unique blend of waterfall methodology, iterative agile development, and rapid prototyping. We created and adapted this development methodology for application in the Design, Development, and Implementation (DDI) phase of eCAMS, with success in the states of Washington and Michigan. In iVision360, design, development, and test are conducted through a series of iterations culminating in a functioning release of software.

It offers the following benefits:

- Faster time-to-market by delivering working software for review in weeks rather than months
- Decreased risk by better aligning users and developers
- Get users involved early in understanding business rules and validating design assumptions
- Identifies more defects earlier in the process allowing for a smoother implementation in production
- Allows for concurrent development of different system components and integrated testing at a much earlier point in the SDLC process

Identification and Description of Open Interfaces. Team Noridian will document all Service interfaces in an Interface Control Document (ICD). This ICD will contain details of hardware, operating systems, software, memory, service packs, product keys, and versions. The ICD will identify all interfaces in the system and how those interfaces will be maintained.

Use of Business Rules Engine. Team Noridian's solution for IME includes RuleIT, a rules engine based on industry standards and built specifically to address the Medicaid program. RuleIT, in its fourth version, has been refined and performance-engineered in real-life production to meet the high demand of a Medicaid enterprise. The use of a rules engine is becoming a standard requirement for new MMIS implementations; however most adoptions of rules engines are not robust. eCAMS has adopted the rules engine from its inception and has matured its implementation across three successful deployments. eCAMS has now made the utilization of RuleIT universal across core business processes and has fine-tuned its implementation approach to minimize implementation risk and maximize compliance with federal and state guidelines. An additional benefit the new MMIS provides the Department is, through EXACT's Integration Services, the RuleIT engine can be shared by other services or made available as a service across the enterprise, based on requirements.

Submission of Business Rules to a HHS-Designated Repository. Team Noridian will use the RuleIT engine reporting features to submit all business rules in human readable form to any HHS repository. We will follow the guidelines for submission of the rules and comply with CMS requests for additional details and specifications. We will work with IME to identify the specific rules that need to be protected from distribution (e.g. those that protect against fraud) and communicate that to CMS.

MITA Condition

Team Noridian has monitored the evolution of MITA from version 1.0 to its current version 2.0 and continue to monitoring the evolution of the next version MITA 3.0 due in 2011. eCAMS core principles of modularity, open standards, and especially its business-driven architecture enables its alignment with the MITA direction. eCAMS is evolving to support adoption of the harmonized standards around health information exchange (HIE) as the Medicaid program becomes a key component of the health care framework. As an example of Team Noridian's real world commitment to MITA alignment, the new MMIS, through EXACT's orchestration services can ingest the new version 3.0 artifacts, thereby accelerating the Departments compliance with the standards.

MITA Self Assessments. Team Noridian will assist IME in performing a self assessment using the final version MITA 3.0 within 12 months of the implementation.

MITA Roadmaps. Team Noridian will work with IME to develop a MITA roadmap. The roadmap will demonstrate how we plan to improve in MITA maturity over the 5-year period and our anticipated timing for full MITA maturity. The roadmap will contain a sequencing plan with considerations of cost, benefit, schedule, and risk.

Concept of Operations (COO) and Business Process Models (BPM). Team Noridian will work with IME to streamline and standardize these operational approaches and business work flows to minimize customization demands on technology solutions and optimize business outcomes. The goals to develop a concept of operations and business work flows for the different business function of IME will be readily supported by the eCAMS platform. This will aid IME in advancing the alignment of the MMIS capability maturity with the MITA Maturity Model (MMM). The eCAMS core architecture leverages the EXACT SOA framework to be able to effectively integrate into disparate systems. The architecture provides an integration backbone that connects core applications and services without directly accessing the underlying systems. The eCAMS architecture is based on leveraging a series of COTS products that use a services-based integration platform. eCAMS relies on open standards and standard application program interfaces (API) for plug-ability of third-party communities such as the Java Business Integration (JBI) standard. The eCAMS architecture leverages the open source–based EXACT Integration Servicees as the core orchestrator tool of business processes across the different applications that support Medicaid operations. The EXACT SOA framework will be the basis of the infrastructure and will eliminate or reduce point-to-point communication between different system components.

Industry Standards Condition

eCAMS system is compliant with: 1) the Health Insurance Portability and Accountability Act (HIPAA) of 1996, Public Law 104-19, Title II, Sections 261-264; 2) the HIPAA Administrative and Simplification Provisions for Privacy (2002) and Security (2003), Code of Federal Regulations (CFR) 45, parts 160, 162, and 164); 3) the Health Information Technology for Economic and Clinical Health (HITECH) Act of 2009 (enacted as part of the American Recovery and Reinvestment Act of 2009); 4) standards adopted by the Secretary under Section 1104 of the Patient Protection and Affordable Care Act(PPACA); and 5) standards and protocols adopted by the Secretary under section 1561 of the Affordable Care Act. Team Noridian's processes ensure all systems and services related to this procurement, including transactions, common identifiers, and privacy and security standards continue to remain in compliance as stipulated in legislation or other regulatory requirements.

Identification of Industry Standards. Team Noridian with work with IME to identify all industry standards relevant to the scope and purpose of their project and produce development and testing plans to ensure full compliance. We will have risk and mitigation strategies in place to address potential failures to comply with the standards.

Incorporation of Industry Standards in Requirements, Development, and Testing Phases. eCAMS provide Web-based user interface that requires no desktop software except the standard version web browser and complies with recognized usability standards such as the American Disabilities Act (ADA), Older Americans Act and the Rehabilitation Act Section 508 Subpart B Section 1194.21. It provides certain usability functions, such as the ability to alter font size and colors to improve readability, which individuals who require assistance can leverage. The eCAMS screens have been validated using compliance testing tools.

Leverage Condition

Typically, in the state infrastructure, the MMIS solution is comparatively a huge investment and provides a lot of infrastructure and tools and enterprise services. The resources and software investments made for the MMIS solution can be leveraged by the IME divisions and the other state agencies. eCAMS is a SOA-based system. Facilitated by EXACT's integration services, eCAMS SOA capabilities are bi-directional, it is equally easy to expose the services built in eCAMS to external system as is to consume services from external agencies. eCAMS portfolio of business and technical services enable our solution to support business processes more effectively. Through the EXACT SOA framework, eCAMS services enable eCAMS to provide access to business process areas, to functions within the overall MMIS application, and to be interfaced via EXACT Integration Services with external components to facilitate exchange of information from external agencies and entities as may be required. The new MMIS will provide IME with several options to leverage existing investments in legacy applications:

- Use outbound interfaces to provider data to external applications that need MMIS data to operate. For example: Operational Data Store (DSS), data warehouse, and External Agencies.
- Use inbound interface options to accept data from external applications that hold key data for MMIS needs, such as external eligibility systems and data from other State agency applications.
- Use EXACT's Integration Services and orchestration services to provide services and consume services from legacy applications.
- Use EXACT's orchestration and rules services to create business processes with external systems that support eCAMS interoperability options.

Multi-State Efforts and Availability for Reuse. eCAMS solution is in use in multiple states. The features that are available out-of-the box in the base product have been built and enhanced with each implementation. eCAMS solution is the very example of the solutions developed with contribution from other states. Team Noridian will facilitate sharing of the project artifacts such as SDLC deliverables,

business requirements, business process flows, logical and physical data models to a national repository as defined by CMS.

Identification of Open Source, Cloud-Based and Commercial Product. Team Noridian has successfully developed components of its solution to be services enabled and deployed in a cloud based environment. We continue to integrate several open-source COTS products into the new MMIS solution.

Customization. Team Noridian follows a unique blend of waterfall methodology, iterative agile development, and rapid prototyping for the DDI phase. The approach facilitates interaction with the customer to understand the new MMIS and identify the degree and amount of customization needed to fit the IME requirements.

Transition and Retirement Plan. Team Noridian will work with IME to identify existing duplicative system services within the state and seek to eliminate duplicated system services with the goal of achieving lower cost of ownership over the long term.

Business Rules Condition

The Team Noridian solution is a combination of our successful management approach, a highly trained and effective operations team, and a robust automated claims processing engine which has the flexibility to configure adjudication rules and work management rules for the vast majority of changes, without the labor intensive and costly programming efforts normally associated with legacy-type systems. The core of the processing solution is the RuleIT rules engine that acts as both a Medicaid adjudication rules repository and an adjudication rules engine. As a centralized adjudication rules repository, RuleIT houses the adjudication rules tied to fee for service (FFS) claims, encounters, and crossover claims. The eCAMS system's unique "continuous flow processing" model facilitates claims to be processed constantly, both in peak and non-peak hours, and is composed of single-cycle processing encompassing current and history edits. This is in sharp contrast to the legacy system, which contains a daily cycle and a weekly cycle to perform history edits and audits.

Degree of Automation. Claims adjudication is a core part of any Medicaid solution, and eCAMS provides a comprehensive claims administration framework with maximized automation. Providers and enrollees are impacted positively by our ability to receive a claim, process the claim correctly, and adjudicate the claim timely and accurately. Both the enrollee and the provider expect accurate and timely claim resolution, and Team Noridian will meet these expectations through its innovative and disciplined approaches. Our solution offers the ability to automate the industry's complex payment and editing policies, which are generally handled using manual intervention. This automation saves Medicaid dollars through accurate claims payments and reduced time spent by staff resolving such claims manually.

Customer Service. eCAMS provides a 21st century customer and partner experience for all individual. Different User perspectives show solution in relation to business capabilities that are available to support a business user. These viewpoints show the various communication channels to be supported by the architecture and the underlying high-level business process area services that are invoked to serve the user. There are three key stakeholders for the system to consider:

- State executive and management staff
- Provider
- Recipient

eCAMS offers all stakeholders various channels of communication and access to key business process area services that facilitate consistency and quality.

Performance Standards and Testing. Team Noridian understands that the success of the MMIS depends on regular monitoring of the contractor to determine if the established performance standards are being met. Performance standards will be documented, reviewed, approved, and monitored between Team

Noridian and the IME through service level agreements (SLAs) and key performance indicators (KPI). The New MMIS will provide the necessary data, which will be used to verify that the SLAs are being met. The MMIS will support IME by providing operational and performance data plus reports for providing visibility and insight into the claims processing business area performance characteristics.

Team Noridian uses a performance dashboard, eCAMS HealthBeat, to monitor performance. The performance dashboard monitors and inspects appropriate measures, such as inventory levels, that position Team Noridian to meet the performance expectations. This inspection and identification of high inventory levels is an important step to meeting the overall performance requirements. Team Noridian can quickly address and reduce high inventory levels that, if not reduced, jeopardize timely performance.

Reporting of Data to Support Oversight, Administration, Evaluation, Integrity, and Transparency. eCAMS is a proven and operational system that is certified in the State of Washington and Michigan using the new CMS certification toolkit. It provides extensive reporting capabilities that are thoroughly used in the MMIS operations at the multiple installations. eCAMS produces electronic reports that provide accurate data necessary for oversight, evaluation, integrity and transparency of MMIS operations. The reports generated are stored in a document management repository and made available for the operational usages. These reports will be delivered to external subscribers such as designated federal repositories or data hub through the eCAMS interfaces framework.

HIE and Other External System Interchange

Team Noridian's proposed solution includes implementing an integration hub infrastructure that is decoupled from the replacement system and the legacy system, as shown in Figure 9-10. It is built on the proven eCAMS solution architecture and leverages the EXACT infrastructure framework. The solution is aligned with current and future industry interoperability standards through Team Noridian's participation in MITA and HL7 standards as well as our continued participation in other key interoperability standards and projects.

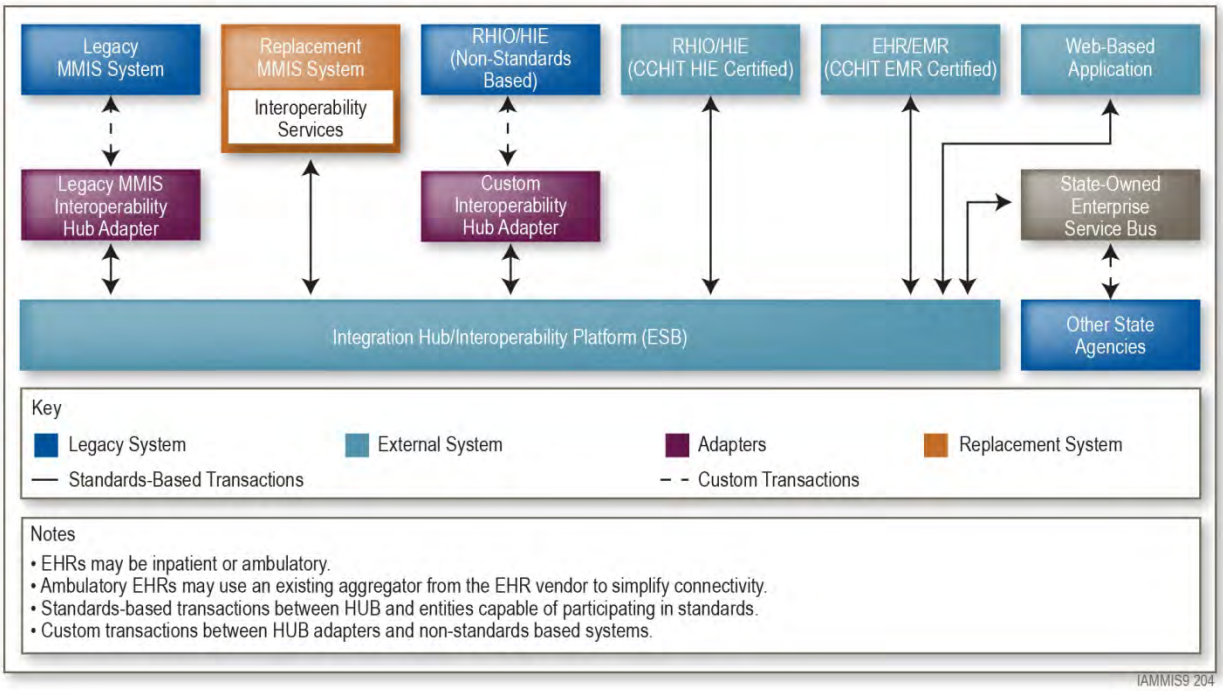

Figure 9-10. Conceptual Design of Integration Hub for HIE. Independent interoperability through standards-based interoperability profiles preserves investment in Department IT assets.

Our solution design is built on a hub model that provides the business partners and external entities exchanging health information data, a single reference point. The implementation allows the infrastructure to remain independent of the legacy or the replacement system, and can further easily be integrated with other SOA infrastructures that may exist in other state departments. The EXACT SOA framework also provides capabilities in the form of deployable adapters that ensure interoperability. For those entities not capable of directly using the standard interoperability transactions, an adapter will have a set of custom transactions between the adapter and the participating system, where it will map the data to the standard transaction that goes to the hub. This isolates the custom work to connect to the hub to a small adapter, and allows the hub to operate independent of any required customization for non-standard participating systems. The EXACT framework provides a standards-based, open, extensible platform for developing software infrastructures using a SOA approach. This unified and comprehensive suite can help create composite applications from existing investments, as well as deliver new business services in a flexible SOA environment with no vendor lock-in, through development in the EXACT community.

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9.1 MMIS System Requirements

RFP Section 7.1.2

Our responses to the MMIS system requirements listed below are submitted in sections 9.1.1 through 9.1.6 as shown below.

- 9.1.1 Member Management Business Area - includes:
  - 9.1.1.1 Member Management (BE)
- 9.1.2 Provider Management Business Area - includes:
  - 9.1.2.1 Provider Management (PR)
- 9.1.3 Operations Management Business Area - includes:
  - 9.1.3.1 Claims Receipt (CR)
  - 9.1.3.2 Claims Adjudication (CA)
  - 9.1.3.3 Prior Authorization (CA)
  - 9.1.3.4 Reference Data Management (RF)
  - 9.1.3.5 Third-Party liability Management (TP)
  - 9.1.3.6 Health Insurance Premium Payment (HP)
- 9.1.4 Program Management Business Area - includes:
  - 9.1.4.1 Program Management Reporting (PM)
  - 9.1.4.2 Federal Reporting (FR)
  - 9.1.4.3 Financial Management (FI)
- 9.1.5 Program Integrity Business Area - includes:
  - 9.1.5.1 Program Integrity Management (PI)
- 9.1.6 Care Management Business Area - includes:
  - 9.1.6.1 Managed Care Enrollment (MG)
  - 9.1.6.2 Managed Care Organization (MC)
  - 9.1.6.3 Primary Care Case Manager and Medical Home and Managed Care Gatekeeper (ME)
  - 9.1.6.4 Waiver, Facility and Enhanced State Plan Services Management (WA)
  - 9.1.6.5 Optional Waiver, Facility and Enhanced State Plan Services Management for the ISIS Replacement System (OWA.SS)
  - 9.1.6.6 Immunization Registry Interface (RI)

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9.1.1 Member Management Business Area – MMIS

This business area includes the system requirements for member management including medically needy spend down requirements.

9.1.1.1 Member Management

9.1.1.1.1 Member Management (BE) System Requirements Table

BE	Member Management Requirements - MMIS	A	B	C	D	E
BE1.01	Support a member data set that contains all required data elements.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE1.01
BE1.01.02	Maintain member demographic data, including, but not limited to the following: a. Mailing address. b. Residential address. c. County of residence. d. Multiple instances of county of legal settlement. e. Guardian name and address. f. Custodian name and address. g. Representative payee name and address. h. Zip plus four on all addresses. i. Date of birth. j. Date of death. k. Pregnancy date of delivery. l. Race(s). m. Gender. n. Marital status. o. Ethnicity or tribal designation. p. Emancipated youth indicator. q. Deprivation code. r. Primary language spoken. s. Primary language for correspondence. t. Benefit address. u. Custody status. v. Telephone numbers such as home, cell, work, guardian and individual ownership of phone) – must store multiple numbers. w. Fax number. x. Email address example, attach e-mail address to member. y. Text number or pager number. z. Head or member of household. aa. Foster care indicator. bb. Foster care for Early and Periodic Screening Diagnosis and Treatment (EPSDT) mailing indicator. cc. Immunization Registry data received and displayed in the Medicaid Management Information System (MMIS). dd. Social Security Number. ee. State ID from the eligibility system. ff. Multiple indicators of disability, chronic or other condition as identified by Iowa Medicaid Enterprise (IME). gg. Member name, legal and preferred. hh. Eligibility span. ii. Case Number. jj. Others as determined by IME.	Yes	No	SM	80	Section 9.1.1.1.2, Requirement # BE1.01.02
BE1.02	Process all transactions that update the member data set on a timely basis as determined by IME, edit fields for reasonableness and control and account for transactions with errors.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE1.02
BE1.02.01	Provide controls to assure that records received from the eligibility system were properly applied.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE1.02.01
BE1.02.02	Provide a weekly listing, in electronic form, "Notices of Decision (NOD)" to members for non-payable Medicaid service claims, combined with the ambulance notice of decision listing, that contains the following information in alphabetical order by member last name:	Yes	No	SM	100	Section 9.1.1.1.2, Requirement # BE1.02.02

BE	Member Management Requirements - MMIS	A	B	C	D	E
	a. Member name and member number. b. Provider name and provider number. c. TCN and denial notice number. d. Date of service and date of NOD. e. Exception code. f. Written reason for denial. g. Same format as current ambulance NOD.					
BE1.02.03	Provide the capability to generate NODs for denials of selected services such as therapy services, rehabilitation therapy service, claims for occupational therapy, physical therapy and speech therapy.	Yes	No	SM	80	Section 9.1.1.1.2, Requirement # BE1.02.03
BE1.03	Support management of member information, including archives, reports, transaction and transaction error tracking.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE1.03
BE1.04	Generate notification when member information is received from external sources to update member records.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE1.04
BE1.05	Receive and process member eligibility information from external sources such as, IME"s Integrated Eligibility System or Social Security Administration (SSA"s) state data exchange, for a given period of time; produce total and detail information that supports error correction and synchronization. Apply reconciliation changes to master file. Produce a file of changed records to be sent to originating source.	Yes	No	SM	100	Section 9.1.1.1.2, Requirement # BE1.05
BE1.06	Archive member data sets and update transactions according to IME provided parameters.	Yes	No	SM	120	Section 9.1.1.1.2, Requirement # BE1.06
BE1.07	Provide member data to support case identification, tracking and reporting for the EPSDT services covered under Medicaid.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE1.07
BE1.07.01	Provide the capability to meet the business requirements of EPSDT.	Yes	No	SM	150	Section 9.1.1.1.2, Requirement # BE1.07.01
BE1.07.02	Provide the capability to track screenings, referrals and treatments for EPSDT members.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE1.07.02
BE1.07.03	Identify all members eligible for EPSDT services within the benefit plan administration rules engine.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE1.07.03
BE1.07.04	Provide the capability for recording all case activity including, but not limited to: a. Logs of notices. b. Recommended dates of service from the periodicity table. c. Actual dates of services. d. IME and contractor contacts. e. Case notes.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE1.07.04
BE1.07.05	Use the workflow management process to provide and log notices, track services provided and enter case notes for each eligible member in a program (such as EPSDT) and at a minimum, include processes listed below: a. Automatically generate notification letters or electronic communications, according to specifications set by IME. Identify the family head of household or foster care worker and generate screenings letters and or electronic communications to this individual, even if the child resides at a different address. b. Retrieve data from the MMIS claims and encounter data (if applicable) to compare to services recommended from the periodicity table. c. Provide for the inclusion of claims attachments. d. Automatically compare and report claims to the periodicity table, to determine if the member received the health checkup examination and related services at the recommended intervals.	Yes	No	SM	80	Section 9.1.1.1.2, Requirement # BE1.07.05

BE	Member Management Requirements - MMIS	A	B	C	D	E
BE1.08	Provide an indicator to suppress generation of documents containing member identification for confidential services or other reasons.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE1.08
BE1.09	Maintain indicators such as clinical or utilization and special needs status for such programs as lock-in, disease management, outcomes and high-dollar case management files.	Yes	No	SM	50	Section 9.1.1.1.2, Requirement # BE1.09
BE1.09.01	Provide the capability to maintain date-specific data necessary to support long term care claims processing, such as level of care (LOC), patient financial responsibility, admit and discharge dates, home-leave days and hospital-leave days.	Yes	No	SM	80	Section 9.1.1.1.2, Requirement # BE1.09.01
BE1.09.02	Support the processing of nursing facility, Intermediate Care Facility for the Mentally Retarded (ICF/MR), Home and Community Based Waiver and other long-term care (LTC) claims through the maintenance of member specific LTC data.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE1.09.02
BE1.09.03	Support the processing of nursing facility, ICF/MR, Home and Community Based Waiver and other long term care claims through the maintenance of provider specific certification and rate data.	Yes	No	SM	150	Section 9.1.1.1.2, Requirement # BE1.09.03
BE1.10	Maintain record and audit trail of a members requests for copies of personal records (including time and date, source, type and status of request).	Yes	No	SM	50	Section 9.1.1.1.2, Requirement # BE1.10
BE1.11	Maintain record and audit trail of errors during update processes, accounting for originating source and user.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE1.11
BE1.11.01	Provide the capability to produce daily audit trail reports and allow inquiries showing all member data updates applied to the member management module.	Yes	No	SM	100	Section 9.1.1.1.2, Requirement # BE1.11.01
BE1.11.02	Provide the capability to maintain an audit trail to document date, time and user who accessed a member record through the real-time interface.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE1.11.02
BE1.12	Allow authorized users to update member records online.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE1.12
BE1.12.01	Provide the capability for authorized users to have online inquiry into the member module with access, at minimum, by case number, member state identification number (SID), social security number (SSN) and member name or partial name.	Yes	No	SM	80	Section 9.1.1.1.2, Requirement # BE1.12.01
BE1.13	Support and track the identification of duplicate member records based on state-defined criteria.	Yes	No	SM	100	Section 9.1.1.1.2, Requirement # BE1.13
BE1.SS.01	Provide the capability to generate file of new and changed eligible members to the contractor responsible for generating eligibility cards as directed by IME including production on demand.	Yes	No	SM	50	Section 9.1.1.1.2, Requirement # BE1.SS.01
BE1.SS.02	Provide the capability to generate an alert when a member gives birth or when a pregnancy is terminated.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE1.SS.02
BE1.SS.03	Eligibility segments must be date driven and provide accurate eligibility information at any point in history.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE1.SS.03
BE1.SS.04	Provide an online change-correction process, which allows the database record to be modified according to users security access levels.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE1.SS.04
BE1.SS.05	Provide links between all modules, such that the user can easily navigate with one “click” according to users security access levels.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE1.SS.05
BE1.SS.07	Provide the capability to maintain current and historical information, with inquiry and update capability, for authorized IME users, on Medicare Part A, B, C, D coverage, including but not limited to:	Yes	Yes			Section 9.1.1.1.2, Requirement # BE1.SS.07

BE	Member Management Requirements - MMIS	A	B	C	D	E
	a. Effective dates. b. Termination dates. c. Medicare identification number. d. Medicare advantage plan information. e. Part D coverage. f. Other health plan information. g. Medicare buy-in information. h. Part C coverage. i. Other information as defined by IME.					
BE1.SS.08	Provide a monthly extract of members that are dually eligible for Medicare and Medicaid, to the Medicare Part A, Part B and Part D carriers, or coordination of benefits carrier and CMS.	Yes	No	SM	75	Section 9.1.1.1.2, Requirement # BE1.SS.08
BE1.SS.09	Provide the capability to periodically archive member records using criteria approved by IME.	Yes	No	SM	120	Section 9.1.1.1.2, Requirement # BE1.SS.09
BE1.SS.10	Provide the capability to void and retain member information as determined by IME.	Yes	No	SM	100	Section 9.1.1.1.2, Requirement # BE1.SS.10
BE1.SS.11	Provide the capability to perform reconciliation of the member module with 100% accuracy, approved by IME to all eligibility files in the eligibility system on a schedule to be determined by IME.	Yes	No	SM	140	Section 9.1.1.1.2, Requirement # BE1.SS.11
BE1.SS.12	Provide the capability to generate Medicare eligibility files for the Medicare claims processor to use in processing crossover claims.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE1.SS.12
BE1.SS.13	Provide address type and effective dates for each address maintained in the member management module. Provide the capability to select the type of address when mailings are prepared for members, example Third-Party Liability (TPL), Explanation of Medical Benefits (EOMBs), EPSDT letters and prior authorization determinations.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE1.SS.13
BE1.SS.14	Provide a robust search capability in the member database using minimal steps and keystrokes to search for all available member data elements.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE1.SS.14
BE1.SS.15	Provide the capability to view a single eligibility episode that is comprised of multiple eligibility segments for example see “the beginning and end date” for all contiguous eligibility segments.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE1.SS.15
BE1.SS.16	Provide the capability to accept and send data using various media options such as, online, Internet Direct Data Entry (DDE), Electronic Data Interchange (EDI) and reports to other state agencies and other external sources, in the format required by IME.	Yes	No	SM	200	Section 9.1.1.1.2, Requirement # BE1.SS.16
BE1.SS.17	Provide the capability to provide authorized staff with real-time access to all modules of the MMIS, for inquiries during normal business hours.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE1.SS.17
BE1.SS.18	Provide the capability to identify the name(s) of the provider(s) to which the member is locked-in.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE1.SS.18
BE2.01	Provide data storage and retrieval for TPL information; support TPL processing and update of the information.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE2.01
BE2.01.01	Support the assignment of members to benefit plans based on rules in the rules engine and provide the capability to set the effective date of enrollment in a Benefit Plan on the date of enrollment, a default date or any state defined date.	Yes	No	SM	150	Section 9.1.1.1.2, Requirement # BE2.01.01
BE2.01.02	Provide the capability to determine if a member is enrolled in multiple benefit plans for example HCBS, Medically Needy, PG (Pregnancy), ICF-MR, QMB and SLMB. Provide the capability to distinguish which benefit plan will fund the service based on the hierarchy as established by IME.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE2.01.02

BE	Member Management Requirements - MMIS	A	B	C	D	E
BE2.01.03	Support a universal identifier for members across all benefit plans and cross-reference that identifier with all prior established benefit plan identifiers.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE2.01.03
BE2.01.04	Maintain the benefit package associated with each benefit plan, including the rules that apply to provider enrollment, claims processing, reporting and any other processing rules.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE2.01.04
BE2.01.05	Provide the capability to maintain insurance coverage data in the member management module including, but not limited to: a. Carrier. b. Policy number. c. Group number. d. Pharmacy Benefit Manager (PBM) ID and member identification number. e. Sponsor, subscriber or policy holder name and identification number(s). f. Type(s) of coverage. g. Dates of coverage. h. Date the coverage was added to the database. i. Date the coverage was updated. j. Court order including date ranges and responsible payer. k. Part D enrollment indicator - The record should indicate the member is enrolled in Medicare Part D and identify the plan the member is enrolled. l. Allow for multiple insurance policies.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE2.01.05
BE2.02	Supports the assignment of members to Medicaid benefits and benefit packages based on federal and or IME-specific eligibility criteria.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE2.02
BE2.02.01	Provide the capability to maintain a historical record of benefit assignment(s) for a member, including identifying dual-eligibility spans.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE2.02.01
BE2.02.02	Provide the capability to create new benefit plans by configuring through the rules engine using a defined process for testing and promoting changes.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE2.02.02
BE2.02.03	Provide the capability to create new benefit plans by a business analyst without involvement of programmers.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE2.02.03
BE2.02.04	Provide the capability to maintain a historical record of benefit assignment(s) for a member, including identifying dual-eligibility spans.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE2.02.04
BE2.03	Apply appropriate benefit limitations for members based on federal and or IME-specific criteria.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE2.03
BE2.04	Maintain record of member benefit limitation information.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE2.04
BE2.05	Calculate and apply member cost-sharing, including premiums and co-pays, for particular benefits based on federal and or IME-specific criteria.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE2.05
BE2.06	Maintain record of member cost-sharing and provide the capability to retain "to date" accumulations for cost sharing if a member moves between benefit plans.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE2.06
BE2.07	Maintain record audit trail of any notice of benefit(s) sent to members including time and date, user source and reason for notice.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE2.07
BE2.SS.01	Provide the capability of real time updates to the member module as directed by IME.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE2.SS.01
BE2.SS.02	Provide the capability to perform mass re-assignment of members prior to the end of the month or on an as needed basis.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE2.SS.02

BE	Member Management Requirements - MMIS	A	B	C	D	E
BE2.SS.03	Provide the capability to maintain a real time interface with the POS to verify member eligibility as directed by IME.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE2.SS.03
BE2.SS.04	Provide the capability to identify and report data exchange transactions that fail either fatal and or non-fatal update edits back to the originating module and user area.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE2.SS.04
BE2.SS.09	Provide the capability to lock-in a member to a certain physician, hospital, pharmacy or all.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE2.SS.09
BE2.SS.08	Provide the capability to report on the number of members in lock-in status, the reason for the lock-in, the number of unauthorized providers billing for services during lock-in time segments.	Yes	No	SM	60	Section 9.1.1.1.2, Requirement # BE2.SS.08
BE3.01	Provide eligibility status for date(s) queried in response to an eligibility inquiry made through the MMIS. Track and monitor responses to queries.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE3.01
BE3.02	Provide notification of third-party payers who must be billed prior to Medicaid in response to an eligibility inquiry made through the MMIS.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE3.02
BE3.03	Provide notice of participation in a managed care program in response to an eligibility inquiry made through the MMIS.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE3.03
BE3.04	Provide notification of program and service restrictions, such as lock-in or lock-out, in response to an eligibility inquiry made through the MMIS.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE3.04
BE3.05	Maintain record and audit trail of responses to eligibility inquiries.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE3.05
BE4.01	Support system transmission and receipt of all current version X12N eligibility verification transactions. System is required to support future standards through the life of the contract at no charge to the State of Iowa.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE4.01
BE4.02	Support production of X12N 270 transactions to query other payer eligibility files and ability to process responses.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE4.02
BE4.SS.01	Provide the capability to produce Health Insurance Portability and Accountability Act (HIPAA) certificates of creditable coverage on a scheduled and ad-hoc basis.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE4.SS.01
BE4.SS.02	Provide the capability to produce HIPAA privacy notices on a scheduled and ad hoc basis.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE4.SS.02
BE4.SS.03	Track disclosure of protected health Information (PHI) and have the capability to indicate persons authorized to discuss PHI for a member.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE4.SS.03
BE5.01	Identify and track potential Medicare buy-in members according to IME and CMS-defined criteria.	Yes	No	SM	80	Section 9.1.1.1.2, Requirement # BE5.01
BE5.02	Transmit IME-identified buy-in member information for matching against CMS-specified federal Medicare member database(s).	Yes	No	SM	120	Section 9.1.1.1.2, Requirement # BE5.02
BE5.03	Accept buy-in member response information from CMS-specified federal Medicare member database(s).	Yes	Yes			Section 9.1.1.1.2, Requirement # BE5.03
BE5.04	Process change transactions to update buy-in member information. Identify and track errors or discrepancies between IME and federal buy-in member information.	Yes	No	SM	80	Section 9.1.1.1.2, Requirement # BE5.04
BE5.05	Provide buy-in member information for program or management use including:	Yes	Yes			Section 9.1.1.1.2, Requirement #

BE	Member Management Requirements - MMIS	A	B	C	D	E
	a. Transactions processed. b. Errors identified. c. Error correction status. d. Medicare premiums to be paid by member.					BE5.05
BE5.06	Track buy-in exceptions for those members who are identified as eligible, but whose premiums have not been paid.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE5.06
BE5.SS.01	Provide the capability to send an alert of all buy-in transactions that may affect eligibility status or cost shares for buy-in members.	Yes	No	SM	60	Section 9.1.1.1.2, Requirement # BE5.SS.01
BE5.SS.02	Provide the capability to generate buy-in premiums and provide the information required to support IME payment of premiums.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE5.SS.02
BE5.SS.03	Provide the capability to send a file to CMS of all buy-in deletions due to Medicaid and or Medicare eligibility termination or death and changes.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE5.SS.03
BE5.SS.04	Provide an alert and a weekly report of when Centers for Medicare and Medicaid Services (CMS) notifies the IME that another state has bought into Medicare for a member.	Yes	No	SM	80	Section 9.1.1.1.2, Requirement # BE5.SS.04
BE5.07	Support automated data exchange process or processes, as specified by CMS, in order to identify and track Medicare Part D dual-eligible and Medicare Low-Income Subsidy (LIS) eligible members for the purposes of cost-avoidance on prescription drug claims and calculating spenddown payments.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE5.07
BE5.07.01	Provide the capability to maintain an interface with CMS to assure the timely accretion of Medicare eligible members for Part A and Part B benefit buy-in.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE5.07.01
BE.SS.01	Maintain historical date-specific spenddown information.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE.SS.01
BE.SS.02	Allow for providers to submit claims electronically for spenddown application for the member and family of the members.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE.SS.02
BE.SS.03	Allow for providers to submit inquiries concerning spenddown requirements for a member.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE.SS.03
BE.SS.04	Allow members to view spenddown information on the web portal including claims that were submitted and used toward spenddown.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE.SS.04
BE.SS.05	Generate notice to provider and member of claims that were applied to spenddown and amount of unmet spenddown.	Yes	No	SM	120	Section 9.1.1.1.2, Requirement # BE.SS.05
BE.SS.06	Apply the amount of claims that are denied for unmet spenddown to the spenddown balance.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE.SS.06
BE.SS.07	Provide the capability to prevent duplicate use of claims for spenddown.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE.SS.07
BE.SS.08	Provide capability to manually deduct claims originally applied to unmet spenddown as directed by IME.	Yes	No	SM	150	Section 9.1.1.1.2, Requirement # BE.SS.08
BE.SS.9	Support edits which prevent payment of claims that were applied to spenddown in whole or part.	Yes	No	SM	100	Section 9.1.1.1.2, Requirement # BE.SS.9
BE.SS.10	Return spenddown met indicator (fund code) to eligibility system once the spenddown amount is met.	Yes	No	SM	80	Section 9.1.1.1.2, Requirement # BE.SS.10

BE	Member Management Requirements - MMIS	A	B	C	D	E
BE.SS.11	Ensure claims are applied to spenddown in the Medically Needy file on a first in, first used basis.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE.SS.11
BE.SS.12	Allow claims for household members and or relatives of the member, to be applied against the spenddown amount per Iowa rules.	Yes	No	SM	80	Section 9.1.1.1.2, Requirement # BE.SS.12
BE.SS.13	Provide online screens showing the Medically Needy spenddown amount, the amount of claims that have accumulated towards the spenddown amount, information for each certification period, the date spenddown is met and information about claims used to meet spenddown.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE.SS.13
BE.SS.14	Provide a summary screen of the member s certification history.	Yes	No	SM	80	Section 9.1.1.1.2, Requirement # BE.SS.14
BE.SS.15	Apply the unpaid portion of Medicare Crossover Claims to the Medically Needy spenddown amount if the amount is greater than zero.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE.SS.15
BE.SS.16	Transmit the following information to the IME each time MMIS loads file transfers from the external systems: a. Confirmation of the date each file is received and loaded. b. The number of files and or records that were successfully transmitted and posted. c. The number and detailed information of the records that were rejected. d. The rejection reason code for each record rejected.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE.SS.16
BE.SS.17	Reversals of claims should automatically adjust spenddown.	Yes	No	SM	100	Section 9.1.1.1.2, Requirement # BE.SS.17
BE.SS.18	Spenddown balances should be made available real-time to the pharmacy point-of-sale system and should be verified before claims are paid.	Yes	Yes			Section 9.1.1.1.2, Requirement # BE.SS.18
BE.SS.19	Process and maintain inputs and outputs including but not limited to the following: Inputs: a. Data from the eligibility systems. b. Provider data. c. EPSDT data. d. Federal and state enrollment rules. e. Data entered and uploaded by professional service contractors. Outputs: a. Notices of Decision and appeal rights to members on denied ambulance claims and denied rehabilitation therapy service claims as directed by the Department. b. Notices of Decision to members for denied and modified prior authorizations. c. State Supplementary Assistance checks to the address on file for each Residential Care Facility (RCF) member. d. Weekly file listing the state ID numbers, names, dates of service, amount paid and date paid of all Medicaid Members for whom a Medicare crossover claim has been paid, but for whom Medicare eligibility is not indicated on the eligibility record. e. Data entry and edit exception reports to the Department for reconciliation with eligibility data. f. Run a monthly report showing any possible duplicates that exist on the MMIS member eligibility file. g. Histories for inquiries with dates of service for which data has been archived. h. All IME specified reports. i. Data extracts for Medicaid Statistical Information System (MSIS), Payment Error Rate Measurement (PERM) and Office of Inspector General (OIG) audits or any federal or state audits.	Yes	No	SM	120	Section 9.1.1.1.2, Requirement # BE.SS.19

As shown in Figure 9.1.1.1-1, Team Noridian has reviewed and analyzed all of the requirements in the related section of the RFP, and provided an overall summary of how our solution meets the requirements based on existing capability and required modification, as well as total DDI hours.

Column	Column Description	Column Summary
Column A	Team Noridian agrees to meet the requirements as stated.	100%
Column B	Team Noridian's existing capability in eCAMS solution meets the requirements.	68%
Column C	Team Noridian will modify the eCAMS solution to meets the requirements.	32%
Column D	Team Noridian's effort to modify the eCAMS solution to meet the requirements.	3465 Effort Hours

Figure 9.1.1.1-1. Team Noridian's solution compliance to the RFP requirements. Our solution will meet all the RFP requirements using the existing system capability as well as configuring and modifying the eCAMS system.

9.1.1.1.2 Approach to Addressing the Member Management System Requirements
Member Management

Team Noridian's solution offers a flexible and scalable solution to meet the current and future needs of IME in delivering high-quality care to its eligible member population. The eCAMS member business process area offers robust functionality to maintain member eligibility information that is brought in from multiple sources, provides flexibility in defining and maintaining benefit packages for members, and supports multiple mechanisms for real-time eligibility verification by providers and other external entities.

Member Management Solution Advantage

eCAMS is a modern, proven MMIS solution providing the Department with effective and efficient member services, benefits administration, and cost containment functionality.

- Centralized member repository with online visibility for eligibility interface reconciliation increases accuracy and availability of data to other business areas
- Proven security and audit services secures protected health information (PHI) and regulates access for covered entities
- Built-in configurable cost avoidance and post payment recovery services offer an efficient cost containment framework for the Department
- Pre-built configurable managed care and contracts business area will ease the Department's adoption towards a managed care service delivery model
- eCAMS member services offers the Department a solution designed for current and future needs for expanded Medicaid coverage, Health Insurance Exchange (HIE) orchestration, and interoperability with Electronic Health Records (EHRs)

eCAMS implements a solid security module to ensure protected health information (PHI) is not compromised and provides functionality to support relationship management and correspondence generation for member outreach purposes. eCAMS supports interfaces with CMS and other entities to support the implementation of Buy-In and Third Party Liability (TPL) processes for dual eligible members.

Core Member Management Business Processes

The eCAMS member business process area supports the core MITA business processes including eligibility determination, member enrollment, member information management, and member support. The member business process area also supports the TPL and Early and Periodic Screening, Diagnosis and Treatment (EPSDT) functionality.

IME identifies the following as core member management objectives:

- Collect and manage information about the member population from diverse sources and enable two-way updates on eligibility interfaces
- Maintain information on each member's Medicaid benefits to support claims payment and other financial processes
- Allow verification of member Medicaid eligibility information by external entities and eliminate manual eligibility determination
- Comply with HIPAA requirements
- Manage the Medicare Buy-In and Part C and D data exchange processes

- A timely, flexible eligibility intake process supporting both batch and real-time interfaces
- A centralized and scalable member data repository which accommodates the existing Medicaid population as well as the projected growth in the Medicaid population.
- Benefit plan structures to support service coverage definitions for all Medical Care Programs (consisting of Medicaid, State Children's Health Insurance Program (SCHIP), and State-only funded programs)
- An online, web-based member management system permitting greater provider and IME accessibility, with role-based access control (RBAC) affording granular security and auditing capabilities that respond to needs arising from Electronic Protected Health Information (ePHI)
- The ability to generate integrated on-demand and batch member correspondence to support outreach
- HIPAA-compliant 270/271 along with HIPAA-compliant real-time web services for eligibility updates and inquiry
- An integrated case management business process area for efficient coordination of member health information
- Comprehensive cost containment coordination functionalities such as Third Party Liability (TPL), buy-in, and cost sharing

The following elaborates the key attributes of eCAMS flexible intake/inquiry process:

- eCAMS supports both batch and real-time eligibility intake through web services, from external eligibility interfaces such as ISIS, Title XIX Eligibility, MMIS, and OCRA. These capabilities are facilitated through an interface service bus and the EXACT interface framework to define and monitor both batch and real-time interfaces.
- eCAMS supports eligibility inquiries through EDI standard 270, HIPAA-compliant online web-based inquiries, and real-time Web services.
- eCAMS can identify duplicate member records based on configurable weight-matching algorithms.
- eCAMS supports member inquiries based on phonetic representation using Oracle's SOUNDEX function.

These features facilitate IME's collection and management of member information from diverse sources, enable two-way updates on eligibility interfaces, and allow external entities to verify member Medicaid eligibility information. The EXACT interface framework currently supports all batch interfaces including Medicare Buy-In interfaces.

- A centralized and scalable member data repository supporting multiple eligibility sources, caters to multiple program needs, and supports optimized claims processing, with structured member data including:
    - Member demographics
    - Gender, birth, and death information
    - Eligibility aid category information including history across multiple programs
    - Benefit plan and managed care program information
    - Provider lock-in information
    - TPL information including Medicare coverage
    - Case head information
    - Member early and periodic screening, diagnosis, and treatment (EPSDT) schedule information tracking and management
    - Member share of cost information and related utilization
    - Language preferences for correspondence
    - Member ID card tracking information
    - Member case tracking
    - Processes such as Medicare Buy-In
    - Health Insurance Premium Payment (HIPP) programs

- A flexible benefit program structure to support FFS, MCO, waiver programs, personal care programs and others as needed by IME:
  - The configurable program structure administers FFS and managed care programs; program definitions include eligibility criteria for the program, covered services, service areas, service restriction, and cost sharing.
  - The configurable structure is derived from commercial health plan structures and carve-out services and service areas within a benefit program. The plans within the benefit program provide multiple delivery modes and a la carte services.

The centralized member data repository along with the configurable benefit program structure facilitates the maintenance of information on each member's Medicaid benefits by IME, in support of claims payment and other financial processes

- An online, web-based eligibility system affords greater accessibility and includes Role Based Access Control (RBAC) for granular security:
  - Member information can be accessed through online web screens as long as the user has proper credentials; information displayed to a user is restricted and based on security access.
  - Authorized providers are allowed to view online eligibility information of a member; the content is limited to what is allowed under the EDI standard 271 HIPAA response.
  - Restrictions and audits are enforced on PHI data inquiries related to protected population.
  - Providers will have the flexibility to inquire on utilization tied to share of cost and will also have the flexibility to view contribution information and prior authorization service utilization
  - eCAMS ensures HIPAA EDI, HIPAA screen compliance, and PHI are enforced and adhered to across all of the eCAMS business process areas. This compliance is already implemented in Washington and Michigan projects.
- Integrated on-demand and batch member correspondence generation features:
  - Users have the ability to generate letters, such as explanation of medical benefits (EOMB), letters of creditable coverage, and EPSDT schedule reminders from the member business process area.
  - Users are afforded the flexibility to generate on-demand or batch processes for mailing; generated letters are stored in electronic Document repository in an automated fashion for later reference and to support audits.
  - Users also have the ability to retrieve all correspondence tied to a specific member from the online member business process area.

Proposed Solution Overview for eCAMS Member Business Process Area

Figure 9.1.1.1-2 depicts the proposed eCAMS member management business architecture along with eCAMS-supported member MITA business processes. The Figure identifies the member-dependent processes tied to the Claims, Managed Care, Prior Authorization (PA), TPL, Case Management, Reference, Provider, and Reporting business process areas. The figure also identifies some of the other required external systems, identified in the RFP, such as eligibility, managed care enrollment broker, Medicare Buy-In, EDI switch vendors, TPL carriers, data warehouse, point-of-sale (POS), and TPL contractor interactions.

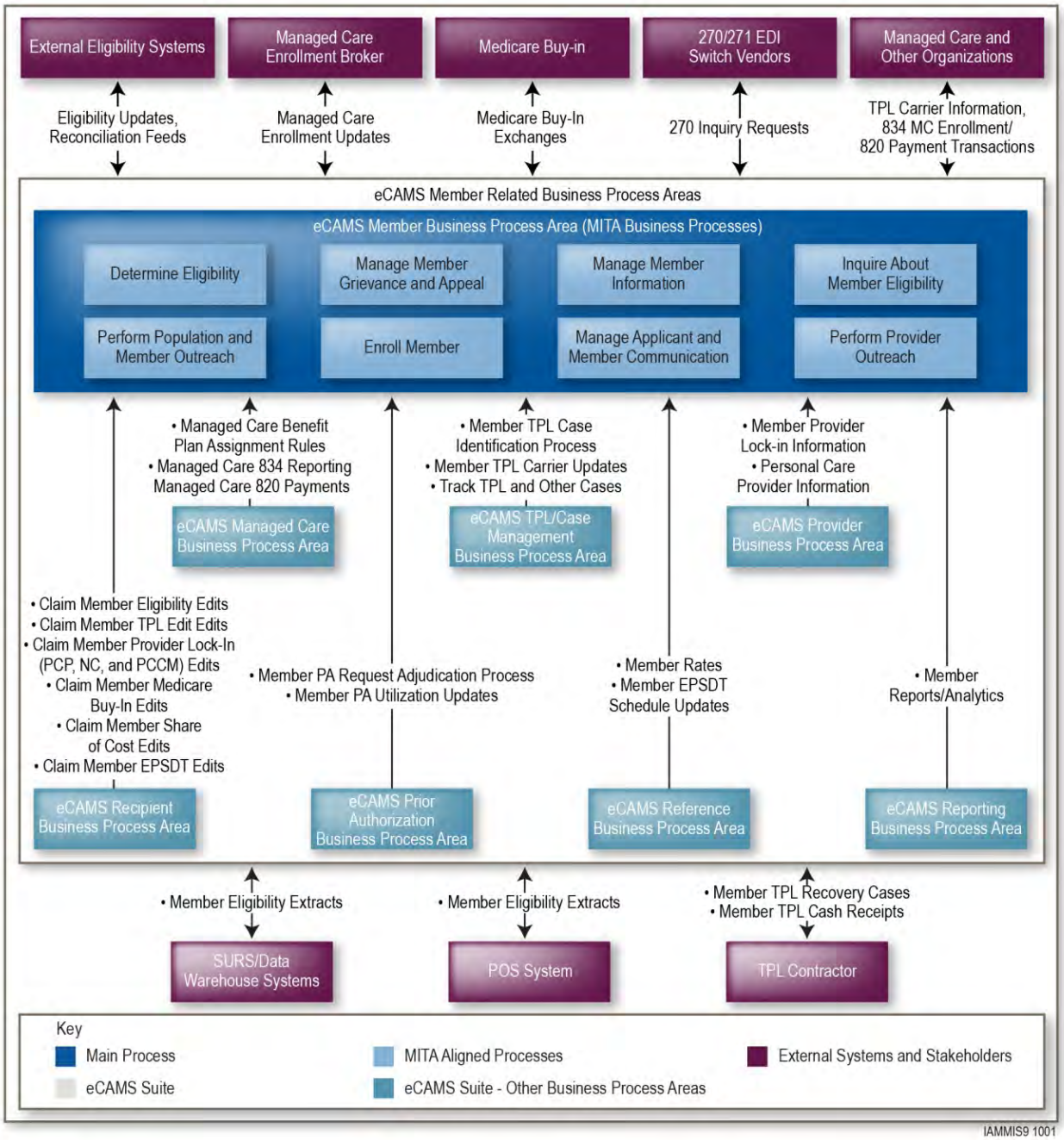


Figure 9.1.1.1-2. Overview of Proposed Member Management Business Process Area. Team Noridian's MITA-aligned eCAMS member business process areas provide IME a reliable and interoperable solution.

eCAMS Member Data Structure

The eCAMS online application is the core system that interacts with the eCAMS Oracle On-Line Transaction Processing (OLTP) member data repository. The member data repository holds a comprehensive scalable data structure to house the member information. Authorized users can inquire through eCAMS online screens about member information stored in the OLTP database, can initiate and track member correspondence and EPSDT schedules, and can screen and track benefit plan

administration. eCAMS includes functionalities such as mass transfer of members from one plan to another, tracking and managing TPL information, initiating and tracking preventive care correspondence, administrating eligibility updates, maintaining plan restrictions, and tracking service utilization.

The eCAMS OLTP data structure is based on relational database management and is optimally normalized to facilitate the scalability and integrity of the stored data. The member data structure is designed to hold members tied to multiple data sources and programs. eCAMS security is granular and can be administered to facilitate user access to a particular member data source, to a member program, or at the member plan level. The member data structure contains built-in data audit services to enforce PHI access audits, and it maintains histories of all available member attributes. Member history information is maintained through data columns such as “start date” and “end date.” The benefit plan structures and eligibility structures are flexible enough to hold unlimited historical data and multiple eligibility criteria for an individual.

Comprehensive Letter and Correspondence Support

eCAMS also includes an integrated letter and correspondence generation feature, which is supported through the correspondence management system based on the DOC1 tool from Pitney Bowes. These processes can be run on demand as well as through a batch letter generation process. A copy of the generated letter also gets stored in the document management system for future access. eCAMS is also seamlessly integrated with the document management system to retrieve documents and correspondence tied to a member.

EXACT Interface Service

EXACT acts as the enterprise interface service bus and will support the upload of eligibility batch feeds from Title XIX Eligibility, MMIS, ISIS and other sources into the member data repository. eCAMS has the flexibility to receive real-time eligibility data through Web services. The interface service also facilitates error escalation and notification models to report on transaction failures related to eligibility feed updates. The eCAMS online interface definition functionality facilitates an administrator’s ability to define new interface definitions, including transport details such as input and output file names, dependant interfaces, error threshold information, error notification contact information, and error escalation notification information.

MITA Business Alignment

The guiding principle for the MITA Business Architecture is “a business-driven enterprise transformation” and Team Noridian’s eCAMS is geared towards this paradigm by blending the right technical components to aid the business transformation. Team Noridian has developed the business layer for eCAMS, building in many of the core functionality of the different process areas of an MMIS. Team Noridian believes eCAMS is uniquely best positioned to align itself with the MITA framework, based on the goals and objectives of the Department.

The MITA Business alignments for the various processes involved in the member management business area are provided in the Table below in Figure 9.1.1.1-3.

#	Group	Processes	eCAMS Alignment	eCAMS MITA Maturity Level (ML) Compliance/Notes
1	Member Management	Determine Eligibility	Not Applicable (N/A)	Business process area that is covered in Statewide eligibility systems
2	Member Management	Enroll Member	Yes	Part of managed care functionality and refers to enrolling within managed care programs; system is designed for ML-3. Medicaid eligibility is determined by eligibility systems
3	Member Management	Disenroll Member	Yes	Part of managed care functionality and refers to enrolling within managed care programs; system is designed for ML-3. Medicaid eligibility is determined by eligibility systems

#	Group	Processes	eCAMS Alignment	eCAMS MITA Maturity Level (ML) Compliance/Notes
4	Member Management	Manage Member Data	Yes	ML-3
5	Member Management	Inquire Member	Yes	ML-3
6	Member Management	Perform Member Outreach	Yes	Operational service; tools are available within the system to support outreach function; system is designed for ML-3
7	Member Management	Manage Member Communication	Yes	ML-3
8	Member Management	Manage Member Grievance/Appeal	Yes	System designed for ML-3 (Case Management business process area capabilities in the system support this feature)

Figure 9.1.1.1-3. MITA Business Services Alignment for Member Management. Our solution is aligned with both the Department's member management business process area requirements and applicable MITA business process areas.

List of Member Management Reports in eCAMS

Figure 9.1.1.1-4 is a table listing all the member management related reports. The capability to produce those reports exists within eCAMS. In addition to these reports there are several other member management reports that are categorized as Operations management reports which are part of eCAMS reports but not included here.

#	Report Name	Description	Available in eCAMS	New Report	Requirement#
1	Eligibility Report	Member eligibility reconciliation report	Yes	No	BE1.SS.11, BE.SS.19
2	EPSDT Report	EPSDT services covered under Medicaid	Yes	No	BE1.07
3	Audit trail reports	Member Audit trail report for batch and real-time	Yes	No	BE1.11.01, BE2.SS.04
4	member lock-in status report	Member lock-in status report	No	Yes	BE2.SS.08
5	Medicare service Report	Medicare service bought by Member in another state	No	Yes	BE5.SS.04

Figure 9.1.1.1-4. Proposed eCAMS Member Management Reports for IME. Table-driven data facilitates robust reporting capabilities while exportable list pages enable on-demand reporting of search results.

Correspondence List

Figure 9.1.1.1-5 provides various correspondence options available within eCAMS to satisfy specific IME requirements. In addition to these examples, other configurable correspondence options are available to meet IME business needs.

#	Correspondence Title	Description	Available in eCAMS	New Letter	Requirement#
2	EPSDT screenings letters	EPSDT screenings letters	Yes	No	BE1.07.05
3	Certificates of creditable coverage	Generate certificates of creditable coverage letters	Yes	No	BE4.SS.01
4	Privacy notices	Generate Privacy practice notices	Yes	No	BE4.SS.02
5	Notices of Decision	Generate notices of Decision letters to Members	No	Yes	BE1.02.02
6	Spend down Notices	Generate notices to provider and member of claim amounts applied to spend down and amount of unmet spend down	No	Yes	BE.SS.05

Figure 9.1.1.1-5. Proposed eCAMS Member Correspondences for IME. Our DOC1 solution provides powerful on-demand and scheduled correspondence capability which is seamlessly integrated with our document management system for instant retrieval of prior correspondence.

Interfaces List

Figure 9.1.1.1-6 lists the interface files supporting member management processing, based on our analysis of the member management requirements section of the RFP.

#	Interface Name	Interface Description	Source	Frequency
1	Money Follows Person File	Money Follows Person File	ISIS	Daily
2	Month End Facilities File	Month End Facilities File	Title XIX Eligibility	Monthly
3	60 Occ Facility-Waiver Program Req. Elig.	60 Occ Facility-Waiver Program Req. Elig.	Title XIX Eligibility	Daily
4	Client Services Report	Client Services Report	Title XIX Eligibility	Daily
5	Date of Death State-ID Not Found	Date of Death State-ID Not Found	Title XIX Eligibility	Monthly
6	Facility CP Change Report	Facility CP Change Report	Title XIX Eligibility	Daily
7	FACS Information for IowaCare	FACS Information for IowaCare	Title XIX Eligibility	Daily/ Monthly
8	ID Cards Print File	ID Cards Print File	OCRA	Daily
9	Medicaid Member Eligibility Extract File	Medicaid Member Eligibility Extract File	Title XIX Eligibility	Daily/Monthly
10	Medicare Eligibility	Medicare Eligibility	Title XIX Eligibility	Daily
11	Medicare Part D Enrollment File	Medicare Part D Enrollment File	Title XIX Eligibility	Daily
12	Month End Facilities File	Month End Facilities File	Title XIX Eligibility	Monthly
13	Month End Waiver File	Month End Waiver File	Title XIX Eligibility	Monthly
14	Nursing Home Client Participation Chgs	Nursing Home Client Participation Chgs	Title XIX Eligibility	Weekly
15	OCRA - Annual - Family Planning	OCRA - Annual - Family Planning	OCRA	Daily
16	OCRA - Annual - From Member Services	OCRA - Annual - From Member Services	OCRA	Daily
17	Medically Needy Transmission File	Medically Needy Transmission File	ABC System	Daily
18	Medically Needy Worker File	Medically Needy Worker File	ABC System	Daily
19	Death information	Death information	Death Registry	Monthly

Figure 9.1.1.1-6. eCAMS interface files in support of the member management business area for IME.

BE1.01

eCAMS provides a comprehensive member business process area, which manages and maintains all the data elements to fully address the requirements of IME.

eCAMS supports a wide variety of member information including demographics, eligibility, benefit plan, identifier, co-pay, provider lock-in, protected population, TPL, Medicare eligibility, buy-in, home and community-based services (HCBS), monthly premiums, EPSDT immunization status, case head, duplicate records, and Medicaid card request details.

The "Show" drop-down menu from Member Detail Page in eCAMS provides access to all the information available in the system about members. The screenshot in Figure 9.1.1.1-7 shows a selection of the data elements that can be accessed.

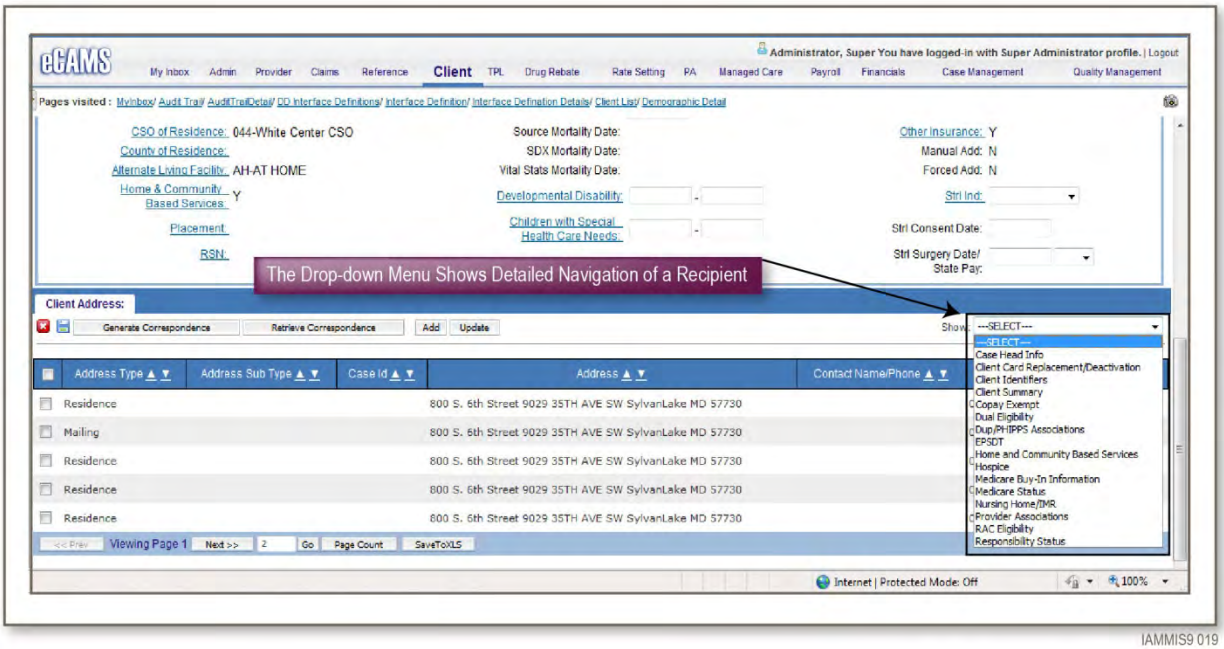


Figure 9.1.1.1-7. Member Data Elements. Member demographic, address, indicators and others member information are processed into eCAMS.

BE1.01.02

eCAMS supports the ability to capture and maintain demographic data elements, such as date of birth, current phone numbers, mailing and an email addresses from multiple systems-of-record.

eCAMS also supports the ability for authorized users to add or update certain address and demographic data elements, per Department-defined business rules.

Each data element in requirement BE1.01.02 is listed below in Figure 9.1.1.1-8 with an indicator to show whether eCAMS currently supports the element (existing), or requires a system modification to support the requirement (SM).

Figure 9.1.1.1-8 eCAMS compliance with BE1.01.02 is met with existing functionality supplemented by minor system modifications.

Data Element	Existing/SM
Mailing address	Existing
Residential Address	Existing
County of Residence	Existing
Multiple Instances of county of legal settlement	SM
Guardian name and address	Existing
Custodian name and address	Existing
Representative payee name and address	Existing
Zip plus four on all addresses	Existing
Date of birth	Existing
Date of death	Existing
Pregnancy date of delivery	SM
Races(s)	Existing
Gender	Existing

Data Element	Existing/SM
Marital status	SM
Ethnicity or tribal designation	Existing
Emancipated youth indicator	SM
Deprivation code	SM
Primary spoken language	Existing
Primary language for correspondence	SM
Benefit address	Existing
Custody status	SM
Telephone numbers such as home, cell, work, guardian and individual ownership of phone) – must store multiple numbers	SM
Fax number	SM
Email address example, must attach e-mail address to member	Existing
Text number or pager number	SM
Head or member of household	Existing
Foster care indicator	Existing
Foster care for Early and Periodic Screening Diagnosis and Treatment mailing indicator	Existing
Immunization Registry data received and displayed in the Medicaid Management Information System (MMIS)	SM
Social Security Number	Existing
State ID from the eligibility system	Existing
Multiple indicators of disability, chronic or other condition as identified by Iowa Medicaid Enterprise (IME)	SM
Member name, legal and preferred	SM
Eligibility span	Existing
Case number	Existing
Others as determined by IME	SM

Figure 9.1.1.1-8. eCAMS compliance with BE1.01.02 is met with existing functionality supplemented by minor system modifications.

In addition to demographic and address information, eCAMS also stores eligibility and authorization information which is used to derive benefit plans and is used by claims processing.

Figure 9.1.1.1-9 shows how such information is updated through the member detail page.

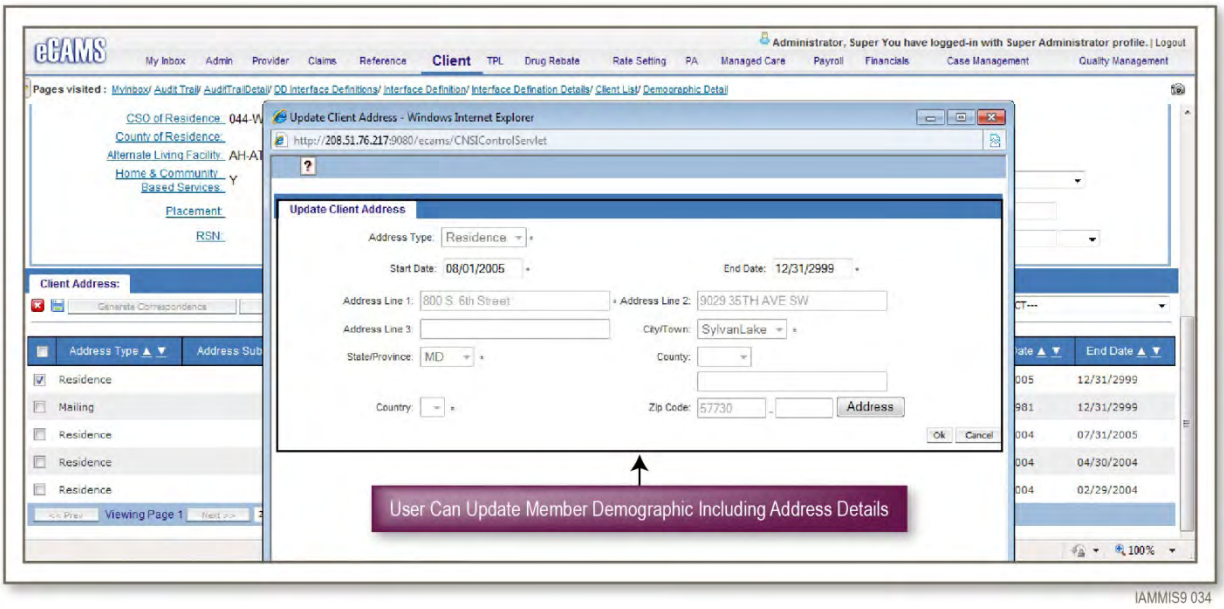


Figure 9.1.1.1-9. Updating Member Information. eCAMS supports additions and updates of member information including eligibility, demographic, address, and indicators, through an easy-to-use interface or direct data entry (DDE) screen functionality.

BE1.02

eCAMS receives and processes all batch eligibility files via EXACT interfaces using a two step process. The system first loads member interface data into a staging table, using defined interface business rules. eCAMS then loads the records into the member database and sends a confirmation email notification for the successful completion of the file load, along with any error details. Definitions include source information of the interface, format of the interface, validating rule component information, interface schedule information, error thresholds, and error escalation contact information.

eCAMS has the capability to maintain member data online via screen functionality where authorized users can either view the records processed via an interface file or update members online. All transactions posted to the member business management area, including those obtained real time, via batch or online are tracked via audit history with error records available for transaction error reporting.

Figure 9.1.1.1-10 depicts the eCAMS interface file configuration for different eligibility source which can be used to track the files loaded or any errors with the transactions processed.

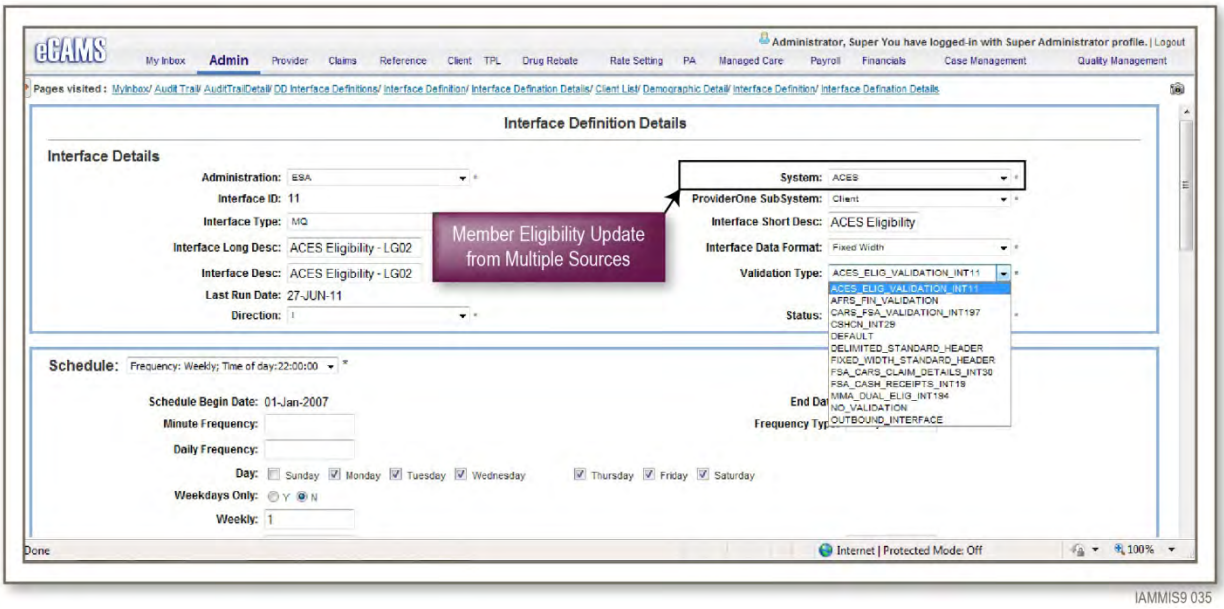


Figure 9.1.1.1-10. Member Eligibility Update. Team Noridian solution offers the flexibility to track and define interfaces, including control validation edits, schedule definitions, error thresholds, and error escalation contact information.

BE1.02.01

eCAMS is capable of receiving member eligibility data via the EXACT batch interface bus and will report any processing errors to the source system via email notification. The system stores eligibility information received from multiple eligibility sources for different or even for same time periods, as shown in Figure 9.1.1.1-11.

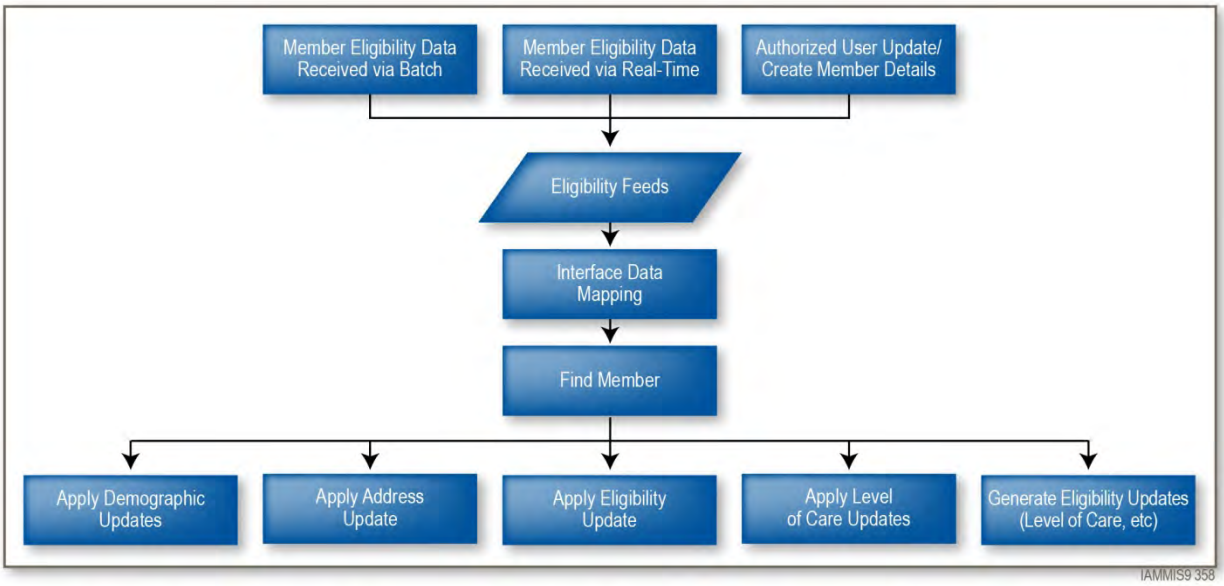


Figure 9.1.1.1-11. Source System Information. eCAMS is capable of receiving, processing, and storing eligibility data from various eligibility sources.

The system has the capability to process member eligibility, demographic, address and other details via real-time using SOA framework and will report any errors back to source system via real-time response.

eCAMS generates error reports for the daily eligibility files loaded via interface and control reports showing the number of records which were successfully created in system, error records and updated records for the member data received from multiple eligibility sources.

The eCAMS data model maintains comprehensive data elements for audit trails for both data update and data add processes. It includes fields such as created by, modified by, created time, modified time, start date, and end date.

Records are never truly deleted from eCAMS. Rather, the system uses a concept of "soft deleting" where a record is inactivated and it is never displayed to the user or used by any process. This approach is universal within eCAMS and is supported for both audit and retroactive processing needs.

The system maintains an indicator of the source system as part of the eligibility, demographic and benefit plans information.

BE1.02.02

eCAMS provides the capability to schedule letters and notices, and uses DOC1 to enable this feature. The system will be configured to generate a weekly listing of notices of decision (NOD) letters to members for non payable Medicaid service claims, combined with the ambulance notice of decision listing in the same format as the current ambulance NOD. The listing will be sorted by member last name and will contain the member name and number, provider name and number, TCN and denial notice number, date of service and date of NOD, exception code, and written reason for denial.

BE1.02.03

eCAMS has the flexibility to generate NOD letters based on denials of claims for selected services such as therapy services, rehabilitation therapy service, claims for occupational therapy, physical therapy and speech therapy. Authorized users can configure the NOD letter schedule. For example, a weekly schedule would generate NOD letters for any claim which denied for the selected services during that week.

BE1.03

eCAMS provides a robust, table-driven database to support the management of member information. The system assigns a unique member system identifier, called a member SID, to each member. All subsequent transactions and queries for a member are associated to the member SID. This enables the member's Medicaid ID, and any other ID for that member, to be linked to the unique eCAMS member SID.

The eCAMS audit framework allows for the logging of all eligibility inquiries, including inquiry date and time, inquiry source (including the source system user ID), and the member included in the inquiry. The system also tracks the date and time of responses to each query, which helps monitor the time lag between a query and a response.

The eCAMS data model maintains comprehensive data elements for audit trail for both data update and data add processes. It includes fields such as created by, modified by, created time, modified time, start date, and end date.

Deleted records are never truly deleted from eCAMS. Rather, the system uses a concept of "soft deleting", where a record is inactivated and it is never displayed to the user or used by any process.

Archival of member records will be configured to support Department-defined business rules.

All interface definitions include interface data file format information, schedule information, transport information, error escalation contact information, the archive folder, and the error report file name along with the name of the folder in which the error report resides.

When the system processes member batch eligibility information via interface it tracks error records which will be reported via email for authorized users. The system tracks records posted to eCAMS which can be used to generate reports.

Figure 9.1.1.1-12 shows different file directory locations that will be used to store error files, inbound files, archived files, and outbound files.

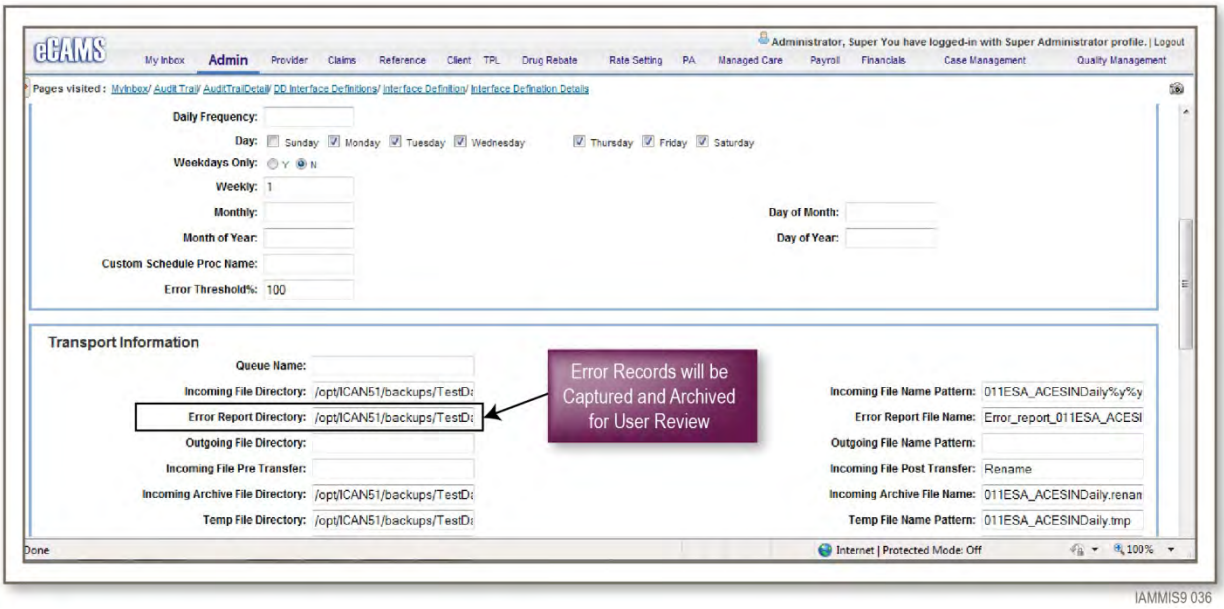


Figure 9.1.1.1-12. Error Records. eCAMS offers different file directory locations to store error files, inbound files, archived files, and outbound files.

BE1.04

In eCAMS, the entire interface orchestration is automated and currently includes notification by e-mail for both completed and in-error interfaces. When information is received from an external source, the interface monitors pick up this information and automatically uploads the file, thus obviating the need for a manual start. Once the eligibility details processed successfully into the system interface generates automatic email notification for the completion of the file load.

BE1.05

eCAMS receives and processes member eligibility information from SSA or Integrated Eligibility System (IME) via the EXACT interface bus and matches incoming member records to members present in the system to apply relevant eligibility, demographic, address and other details. If the incoming member record is not present in eCAMS, new eligibility details will be created in the system. If the member already exists in eCAMS, the member's data will be updated with the new information. The member's existing eligibility records will be inactivated for historical purpose.

The Team Noridian interface team will use the eCAMS interface run-instances screen to identify the status of the interfaces. The Department will be notified of failed interfaces along with the reasons for the failure at the record level. If a failure is system related, authorized users will identify the cause and rerun the interface for the failed records. If the error is related to an external source system, authorized users will escalate the issue in a timely manner to the external source staff. Using Department defined business rules, e-mail notifications of such errors can be sent directly to the external system staff contact. Interface control reports are available to authorized Department and contractor staff and reconciliation files of changed records are provided to the originating source.

BE1.06

eCAMS facilitates the archive option through established processes, based on data partitions, to archive interface files and member data in the eCAMS database. Team Noridian will develop archival requirements in collaboration with IME.

BE1.07

eCAMS supports case identification and tracking of EPSDT members and tracks the correspondence sent to members related to their screening status or immunization schedule. The immunization and screening definitions and the schedules are maintained in the online reference business process area. During the member eligibility intake process, the member's dataset is profiled through the EPSDT definitions, and based on a match, an EPSDT case is generated.

Figure 9.1.1.1-13 depicts EPSDT tracking for a member; the screen for member EPSDT tracking includes a link to the claim that satisfied the immunization or screening schedule.

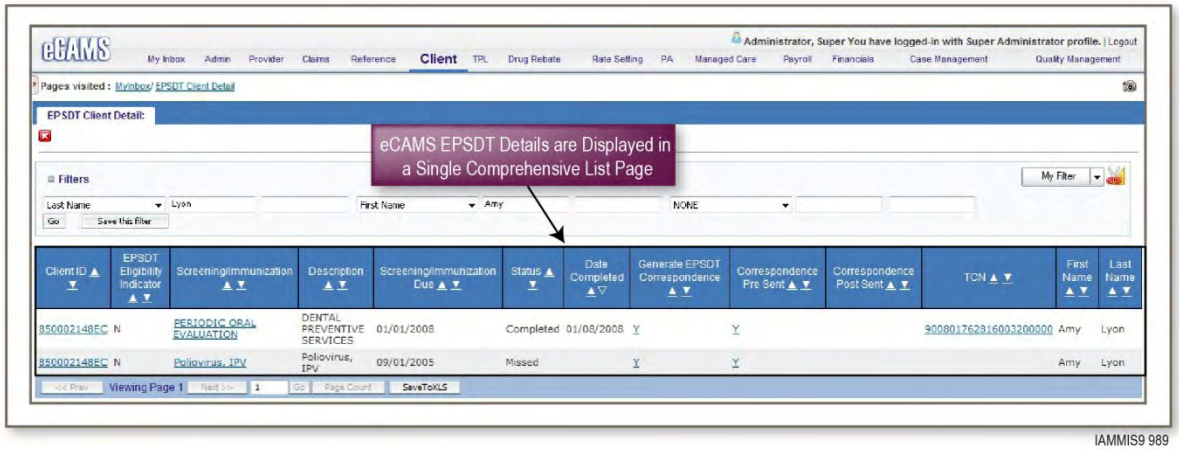


Figure 9.1.1.1-13. Member EPSDT Information Tracking. Comprehensive EPSDT tracking information appears on a single screen with links to drill-down into specific screening, correspondence and claim data.

BE1.07.01

eCAMS meets all EPSDT business requirements such as case identification, tracking, and correspondence. Team Noridian's proposed interface, with a statewide automated immunization registry, will facilitate regularly scheduled data exchanges to populate the immunization registry with details on the Medicaid children receiving immunizations, including all related information, corresponding claims, and reminder and recall notice date.

eCAMS provides online EPSDT screens to provide comprehensive EPSDT tracking information which appears on a single screen and includes screening/immunization due dates, correspondence tracking, and a link to the claim that satisfied the immunization or screening schedule.

BE1.07.02

All screenings, referrals and treatments for the EPSDT members can be viewed online, as shown in Figure 9.1.1.1-13.

BE1.07.03

The eCAMS Reference module provides the online screen functionality with a flexible benefit plan administration wizard, which can be used by authorized users to define EPSDT services for different benefit plans.

The benefit plan definition includes the eligibility criteria for the plan, the services covered, EPSDT criteria, applicable plan premiums, the co-pay deductible, and excluded services.

When the system receives and processes eligibility and authorization information, it uses the benefit plans defined in the reference module to assign benefit plans at member level based on eligibility and authorization factors which will access to different services defined at benefit plan level and will be used by claims during adjudication.

During the eligibility intake process, eCAMS applies and associates benefit plans based on eligibility criteria defined for the member, whether for FFS, managed care benefit plans, or other defined plans.

BE1.07.04

eCAMS provides the functionality to record EPSDT case activities, including logs of notices, service due dates, service status, actual service completion date and case notes. EPSDT system can also be configured to capture IME/contractor contact details. The comprehensive EPSDT tracking information can appear on online screens with links to service details, correspondence data, and claim history, as shown in Figure 9.1.1.1-13.

BE1.07.05

eCAMS has work flow process systems which will track services provided for members in different programs, such as EPSDT, and generate email and letter notifications to the head of household, guardian, foster care workers, or other specific individuals as directed by IME. Correspondence addresses are tied to the individual, thus supporting different mailing addresses for the member and guardian.

eCAMS has the flexibility to define schedules to generate letters or notification based on system events.

The eligibility information stored in eCAMS is used for claim and encounter processing based on member EPSDT details. During claims processing, EPSDT claims are checked against the EPSDT/Immunization screening schedule definitions (periodicity schedules), as maintained by the eCAMS Reference business process area, to determine if the schedule was met. This level of schedule tracking allows the system to generate reminders and notice letters for follow up. eCAMS supports the ability to configure EPSDT processing to include claim attachments.

All screenings, referrals and treatments for the EPSDT members can be viewed online, as shown in Figure 9.1.1.1-14.

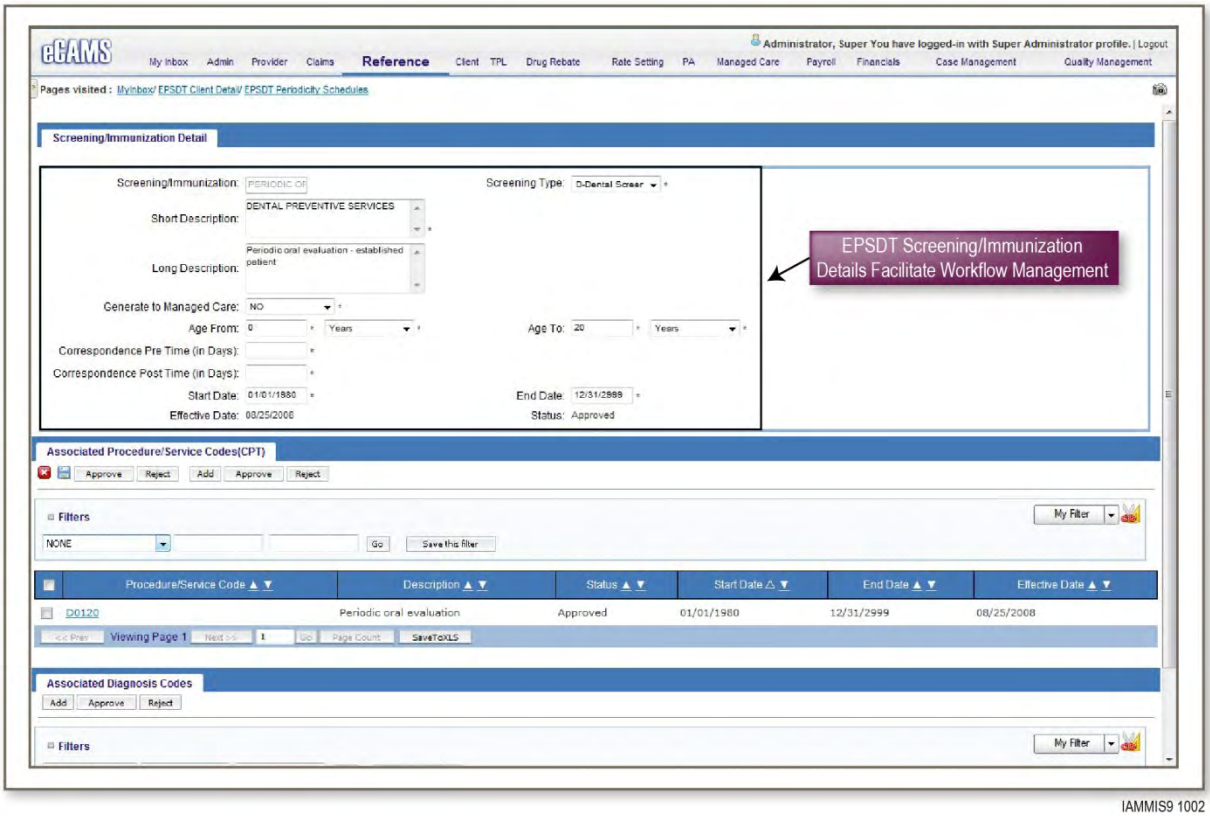


Figure 9.1.1.1-14. EPSDT Services Received. Claims will use the EPSDT screening schedule definitions (periodicity schedules) as maintained in the eCAMS reference business process area for tracking immunization/EPSDT performance against the actual as determined through the EPSDT claims data.

BE1.08

eCAMS supports indicators meeting the enhanced security needs for members. In eCAMS, certain members receiving confidential services are identified via a protected population indicator. For members with such an indicator, eCAMS audits every inquiry and any updates made to these member records; the same types of audits are extended to suppress the member document generation. eCAMS also ensures documents such as the EOMB are not generated for members who have received any confidential services during a reporting period.

This protected population indicator is available for use by authorized users to suppress the generation of documents containing member identification for confidential services or other reasons.

Figure 9.1.1.1-15 depicts the protected population indicator.

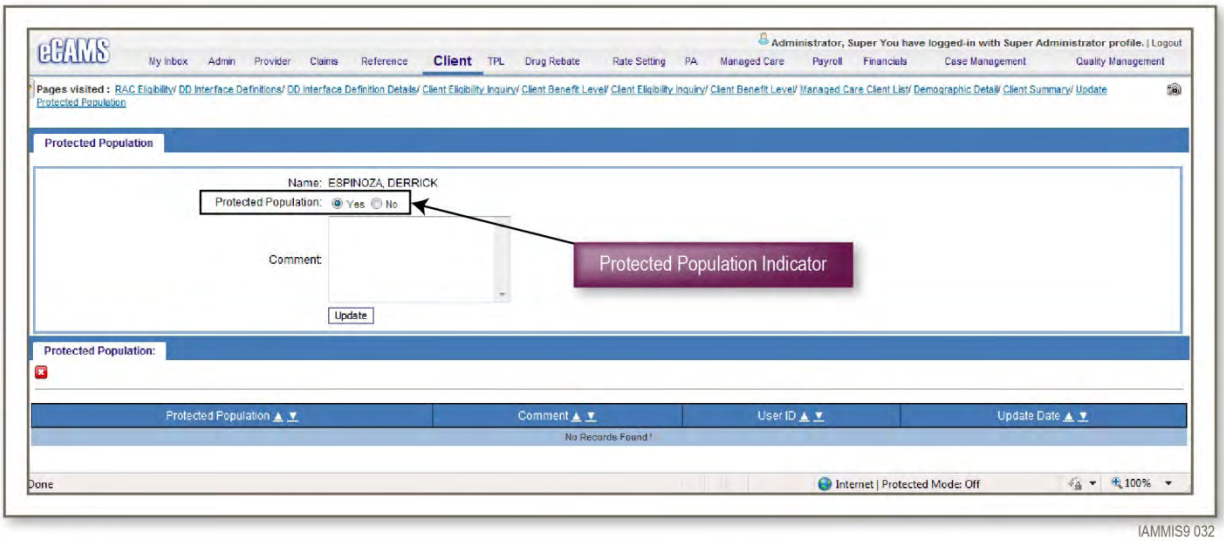


Figure 9.1.1.1-15. Protected Information. An easy-to-use protected-population indicator is native to eCAMS for audit, privacy, and security needs.

BE1.09

eCAMS maintains service utilization, special population, lock-in information, and case management indicators in its member data repository. The member data model will be extended to house clinical and disease management outcomes for IME. Figure 9.1.1.1-16 identifies the existing indicators such as duplicate member (in this screen "Client"), PHIPP case, co-pay exemption, restricted provider, managed care enrolled, lock-in, hospice, EPSDT, TPL, and Medicare status. eCAMS will be modified to add additional indicators as required to support business processes related to disease management, outcomes, and high-dollar case management files. Team Noridian will collaborate with the Department to define the source data for new indicators.

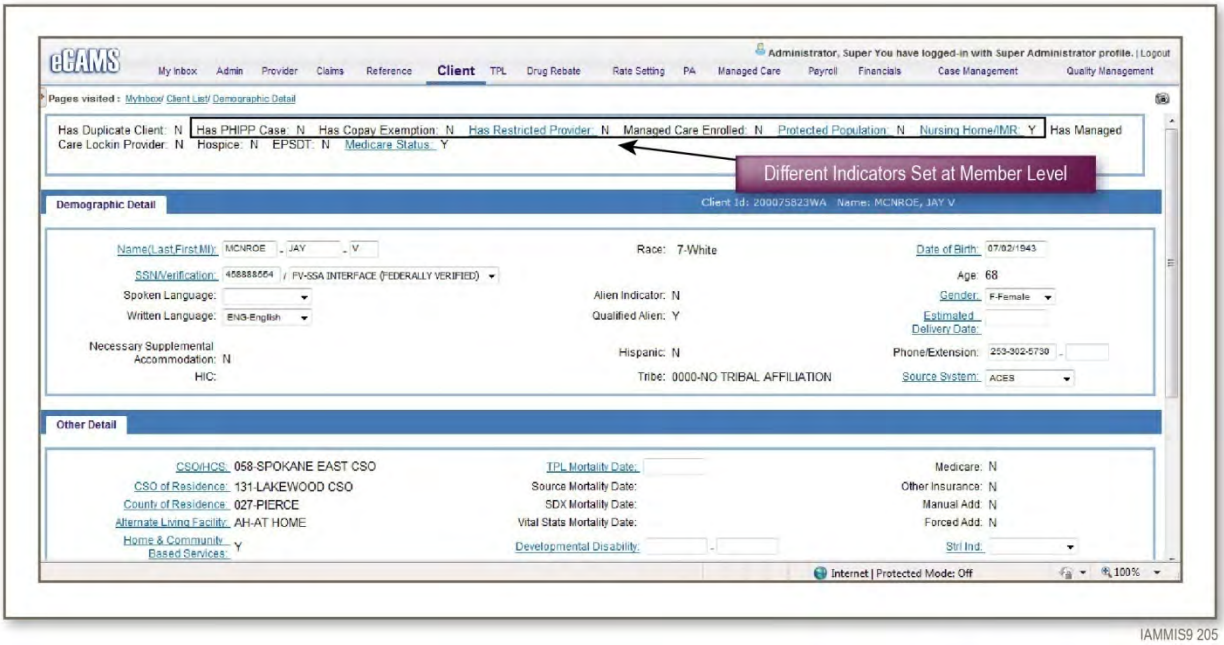


Figure 9.1.1.1-16. Special Indicators on Member Information. A member data model supporting unlimited member indicators will support IME to track members with additional characteristics.

BE1.09.01

eCAMS supports the ability to capture and maintain date-specific data from source systems that is necessary to support long term care claims processing, such as level of care (LOC), patient financial responsibility, admit and discharge dates, home-leave days, and hospital-leave days.

LTC information is combined with eligibility data from other sources to derive appropriate benefit plan assignments. LTC indicators are displayed online along with other indicators such as lock-in, PCP, PCCM, TPL, and Managed Care.

eCAMS gathers the patient liability amounts in the case of nursing homes claims and applies these amounts on the claim to calculate the final payment amount.

Figure 9.1.1.1-17 depicts the member details information including admit and discharge dates for nursing home facility.

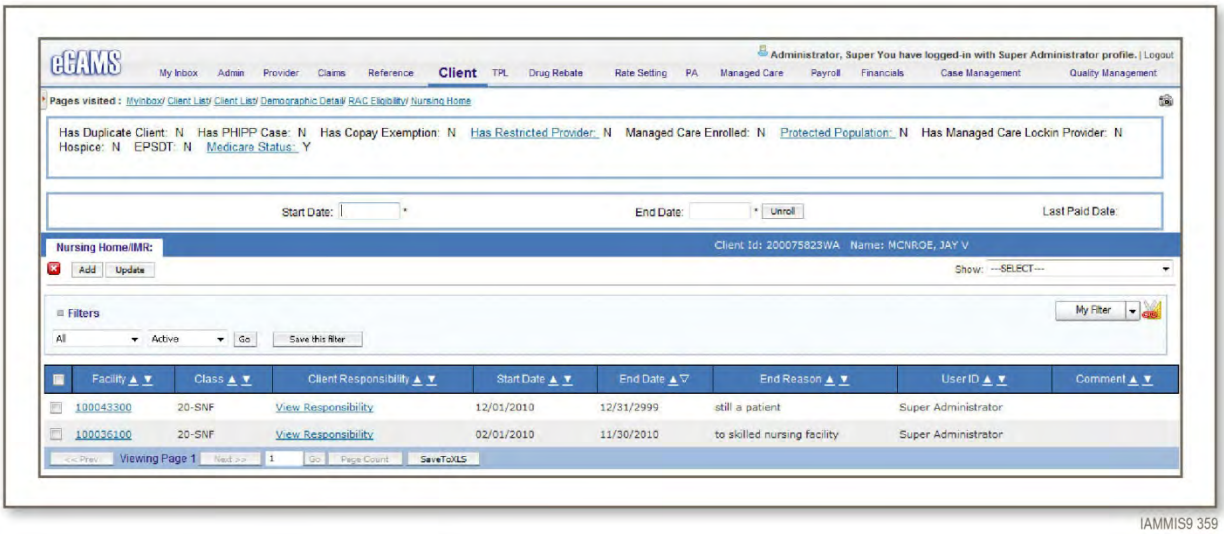


Figure 9.1.1.1-17. Long-term care Claims Processing. eCAMS provides the member details information including admit and discharge dates for nursing home facility.

BE1.09.02

eCAMS supports a wide variety of member information including demographics, eligibility, benefit plan, identifier, co-pay, provider lock-in, protected population, TPL, Medicare eligibility, buy-in, home and community-based services (HCBS), LTC, Intermediate Care Facility for the Mentally Retarded (ICF/MR), monthly premiums, EPSDT immunization status, case head, duplicate records, and Medicaid card request details.

eCAMS combines nursing facility, ICF/MR, Home and Community Based Waiver and other long-term care (LTC) information with eligibility data from other sources to derive appropriate benefit plan assignments in support of claim processing.

Figure 9.1.1.1-18 depicts the LTC Eligibility information stored in eCAMS which will be used for claims processing.

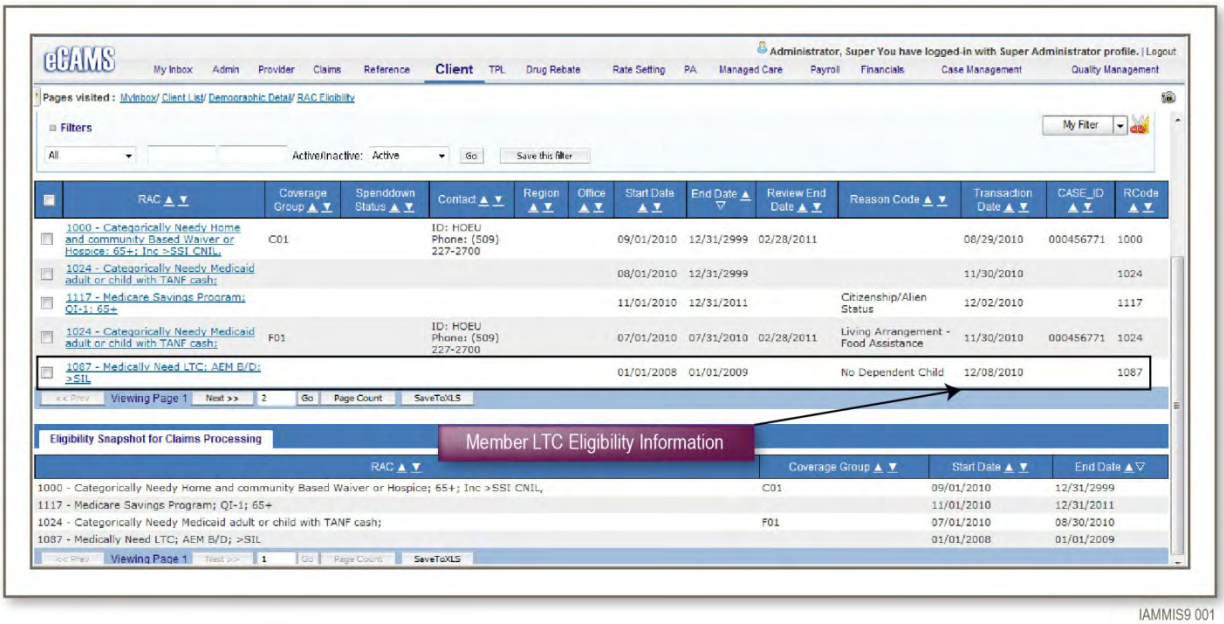


Figure 9.1.1.1-18. LTC Eligibility Information. eCAMS stores LTC eligibility information for claims processing.

BE1.09.03

eCAMS supports a wide range of pricing rules, including code specific rates, provider specific rates, recipient rates, group rates, and taxonomy rates. All of these rates are contained on the rate setting tables which are viewable online by authorized users. Rates are maintained either manually or uploaded into eCAMS and applied in a batch environment. eCAMS provides the flexibility to configure the provider management business area to maintain provider and rate-specific data in support of applicable certification criteria.

BE1.10

eCAMS provides the capability to maintain audit trail in the member business process area. eCAMS will hold requests from members for personal records and will document related case activities through the eCAMS case management business process area. The activity list will track the request date, source, status, and other details along with the communication details.

BE1.11

The eCAMS data model maintains comprehensive data elements for audit trails for data additions and updates of member eligibility records processed via interface for batch eligibility files, real-time eligibility updates or direct data entry (DDE) screen updates from authorized users in eCAMS. The data model includes fields such as source/created by, modified by, created time, modified time, start date, and end date.

The system maintains an indicator of the source system as part of the eligibility, demographic, and benefit plans information.

eCAMS generates error reports for the daily eligibility files, loaded via interface, and control reports showing the number of records which were successfully created in the system, error records, and updated records for the member data received from multiple eligibility sources.

BE1.11.01

eCAMS maintains comprehensive audit trail data for all data additions and changes. The audit trail data is available for online inquiry as well as inclusion in a daily audit trail report.

eCAMS also supports the ability to view the results of member data updates applied to the member management module. For example, eCAMS maintains both active and historical records of member benefit plan assignments. Authorized users can view both active and historical benefit plan details using screen functionality.

BE1.11.02

eCAMS framework supports storing user id, process name, and record processed date and time via real-time or batch to generate audit trail reports. The system will be configured to audit and store member information access through real-time interface by tracking user access to specific data in the member business area.

BE1.12

eCAMS supports online updates and additions of member information including eligibility by authorized users. It also maintains security profiles based on role-based access control (RBAC) to support the ability to control the type of access a user is assigned. While certain roles are assigned a profile enabling changes to member data, another role may be assigned a read-only profile enabling the user to view, but not change, member data.

eCAMS security is granular and can be administered to facilitate user access to a particular member data source, to a member program, or at the member plan level. The member data structure contains built-in data audit services to enforce PHI access audits, and it maintains histories of all available member attributes.

Figure 9.1.1.1-19 illustrates the update page for member address information for authorized users to change address details via online.

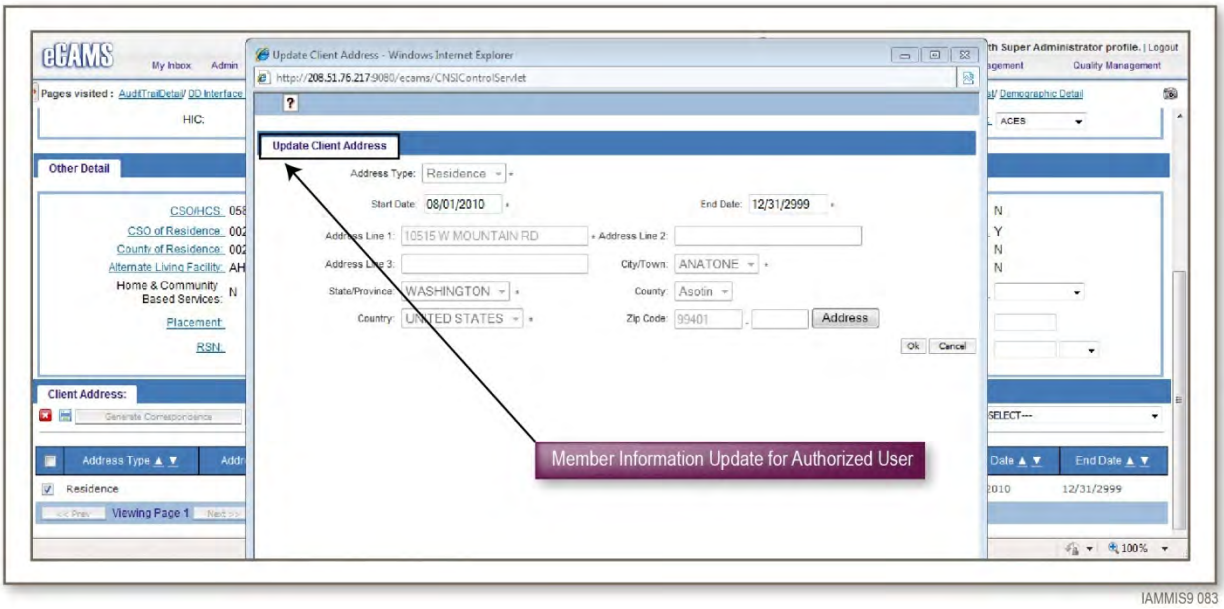


Figure 9.1.1.1-19. Member Information Update Option. eCAMS supports additions to, and updates of, member information including eligibility, TPL, Medicaid Card request, and share-of-cost, through an easy-to-use interface.

BE1.12.01

eCAMS supports authorized users to inquiry member data using case number, SSN, member first name, member last name, date of birth, HIC code, source system name as search criteria to display member information like eligibility details, demographic details, lock-in indicators, benefit plan details, TPL details and other information. The system can be configured to add additional search filter options like member state identification number (SID) or member partial name to inquire member details.

Figure 9.1.1.1-20 depicts authorized users to access member information using different filter criteria.

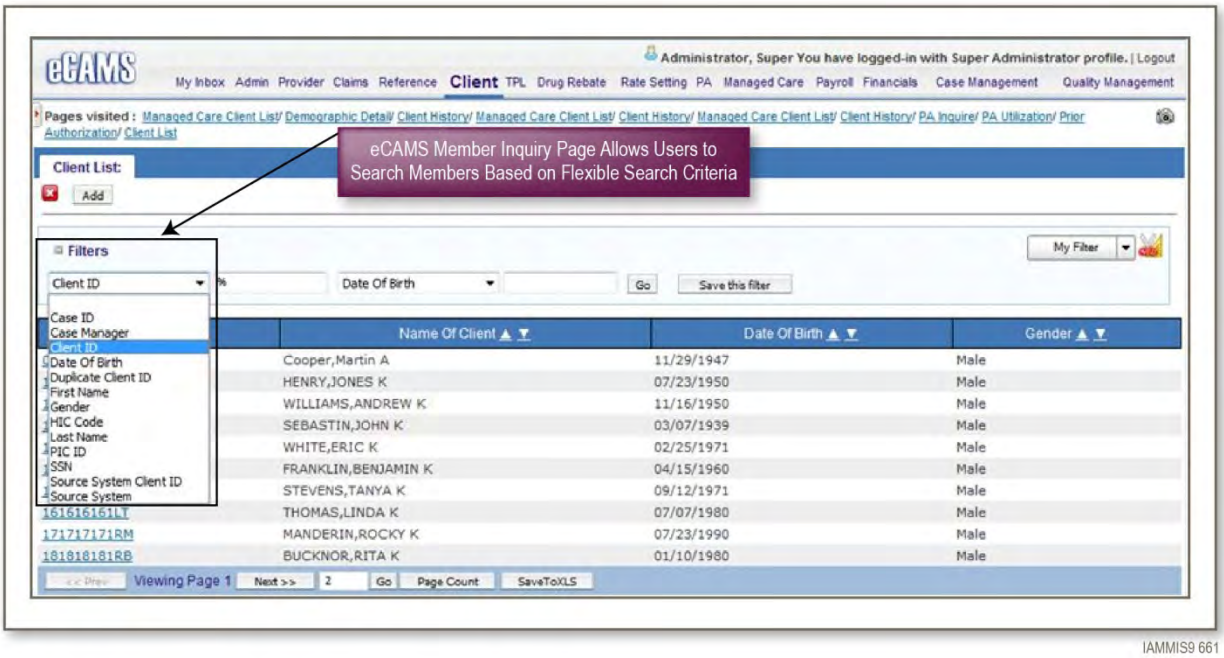


Figure 9.1.1.1-20. Searching Member Details. eCAMS allows authorized users to access member information using different filter criteria.

BE1.13

The eCAMS member data intake process includes the ability to identify duplicate member records using configurable, Department defined duplicate criteria, with weighted algorithms using SOUNDEX intelligence, which helps facilitate a more accurate duplicate identification process.

As part of match logic, duplicate records are included in daily error reports for authorized users to research and correct.

During manual additions of members from online screens, the system ensures the member identifier entered does not already exist in the member data repository, thus preventing the accidental creation of duplicate member identifiers.

Online display of member association information including duplicate identifiers and case head member information helps identify duplicate members and related members.

Figure 9.1.1.1-21 identifies a duplicate member record that has multiple associated member IDs.

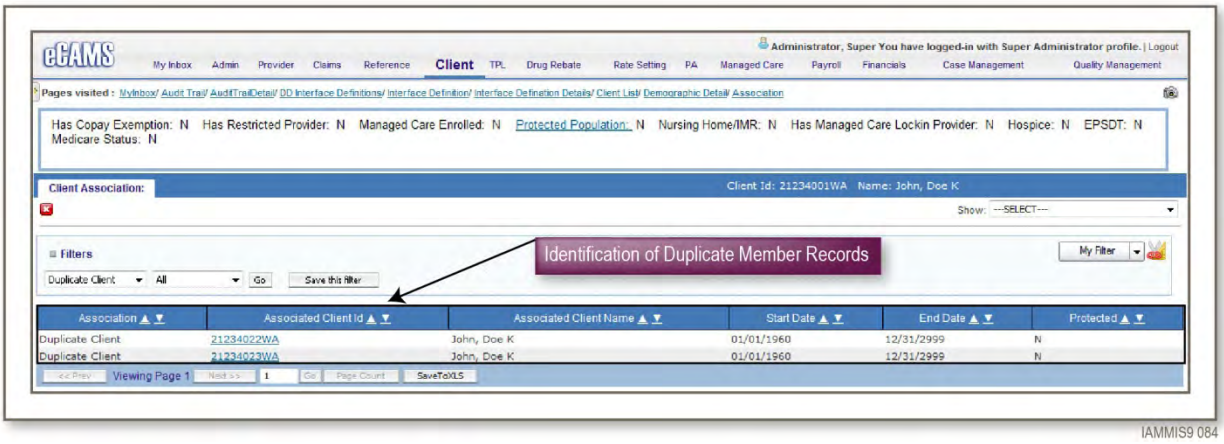


Figure 9.1.1.1-21. Duplicate Member Record. Easy-to-display member association information, including duplicate identifiers and case head member information will help identify duplicate members and related members through online screens.

BE1.SS.01

eCAMS supports the ability to automatically generate identification card records for new members, as well as existing members, having eligibility changes. The generation of the card request record is automatic and configurable, based on Department defined business rules.

All card request records are transmitted daily to the card contractor via a card-request file. The card contractor returns a response file upon fulfillment of the order. eCAMS updates the status of a card to show the current state of the card request. Status values include pending requests ("pending"), requests sent to the contractor, ("first issue" and "replacement"); and the response received from the contractor, ("issued" or "undeliverable"). Figure 9.1.1.1-22 depicts eligibility card request status in eCAMS.

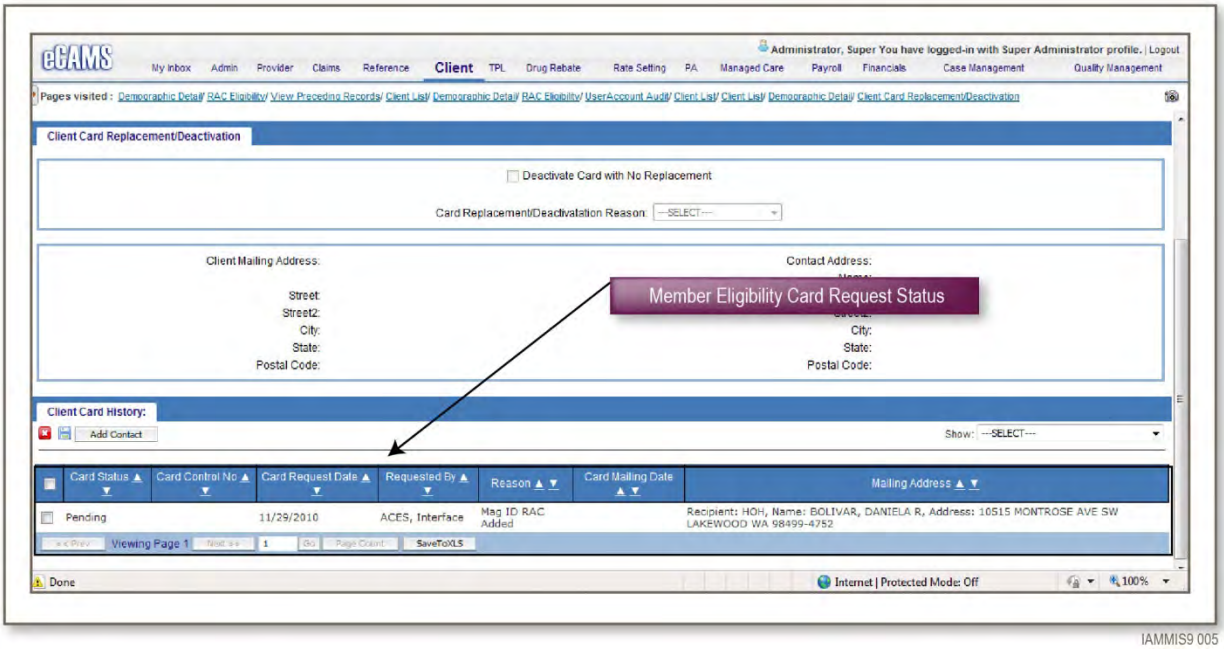


Figure 9.1.1.1-22. Member Eligibility Card Status. eCAMS allows authorized users to request eligibility card status of members.

BE1.SS.02

eCAMS supports the ability to trigger automated processes such as correspondence generation, alerts, and notification based on system events or user-initiated actions. For example, eCAMS can be configured to generate an alert based on receipt of a claim containing a procedure code related to birth or termination of pregnancy.

Figure 9.1.1.1-23 depicts different alert messages available in user inbox based on user triggered or system triggered events.

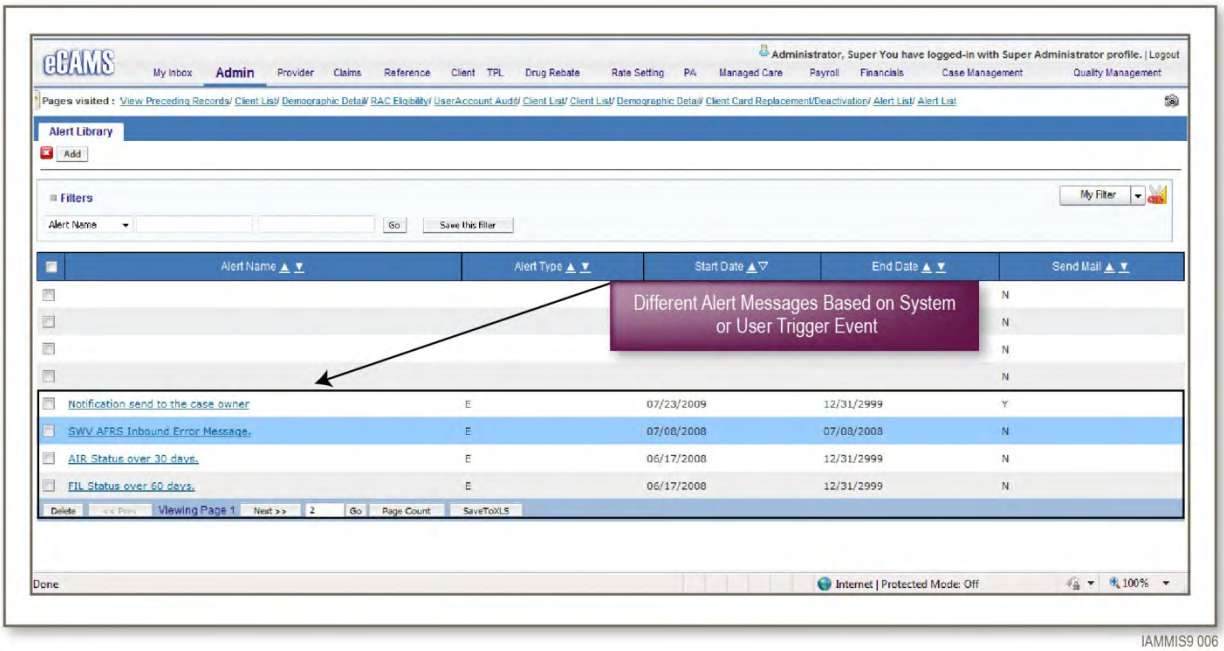


Figure 9.1.1.1-23. Alert Messages. eCAMS provides different alert messages based on whether the trigger event is from the system or the user.

BE1.SS.03

eCAMS receives and stores eligibility segments from one or multiple source systems. Each segment contains start and end dates, as well as the transaction date, which indicates the date the record was posted to eCAMS.

If an incoming record conflicts with an existing record, Department defined business rules are applied to configure eCAMS to produce the most effective resolution. Example resolutions are:

- Reject the incoming record whenever it conflicts with an existing record. Report the rejected record to the source system.
- Replace the existing record by flagging it as inactive, resulting in a "soft-delete" of the existing record. The existing record is no longer available to any eligibility, benefit plan, claim or PA process; and is only visible to users authorized to view inactive records. The new incoming record replaces the existing record. Benefit plans are updated accordingly.
- Adjust the existing record to end one day before the start of the new record. Keep both records active and treat the new record as a change in eligibility.

eCAMS maintains current and historic eligibility information for claims adjudication and eligibility inquiry with eligibility begin, end dates, and other eligibility factors received from the interface file. Based on date of service, the member eligibility record will be applied during claims and encounter processing.

Figure 9.1.1.1-24 shows the available eligibility history for a member.

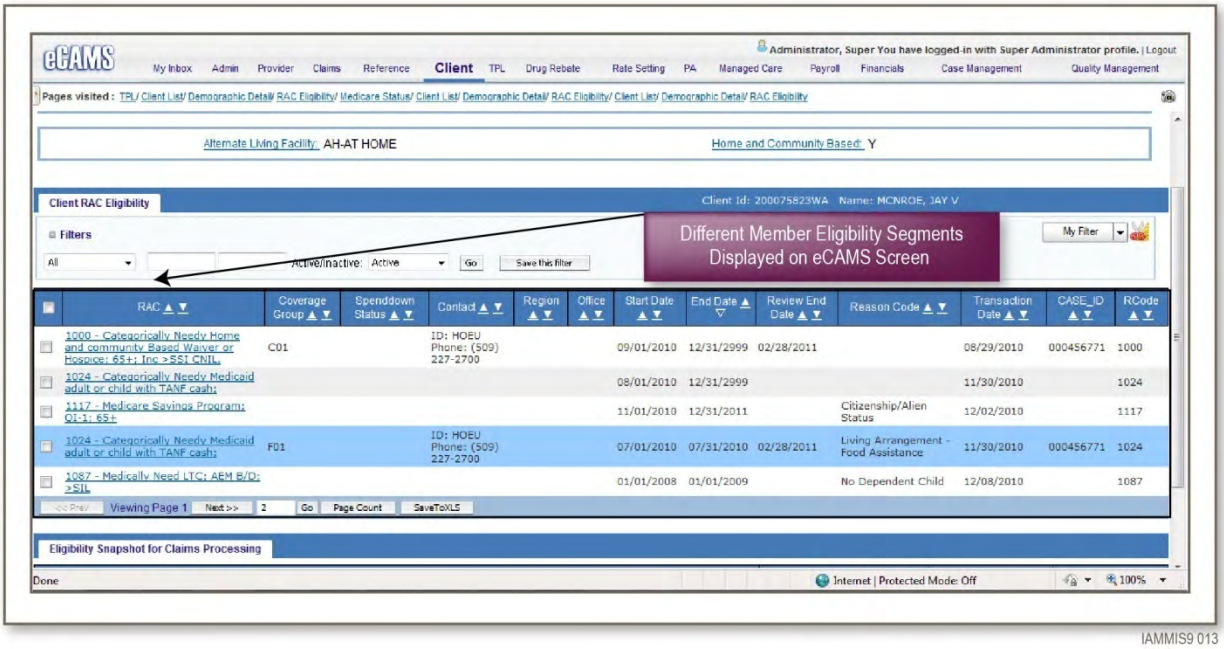


Figure 9.1.1.1-24. Member Eligibility History. The eCAMS Member Eligibility History screen provides detailed eligibility information available in the system.

BE1.SS.04

eCAMS maintains security profiles based on role-based access control (RBAC) to support the ability to control the type of access a user is assigned. While certain roles are assigned a profile enabling changes to member data, another role may be assigned a read-only profile enabling the user to view, but not change, member data.

eCAMS security is granular and can be administered to facilitate user access to a particular member data source, to a member program, or at the member plan level. The member data structure contains built-in data audit services to enforce PHI access audits, and it maintains histories of all available member attributes.

Figure 9.1.1.1-25 depicts users to update demographic information based on their security access level.

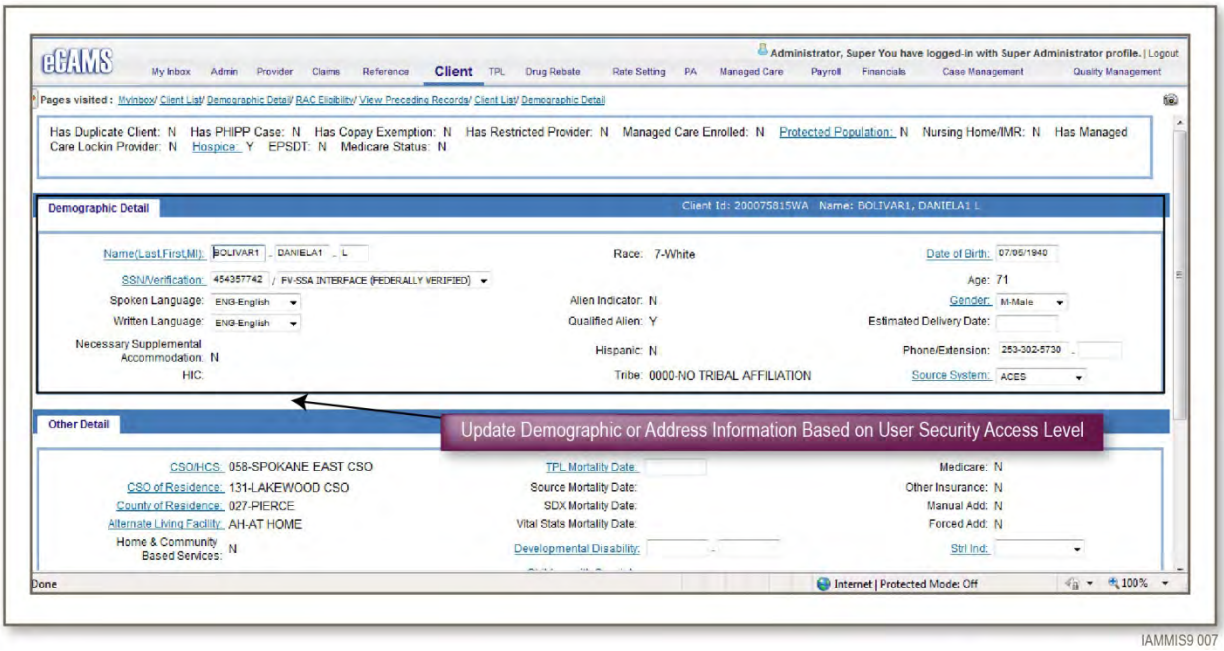


Figure 9.1.1.1-25. Member Demographic Screen. Authorized users can view or update demographic or other details based on their security privileges.

BE1.SS.05

eCAMS hosts all business process modules, such as claims, prior authorization, member management, TPL, and managed care in one system.

The online user interface provides easily-accessible hyperlinks to every module across the top of every eCAMS web page. Users can quickly jump from one module to another with a single mouse click.

eCAMS also displays a list of the most recently visited web pages, conveniently positioned just under the individual module link labels. This recent page history can be used to instantly jump back to a recently-visited page, even if the user had since navigated to several other pages.

Within a page displaying member data, specific indicators and data elements are displayed as hyperlinks to more detail and other areas within eCAMS. For example, when the user clicks on an indicator showing "Has Managed Care Provider = Y", the user's session instantly navigates to the managed care business process module and displays the details for that member's managed care provider. The user can then click the close button on the managed care provider screen, or click a previous page in the recent page history path, to instantly navigate back to the previous (or earlier) page. The eCAMS session remains anchored to the particular member, even when navigating to another business area such as managed care or TPL.

BE1.SS.07

eCAMS supports MMA data exchange from the Social Security Administration (SSA) or CMS to identify potential Medicare recipients and, with the proper authentication, update the member repository with data including Part A, B, C and D start dates, end dates, all amount fields, TPL data, and premium paid by the State, for coverage information, TPL recovery, and Buy-In.

eCAMS processes and stores Medicare coverage details along with other commercial TPL information received from multiple vendors. Authorized users can view and update all TPL data for a member online via DDE screen functionality.

Figure 9.1.1.1-26 provides an example list page showing Medicare Part A details for a specific member.

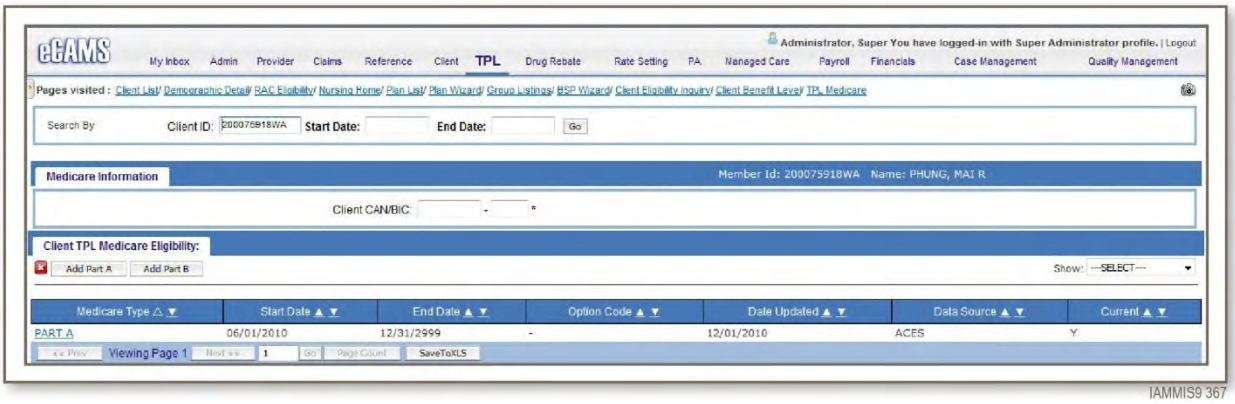


Figure 9.1.1.1-26. eCAMS Medicare List Page. Detail records for all Part A, B, C and D coverage are available in a single list page.

BE1.SS.08

eCAMS maintains an indicator for members with dual Medicare/ Medicaid coverage. The eCAMS EXACT interface framework supports extracting member dual Medicare and Medicaid coverage information on a monthly basis for distribution to Medicare and coordination-of-benefit carriers as well as to CMS.

BE1.SS.09

eCAMS has the capability to archive member records based on the eligibility time period or based on claims adjudication status. eCAMS facilitates the archive option through both the interface and the database archival process through which data is archived based on data partitions. This can be configured to archive member records based on criteria approved by IME.

BE1.SS.10

eCAMS stores member detail information received via batch, real-time, or DDE through screen functionality. This member record information will be retained as long as it is used for claims processing and will be archived based on IME defined details.

eCAMS supports online updates of member information including end-dating or voiding eligibility data by authorized users.

Records are never truly deleted from eCAMS. Rather, the system uses a concept of "soft deleting", where a record is inactivated and it is never displayed to the user or used by any process.

BE1.SS.11

eCAMS processes member records information received via interface, real-time, or DDE screen functionality and will generate error report for any records which will error out. This report can be used for analysis and to resend error records with updated information so that it can be processed into eCAMS.

Figure 9.1.1.1-27 depicts the reconciliation report within eCAMS which can be used to accurately match the records processed into the system.

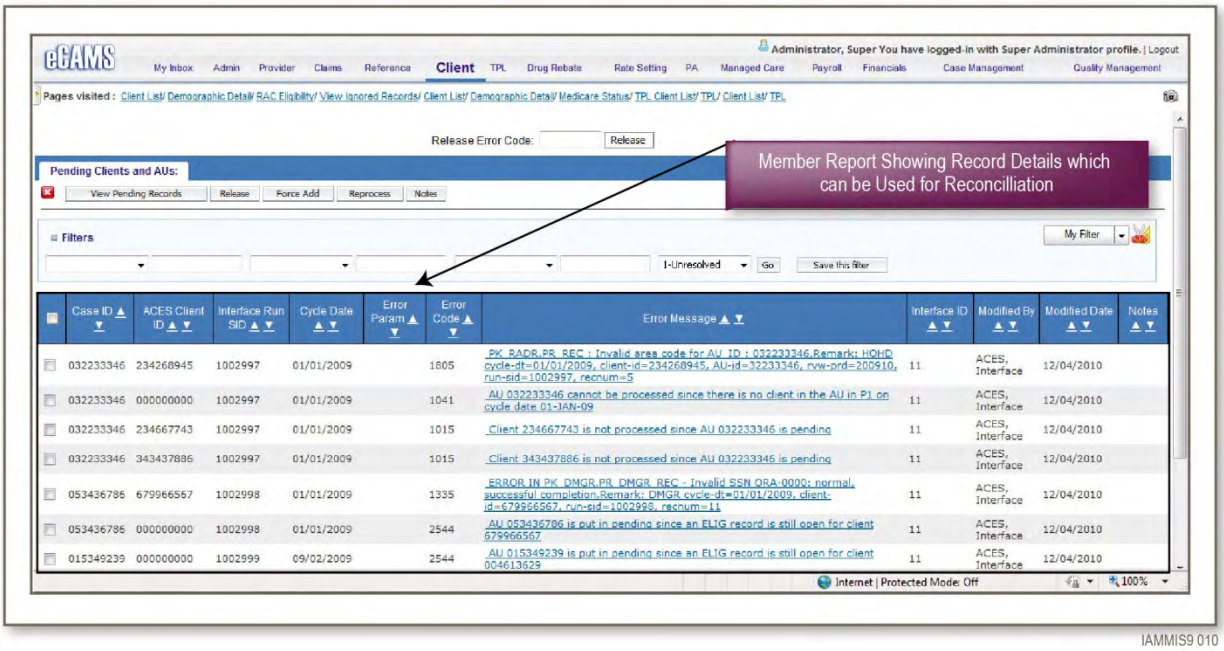


Figure 9.1.1.1-27. Reconciliation Report. eCAMS provides member reports with record details that can be used for reconciliation.

BE1.SS.12

eCAMS maintains detailed Medicare Part A, B, C and D data at the member level. The system is capable of extracting this Medicare data and distributing it via the EXACT interface framework to the Medicare claims processor for use in processing crossover claims.

BE1.SS.13

eCAMS stores different addresses received from eligibility files to be used for letter generation or for prior authorization determinations. eCAMS also has the flexibility for users to set the address type for different letter generations or for generating outbound files to external vendors.

Figure 9.1.1.1-28 depicts different address types maintained in eCAMS and can be used for letter generations.

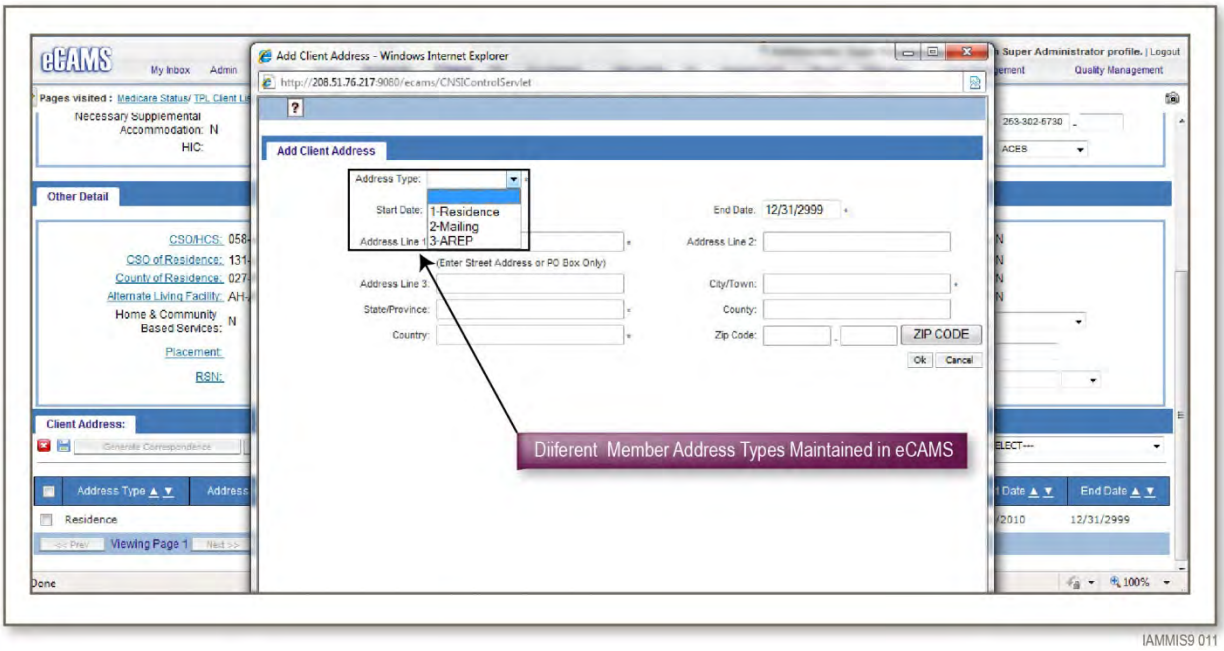


Figure 9.1.1.1-28. Member Address Types. eCAMS provides different address types which can be configured to generate letters to correct address types.

BE1.SS.14

The eCAMS online search functionality supports searches for member data using SSN, member name, case number, and other search filters which will display member detailed information. Search filters can be combined to narrow the results of a search. For example, authorized users can search for members with a last name of Jones and a birth date of 06/21/1987.

eCAMS utilizes SOUNDEX to return name results which sound similar to the name entered in the search criteria. eCAMS supports wild cards, based upon Department defined business rules, for certain search data elements. eCAMS supports the ability to search for multiple (and duplicate) member records using list page filters. For example, a search of last name "Smith" and first name "John" will result in a list of every member record with a name of John Smith. The list page display contains columns for key identifiers, such as member Medicaid ID and date-of-birth to help the user see duplicate records.

eCAMS provides powerful reporting capabilities via list pages. Extensive filter options are available on a single page to perform complex searches using minimal keystrokes/mouse clicks. These pages display the results of a query based on user-selected filter criteria. The results may be one or multiple, (up to many pages) of rows satisfying the query. The result list can be sorted by any displayed column in ascending/descending order. If a user selects a filter that is not a standard column on the list page, the result list dynamically adds the filter criteria as another display column. Users can export the result list to Microsoft Excel for additional analysis and reporting. The eCAMS member detail page provides comprehensive coverage, demographic and indicator data in a single page. This dashboard view enables fast drilling into hyperlinks such TPL, lock-in, PHIPP case, and EPSDT data. Finally, the "Show" menu enables single-click page jumping to member details such as case, ID card, hospice, copay exemptions, and dual eligibility.

Figure 9.1.1.1-29 depicts the different search filter criteria which can be used by authorized users to view member detail information.

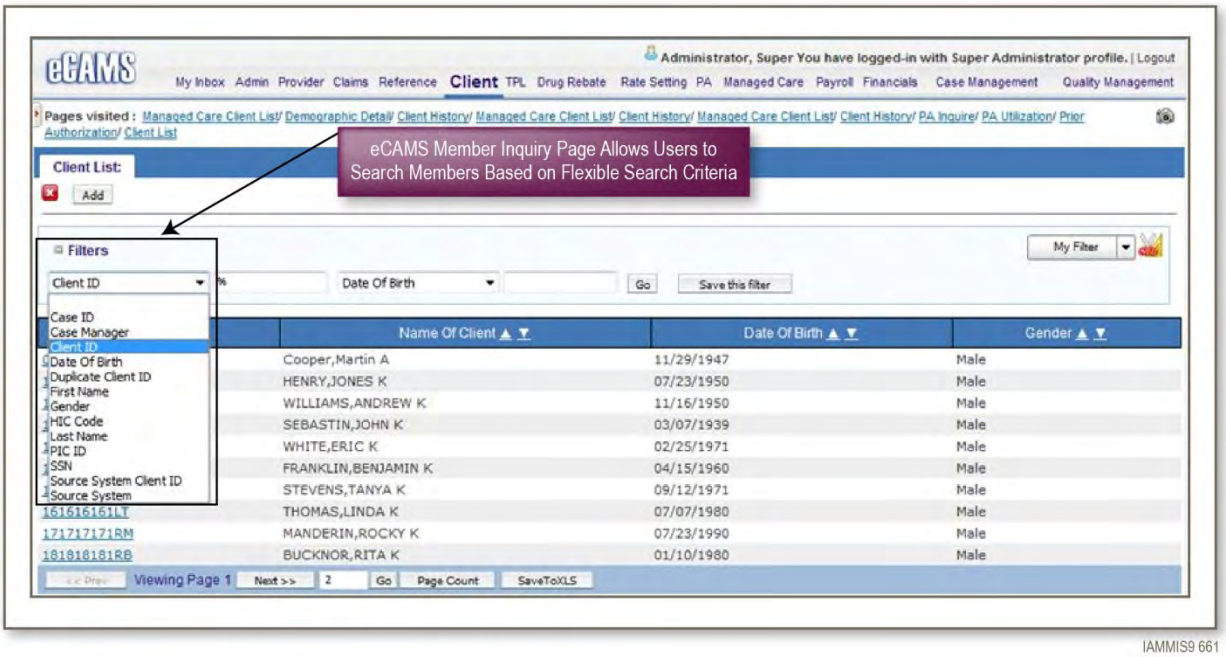


Figure 9.1.1.1-29. Search Filter Criteria. eCAMS enables search filters via easy-to-use drop-down lists.

BE1.SS.15

eCAMS stores eligibility segment information received from multiple sources via batch, real-time, or DDE screen updates.

eCAMS stores and displays each eligibility segment received from source systems-of-record. Each segment includes a start and end date. Eligibility segments from all sources and programs are displayed on the same list page.

Two contiguous eligibility segments for the same coverage constitute a single, contiguous episode of coverage which is represented by one benefit plan assignment record. In such a case, eCAMS displays all eligibility segments, including their respective start and end dates, which comprise the single benefit plan. eCAMS also displays the single benefit plan, which has a start date equal to the start date of the earliest eligibility segment, and an end date equal to the end date of the latest eligibility segment.

Figure 9.1.1.1-30 depicts different eligibility segments displayed on eCAMS screen.

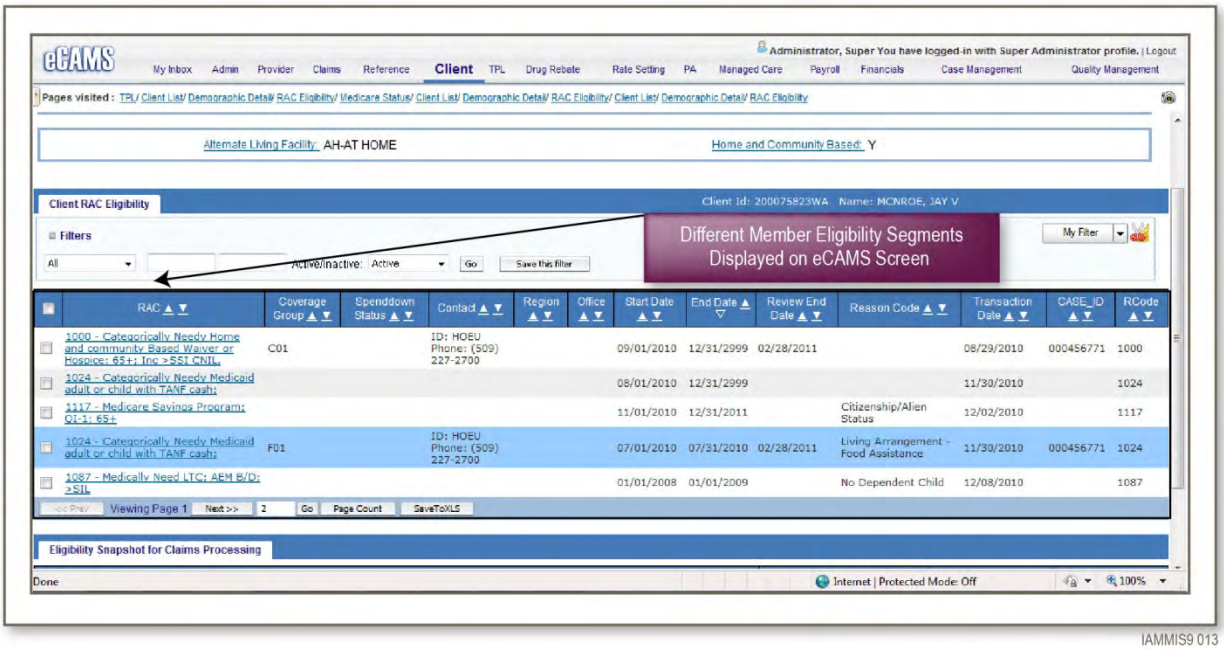


Figure 9.1.1.1-30. Member Eligibility Segments. eCAMS stores eligibility segments for multiple span periods for same source and for same periods from different eligibility sources.

BE1.SS.16

eCAMS framework supports accepting batch data via EXACT, real-time, or DDE screen functionality to store member data information and can be exchanged with other external sources/vendors using 270/271 real-time/batch transactions.

eCAMS provides the flexibility to generate reports and outbound files using EXACT interface framework or data exchange using web service framework to other state agencies and external sources. Team Noridian will collaborate with IME to define interface format requirements.

BE1.SS.17

eCAMS hosts all business process areas, such as claims, prior authorization, member management, TPL, and managed care in one system.

The online user interface provides real time easily accessible hyperlinks to every module across the top of every eCAMS web page. Users can quickly jump from one module to another with a single mouse click.

Team Noridian will collaborate with IME to configure user access profiles based on Department defined business rules, including definitions for normal business hours. Each user is assigned a profile which dictates the exact business process areas that may be accessed and the specific functions that may be performed within each area.

BE1.SS.18

eCAMS process member lock-in detail information via interface files which is stored in the member module. This lock-in information is displayed as provider associations on the screens to authorized users. eCAMS establishes associations between members and providers based upon level of care authorization records, PCCM data, and other provider-specific eligibility data received from source systems. A lock-in record is one example of a member-provider association in eCAMS.

Figure 9.1.1.1-31 depicts lock-in provider information showing online.

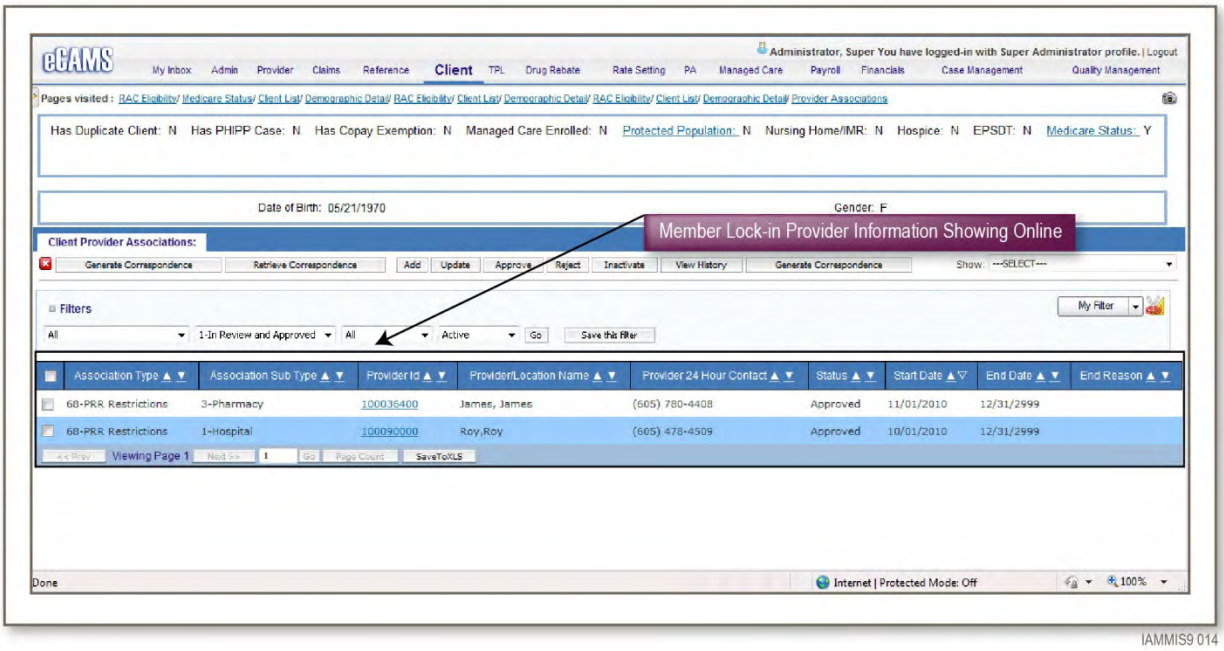


Figure 9.1.1.1-31. Member Lock-in Information. eCAMS will set an indicator for member lock-in and user can click on indictor to view the lock-in details.

BE2.01

eCAMS supports processing of TPL information details received from external third party resource organizations, Medicare Part A, Part B and Part D carriers, CMS and coordination-of-benefits carriers, via batch with our robust EXACT interface bus framework, via real-time updates using web service framework or via DDE updates using screen functionality. This TPL information is stored in the member system and is used for claims processing.

Users can view detailed TPL information on screens to see which process updated the TPL coverage. Figure 9.1.1.1-32 depicts TPL information created via DDE screen functionality.

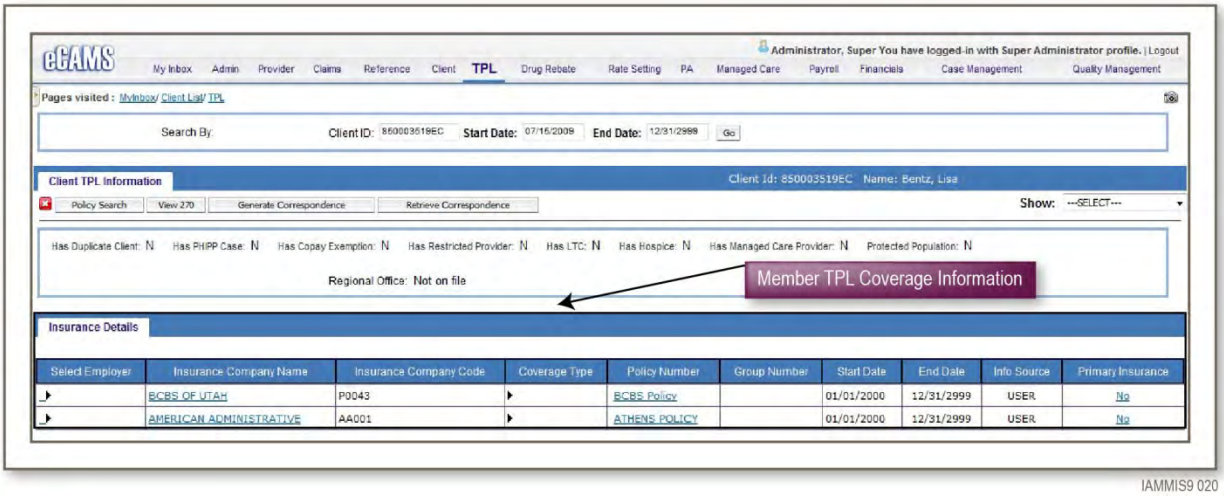


Figure 9.1.1.1-32. Member TPL Coverage Information. eCAMS stores TPL coverage details from multiple sources for different time periods.

BE2.01.01

The eCAMS reference management module maintains all benefit plan creations, their co-existence with other benefit plans, priority and restrictions to different codes like procedure, diagnosis, claim types. The benefit plan assignment matrix is used by the member management module to assign benefit plans at the member level based on different data elements received in eligibility segments. eCAMS provides the flexibility to define specific table driven business rules for benefit plan effective dates, and to set them at the benefit plan level. For example, the rule for the effective date of benefit plan A may be to set the effective date as the first day of the following business month, while the effective date for benefit plan B may be a default date defined by IME.

Figure 9.1.1.1-33 identifies multiple benefit coverage groups assigned for a member.

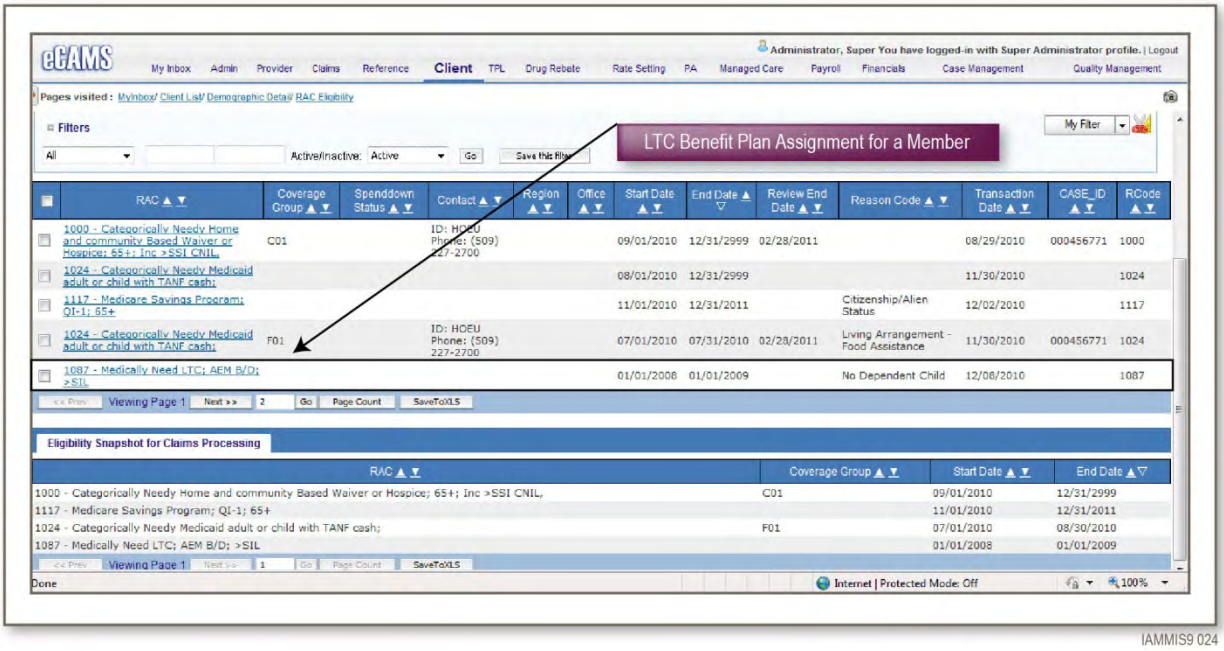


Figure 9.1.1.1-33. eCAMS assigns benefit plan, including start and end dates, based on eligibility and demographic factors.

BE2.01.02

eCAMS supports the creation and maintenance of different benefit plans using the reference business process module via online screen functionality. Department defined business rules outline the benefit plans and their priority. The benefit plan definition includes the eligibility criteria for the plan, the services covered, applicable plan premiums, the co-pay deductible, and excluded services.

During the eligibility data intake process, eCAMS applies and associates benefit plans based on eligibility criteria defined for the member, whether for FFS, managed care benefit plans, or other defined plans.

Whenever eCAMS receives eligibility and authorization data from multiple sources it uses benefit plan rules for priority and co-existence to derive benefit plan assignments using the eligibility factors received.

eCAMS applies Department-defined recipient aid category (RAC) hierarchies based on covered services as defined through procedure/revenue codes and taxonomy codes. The claims adjudication process utilizes the combination of RAC hierarchies and benefit plan assignments to determine which benefit plan will fund the claimed service.

Figure 9.1.1.1-34 depicts benefit plan assignment in eCAMS using eligibility factors received as part of eligibility files and defined benefit plan rules.

BE2.01.03

The eCAMS reference administration has the flexibility to define benefit plans using DDE screen functionality. When system receives eligibility files from multiple sources it will process and assigns benefit plans at member level based on eligibility and authorization factors. These different benefit plan segments will be linked to a member and will be used for claims processing for that member for the date of service received.

The system assigns a unique member system identifier, called a member SID, to each member. All subsequent transactions and queries for a member are associated to the member SID, after a detailed de-duplication process. This enables the member's Medicaid ID, and multiple benefit plan identifiers for that member, to be linked to the unique eCAMS member identifier and avoid duplication of member records/data.

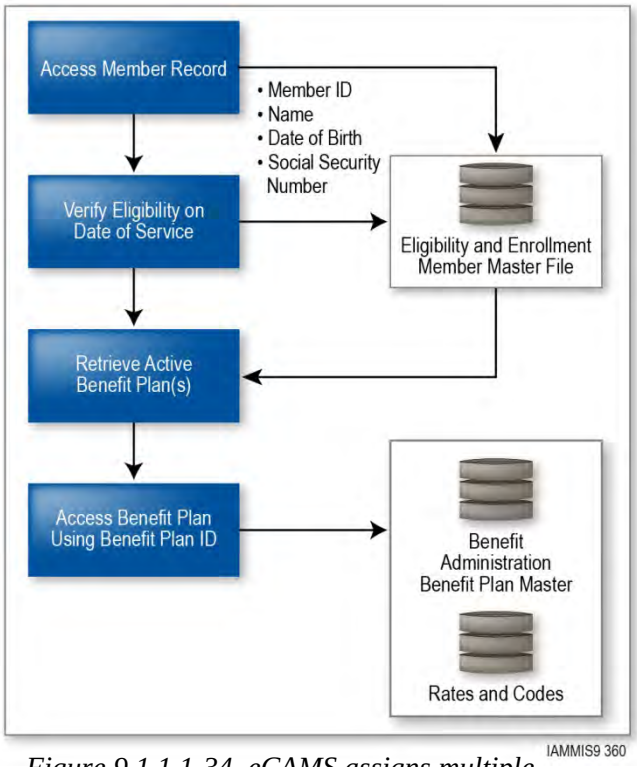


Figure 9.1.1.1-34. eCAMS assigns multiple benefit plans for a member based on eligibility and authorization factors.

BE2.01.04

The eCAMS reference module has the flexibility for authorized users to seamlessly define and maintain different benefit plans using benefit plan administration wizard. The defined benefit plans will have priority, co-existing with other benefit plans and restriction like procedure, diagnosis, claim type, and provider which will be used during claims processing.

When eCAMS receives member eligibility information through the interface it will use the benefit plan defined in the reference module to assign these at the member level.

When system processes claims for members it will use the benefit plan assigned at member level and will check the different restrictions defined at benefit plan level before paying.

Figure 9.1.1.1-35 depicts DDE screen functionality for authorized users to define and maintain benefit plan details.

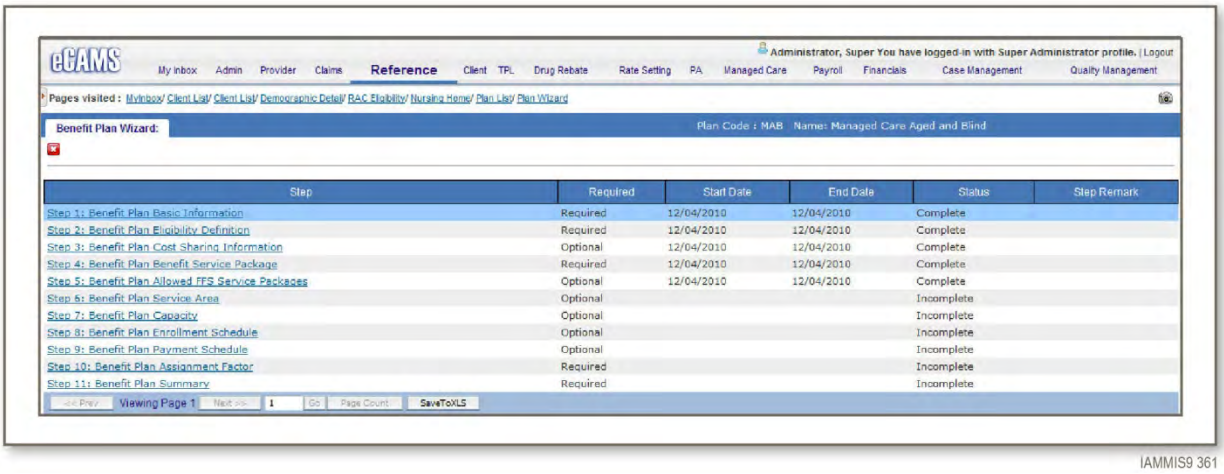


Figure 9.1.1.1-35. DDE screen functionality. User can create different benefit plans and can associate different services package for the benefit plans.

Figure 9.1.1.1-36 depicts the benefit plan assignment for member and its usage during claims processing.

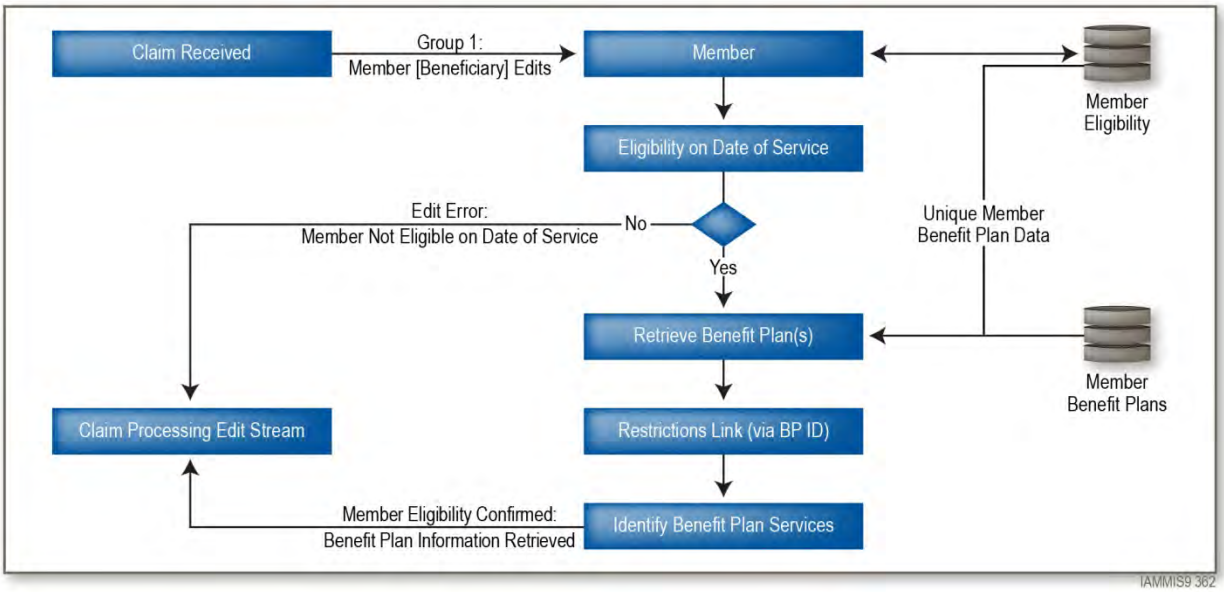


Figure 9.1.1.1-36.Benefit Plan Assignment. Benefit plans provide tight integration between member eligibility data and claims processing.

BE2.01.05

eCAMS has the capability in storing multiple TPL records for a member as received via batch interface files, real-time, or DDE and allows authorized users to update TPL or carrier information online using eCAMS screen functionality.

eCAMS' TPL business process area allows the configuration of comprehensive information, including but not limited to the following:

- Carrier
- Policy number
- Group number
- Pharmacy Benefit Manager (PBM) ID and member identification number

- Sponsor, subscriber or policy holder name and identification number(s)
- Type(s) of coverage
- Dates of coverage
- Date the coverage was added to the database
- Date the coverage was updated
- Court order including date ranges and responsible payer
- Part D enrollment indicator - The record should indicate the member is enrolled in Medicare Part D and identify the plan in which the member is enrolled
- Allow for multiple insurance policies

eCAMS supports and displays multiple TPL records for a member, including the ability to prioritize each coverage record based on the payer.

Figure 9.1.1.1-37 depicts TPL coverage information where the user can change insurance coverage data.

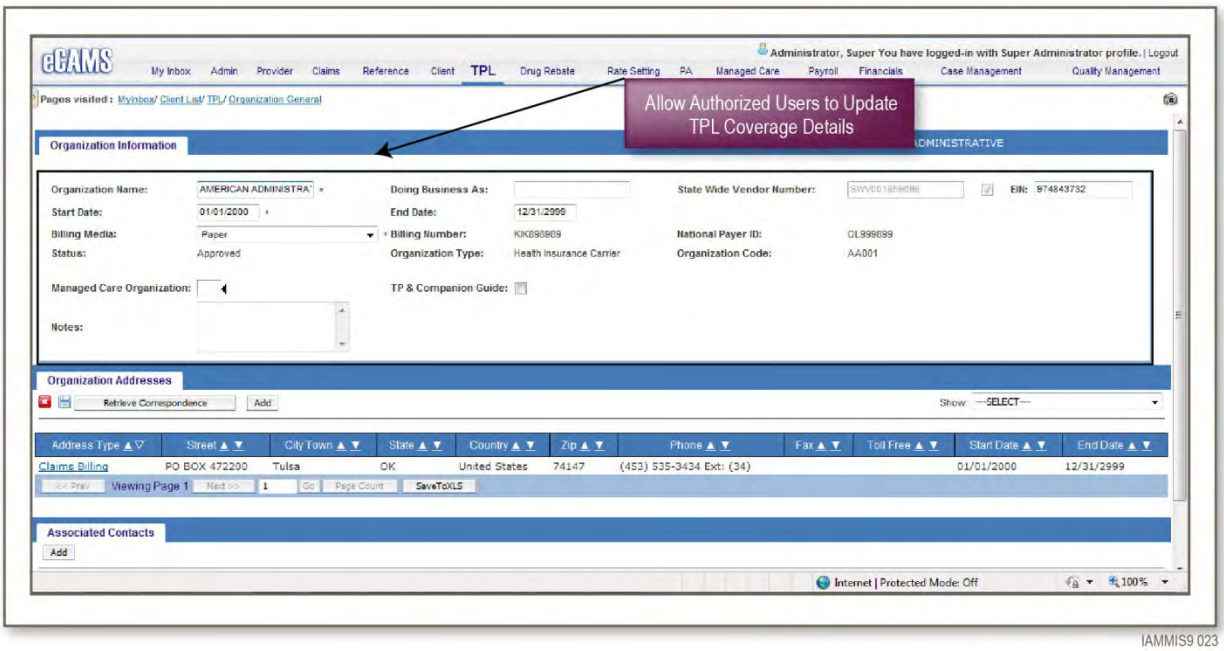


Figure 9.1.1.1-37.TPL Coverage. eCAMS has flexibility for authorized users to create or maintain TPL coverage online.

BE2.02

eCAMS assigns benefit packages based on the eligibility criteria and assignment factors defined in the benefit package definition. This information will be configured to meet IME needs and rules. The benefit packages are associated with eligibility criteria at the time benefit packages are defined. This association allows members to be assigned to benefit packages.

BE2.02.01

eCAMS maintains both active and historical record of benefit plan assignments for a member and compares Medicare coverage data with Medicaid eligibility records to report and display dual eligibility information. Users can view both active and historical benefit plan details using screen functionality.

Figure 9.1.1.1-38 depicts active benefit plan segment details on screen which includes both current and history segments.

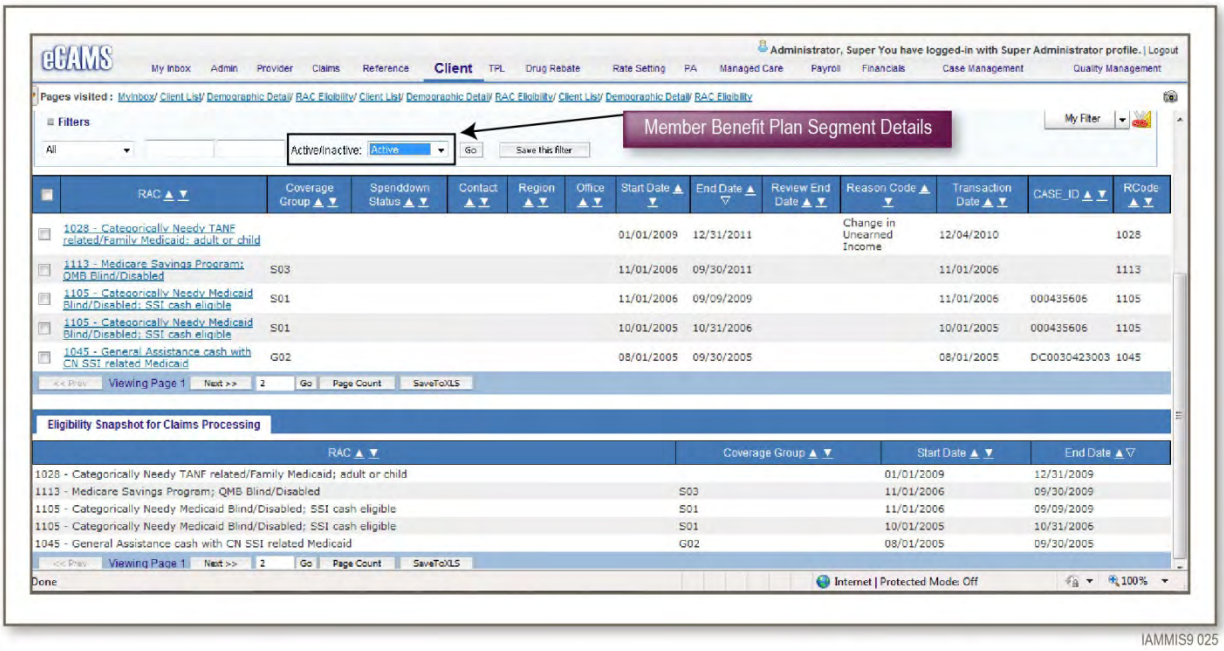


Figure 9.1.1.1-38.Member Benefit Plan Segment Details. eCAMS keeps both active and inactive benefit plan details history and can be viewed online.

BE2.02.02

The eCAMS reference business process administration module has the flexibility to define and maintain benefit plans for authorized users.

The system provides a benefit plan wizard which allows authorized users to define different benefit plans, create hierarchy and restrictions, which will be used during claims processing.

eCAMS provides the flexibility to configure the benefit plan definition process to support testing benefit plan changes in designated test environments and promoting them to production as per the established testing and migration processes.

Figure 9.1.1.1-39 depicts benefit plan wizard which will be used by authorized users to define different benefit plans without system dependency.

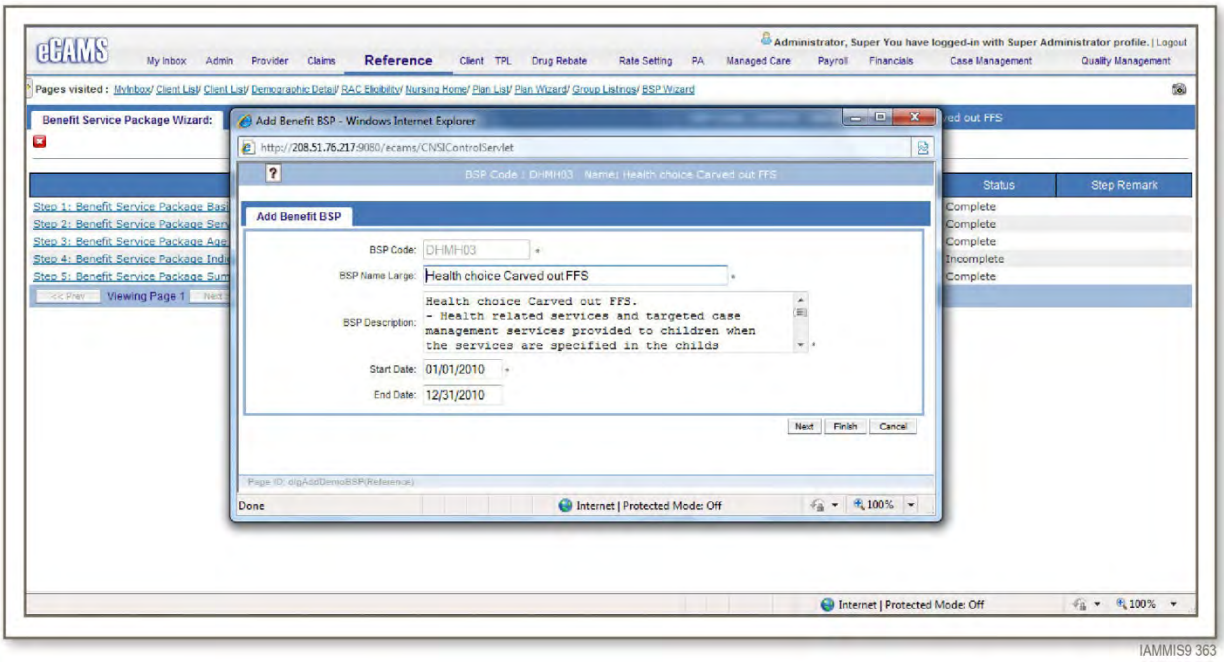


Figure 9.1.1.1-39. Benefit Plan Wizard. eCAMS provides and online wizard to walk authorized users through the process of defining a benefit plan.

BE2.02.03

The eCAMS reference business process module supports the ability for authorized users to define and maintain different benefit plans without programmer dependency. The benefit plan wizard allows authorized users to define different types of benefit plans such as Fee for Service or Managed Care. The system also has the flexibility to define different restrictions at the benefit plan level such as service area, capacity, claim type, and cost sharing which will be used during claims processing. The results of the benefit plan configuration process are stored in table driven rules for use in benefit plan assignments and claims processing.

BE2.02.04

eCAMS maintains both active and historical record of benefit plan assignments for a member including their dual eligibility information. Users can view both active and historical benefit plan details using screen functionality.

BE2.03

The eCAMS reference module provides online screen functionality for authorized users to define restrictions/limitation for different benefit plans.

During the eligibility intake process, eCAMS applies and associates benefit plans based on eligibility criteria defined for the member, whether for FFS, managed care benefit plans, or other defined plans. The benefit plan definition includes the eligibility criteria for the plan, the services covered, applicable plan premiums, the co-pay deductible, and excluded services. During claims processing, the system uses the limitations and restrictions defined at benefit plan level for their adjudication.

Figure 9.1.1.1-40 shows authorized users how to create different limitation for benefit plan which will be used during claims processing.

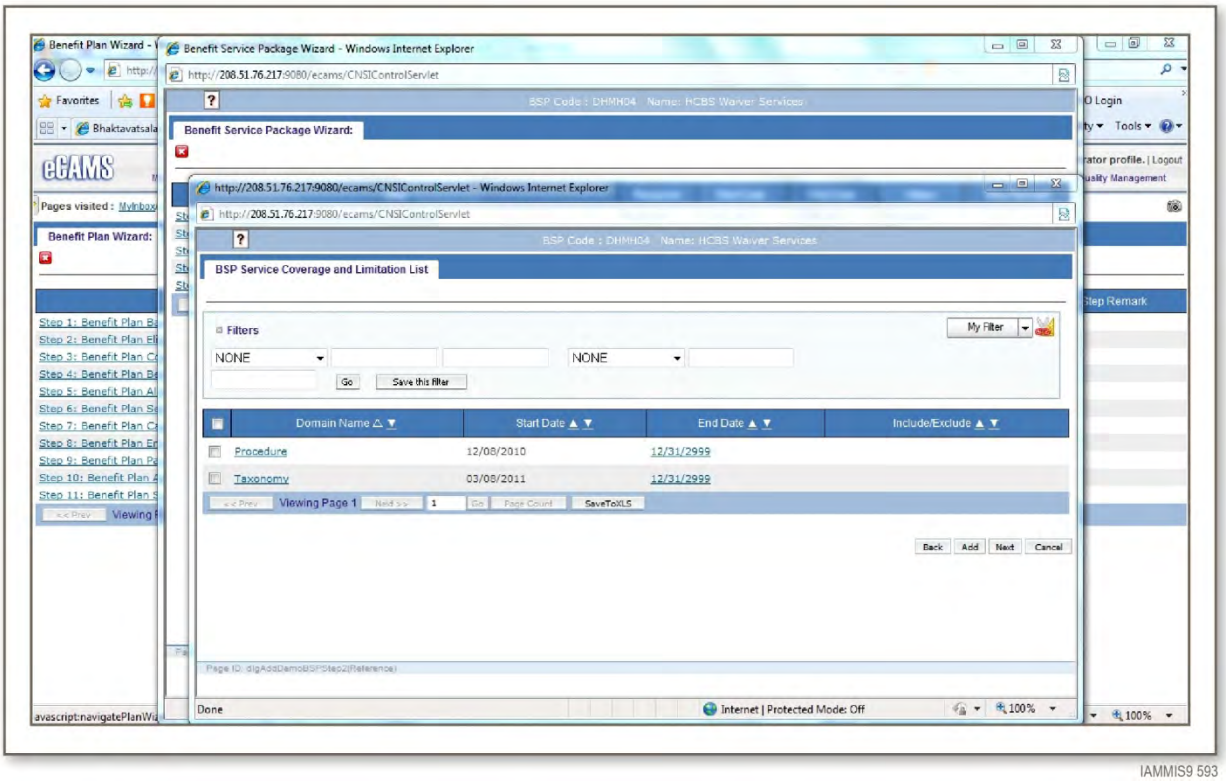


Figure 9.1.1.1-40. Creating Different Limitations. Users can define different service coverage or Limitations which will be used by claims.

BE2.04

The eCAMS benefit plan definition maintains service coverage and service limits restrictions, and uses approximately 18 factors, including procedure code, revenue code, place-of-service code, taxonomy, bill type, and geographic location. The service limitations include both dollar-based and unit-based limits. Benefit plan information includes cost sharing information such as plan premiums, deductible, spenddown, and co-pay.

BE2.05

The eCAMS Benefit Plan definition covers cost sharing information, including premiums, co-pay, deductible, and spenddowns. eCAMS can also define cost-sharing frequency.

Figure 9.1.1.1-41 illustrates options for defining cost-sharing tiers. Options include such values as the tier basis, (income or family size), tier start and end dates, family size and income, premium payment frequency and amount, co-pay frequency and amount, out-of-pocket ceiling frequency and amount, and spenddown frequency and amount.

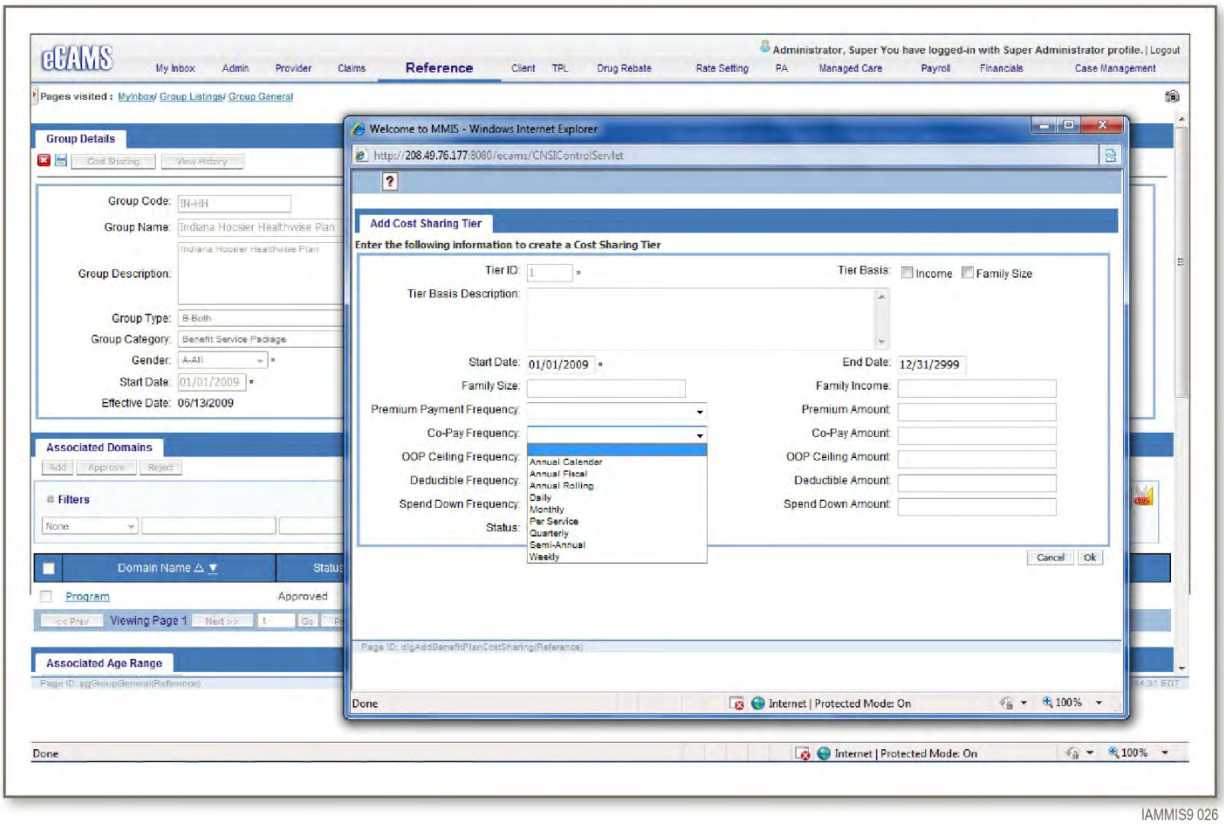


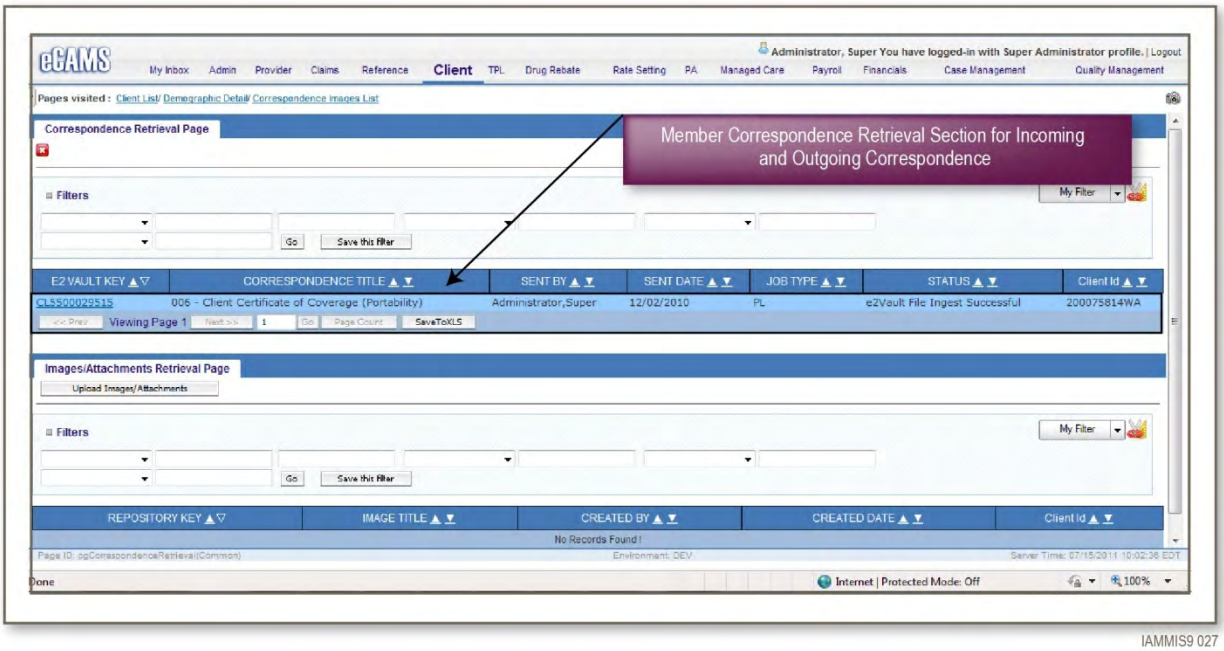
Figure 9.1.1.1-41. Defining Cost Sharing Tiers. eCAMS provides a comprehensive, online benefit plan definition framework, plan cost sharing, plan coverage, premiums and co-pays information.

BE2.06

eCAMS benefits administration provides flexible user-friendly online screen functionality which allows users to define cost sharing details at the benefit plan level. Claims processing will check member benefit plan details and corresponding cost sharing information to calculate the member's out of pocket expense before paying the claim. The system also checks for cost sharing details if the member moves from one benefit plan to another before the claim is processed.

BE2.07

The eCAMS member business process area maintains all case tracking information, including audit history of member notices, with date and time sent, originating user, and reason for the notice. Authorized users are able to display a list of all correspondence, including links to the correspondence images stored in OnBase.Figure 9.1.1.1-42 identifies the Member Correspondence Retrieval screen for incoming and outgoing correspondence, including date fields.

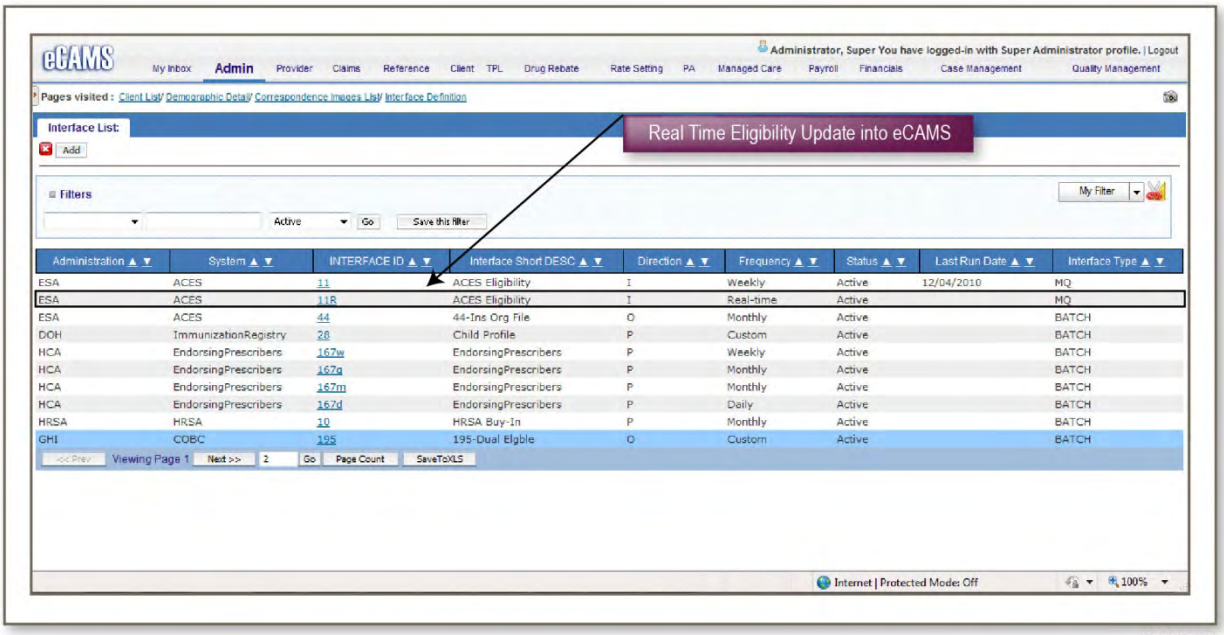


IAMMIS9 027

Figure 9.1.1.1-42. Member Correspondence. eCAMS enables the display and retrieval of all member correspondence.

BE2.SS.01

eCAMS has the capability to receive and process member eligibility, demographic, and authorization information real time using web service framework. Eligibility data received real time is immediately posted to the member eligibility database and is available for claim, prior authorization, and eligibility inquiry processes. Figure 9.1.1.1-43 depicts one of real time eligibility source defined in eCAMS.



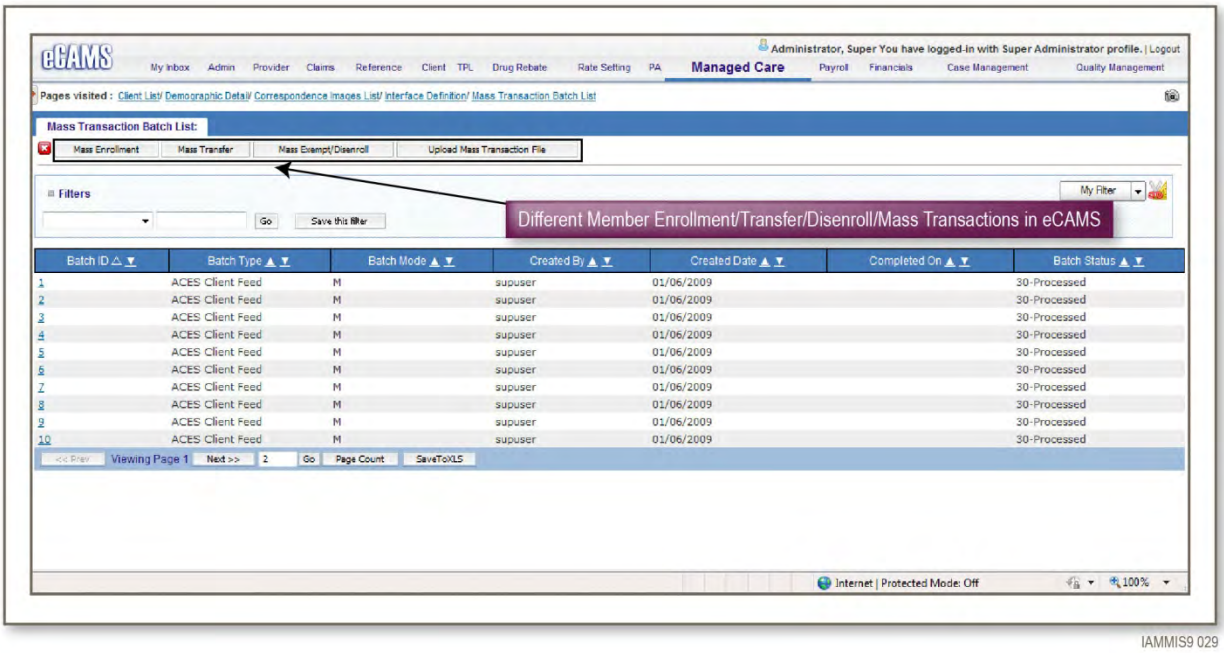
IAMMIS9 028

Figure 9.1.1.1-43. Real Time Eligibility source. eCAMS interface list page showing both batch and real time interfaces.

BE2.SS.02

eCAMS provides the flexibility to perform mass transactions, including mass enrollment, mass transfer of members from one plan to another, and mass disenrollment. eCAMS also supports mass transaction submission requests with its ability to upload mass transaction data files in Excel format

Figure 9.1.1.1-44 identifies the available mass transaction selection criteria in eCAMS. After the selection is made, a mass transaction batch is submitted for execution. Users also view all the transactions under the batch and exclude a transaction from the batch.



IAMMIS9 029

Figure 9.1.1.1-44. Mass Transactions. eCAMS page for initiation of mass enrollment, transfer and disenrollment batch transactions.

BE2.SS.03

eCAMS supports secured real time interaction with POS using web service framework to verify member eligibility as directed by IME. Team Noridian has implemented a proven real time POS interface for the eCAMS system servicing the State of Washington. We will modify the interface to meet the needs of IME.

BE2.SS.04

eCAMS supports the creation and maintenance of unique business rules for each eligibility source, including real time and batch interfaces. Business rule definitions include the interface source and format, data element validation, error thresholds, and escalation procedures.

eCAMS reports warning and fatal errors for each eligibility record that is received from systems of record. Error messages are configured based on interface business rules, and can include messages such "possible duplicate - record allowed" or "exact duplicate - record rejected". The member ID is included with each reported error.

The system also supports tracking of each interface instance through the use of online screens displaying execution details, such as number of records processed and number of records in error.

BE2.SS.09

eCAMS maintains lock-in information in its member data repository and supports physician, house hospital, and pharmacy lock-in indicators. Figure 9.1.1.1-45 depicts member lock-in for a provider.

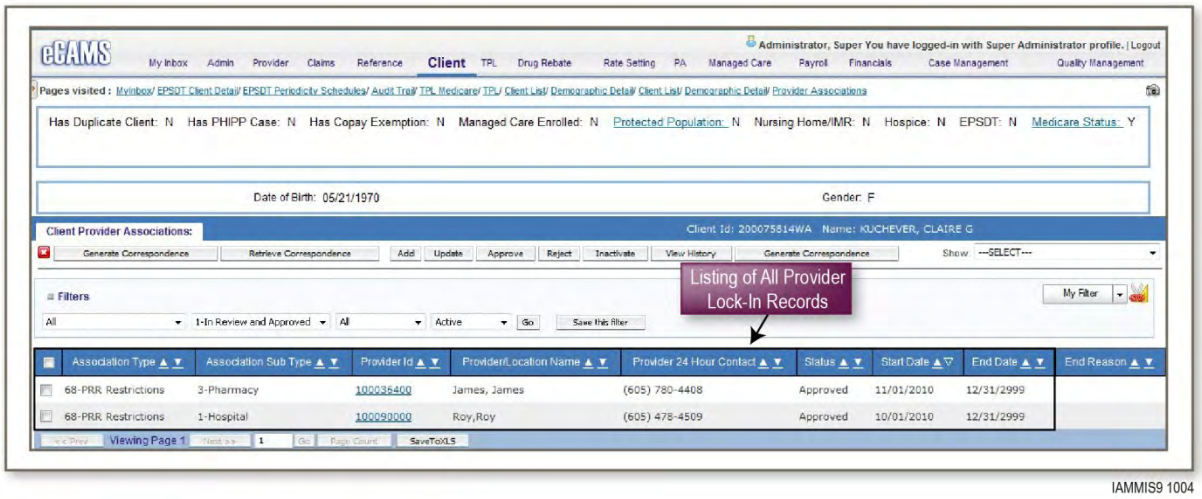


Figure 9.1.1.1-45. Member Lock-in. eCAMS list page showing provider lock-in assignments for a member.

BE2.SS.08

eCAMS maintains eligibility, benefit plan, cost of sharing, provider lock-in, TPL, Medicare eligibility, and EPSDT information as part of member information. This information is accessed by claims adjudication, payment, managed care, and TPL recovery processes.

eCAMS provides the flexibility to configure reports showing the number of members in lock-in status, the reason for the lock-in and the number of unauthorized providers billing for services during lock-in time segments.

BE3.01

eCAMS allows authorized users to inquire member eligibility information by providing primary attributes for the date of service so it will display the eligibility details. The system has the capability to track the user inquiry details including inquiry date and time, inquiring provider or eCAMS ID, date(s) of service, and member ID. Figure 9.1.1.1-46 depicts providers submitting member eligibility inquires for date of service using eCAMS screen functionality.

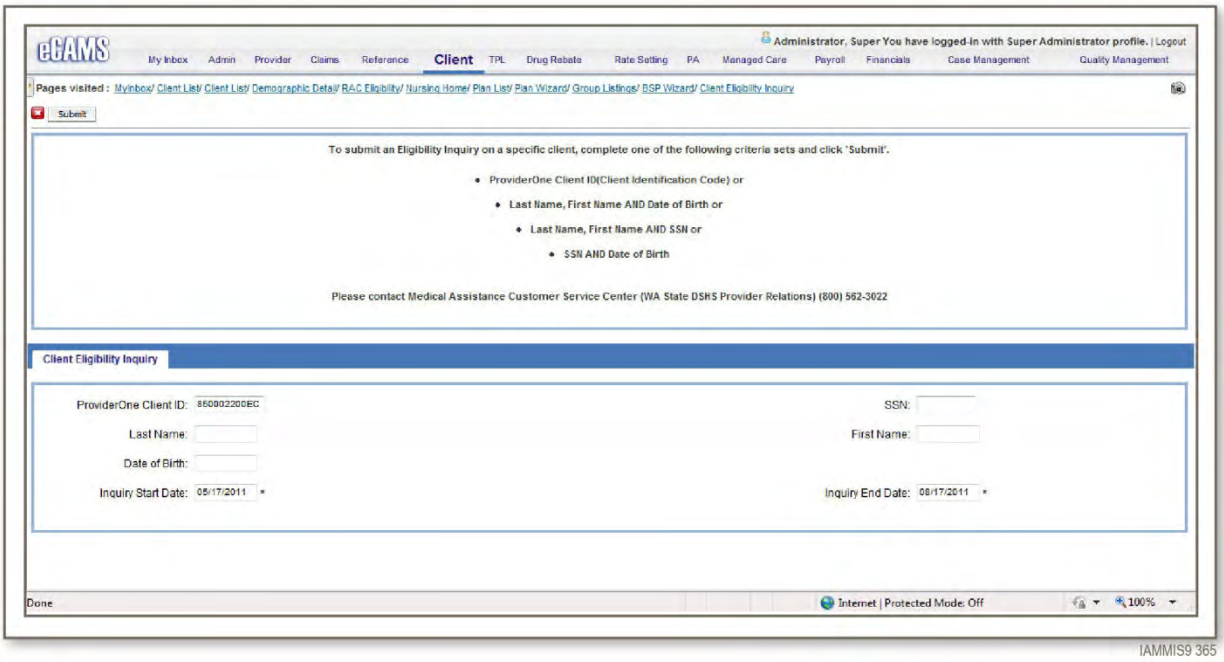


Figure 9.1.1.1-46. Providers Submitting Member Eligibility Inquiry. eCAMS entry point for online provider eligibility inquiries.

Figure 9.1.1.1-47 depicts Eligibility Inquiry results based on Provider inquired date of service.

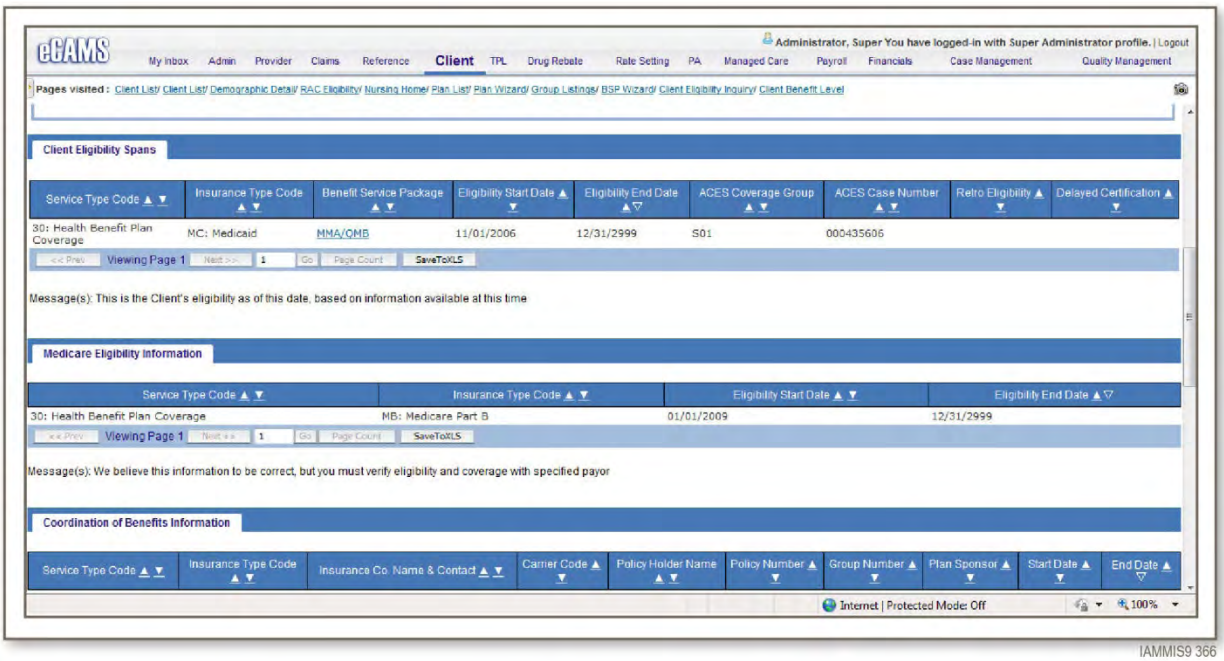
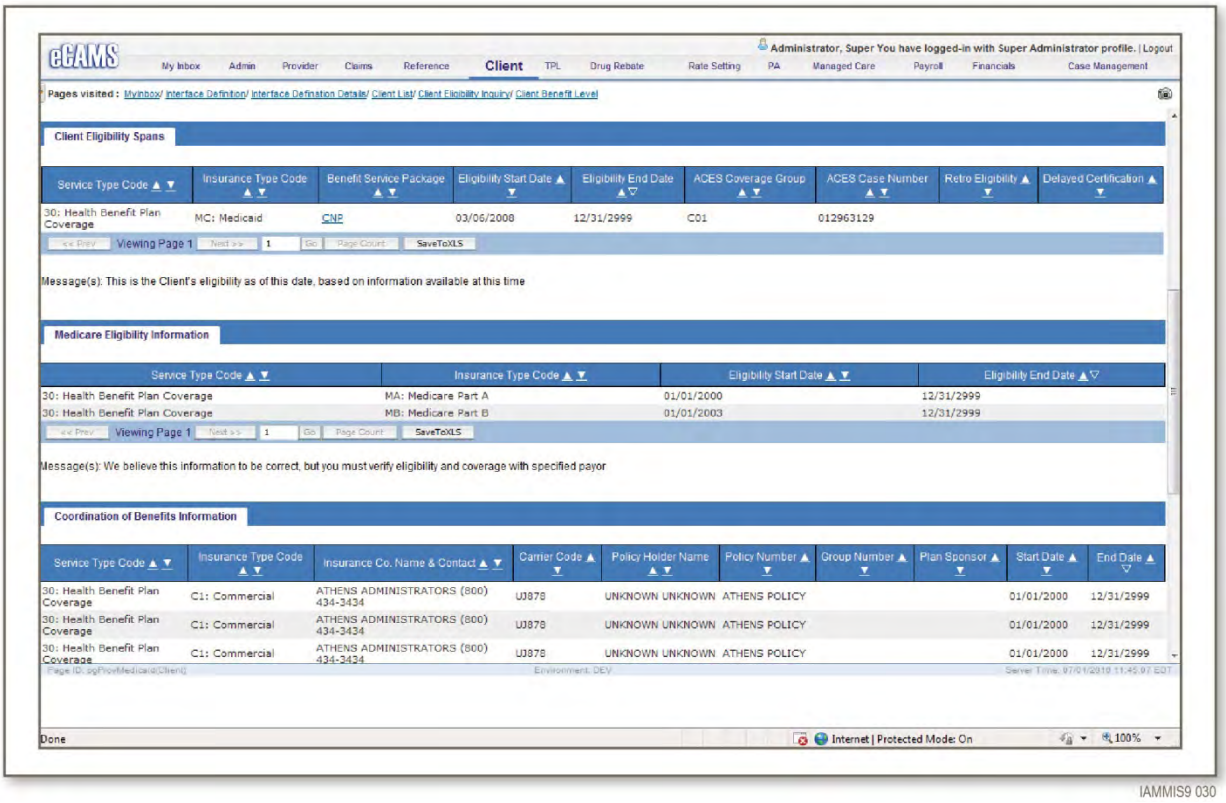


Figure 9.1.1.1-47. Eligibility Inquiry. eCAMS provides member eligibility, TPL, and other details for the provider inquired date of service.

BE3.02

The eCAMS eligibility inquiry response complies with the HIPAA 270/271 transaction standard and provides TPL information in the response, which includes details on third-party payers and Medicare eligibility.

Figure 9.1.1.1-48 identifies the TPL information on a member record.



IAMMIS9 030

Figure 9.1.1.1-48. eCAMS summarizes current eligibility spans, Medicare coverage and TPL inform in a single page

BE3.03

eCAMS provides information on member participation in a managed care program in response to eligibility inquiries. The member eligibility inquiry response supports lock-in, PCCM, and managed care provider information.

BE3.04

eCAMS maintains service utilization, special population, lock-in information, and case management indicators in its member data repository. This information is accessed by eligibility verification, claims adjudication, payment, managed care, and TPL recovery processes.

An online provider eligibility inquiry response includes member lock-in, Primary Care Case Management (PCCM), and Primary Care Physician (PCP) indicators when present.

BE3.05

The eCAMS audit framework allows for the logging of all eligibility inquiries, including inquiry date and time, inquiry source (including the source system user ID), and the member included in the inquiry. The

system also tracks the date and time of responses to each query, which helps monitor the time lag between a query and a response.

BE4.01

Team Noridian provides a fully HIPAA compliant system to support all current mandated transactions as specified by HIPAA and provides the framework for implementing the future standards. eCAMS framework is extendable and could be easily modified to accept future and other non mandated EDI formats identified by the Department.

The new MMIS will provide support for all CMS mandated transaction and code sets, including the 5010 version for the X12N transactions and the ICD10 code set. Team Noridian will support all future standards throughout the life of the contract. The timing for implementing any future standards will be negotiated with the Department based on CMS mandated timetables for implementation as well as the agreed upon project work plan for the new MMIS.

Team Noridian's proposed HIPAA compliant solution is addressed more in detail in section 9.2.3, HIPAA Transaction Requirements.

BE4.02

eCAMS supports sending X12N 270 transactions to third parties to query other payer eligibility files. Responses received (271) are processed and third-party information is updated for members based on the responses, based on mutual agreement between IME, trading partners, and Team Noridian.

BE4.SS.01

eCAMS framework supports a generation of creditable coverage on a schedule and can be configured for ad hoc basis as defined by IME. Refer to Figure 9.1.1.1-42 for an example of the Member Correspondence Retrieval screen with a link to a certificate of creditable coverage letter.

BE4.SS.02

eCAMS has the flexibility for the Department to define batch letter generation schedules. Based on the defined schedule the system will identify members to receive privacy notices and will use Doc1 to generate the letters.

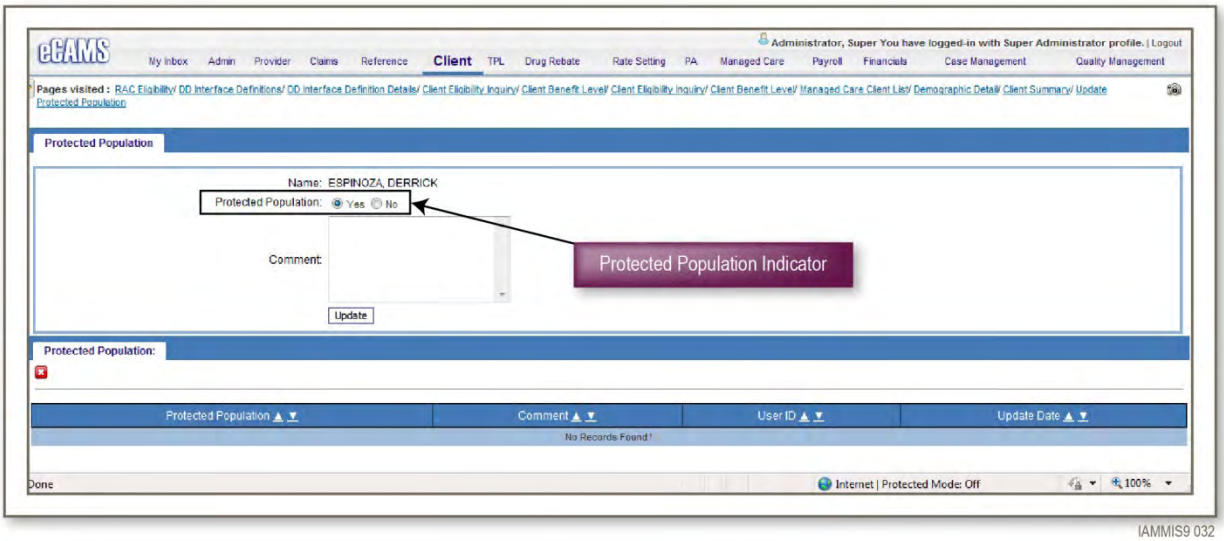
eCAMS enables authorized users to change the schedule based on their needs so the letter generation can happen on an ad hoc basis.

BE4.SS.03

eCAMS audit framework allows for the logging of all eligibility inquiries, including inquiry date and time, inquiry source, the source system user ID, and the member included in the inquiry. The system also tracks the date and time of responses to each query.

eCAMS supports indicators meeting the enhanced security needs for members. In eCAMS, certain members receiving confidential services are identified via a protected population indicator. For members with such an indicator, eCAMS supports the ability to define individuals authorized to discuss PHI for the member, and audits every inquiry and any updates made to these member records; the same types of audits are extended to suppress the member document generation. eCAMS also ensures documents such as the EOMB are not generated for members who have received any confidential services during a reporting period.

Figure 9.1.1.1-49 depicts the protected population indicator.



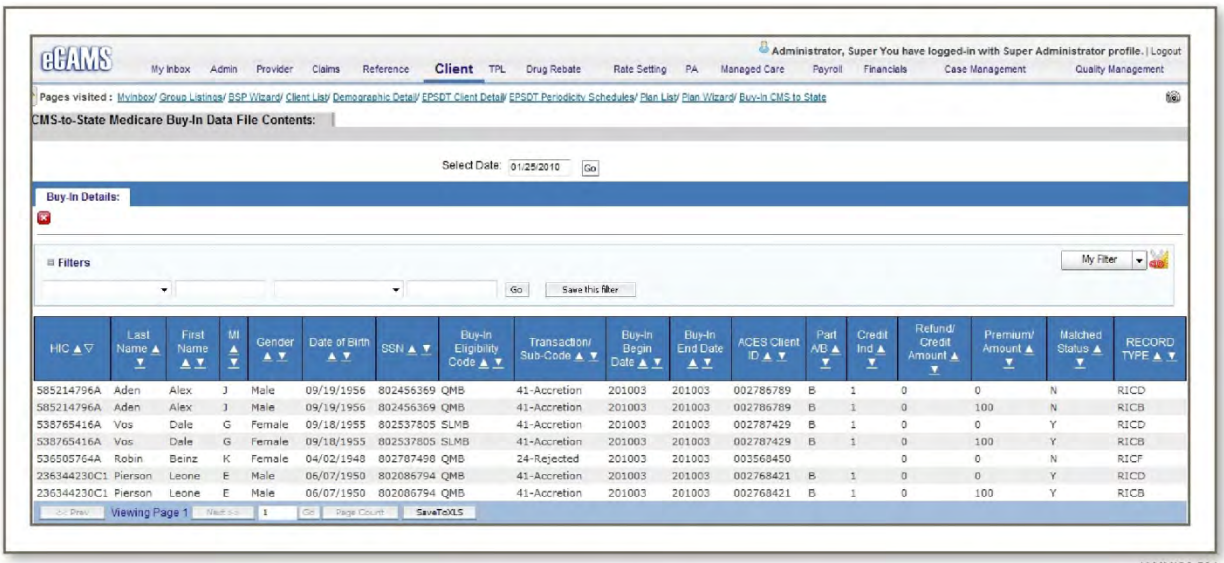
IAMMIS9 032

Figure 9.1.1.1-49. Protected Population Indicator. An easy-to-use protected-population indicator is native to eCAMS for audit, privacy, and security needs.

BE5.01

As described in our response to requirement BE5.06, eCAMS implements a bi directional buy-in data exchange process for maintaining up to date information on the Medicare buy-in status of members. eCAMS has the capability to determine eligible buy-in members based on based on CMS or State defined criteria. eCAMS Medicare Buy-In Maintenance screens allow the user to track the Buy-In Recipient List and Buy-In status along with the payment made. The interface instances screen provides information related to the statistics tied to the number of records processed, records in error, error description, and correction messages.

Figure 9.1.1.1-50 shows the Interface screen that will be used as part of the support of Department Buy-In business requirements.



IAMMIS9 594

Figure 9.1.1.1-50. eCAMS Support for Buy-In Interfaces. Flexible eCAMS interface definitions support buy-in interfaces to support Department cost-containment efforts.

We understand the critical role this information plays in ensuring accurate claims processing. The eCAMS system provides the capability to be extended to support premium reimbursements for additional Department programs.

BE5.02

The eCAMS outbound interface transmits potential Medicare Buy-In member information to CMS for verification and matching. After Medicare has performed verification and matching, automated premiums are established and paid on behalf of the member.

BE5.03

eCAMS receives buy-in member information via the interface and applies records into the system. The system will track the number of records applied into the system, and the error out records will be reported in email notification. The eCAMS EXACT interface framework processes CMS Buy-In responses and automated premiums are established and paid on behalf of the members.

BE5.04

eCAMS processes change transactions and updates member Buy-In information in an automated fashion. eCAMS online screens help track Buy-In members and premium history information. The system will track errors or discrepancies during file processing using interface so that the system can report them in email notification to correct the data for reprocessing.

BE5.05

eCAMS Medicare Buy-In Maintenance screens allow the user to track the Buy-In Member List and Buy-In status along with the payment made. The interface instances screen provides information related to the statistics tied to the number of records processed, records in error, error description, and correction messages.

BE5.06

The eCAMS member business process area allows the user to track the Buy-In Member List and Buy-In status along with the payments made. The buy-in payment history screen displays members eligible but premiums have not been paid.

BE5.SS.01

eCAMS receives buy-in Medicare details from CMS and processes the details via interface. All buy-in details are stored in the system and the system will set an indicator for all buy-in transaction members based on their eligibility status. Based on Department defined schedules, the system can generate alerts to members for their eligibility or cost sharing status change.

BE5.SS.02

eCAMS supports a bi directional Medicare buy-in data exchange process with CMS. Automated premiums are established and paid on behalf of the members. eCAMS automatically processes change transactions and updates member buy-in information. eCAMS online screens help track Buy-In members and premium history information.

BE5.SS.03

eCAMS combines the ability to track dual Medicaid/Medicare eligibles, along with death information, to identify the Medicare buy-in members to report to CMS for the purpose of deleting their buy-in status. eCAMS will use evidence of an end in Medicare or Medicaid coverage, or evidence of the death of a member, to include the member's record in the outbound CMS interface for termination of their buy-in program.

BE5.SS.04

The eCAMS EXACT interface bus will be configured to receive Medicare information updates through Medicare Transaction files from the Medicare buy-in system or CMS as an inbound interface.

eCAMS' alert management framework will be configured to notify the Department when the transaction carries information another state has bought into Medicare for a member. This information will be maintained as a part of the member information set within the eCAMS member business process area. Team Noridian will configure a new indicator and provide a report of updates received from CMS regarding member buy-in records from other states.

BE5.07

The eCAMS interface receives and processes Medicare file from CMS. The system will look for dual eligibility for member based their Medicaid and Medicare eligibility information in eCAMS. This will be enhanced to support the MMA Part D data exchange processes, to identify and track Medicare Part D dual-eligible and Low Income Subsidy (LIS) eligible members to reduce costs on prescription drug claims and calculate spenddown payments.

BE5.07.01

eCAMS supports a scheduled Medicare data exchange from CMS to identify members with Medicare and update the member repository with data including Part A, B, C and D start dates, end dates, all amount fields, TPL and premium payment data, for coverage information, TPL recovery, and Buy-In. Timely accretion of Medicare data to eCAMS is ensured by immediate posting and processing of the inbound CMS Medicare file, followed by immediate file processing result alerts to defined operational staff.

Figure 9.1.1.1-51 identifies such coverage definition identified on a member.

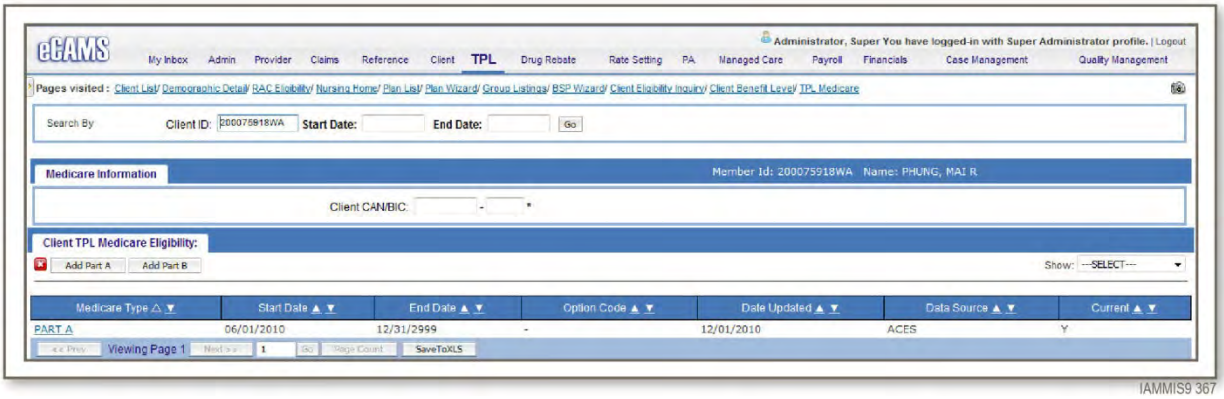


Figure 9.1.1.1-51. Coverage Definition. The eCAMS Member Management business process area capability to identify Medicare entitlement will perform effective cost containment.

BE.SS.01

eCAMS' member system processes spenddown information received via interface and keeps historical spenddown information, which can be used for claim processing or analysis. Claims will check for the stored spenddown details and once the spenddown amount is met, member Medicaid eligibility information will be used by claims to process.

BE.SS.02

Spenddown information stored in the member management system will be used for claims adjudicating or processing and will post respective edits based on IME defined rules. eCAMS supports electronic claim submission, including claims to be applied to spenddown.

eCAMS associates all of the members comprising a case to one another. During the claims adjudication process, the ability to determine if a claim belongs to a case where the head of household is enrolled as a spenddown client is available. Once identified, the payment amount of the claim can be applied against the spenddown amount of the case head.

BE.SS.03

eCAMS' DDE screen functionality allows authorized providers to inquire spend down eligibility information for a member. It also allows authorized providers to submit 270/271 for spenddown inquiries.

BE.SS.04

The eCAMS member portal has the flexibility to display member spenddown information; including claims applied towards spenddown, along with other member benefit related details using secured access privilege.

BE.SS.05

eCAMS' framework supports the generation of letters of notice to providers and members of claims that were applied to spenddown based on scheduled trigger set by IME.

BE.SS.06

eCAMS deducts claims payments if the spenddown amount is not met by the member. Based on the member spenddown information, claims post edit 02235 - CLIENT PENDING SPENDDOWN REVIEW. The edit disposition is set to suspend ensuring the spenddown has been met.

The eCAMS member record maintains spenddown information and tracks the spenddown balances of an individual member.

BE.SS.07

The eCAMS adjudication engine has edits related to specific policies which are grouped in the rules engine based on a logical grouping of those policies. For example, in eCAMS there is a set of duplicate claims edits which could be configured to execute Department policies on exact and suspect duplicates applied to spend down for the same member.

BE.SS.08

eCAMS collects member spenddown amounts via eligibility interfaces. The spenddown amount is then available for reduction during claims adjudication.

eCAMS also supports adjustment processes whereby based on IME direction, Team Noridian can manually flag the adjustment claim to be deducted from the original unmet spenddown. The adjustment adjudication process will automatically deduct from the originally applied to unmet spenddown amount.

BE.SS.9

The claims adjudication module within eCAMS supports flexible editing of claims during adjudication which prevents claims from being paid, in whole or part, during the period in which the client has not met their spenddown responsibility.

The claims meeting these editing criteria can be marked as paid, but paid at zero, for service registry, similar to encounters where the services are registered as rendered but the payment amount is zero.

BE.SS.10

eCAMS returns a spenddown met indicator (fund code) to the eligibility system once the spenddown amount is met. The interface between the State eligibility system and eCAMS eligibility system is bi directional in that both applications provide daily feeds to each other in order to stay in sync.

BE.SS.11

The claims adjudication module within eCAMS works on a first in, first processed basis. As such, the spenddown for claims in the medically needy file will be applied on a first in, first processed basis.

BE.SS.12

eCAMS associates all of the members comprising a case to one another. During the claims adjudication process, the ability to determine if a claim belongs to a case where the head of household is enrolled as a spenddown client is available. Once identified, the payment amount of the claim can be applied against the spenddown amount of the case head.

BE.SS.13

eCAMS processes eligibility information using interface and will store medically needy spenddown amounts and other authorization information in the system. DDE screen functionality allows authorized users to view spenddown details of claims which have been processed against member eligibility details.

BE.SS.14

eCAMS receives and processes member eligibility information multiple eligibility sources via interface for batch files, real-time updates using web-service framework and through DDE screen functionality for authorized users.

Once the system applies Medicaid eligibility information for a member, the system will allow authorized users to view certification history of member Medicaid eligibility periods.

BE.SS.15

Team Noridian will configure business rules in eCAMS so during the claims adjudication process, these rules will be utilized for applying the unpaid portion of Medicare crossover claims to the outstanding spend down amount of a client.

BE.SS.16

eCAMS EXACT interface framework supports receiving files from external systems and records all the applied, error and rejected records. eCAMS generates email error notifications to Department-defined distribution lists and generates scheduled control reports showing the number of records processed, and the number of error records per interface. eCAMS also generates a daily member level error report which shows all details for all error records from each eligibility interface.

BE.SS.17

Reversal or adjustments of paid claims will result in the spenddown amount maintained on the MMIS eligibility tables being restored by the amount of the original claim payment.

BE.SS.18

eCAMS supports secured real time interaction with POS using web service framework to verify member eligibility as directed by IME. Team Noridian has implemented a proven real time POS interface for the eCAMS system servicing the State of Washington. We will modify the interface to meet the needs IME.

Team Noridian will work with IME during the DDI phase of the contract to explore the possibility of allowing the exchange of spenddown information to occur in a real-time environment.

BE.SS.19

eCAMS processes eligibility data, EPSDT data, provider data and other defined details from multiple sources and stores all other information as defined in above requirement in member module. It also allows

users to update required details through online screens. Based on user access privilege they can navigate to multiple systems to verify claims details, view provider information or member enrollment details.

eCAMS is capable of generating notices, letters, or reports based on event triggered criteria. It uses EXACT interface framework to generate outbound files to external systems.

Team Noridian will configure eCAMS to ensure it supports the processing requirements for all inputs and outputs defined by IME including:

Inputs:

- Data from the eligibility systems
- Provider data
- EPSDT data
- Federal and state enrollment rules
- Data entered and uploaded by professional service contractors.
- Other inputs

Outputs:

- Notices of Decision and appeal rights to members on denied ambulance claims and denied rehabilitation therapy service claims as directed by the Department.
- Notices of Decision to members for denied and modified prior authorizations.
- State Supplementary Assistance checks to the address on file for each Residential Care Facility (RCF) member.
- Weekly file listing the state ID numbers, names, dates of service, amount paid and date paid of all Medicaid members for whom a Medicare crossover claim has been paid, but for whom Medicare eligibility is not indicated on the eligibility record.
- Data entry and edit exception reports to the Department for reconciliation with eligibility data.
- Run a monthly report showing any possible duplicates that exist on the MMIS member eligibility file.
- Histories for inquiries with dates of service for which data has been archived.
- All IME specified reports.
- Data extracts for Medicaid Statistical Information System (MSIS), Payment Error Rate Measurement (PERM) and Office of Inspector General (OIG) audits or any federal or state audits
- Other outputs

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9.1.2 Provider Management Business Area – MMIS

This business area includes the system requirements for provider management.

9.1.2.1 Provider Management

9.1.2.1.1 Provider Management System Requirements Table

PR	Provider Management Requirements - MMIS	A	B	C	D	E
PR1.01	Provide secure access to provider applications.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR1.01
PR1.01.01	Have security to maintain control over all data pertaining to provider enrollment.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR1.01.01
PR1.01.02	Provide authorized IME and contractor user inquiry access to provider data stored within the system.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR1.01.02
PR1.01.03	Provide update access only to authorized IME and contractor staff to make updates to the provider data.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR1.01.03
PR1.01.04	Provide the ability to recall provider applications by several different key fields such as name or reference number as defined by IME.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR1.01.04
PR1.01.05	The provider module must process provider data in an online, real-time mode and produce audit trails of all updates.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR1.01.05
PR1.02	Provide capability to route provider applications, collect and processes provider enrollment and status information.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR1.02
PR1.02.01	Provide edits, in the provider enrollment and update process, to track and identify errors and inconsistencies.	Yes	Yes			S Section 9.1.2.1.2, Requirement # PR1.02.01
PR1.02.02	Accept electronic signature on enrollment without hard copy as allowed by IME, state and federal regulations.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR1.02.02
PR1.02.03	Provide capability to upload provider enrollment files electronically and create electronic audit trail with ability to review applications.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR1.02.03
PR1.02.04	Edit appropriate provider applications and existing providers against the CMS excluded provider list.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR1.02.04
PR1.02.05	Provide capability to manually exclude providers and mark the provider as “Terminated by Medicaid Authority”. Providers marked as “Terminated by Medicaid Authority” must be manually released for participation in Medicaid prior to any claims payment. Providers marked as terminated by Medicaid authority must be terminated on the date provided.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR1.02.05
PR1.02.06	Provide the capability to suspend a provider application in pending status, until additional information is received from the provider.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR1.02.06
PR1.02.07	Assign a unique tracking number to each provider enrollment application or correspondence document.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR1.02.07
PR1.02.08	Provide the capability to tie provider correspondence documents to appropriate enrollment application when applicable.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR1.02.08

PR	Provider Management Requirements - MMIS	A	B	C	D	E
PR1.02.09	Identify and report providers (individual or group) that have initiated the enrollment process but have failed to return required information necessary to complete the enrollment into the Medicaid Program.	Yes	No	SM	30	Section 9.1.2.1.2, Requirement # PR1.02.09
PR1.02.10	Provide the capability to identify sanctioned providers and facilities to prevent the enrollment of members in sanctioned facilities.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR1.02.10
PR1.03	Produce notices to applicants of pending status, approval or rejection of their applications. Provide online real-time update capability for the provider file.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR1.03
PR1.03.01	Automatically generate notices to providers including but not limited to status change, approvals, denials and license expiration as determined by IME.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR1.03.01
PR1.03.02	Provide the capability for a provider to choose to receive provider communications by secure encrypted email, fax or combination or as directed by the IME.	Yes	No	SM	100	Section 9.1.2.1.2, Requirement # PR1.03.02
PR1.04	Maintain a provider numbering system with unique numbers that may be used to identify a provider's type and ensure that appropriate provider number ranges are allowed to prevent system problems in processing. Map NPI numbers to internal assigned numbers. Assign and maintain provider numbers for providers not eligible for an NPI number.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR1.04
PR1.04.01	Perform an automated duplicate checking process prior to adding applications to the file.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR1.04.01
PR1.05	Flag and route for action if multiple internal provider numbers are assigned to a single provider.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR1.05
PR1.06	Support communications to and from providers. Track and monitor responses of communications.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR1.06
PR1.06.01	Support mailings to multiple provider addresses as requested by the provider electronically or as directed by IME.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR1.06.01
PR1.06.02	Support different notifications to be sent to providers by program area or benefit plan (e.g., LTC, Home and Community Based Services (HCBS) and EPSDT).	Yes	Yes			Section 9.1.2.1.2, Requirement # PR1.06.02
PR1.07	Support a provider appeals process in compliance with federal guidelines contained in 42 CFR 431.105.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR1.07
PR1.08	Provide for date-specific provider enrollment and demographic data.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR1.08
PR1.08.01	Enable provider application processing statistics by type, month, year and processor.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR1.08.01
PR1.08.02	Provide the capability to track all provider enrollment denials in the provider tracking database.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR1.08.02
PR1.09	Generate information requests, correspondence or notifications based on the status of the application for enrollment.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR1.09
PR1.10	Track the sending of IME furnished information to enrolled providers.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR1.10
PR1.11	Produce responses to requests and or inquiries on the adequacy of the Medicaid provider network based on provider and or member ratios by geographic region and or provider type.	Yes	No	SM	75	Section 9.1.2.1.2, Requirement # PR1.11

PR	Provider Management Requirements - MMIS	A	B	C	D	E
PR1.12	Provide for consistent provider naming conventions to differentiate between first names, last names and business or corporate names to allow flexible searches based on the provider name.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR1.12
PR1.SS.02	Enrollment tracking process must be fully integrated with the MMIS and Point-of-Sale (POS) so that information can be tracked from enrollment request through provider enrollment without requiring duplicate entries in systems.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR1.SS.02
PR2.01	Track and support the screening of applications and ongoing provider updates for NPIs, state licenses and specialty board certification as appropriate. Review team visits when necessary and any other state and or federal requirement.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR2.01
PR2.02	Track and support any established provider review schedule to ensure providers continue to meet program eligibility requirements.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR2.02
PR2.02.01	Maintain the capability to place a provider on either prepayment or post payment review including the capability to identify whether the status is no review, prepayment review, post payment review, or both pre-and-post payment review and include an indicator to identify the reason the provider was placed on review.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR2.02.01
PR2.03	Verify provider eligibility in support of other system processes (e.g., payment of claims).	Yes	Yes			Section 9.1.2.1.2, Requirement # PR2.03
PR2.04	Capture Clinical Laboratory Improvement Amendments (CLIA) certification information and the specific procedures each laboratory is authorized to cover. Link the information for use in claims adjudication.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR2.04
PR2.04.01	Receive updates to CLIA numbers and certification information. The CLIA and certification information must be maintained by date segment, including an audit trail of the changes made.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR2.04.01
PR2.04.02	Use CLIA information from the national data site in the enrollment process.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR2.04.02
PR2.05	Cross-reference license and sanction information with other state or federal agencies.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR2.05
PR2.05.01	Provide the capability of matching providers based on a file of sanctioned providers received from the appropriate state licensing authority and other provider licensing boards, as well as other licensing and certification boards and flagging and updating the provider's record for termination.	Yes	No	SM	600	Section 9.1.2.1.2, Requirement # PR2.05.01
PR2.06	Generate notices to providers of expiring Medicaid agreements and or state licenses.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR2.06
PR2.06.01	Automatically generate letters to providers requesting license certification renewal prior to end date of current certification or license as directed by IME.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR2.06.01
PR2.06.02	Automatically generate an alert and a provider termination notice when the provider fails to respond within 30 days with updated license renewal information.	Yes	No	SM	40	Section 9.1.2.1.2, Requirement # PR2.06.02
PR2.06.03	Have the capability to edit the provider master file for license end date.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR2.06.03
PR2.07	Maintain multiple provider specific reimbursement rates with beginning and ending dates consistent with IME policy including but not limited to: a. Per Diem. b. Percentage of charges. c. Fee-for-Service (FFS). d. Ambulatory Payment Calculations (APC). e. Diagnosis Related Groups (DRG). f. Other.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR2.07

PR	Provider Management Requirements - MMIS	A	B	C	D	E
PR2.07.01	Provide the capability to store and maintain provider rates including historical rates and date changes.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR2.07.01
PR2.SS.01	Maintain the capability to limit billing and providers to certain benefit plans, services, by procedure codes, ranges of procedure codes, member age or by provider type(s) or as otherwise directed by IME.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR2.SS.01
PR2.SS.02	Provide data elements to capture provider contact information.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR2.SS.02
PR2.SS.03	Provide online view of all provider specific rates.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR2.SS.03
PR2.SS.04	A data element must exist to capture the facility bed size.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR2.SS.04
PR2.SS.05	Ensure all end dates are linked, so they can be synchronized to the end date of the licenses of the state of servicing location or other licenses as directed by IME.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR2.SS.05
PR2.SS.06	Provide a mechanism to identify provider types not required to have a license.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR2.SS.06
PR2.SS.07	Ensure the billing provider is enrolled and has a provider number. Individual practitioners associated with the billing provider will be linked to the billing provider ID.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR2.SS.07
PR2.SS.08	Support automated criminal background checks for all providers as specified by IME.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR2.SS.08
PR2.SS.09	Store geographic codes for provider locations.	Yes	No	SM	200	Section 9.1.2.1.2, Requirement # PR2.SS.09
PR2.SS.10	Enable different provider enrollment rule definitions by provider, provider type, program, geographic area and other areas, as defined by IME.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR2.SS.10
PR3.01	Accept, validate and process transactions or user entries to update and maintain provider information.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR3.01
PR3.01.01	Provide for the collection and maintenance of additional data in the provider database, including, but not limited to: a. Sanction information. b. Accreditation information. c. Provider links to Taxpayer Identification Number (TIN) and parent organizations. d. Inactive and active filter. e. Care management and or lock-in restrictions. f. Case load assignments. g. License number and licensure status. h. Pay for performance (P4P) indicator. i. Restrictions for payments (no payment for surgeries). j. Flag for Electronic Funds Transfer (EFT) information. k. Flag for electronic claim submission. l. Drug Enforcement Administration (DEA). m. County. n. Email contact information.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR3.01.01
PR3.02	Provide user access to provider data and allow extraction of information. The extracts or reports could include such items as: a. The current status of providers records. b. An alphabetical provider listing. c. A numeric provider listing. d. A provider rate table listing. e. An annual re-certification notice.	Yes	No	SM	100	Section 9.1.2.1.2, Requirement # PR3.02

PR	Provider Management Requirements - MMIS	A	B	C	D	E
	f. A provider "group affiliation" listing. g. A provider specialty listing. h. A provider listing by category of service.					
PR3.02.01	Provide the functionality to produce a variety of standard production reports, as well as user-defined, parameter-driven reports and listings of data contained in the Provider Master file.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR3.02.01
PR3.03	Track and control the process of reconciliation of errors in transactions that are intended to update provider information.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR3.03
PR3.04	Maintain current and historical multiple address capabilities for providers.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR3.04
PR3.05	Maintain an audit trail of all updates to the provider data for a time period as specified by IME.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR3.05
PR3.05.01	Provide an online audit trail that is easily queried for all transactions applied to provider record(s), with the date of the transaction, time of the transaction, type of transaction (e.g., add, change) and the identification of the person applying the transaction.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR3.05.01
PR3.07	Update and maintain financial data and all necessary information to track consolidate and report 1099 information including current and prior year 1099 reported amounts.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR3.07
PR3.08	Maintain links from providers to other entities such as groups, Managed Care Organizations (MCO), chains, networks, ownerships and partnerships.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR3.08
PR3.09	Provide capability to do mass updates to provider information based on flexible selection criteria.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR3.09
PR3.09.01	Maintain the capability to apply mass updates to provider-specific rates based on IME s specified criteria.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR3.09.01
PR3.10	Maintain indicators to identify providers that are Fee-for-Service (FFS), MCO network only and other state health care program participants.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR3.10
PR3.11	Maintain a flag for providers who are eligible to use EFT and electronic claims submission.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR3.11
PR3.SS.01	Provide the capability to match the data received from the death registry interface and create an alert when there is a match with an active provider name. Verify the match and disenroll the provider if match is accurate.	Yes	No	SM	200	Section 9.1.2.1.2, Requirement # PR3.SS.01
PR3.SS.02	Provide the capability to reactivate a previously enrolled provider without complete reenrollment.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR3.SS.02
PR3.SS.03	Maintain a minimum of five years of provider demographic information, rates and claim payment history data for online inquiry by the contractor and authorized IME staff. All demographic information and rates must be maintained by date segments.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR3.SS.03
PR3.SS.04	Enable a process to suspend, terminate or withhold payments from providers under investigation.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR3.SS.04
PR3.SS.05	Provide the capability for automated disenrollment procedures according to IME defined criteria.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR3.SS.05
PR3.SS.06	Ability to identify if the provider uses electronic health records (EHR) and the CMS certification number of the EHR system.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR3.SS.06

PR	Provider Management Requirements - MMIS	A	B	C	D	E
PR4.01	Require (when appropriate), capture and maintain the ten digit NPI.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR4.01
PR4.02	Accept the NPI in all standard transactions mandated under HIPAA.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR4.02
PR4.03	Interface with the National Plan and Provider Enumeration System (NPPES) to verify the NPI of provider applicants once the Enumerator database is available.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR4.03
PR4.04	Do not allow atypical provider to be assigned numbers that duplicate any number assigned by the NPPES.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR4.04
PR4.05	Provide ability to link and de-link to other Medicaid provider IDs for the same provider (e.g., numbers used before the NPI was established, erroneously issued prior numbers, multiple NPIs for different subparts). Capture and crosswalk subpart NPIs used by Medicare, but not Medicaid, to facilitate Coordination of Benefits (COB) claims processing.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR4.05
PR4.SS.01	Provide the capability to process an NPI, taxonomy and other fields as specified by IME including secondary NPI.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR4.SS.01
PR4.SS.02	Be capable of producing a random sample of providers for audit purposes based on IME established selection criteria.	Yes	No	SM	200	Section 9.1.2.1.2, Requirement # PR4.SS.02
PR4.SS.03	Send alert if multiple provider numbers are assigned to a single atypical provider.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR4.SS.03
PR4.SS.04	Process actions and responses to B Notices from Internal Revenue Service (IRS) as determined by IME.	Yes	No	SM	200	Section 9.1.2.1.2, Requirement # PR4.SS.04
PR.SS.01	Provide online inquiry to summary information regarding provider year-to-date claims submittal and payment data.	Yes	No	SM	200	Section 9.1.2.1.2, Requirement # PR.SS.01
PR.SS.02	Maintain the flexibility to change provider type categories and convert history records to reflect new provider type categories.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR.SS.02
PR.SS.03	Provide the capability to store multiple provider addresses per provider and a corresponding e-mail address for each of the mailing addresses on the provider file. Addresses include but are not limited to a location address, pay- to address, corporate address and correspondence address.	Yes	No	SM	200	Section 9.1.2.1.2, Requirement # PR.SS.03
PR.SS.04	Capture and maintain vendor code field in MMIS for HMO or MediPASS providers.	Yes	No	SM	50	Section 9.1.2.1.2, Requirement # PR.SS.04
PR.SS.05	Provide the capability to add new provider types with situational parameters for data such as rates, types, service limitations as directed by IME.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR.SS.05
PR.SS.06	Provide the capability to support periodic provider re-enrollment.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR.SS.06
PR.SS.07	Provide the capability to produce a provider file audit report to document the processing of all update transactions for the previous day, showing a facsimile of the old record, the new record and the ID of the staff updating the files.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR.SS.07
PR.SS.08	Produce provider mailing labels based on specific provider attributes and merge with letters as directed by the IME.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR.SS.08

PR	Provider Management Requirements - MMIS	A	B	C	D	E
PR.SS.09	Provide the capability to identify the entity that holds a lien against the provider if applicable, total lien amount, periodic payment amounts withheld, cumulative payment amounts withheld, and lien balance.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR.SS.09
PR.SS.10	Provide the capability to produce alphabetic and numeric provider lists with totals and subtotals that can be restricted by selection parameters such as provider type, provider specialty, county, zip code and enrollment status.	Yes	No	SM	150	Section 9.1.2.1.2, Requirement # PR.SS.10
PR.SS.11	Provide capability to provide data required for rate setting.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR.SS.11
PR.SS.12	Provide the capability to update licensure data based on electronic files from occupational licensing entities.	Yes	No	SM	600	Section 9.1.2.1.2, Requirement # PR.SS.12
PR.SS.13	Synchronize data with statewide provider directory Health Information Exchange (HIE) and licensing boards.	Yes	No	SM	200	Section 9.1.2.1.2, Requirement # PR.SS.13
PR.SS.14	Accept and upload enrollment information, including NPI if required on providers from external source.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR.SS.14
PR.SS.15	Accept and upload rate information from external sources including excel spreadsheets.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR.SS.15
PR.SS.16	Provide the capability to identify providers whose licenses, certifications, provider agreements and permits are set to expire ninety (90) days prior to the end date of current certification, licensing or permit period and notify the contractor of the pending expiration.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR.SS.16
PR.SS.17	Perform automated checks of national databases and bulletin boards for exclusions, sanctions or license revocation in other states or by CMS.	Yes	No	SM	400	Section 9.1.2.1.2, Requirement # PR.SS.17
PR.SS.18	Identify providers that have a foreign mailing address and provide the capability to not send payment to a foreign mailing address.	Yes	No	SM	25	Section 9.1.2.1.2, Requirement # PR.SS.18
PR.SS.19	Provide the functionality to allow multiple provider status codes to be valid for the same or overlapping timeframes.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR.SS.19
PR.SS.20	Process and maintain inputs and outputs including but not limited to the following: Inputs: a. Provider enrollment data. b. Provider demographic changes. c. Provider rate changes. d. State and federal licensing and certification documentation. e. Provider sanction listings. Outputs: a. Daily, monthly and on request reports and address labels. b. Daily provider files. c. Produce and deliver to the IME all reports requested by the IME from the provider data maintenance function, at the specified frequency, medium and delivery destination. d. Remittance advices in electronic format and X12N 835. e. Annual 1099s, on federally approved forms and mail to providers. f. Group mailings and provider labels based on selection parameters such as provider type, zip code, specialty, county and special program participation. g. Report identifying any providers who have changed practice arrangements (e.g., from group to individual of from one business to another) by provider type as requested by the IME. h. Data required for rate setting as required by IME.	Yes	Yes			Section 9.1.2.1.2, Requirement # PR.SS.20

As shown in Figure 9.1.2.1-1, Team Noridian has reviewed and analyzed all of the requirements in the related section of the RFP, and provided an overall summary of how our solution meets the requirements based on existing capability and required modification, as well as the total number of DDI hours needed to develop those capabilities not currently existing in the system.

Column	Column Description	Column Summary
Column A	Team Noridian agrees to meet the requirements as stated.	100%
Column B	Team Noridian's existing capability in eCAMS solution meets the requirements.	83%
Column C	Team Noridian will modify the eCAMS solution to meets the requirements.	17%
Column D	Team Noridian's effort to modify the eCAMS solution to meet the requirements.	3570 Effort Hours

Figure 9.1.2.1-1. Demonstrated Compliance of Team Noridian's Solution to the RFP Requirements. Our solution will meet all of the RFP requirements by either using existing system capability or configuring and modifying the eCAMS system.

9.1.2.1.2 Approach to Addressing the Provider Management Requirements Business Area Overview

Team Noridian believes that a mature Provider Management business area is one of the most critical elements of a successful implementation and ongoing Medicaid operations. The Provider Services unit is responsible for engaging and collaborating with the provider community, a key stakeholder in the overall delivery of the Medicaid program. Team Noridian believes a robust system framework, augmented by mature and proven operational practices, is the foundation for success with the provider community. Team Noridian's system solution, referred to as eCAMS in this section, provides a rich set of MITA-aligned capabilities to automate and improve the provider related business processes, such as provider enrollment, disenrollment, and provider communication. eCAMS provides the Iowa Department of Human Services (the Department), Iowa Medicaid Enterprises (IME), and their providers with a full range of online, real-time inquiry and update functions that replace legacy paper-driven processes with Web-based data entry screens. In the state of Michigan implementation of eCAMS, the self service provider enrollment function enabled the re-enrollment and re-verification of the active providers in a period of six months ahead of the system rollout. In the state of Washington implementation of eCAMS, provider functions enabled provider registration and re-verification more than a year before system rollout. Further, eCAMS data architecture and data services, such as license verification, allowed for improved provider data collection. This comprehensive and quality provider data will enable the Department to make better decisions relating to the provider network and enrollee access to care and to more accurately adjudicate and pay claims.

Team Noridian Advantage

Team Noridian's prior implementations in the states of Michigan and Washington will bring the Department a proven and mature Provider Management solution.

- Team Noridian's eCAMS system is the only modern, web-centric, provider enrollment and maintenance solution fully certified by the Centers for Medicare and Medicaid Services.
- Proven system successfully supported early enrollment of 40,000 providers in Michigan and registration of 55,000 providers in Washington.
- Proven eCAMS Provider Management will enable IME to support NPI-compliant providers, managed care organizations, and atypical providers such as personal care providers.
- Rich enrollment options include online enrollment through secure self-service Provider portal and offline enrollments through smart PDF forms and XMLto facilitate higher process maturities and provider adoption rate.

Team Noridian's approach of using Web technology and implementing paperless business processes aligns with the Department's vision. eCAMS is the only true web-centric, automated provider enrollment solution in the State Medicaid market that is in production, running successfully in more than one state program, and fully certified by the Centers for Medicare and Medicaid Services (CMS). The state Medicaid programs in Michigan and Washington have been using eCAMS provider management functionality successfully for more than two years. The Michigan Community Health Automated Medicaid Processing System (CHAMPS) and Washington (ProviderOne) programs current support enrolled provider communities similar in size to the current volumes for IME. Figure 9.1.2.1-2 shows enrollment statistics for the

CHAMPS and ProviderOne implementations as compared to the IME provider community. eCAMS supports enrollment of typical, medical providers, both individuals and organizations, who have National Provider Identifiers (NPIs). eCAMS also effectively manages provider enrollment for managed care organizations, billing agents, and atypical providers who may not qualify for NPIs. eCAMS has been certified for all of the Provider Management business areas outlined under the new CMS Medicaid Enterprise Certification Toolkit, which includes criteria from the State Medicaid Manual, Industry Best Practices, Health Insurance Portability and Accountability Act (HIPAA) and the Code of Federal Regulations (CFR). Team Noridian's business partner, CNSI, has recent successful certification experience mapping eCAMS functionality under the new certification tool kit will facilitate rapid and positive results for IME's Medicaid Management Information System (MMIS) certification process.

Provider Metrics	IME Provider Community	MI MMIS CHAMPS	WA MMIS ProviderOne
Enrolled Provider Volume	77,000	58,000	56,000
Managed Care Organization (MCO) Volume	6	13	33
Atypical Providers	Yes	No	Yes

Figure 9.1.2.1-2. Provider Metrics Comparison — eCAMS Implementations. Comparison to provider volumes in other eCAMS production installations shows that Iowa's provider population will be easily supported.

In Figure 9.1.2.1-3, Team Noridian provides a feature comparison summary as listed in the Department's Request for Proposal, Section 4.1.3 (Provider Function). In this figure, we present the major features identified with a brief summary of how eCAMS supports the stated function.

#	Feature	Iowa Legacy Provider System	Team Noridian's eCAMS System
1.	Processes provider applications and information changes interactively using online screens, including immediate entry, verification and updating of provider information to ensure only qualified providers complying with program rules and regulations are reimbursed for services rendered to eligible Medicaid members.	Yes	Yes
2.	Meets or exceeds all federal and state requirements for a Medicaid provider subsystem.	Yes	Yes – Certified by CMS under the most recent version of the certification checklists.
3.	Provider Master File Configuration.	Six master files: the provider group file, provider intermediary file, Medicare-to-Medicaid cross-reference file, provider HMO plan file, and the National Association of Boards of Pharmacy (NABP)-to-Medicaid cross-reference file.	One integrated Master File supporting multiple enrollment types, including individuals, groups, facilities, agencies, and institutions, (including pharmacies) managed care Organizations, billing agents, tribal health faculties, and unique, limited enrollment term special considerations providers.
4.	Provider Master File Integration	Interfaces with the claims processing, recipient, MAR, SUR, TPL, and EPSDT subsystems to supply provider data for claims processing and provider enrollment and participation reporting.	Integrated with the claims processing, member, EPSDT, TPL, Finance, subsystems with direct, real-time, database connection for claims processing, payments, and provider enrollment and participation reporting.
5.	Online Maintenance	▪ Additions and changes to the provider master file are processed online and in real time, they can be verified immediately upon entry. They are also immediately available for use in processing claims and other system functions. ▪ Edits each field and redisplays the full screen with any errors highlighted.	▪ Additions and changes to the provider master file are processed online and in real time, they can be verified immediately upon entry. They are also immediately available for use in processing claims and other system functions. ▪ Edits each field and provides informational messages to guide corrections. ▪ Supports separation of duties between data entry and approval processes. ▪ Supports Provider self-service maintenance requests via Provider Portal.

#	Feature	Iowa Legacy Provider System	Team Noridian's eCAMS System
6.	Online Inquiry	Allows inquiry to providers by various search paths, including provider number, Social Security, or federal employer identification number, provider name, unique physician identification number (UPIN), provider type, provider county, provider type within county and Drug Enforcement Administration (DEA) number. The inquiry can also be limited to only actively enrolled providers or can include all providers.	▪ Allows up to four simultaneous search criterion values, including provider name, system assigned provider number, NPI, Tax ID, provider type, provider specialty, provider city, provider county, multiple alternate identifiers, including legacy MMIS provider ID(s) DEA number, UPIN, and Medicare ID. Searches can be limited to a particular enrollment type and business status (active, terminated, etc.) or it can include all providers. ▪ Frequently used search criteria can be saved and reused at the individual user's discretion. ▪ Search results can be exported to Excel for additional analysis.
7.	Enrollment Processes	Online software is used to enroll providers of service, which formalizes the procedure for application, verification of state licensure and authorization for claim submission and payment.	▪ Online enrollments can be completed by Providers in self-service mode or by authorized IME enrollment workers. Online enrollment ensures verification of state licensure and other credentials required for claims submission and payment. ▪ Business process wizard (wizard) technology supports the online enrollment process guiding the member through every required step while validating and verifying the information entered to ensure it is both complete and accurate. ▪ Optional enrollment submission can be done via PDF or XML application. Application forms can be downloaded, completed offline, and uploaded for verification and submission.
8.	Provider Identification:	The provider subsystem provides a method of identifying each provider's type and specialty, as well as the claim types the provider is allowed to submit.	Provider type, provider specialty and provider taxonomy are captured to identify the enrollment credentials required. Allowed claim types and services are mapped to the provider's taxonomy through relational database tables.
9.	Provider Cross-referencing	▪ Relate provider to as many as ten provider groups. ▪ Identify an infinite number of member providers for a provider group. ▪ Relate provider to as many as ten billing agents. ▪ Identify member providers for a billing agent. ▪ Maintain previous provider number. ▪ Maintain new provider number. ▪ Relate to alternative practice locations or billing entities. ▪ Identify lien-holder provider number. ▪ Identify provider as managed care along with maximum enrolled number of members. ▪ Identify all Medicaid provider IDs related to an NPI.	▪ Relates the provider to an infinite number of provider groups. ▪ Identifies an infinite number of member providers for a provider group. ▪ Relates the provider to an infinite number of billing agents. The billing agents must be enrolled in eCAMS. ▪ Relates a billing agent to an infinite number of member providers. ▪ Maintains an unlimited number of previous provider numbers. ▪ Maintain new provider number. ▪ Supports up to 1024 alternative practice location. ▪ Supports an infinite number of billing entities. ▪ Through the integrated Financials subsystem, supports identification of multiple lien-holders. ▪ Identifies managed care providers as a unique provider enrollment type. Through the integrated Managed Care subsystem, identifies maximum and current member enrollments. ▪ eCAMS supports a single provider enrollment for each unique NPI/TIN combination regardless of the number of program, provider type, and specialty (specializations) the provider has. eCAMS identifies all providers associated to a single TIN. ▪ Has the capability to support multiple of alternate identifiers allowing cross-referencing to other systems external to the MMIS.
10.	Institutional rates:	The provider subsystem maintains institutional rates by charge mode, level of care and effective dates.	eCAMS integrated Rate Setting subsystem maintains rates by individual provider, taxonomy, eCAMS-defined group, Service, Member or and DRG. All rates include charge mode, level of care and effective dates.
11.	Hold and review:	The provider subsystem maintains six occurrences of provider review indicators for the review and suspension of claims for specific dates of service, procedures, diagnoses or type of service codes.	eCAMS provider subsystem maintains an infinite number of provider review indicators through the use of system-defined groups entered via the integrated Reference subsystem. A provider can be associated to an infinite number of groups. eCAMS also support multiple provider indicators including several types of hold-review indicators.
12.	Language indicator:	Identifies the different languages spoken in the provider's office, including Spanish, Bosnian, Serb and Croatian, Vietnamese and Lao.	eCAMS captures languages spoken and supports indicators for: ▪ Amharic – Ethiopian ▪ Arabic ▪ Bhutanese ▪ Bosnian ▪ Chinese ▪ Dakota ▪ English

#	Feature	Iowa Legacy Provider System	Team Noridian's eCAMS System
			▪ French ▪ German ▪ Japanese ▪ Kunama – Ethiopian ▪ Lakota ▪ Nakota ▪ Oromo – Ethiopian ▪ Other ▪ Polish ▪ Russian ▪ Sign Language ▪ Somali ▪ Spanish ▪ Swahili ▪ Team Noridian will add additional indicators for Serb, Croatian, Vietnamese, and Lao.
13.	Special units and programs:	The provider subsystem maintains the certified units used in hospital pricing.	eCAMS captures bed counts (units) for all facility enrollments.
14.	Diagnosis related group (DRG) ambulatory patient classification (APC) pricing information	The provider subsystem maintains ten occurrences of DRG and APC base rates and add-ons by effective date.	eCAMS integrated Rate Setting subsystem maintains rates by individual provider, taxonomy, eCAMS-defined group, Service, Member or and DRG. All rates include charge mode, level of care and effective dates. An infinite number of rates can be captured in eCAMS.
15.	Reports	The provider subsystem produces various provider listings, mailing labels and processing reports daily, monthly and on-request. Provider address labels may be requested by a number of different selection criteria.	eCAMS provider subsystem produces various reports as shown in Figure 9.1.2.1-14. Mailing label requests will be configured as a new on-demand report type for IME.
16.	Audit trails include logging both a "before" and "after" image of each master file record updated online. The transaction log file is then used to support daily update activity reporting and is retained for historical needs.	Yes	Yes

Figure 9.1.2.1-3.Comparison of Features Legacy MMIS and eCAMS. eCAMS provides complete support for the Provider Business Area including comprehensive integration with Claims and Rate Setting functions enhancing IME's ability to effectively manage its provider population.

MITA Alignment

The eCAMS Provider Management business process area supports all of the processes identified in the MITA's Provider Management business process area. Figure 9.1.2.1-4 shows eCAMS functions supporting MITA-identified processes for provider enrollment and disenrollment; management of provider information; multiple functions supporting provider inquiry, including inquiry by business users and other system functions inquiring about the status of providers; and support for provider grievances and appeals. Figure 9.1.2.1-4 also shows the eCAMS Provider business architecture as it relates to the uses of provider-related information to the other business process areas. Figure 9.1.2.1-5 identifies the applicable MITA business processes available under the Provider Services business area and Team Noridian solution alignment. Team Noridian has operational experience with these business processes as delivered through eCAMS.

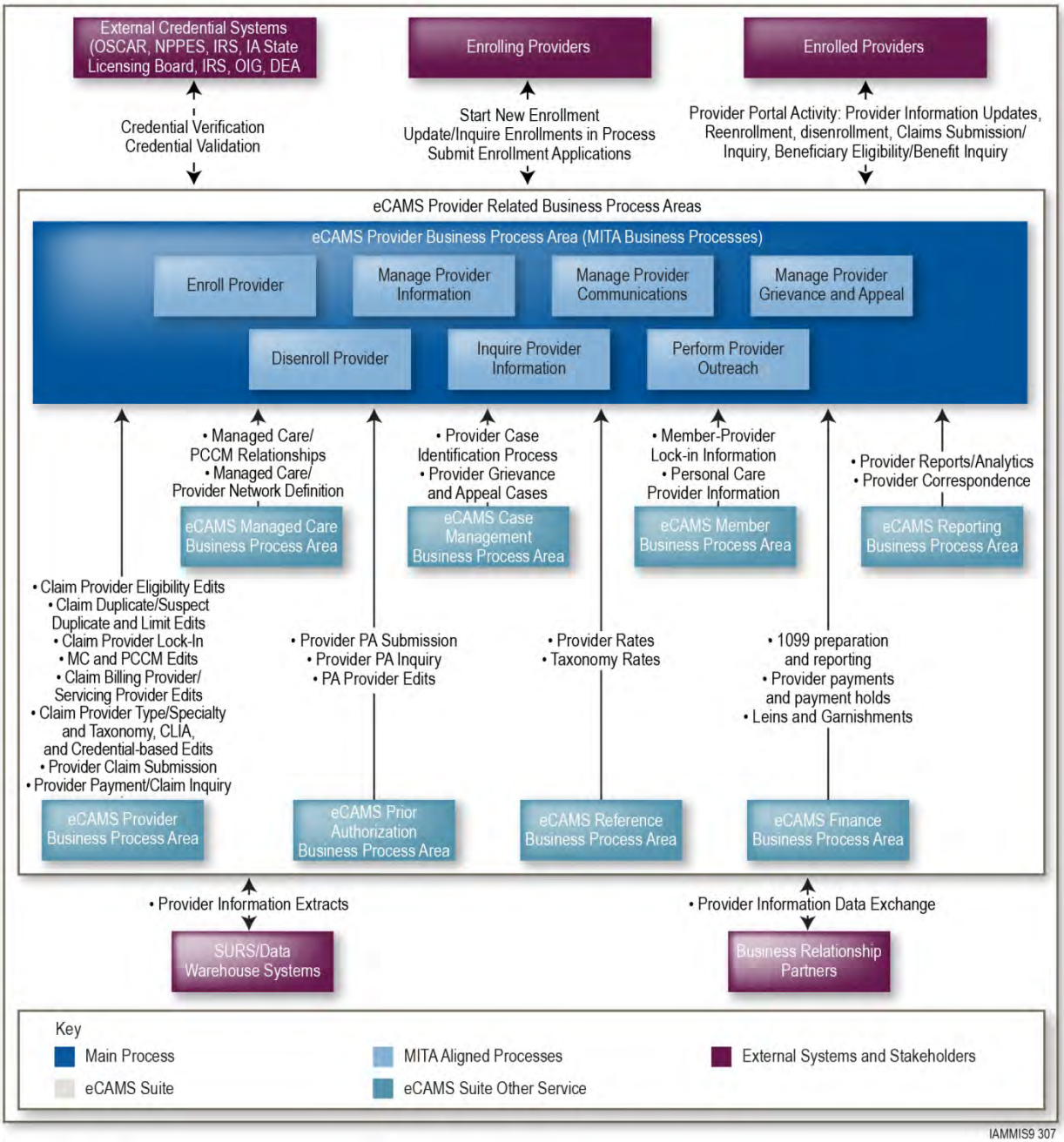

Figure 9.1.2.1-4. Provider Management Business Process Area Architecture. Provider Management business process area architecture shows key interactions and provider information exchanged between eCAMS internal business process areas and external business relationships.

#	Group	Processes	eCAMS Alignment	eCAMS MITA Maturity Level (ML) Compliance/Notes
1	Provider Enrollment	Enroll Provider	Yes	ML-3
2	Provider Enrollment	Disenroll Provider	Yes	ML-3
3	Provider Information Management	Manage Provider Information	Yes	ML-3
4	Provider Information Management	Inquire Provider Information	Yes	ML-3

#	Group	Processes	eCAMS Alignment	eCAMS MITA Maturity Level (ML) Compliance/Notes
5	Provider Support	Manage Provider Communication	Yes	ML-3
6	Provider Support	Manage Provider Grievance and Appeal	Yes	ML-3
7	Provider Support	Perform Provider Outreach	Yes	Operational Service; tools available within eCAMS to support outreach functions.

Figure 9.1.2.1-5. Alignment to Provider Management MITA Processes. eCAMS Provider Management business area has been certified twice by CMS under the new certification checklists. eCAMS is aligned with CMS MITA Provider Management business processes.

Overall Scope of Provider Management Business Area

Figure 9.1.2.1-6 shows the overall scope of the Provider Management business process area in eCAMS. In this figure, we show a summary of the functions available to providers, IME, and Team Noridian operations staff, as well as the relationship of the online functions to the eCAMS provider repository and the provider decision management framework. Figure 9.1.2.1-6 also shows eCAMS Provider Management business process area support for provider communications and outreach activity.

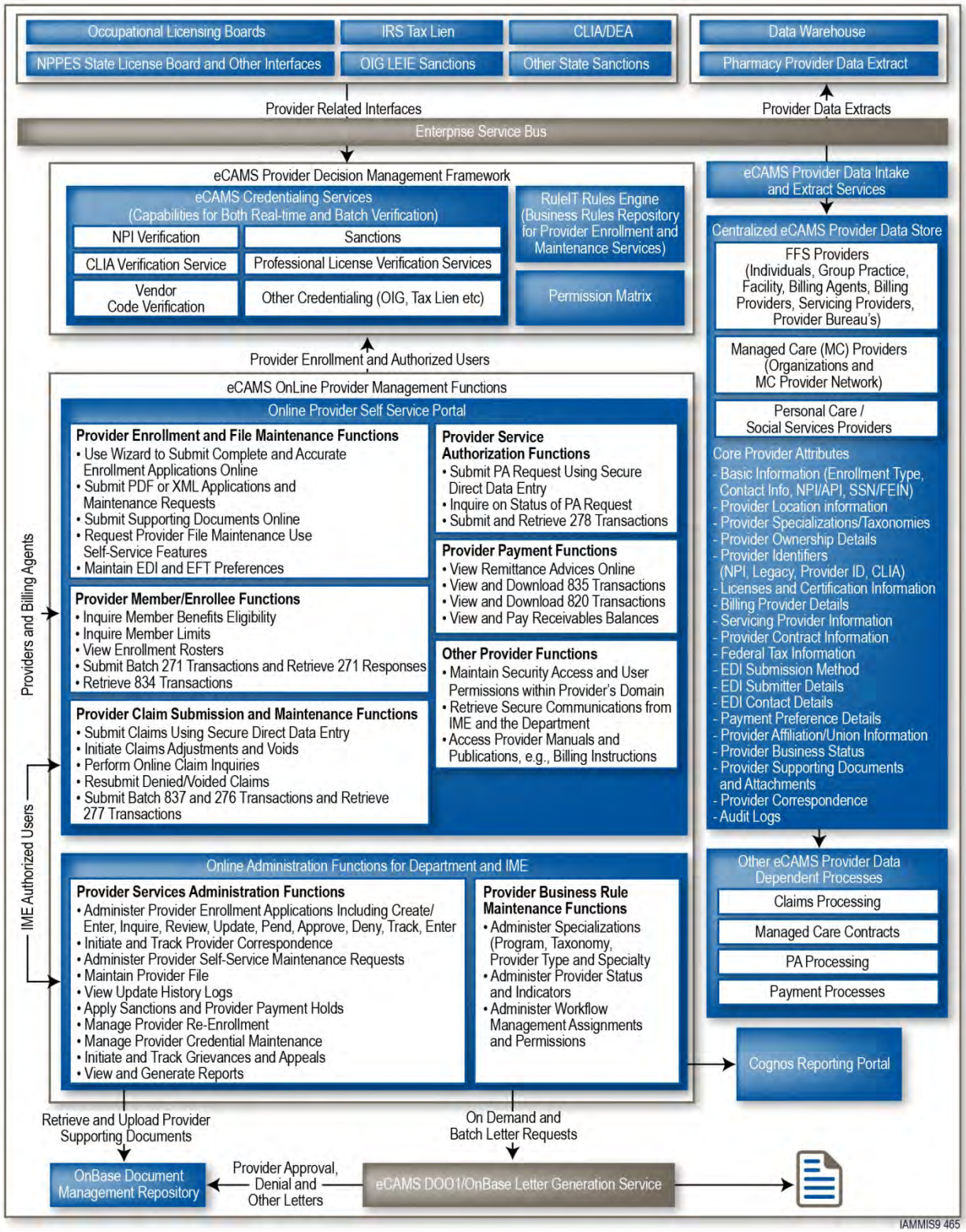

Figure 9.1.2.1-6.Provider Overview. eCAMS Provider Management business process area includes online functions, Provider Data repository content interfaces, and relationships with other eCAMS business process areas.

Taken together, Figure 9.1.2.1-4 and Figure 9.1.2.1-6 show how eCAMS completely supports the Provider Management business process area with a MITA-aligned solution that will position the Department to meet its objectives, including:

- Early deployment of provider enrollment functions (this is not an RFP requirement, but is being proposed by Team Noridian based on positive experience in other states)
- Online Web capabilities for all users, including providers. eCAMS offers a unique provider portal that allows providers to access many services 24 hours a day, 7 days a week (24x7). The portal enables them to enter new enrollment applications, maintain their provider data, enter and inquire about claims, enter and inquire about prior authorization (PA), view and download remittance advices, and send and receive HIPAA transaction sets.
- User-friendly rules engine-based structure to support credentialing and provider enrollment/ reenrollment policies.
- Excellent audit trail features identifying who initiated the change, what changed, when the change was requested, who approved/denied the change, and when it was approved or denied.
- Outstanding filtering and inquiry capabilities allowing authorized users to search for and retrieve provider information based on user-supplied search criteria.
- Compliance with and use of the National Provider Identifier (NPI) for provider enrollment and claims adjudication is a native feature of eCAMS.
- Automatic assignment of atypical provider IDs for providers who are not eligible for NPIs.
- Full integration with the Case Management business process area to support provider grievances and appeals.

Overall, eCAMS Provider Management business process area benefits the Department by modernizing and streamlining the many paper and manual processes used in the legacy environment, while substantially increasing the ability to respond to provider requests and improve customer service. eCAMS replaces the Department's multiple provider files with a single database capable of managing enrollment and interrelationships of all types of providers. eCAMS centralized database virtually eliminates duplicate enrollments using a single master record to contain all relationships the provider may have with IME. Even if a provider has multiple provider types, eCAMS retains the information under a single enrollment that is permanently linked to the provider's unique NPI and Taxpayer Identification Number (TIN).

eCAMS Provider Management business process area is functionally divided into four major features areas which are:

- Initial Provider Self-service Enrollment
- Online Self-service Provider Portal (Web Portal)
- Provider Enrollment and Maintenance Administration
- Provider Business Rule Maintenance and Credentialing

In the remainder of this overview, we present a discussion of each feature area.

Manage Initial Provider Enrollment

The interactive online enrollment application provides structured, online screens with the business process wizards that guide the provider step-by-step through the eCAMS enrollment process. The provider may begin an application and keep working on it for several days or weeks. The eCAMS wizard maintains the state of the application and allows the provider to continue exactly where the individual left off. The wizards are configured to the Department's standards and fully support IME-specific credentialing rules. As the provider proceeds through the application, the wizard lists each step required and shows which steps have been completed. It allows the providers to navigate, view, and modify any information in the application up to final submission for review and approval. After collecting some basic information, eCAMS generates unique application numbers that providers use as reference numbers

allowing them to stop and later continue working on their applications. The unique reference number also allows providers to check on the status of their submitted application.

The wizard uses rules engine functions to designate steps dynamically as "required" or "optional," depending on data supplied by the provider. The wizard also displays validation error messages throughout the data entry process. These interactive messages alert the provider to conditions that need to be corrected ensuring valid and complete data is captured prior to submission.

eCAMS supports multiple enrollment types. The wizard validation rules are based on the enrollment type and provider type and specialty. The rules support validation of such details as the National Provider Identifier (NPI), Clinical Laboratory Improvement Act (CLIA), and Drug Enforcement Agency (DEA) numbers. eCAMS supports interface-based credential validation and currently supports Office of Inspector General LEIE provider sanctions, CLIA, and National Plan and Provider Enumeration System (NPPES). eCAMS also supports customizable interfaces for State licensing organizations.

The enrollment process captures many details about the provider. All details are captured through eCAMS Provider portal data entry pages and dialogs are triggered by enrollment steps in the wizard. Figure 9.1.2.1-7 shows an example of the wizard for a newly initiated enrollment. Representative information captured includes:

- Provider NPI or eCAMS-assigned Atypical Provider ID (API)
- Provider name, gender, and date of birth or alternately organization name and the alternate name for the business (Doing Business As or DBA)
- Credentials such as licenses, certifications, training, and education
- Provider type and areas of specialization captured as nation standard taxonomies or as locally assigned taxonomy
- Multiple provider addresses and contact details, including office locations, pay to location, and mailing addresses
- Claim submission and payment preferences and elections for electronic funds transfer (EFT) and HIPAA transaction submission
- Multiple provider identifiers information, such as social security number (SSN), federal employer identification number (FEIN), DEA, and CLIA numbers, as well as multiple legacy MMIS IDs
- Provider associations with other entities, such as owners, billing agents, and servicing providers to whom the provider may submit bills
- Federal tax details for identity validation and 1099 preparation

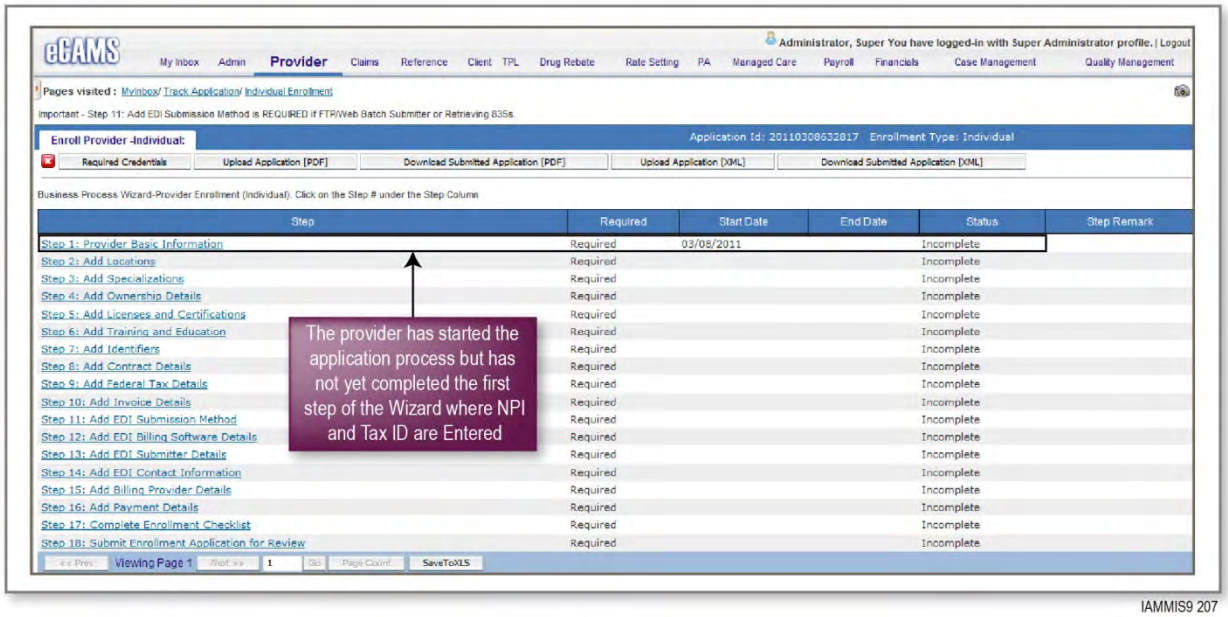

Figure 9.1.2.1-7. eCAMS Individual Enrollment Business Process Wizard. eCAMS wizard guides the enrolling provider through all steps of the enrollment process.

Providers have the ability to submit electronic documents, such as licenses and other information. These documents are imaged and then tagged electronically for automatic association to their enrollment application. eCAMS validates and ensures that all enrollment steps required in the wizard are completed. eCAMS stops providers from submitting their applications until they have passed all online validity and completeness checks for the enrollment type. As a final step before submission, eCAMS displays a downloadable document submission checklist to assist providers in submitting any required backup documentation to support their enrollment.

For providers who prefer to work off-line, eCAMS offers support for downloading application forms in PDF and XML formats. Once completed, the application forms can be easily uploaded to eCAMS and submitted for IME review.

When the provider's application is approved by the enrollment specialist, an enrolled provider record is immediately created and activated in the eCAMS provider data repository as shown in Figure 9.1.2.1-6. Following successful enrollment, the provider can access the online self-service provider portal.

Online Self-Service Provider Portal

eCAMS features a secure, Web-based, provider portal that delivers functionality for provider access to a rich set of self-service functions 24x7. After successful enrollment, providers may use the provider portal to manage:

- Initial provider enrollment
- Enrolled provider information
- Claims submission and inquiry
- PA submission and inquiry
- Recipient eligibility inquiry
- Payment inquiry
- Self-administered access to their own data

The provider portal offers multiple time saving measures. It offloads the data entry workload from IME enrollment specialists to the provider. eCAMS business process wizards (wizards) and online, real-time

edits virtually eliminate keying errors. Data entry is primarily performed through data entry screens on the Provider portal, which reduces the volume of issues and delays resulting from loss of forms in the mail — and thus the amount of time needed to process new applications and maintenance requests. In turn, the time saved with this new functionality frees the enrollment specialists to focus on more critical business functions, such as credential verifications, provider outreach, and customer service.

The portal offers the following benefits to providers:

- Improved access for participating providers who can now interact with the Department's Medicaid program 24x7 rather than waiting in a call queue during business hours
- Reduced provider call volumes because they can check on the status of their application and request changes to their records directly through the self-service feature
- Improved customer service because of shorter processing cycles

Figure 9.1.2.1-8 shows a sample screen shot from the provider portal's main menu as it appears to an enrolled provider. The terminology in our sample screen shot is drawn from a previous deployment; eCAMS will use IME terminology for its implementation.

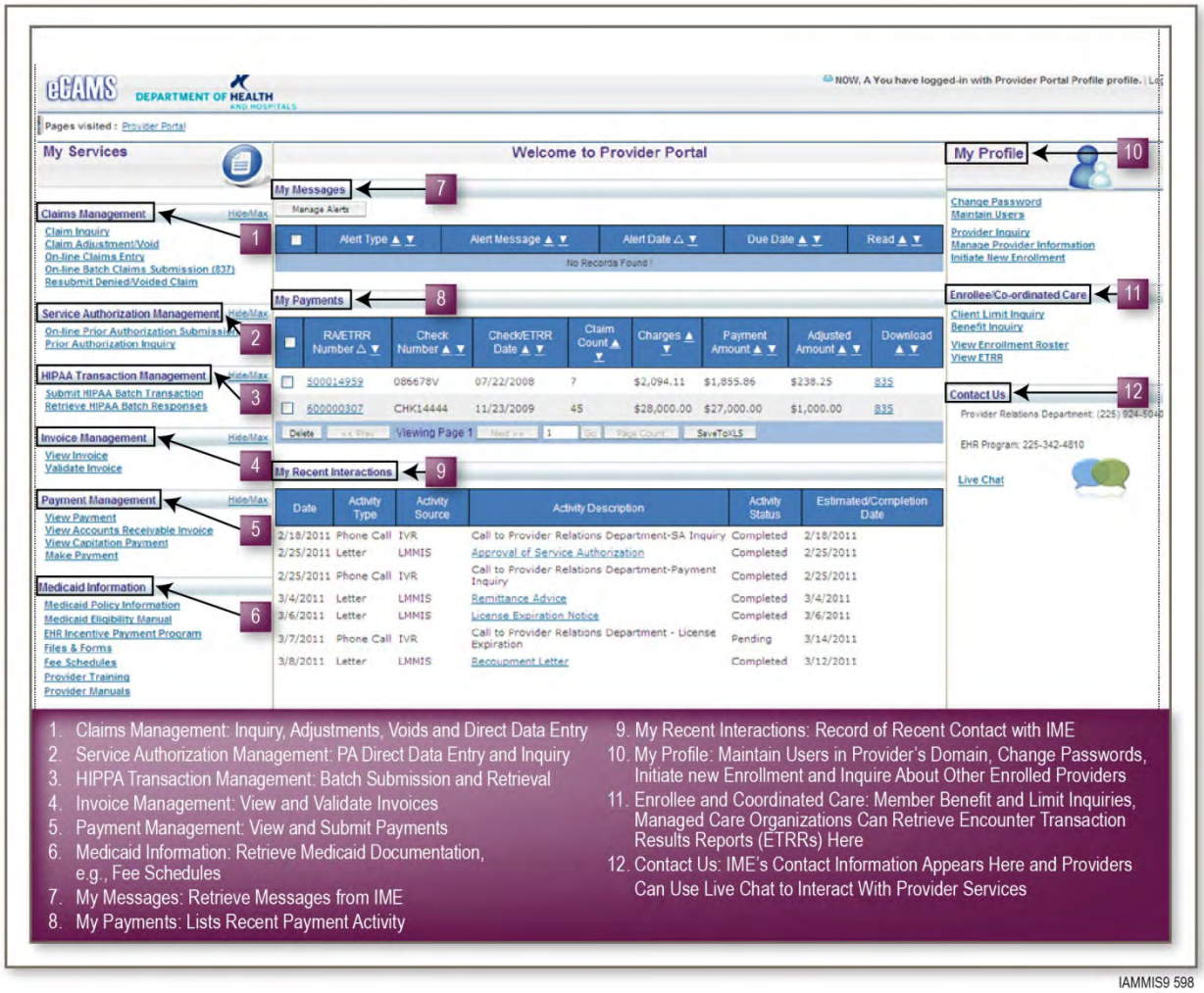

Figure 9.1.2.1-8. eCAMS Self-Service Provider Portal. The main menu of the eCAMS provider portal makes primary functions available to authorized providers twenty-four hours a day, seven days a week.

Manage Enrolled Provider Information. Enrolled active providers have the ability to maintain the bulk of their provider data through the portal's self-service maintenance as shown in Figure 9.1.2.1-8 (Feature 10). Providers can maintain information such as license information, taxonomy, location updates, payment information, and claim submission information. Once the updates are made by the provider, the information is submitted to the provider enrollment unit for review and approval. All updates remain in a pending "in-review" status until approved by the enrollment specialist. Once approved, the update becomes active immediately. eCAMS maintains comprehensive historical information that can be viewed by providers and IME users thus providing a transparent and auditable system. eCAMS features support ongoing management of provider information, including automatic generation of license renewal reminders to notify providers about license expiration and automatic generation of welcome packages for newly enrolled providers.

Manage Provider Claims. Both billing agents and billing providers have the capability to submit electronic data interchange (EDI) batch claims and to perform online direct data entry (DDE) of claims through the online screens. The DDE screens are HIPAA-content compliant and support entry of professional (837P), institutional (837I), and dental (837D) claims. The DDE screens support features such as claim templates that aid in faster claim entry. Manage Provider Claims functions are shown in Figure 9.1.2.1-8 (Feature 1).

eCAMS supports provider inquiry on claim status and provides the capability to retrieve TA1, 999, and 835 remittance advice through self-service online screens. It also supports provider-initiated claim adjustments, resubmission, and claim review requests.

Manage Provider Service Authorizations. Providers may enter, submit, and inquire about PA requests. The PA Submission function ensures both the submitting/servicing provider and the recipient are active. This function also verifies that the provider is authorized to perform the requested service and that the recipient is authorized receive the requested service. Providers have the ability to inquire on the status of the PA requests and on PA utilization information, such as units used and available, and dollar amounts used and available, through the self-service online screens. Manage Service Authorization features are shown in Figure 9.1.2.1-8 (Feature 2).

Inquire Recipient Eligibility Status. Providers have the ability to inquire on the recipient eligibility status through the self-service portal. The online inquiry functionality HIPAA EDI 270-compliant, and the eligibility response screen is HIPAA EDI 271-compliant. eCAMS supports eligibility inquiry through Web services, as currently deployed in Michigan CHAMPS implementation. Eligibility inquiry features are shown in Figure 9.1.2.1-8 (Feature 11).

Inquire Provider Financial Information. Providers have the ability to inquire on payments, and outstanding payable and receivable information. This information is available at the Pay-To provider level. Payment management features are shown in Figure 9.1.2.1-8 (Features 5 and 8). Providers can also view and validate invoices through the portal. Invoice Management features are shown in Eligibility inquiry features are shown in Figure 9.1.2.1-8 (Feature 4).

Self-Administer Provider User Access. eCAMS allows enrolled providers to manage access to their self-service functions. This feature makes it possible for the provider to make needed access changes without having to rely on enrollment unit staff to add or revoke users tied to a provider. These portal functions are shown in Figure 9.1.2.1-8 (Feature 10).

MCO Features. Several additional provider portal features are available specifically to support managed care providers. These features include online retrieval and download of encounter transaction results reports (ETRRs) using, 820 payment details, and 834 enrollment rosters. 820 premium payments (capitation payments) are shown in Figure 9.1.2.1-8 (Features 5 and 8). ETRRs and 834 enrollment rosters are shown in Figure 9.1.2.1-8 (Feature 11).

Retrieve Communications from IME. The "My Reminders" area of the provider portal page, shown in Figure 9.1.2.1-8 (Feature 7), facilitates communication with the provider. Using this feature, Team Noridian can securely deliver electronic communications to the provider, including license expiration, announcements, or re-enrollment reminders.

Providers can also access the Department's policy documents and billing instructions through the Medicaid Information function (Figure 9.1.2.1-8, Feature 6) and interact with IME using a live chat function (Figure 9.1.2.1-8, Feature 12). eCAMS also gives providers a convenient list of recent interaction as shown in Figure 9.1.2.1-8 (Feature 9).

Provider Enrollment and Maintenance Administration

eCAMS pages are designed to give a nearly identical graphical user interface (GUI) experience to providers and enrollment specialist staff. Because the pages are identical in most cases, it is easier for the Department to provide support to providers. This also simplifies help desk processes. All of the features described above are available through eCAMS interface used by enrollment specialists with the exception of self-administration of provider users.

Figure 9.1.2.1-9 shows the main menu page for provider unit enrollment specialist access to the Provider Management business process area.

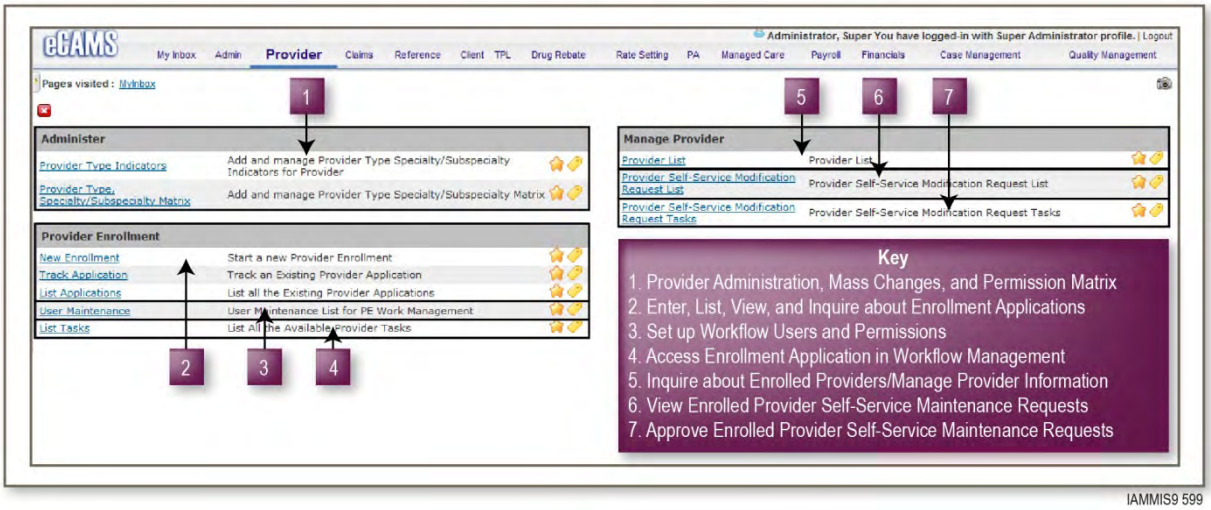

Figure 9.1.2.1-9. eCAMS Provider Main Menu for Authorized IME Users. The eCAMS Provider Management business process area displays a menu specifically for provider administration and enrollment staff.

The eCAMS Provider Management business process area allows enrollment unit staff the ability to perform many different functions. The three main menu selections are as follows:

- Administer
- Provider Enrollment
- Manage Provider

In this section, we describe these functions and provide additional general information on the Provider Management business process area and the provider decision management framework for enrollment unit staff.

Administer

Under the Administer menu, authorized enrollment unit staff access eCAMS provider functions to perform mass updates to providers and define new provider type and specialty combinations. Custom

provider type and specialty combinations are needed to support atypical providers who will not have CMS-assigned taxonomies. Users select the mass update features to add newly defined taxonomies to all providers of a specific type, end-date discontinued taxonomies, and associate taxonomies to various IME programs. Users access the mass update feature to add or end-date certain indicators. This makes it easy for authorized enrollment unit staff to apply changes affecting many providers. For more on this topic, see the discussion on the Provider Management business process area decision management framework below.

Provider Enrollment

Under the Provider Enrollment menu, enrollment specialists access functions to begin a new enrollment application or view applications entered by providers, applications under review for acceptance or rejection, and applications that have been accepted or rejected. The enrollment specialist uses a tracking number to view a specific application or to search through the entire list or make inquiries based on user-defined parameters. This menu enables authorized enrolment unit users to access the User Maintenance function that that is used to authorize provider enrollment staff for specific enrollment and maintenance review queues.

The List Tasks feature allows enrollment specialist to access the enrollment applications that are available in the workflow queue. When a provider submits a new application, eCAMS automatically generates a notification to the enrollment specialist responsible for reviewing the application and for making the "approve" or "deny" decision. The designated enrollment specialist receives a notification to review the application in their eCAMS inbox. eCAMS workflow management functionality manages the routing of new enrollments. It routes applications based on the provider's enrollment type and taxonomy. Routing is configured according to business need.

eCAMS employs the wizard checklist concept for providers and for enrollment specialists. The checklist has both optional and required steps that vary based on enrollment type. Providers cannot submit the application for review until all required checklist steps are completed. Similarly, the designated enrollment specialist cannot approve a provider application without addressing all of the steps defined as required. Each step has a status to indicate if a review step has been completed, is in process, or is yet to be started. During the review of a request, eCAMS enables designated staff members to override a step by marking the step "not required." eCAMS also provides the ability for the reviewer to refer a step to another agency for their review.

The comment function, available throughout eCAMS, provides the enrollment specialist with a free-form text fields to record their comments concerning denial or approval of an application or any actions taken related to a specific step in the checklist.

Manage Provider

Under the Manage Provider menu, authorized users can access the robust Provider List feature—a short name for an extremely powerful function within the Provider Management business process area. Provider List allows the user to search on multiple provider attributes to locate a specific enrolled provider (e.g., NPI 1234567890) or groups of providers sharing a common set of attributes (e.g., zip code and taxonomy). Once the inquiry is completed, the user can drill down to the provider details they are authorized to view. Once the specific provider is located, the user can perform functions such as changing details about that provider, generating correspondence, or using expert mode modification to disenroll the provider.

The Manage Provider menu provides authorized enrollment specialists access to requested modifications initiated by providers on the Provider portal. eCAMS can be configured to require enrollment unit approval for any provider-initiated change requested or to automatically process and approve certain provider-submitted changes, such as a change in a provider phone number or additional office address.

This flexibility allows the enrollment unit to selectively retain review and approval authority while ensuring that many changes can be submitted by the provider and automatically processed by eCAMS without delay. For changes requiring review prior to approval, eCAMS workflow management functionality manages the routing process. eCAMS routes maintenance requests based on the requesting provider's enrollment type and taxonomy. As with the enrollment workflow, the maintenance request routing can be configured according to business need.

General Provider Management Functions

eCAMS allows authorized users to generate online correspondence, including provider approval/denial letters. It enables new letter templates to be built to meet the needs of the Department. All system-generated correspondence is saved and tracked under the document management system for future reference and audit.

eCAMS provides a robust reporting capability for querying information about enrollment data using predefined filter criteria. eCAMS is set up to provide daily reports on enrollment statistics. The reporting capability can be configured to run reports on weekly, monthly, or other intervals.

A comprehensive Case Management feature is built into the core of eCAMS that allows tracking of all of the activities of a provider or applicant as a single case. The system creates soft links associating all provider data to enable quick and accurate access to comprehensive information.

Provider Business Rule Maintenance and Credentialing

The eCAMS decision management framework allows authorized users to configure, define, and maintain the business rules required for provider enrollment, disenrollment, re-enrollment, and maintenance activities as required by IME policy. The decision management framework includes features that allow authorized users to perform the following activities:

- Define State-specific taxonomies combinations. Alternately, IME can choose to implement provider type and specialty (PTSP) rather than taxonomy schemes. Both are supported by eCAMS.
- Configure mandatory, optional, and conditionally mandatory enrollment and re-enrollment data requirements by provider enrollment type and specialty.
- Define and configure credentialing and re-credentialing rules for each unique provider type and specialty combination.

Business Rules

In eCAMS, business rules use the following tools to define three broad areas:

- Permissions Matrix — To define the taxonomies the state supports
- Credentialing Matrix — To define specific credentials required by the successful applicant for each defined enrollment type/taxonomy combination
- Rule Composer — To define the enrollment steps needed for each category of enrollment

Permissions Matrix

The Permissions Matrix tool provides the following functions related to PTSPs:

- Defines PTSP combinations
- Associates standard taxonomies to the defined PTSPs
- Defines and associates non-standard taxonomies to the PTSPs
- Sets pre-defined provider indicators for all providers having a particular PTSP or taxonomy
- Credentialing Matrix

IME maintains specific policy on the credentials each provider must present to be enrolled and to be able to serve IME Medicaid recipients. The Credentialing Matrix includes a complete list of all possible

credentials and allows authorized users to define which of these credentials must be provided for each enrollment or re-enrollment activity. Examples of required credentials include:

- Medical licenses
- Specialty board certifications
- General surgery certifications
- American Board of Surgery or Surgical Critical Care
- Specialty certifications, such as the CLIA certification for a laboratory
- Trading Partner Agreement to conduct business using HIPAA transactions
- State business licenses
- Evidence of malpractice insurance
- Additional credential requirements defined by IME

Prior to enrollment approval, the eCAMS wizard applies credentialing policy in real time as the provider enters enrollment information. All required credentials must be entered in order for the application to be submitted. The wizard provides a lookup feature to ensure that the provider understands what must be provided. The wizard notifies the provider if required credentials are missing.

Once the provider's enrollment is approved, the Credentialing Matrix is applied each time a change is requested. The maintenance wizard provides the same functions as the enrollment wizard, advising the provider of missing information in real time.

eCAMS generates warning notices to providers in advance of the expiration of a required credential. This allows the provider to update the credential and avoid any lapse in active status.

On a nightly basis, provider records are reviewed against the Credentialing Matrix; when missing or expired credentials are found, the provider's records are marked as inactive.

Using the Credentialing Matrix, authorized users have the ability to implement new or revised credentialing requirements through a simple table change. The new credentialing requirement is effective as soon as the update is made. The enrollment unit begins by generating a communication that notifies affected providers of the new requirement and its effective date. The communication specifies the date when the credential must be provided if their enrollment is to remain valid. eCAMS automatically changes the status to "inactive" for providers who do not comply. This method limits inactivation to specific taxonomies and programs for which the credential change is applicable. Other taxonomy/program combinations for the provider remain active.

RuleIT Rule Composer

eCAMS uses the flexible and comprehensive RuleIT Rule Composer to define the enrollment rules for each provider enrollment type and taxonomy (or PTSP). An enrollment type is a predefined general category of provider. Authorized users will use the Rules Composer to define each step of the enrollment process and the data elements required to complete that step for each enrollment type.

The business rules developed in the decision management framework discussed above are deployed to providers and enrollment unit staff in the form of wizards that govern the enrollment and maintenance activities for each type of enrollment. Once all of the business rules are defined, the authorized user will use the Rules Composer to organize the enrollment path for each type of enrollment.

Benefit and Feature Summary

Team Noridian's approach to the Provider Management business process area provides IME with significant benefits, as summarized in Figure 9.1.2.1-10.

Features and Benefits of eCAMS Provider Business Areas	
Self-service provider portal dedicated to providers	▪ Reduced provider call volumes and written inquires ▪ Faster throughput for new application and re-enrollments ▪ Improved level of service to providers through 24x7 access to IME provider services ▪ Accurate provider records
Rules engine-based credentialing	▪ Faster implementation of policy changes ▪ Consistent application of enrollment policy through wizards
Business process wizards for enrollment and maintenance	▪ Easy to use, step-by-step process with built-in validation and feedback to ensure complete and accurate information before submission to IME ▪ More complete and accurate applications and maintenance requests that are easier and faster to process
Look and feel very similar for providers and IME	▪ Easier to help providers with questions ▪ Easier to maintain consistency among authorized users entering data
Ability to define State-specific taxonomies/PTSPs	▪ Easy to support traditional and nontraditional provider enrollment processes
Integration with Medicaid Incentive Payment Program	▪ eCAMS has all of the hooks and data elements necessary to track provider's participation in the State's electronic health records Medicaid Incentive Payment Program
Single enrollment for all of a provider's relationships with IME	▪ eCAMS integrated provider database allows a provider to enroll with multiple provider types and specialties under a single enrollment record virtually eliminating duplicate provider conditions ▪ Reduced maintenance as changes entered can be applied to one or many relationships the provider may have with IME ▪ Easier, consolidated maintenance ▪ More accurate and current data

Figure 9.1.2.1-10.Provider Management Business Area Features and Benefits. eCAMS brings time efficiencies to the critical Provider Management function.

Interfaces Listing

eCAMS supports a number of interfaces in support of the Provider Management business area as shown in Figure 9.1.2.1-11 and Figure 9.1.2.1-12. Figure 9.1.2.1-11 shows eCAMS external interfaces and Figure 9.1.2.1-12 shows internal interfaces.

External Interfaces					
#	Interface Name	Interface Description	Source	Destination	Requirement #
1.	Death information	This file contains Death information from the Death Registry. It is accepted into eCAMS Provider business area via FTP transmission on a weekly basis.	Death Registry	MMIS	PR3.SS.01 PR2.05.01 PR3.01
2.	B-1 Reporting	This file is the B-1 Reporting which is sent to the Email To User. It is transmitted from the eCAMS Provider business area via e-mail transmission on an On Receipt basis.	OnBase	Email To User	PR4.SS.04
3.	Bank Reconciliation File	This file is the Bank Reconciliation File which is sent to the Check Write System. It is transmitted from the eCAMS Provider business area via Connect Direct transmission on a weekly basis.	MMIS	Check Write System	N/A
4.	IDPH License Files	This file is the IDPH License Files which is sent to the COLD/DIP Server. It is transmitted from the eCAMS Provider business area via FTP transmission on a monthly basis.	MMIS	COLD/DIP Server	N/A
5	MMIS Providers File	This file is the MMIS Providers File which is sent to the Pharmacy Data Warehouse. It is transmitted from the eCAMS Provider business area via SFTP transmission on a monthly basis.	MMIS	Pharmacy Data Warehouse	PR1.SS.02

External Interfaces					
#	Interface Name	Interface Description	Source	Destination	Requirement #
6.	Provider 1099 Tapes	This file is the Provider 1099 Tapes which is sent to the IRS. It is transmitted from the eCAMS Provider business area via FTP transmission on a yearly basis.	MMIS	IRS	PR2.05.01
7.	Provider Address File	This file is the Provider Address File which is sent to the IME Server. It is transmitted from the eCAMS Provider business area via FTP transmission on a daily basis.	MMIS	IME Server	N/A
8.	Occupational Licensing	These files contains occupational licensing information to be applied to the provider database	Occupational Licensing Boards to be Identified	MMIS	PR.SS.12 PR3.01
9.	Iowa Health Information Exchange (HIE)	This file will contain HIE provider data to be matched with and applied to the provider database.	Iowa HIE	MMIS	PR.SS.13 PR3.01
10.	Iowa Statewide Provider Directory	This file contains statewide provider directory data to be matched with and applied to the provider database.	To be determined	MMIS	PRSS.13 PR3.01
11.	Medical Licensing	This file contains professional and institutional medical license information to validate and update the provider database.	Iowa Board of Medicine	MMIS	PR.SS.13 PR2.05.01 PR3.01
12.	CMS Excluded Provider List (OIG List of Excluded Individuals and Entities)	This file contains individuals and organizations who are sanctioned by the Office of the Inspector General.	OIG	MMIS	PR1.02.04 PR1.02.10 PR2.05.01 PR3.01
13.	Online Survey Certification and Reporting (OSCAR)	This file contains Clinical Laboratory Improvement Act (CLIA) information to validate laboratory providers and related claims.	OSCAR	MMIS	PR2.04.01 PR2.04.02 PR2.05.01 PR3.01
14.	National Provider and Payer Enumeration System	National Provider Identifier (NPI) validation and verification.	NPPES	MMIS	PR2.05.01 PR3.01
15.	Drug Enforcement Agency (DEA)	Valid DEA numbers for verification of provider database.	DEA	MMIS	PR2.05.01 PR3.01
16.	Bank Account and Routing Number Information	This is a bidirectional interface between eCAMS and the State Payment System to establish new providers and to maintain current payment status information in the provider database.	MMIS	State Payment System	PR2.05.01 PR3.01
17.	State Sanctioned Providers	This is a new interface to accept information from state sanctioning organizations to update the provider database.	To Be Determined	MMIS	PR1.02.10 PR2.05.01 PR3.01
18.	National Association of Boards of Pharmacy	NABP Numbers for provider validation and verification	NABP	MMIS	PR2.05.01

Figure 9.1.2.1-11. eCAMS External Interfaces. The Provider Management business area interacts with a number of external business partners.

Internal Interfaces					
#	Interface Name	Interface Description	Source	Destination	Requirement#
1.	eCAMS Correspondence for OnBase Vault Keys	When eCAMS generates correspondence to a provider, the correspondence will be passed to the OnBase and cataloged in the EDMS.	Provider Subsystem	OnBase	PR1.02.08
2.	OnBase Correspondence Vault Keys	This interface carries two kinds of information. First, when new eCAMS-generated provider documents are cataloged in the EDMS, OnBase will pass the appropriate vault retrieval key information to the eCAMS database to allow for in-context retrieval in the	OnBase	Provider Subsystem	PR1.02.08

Internal Interfaces					
		Provider subsystem. Second, providers or other external entities send provider-related correspondence or other documents they will be imaged, coded to tie to the provider's record and the vault keys will be sent to the provider subsystem for retrieval.			
3.	Provider Address File	This file is the Provider Address File, which is sent to OnBase. It is transmitted from the eCAMS Provider business area via FTP transmission on a daily basis.	MMIS	OnBase	N/A
4.	PRV_TB_Transfer (DW14)	This file is the PRV_TB_Transfer (DW14), which is sent to the Data Warehouse. It is transmitted from the eCAMS Provider business area via SQL transmission on a daily basis.	OnBase	Data Warehouse	N/A

Figure 9.1.2.1-12. eCAMS Internal Interfaces. eCAMS Provider Management business area exchanges data with several business areas within the system.

Letters/Correspondence Listing

eCAMS generates letters to support the business needs of the IME Provider Services team. Figure 9.1.2.1-13 lists current and planned letters and notices.

#	Correspondence Title	Description	Available in eCAMS	New Letter	Requirement#
1.	Letter #7 License Expiring	This letter is automatically generated as a result of the nightly sweep process. For the Department, there are several conditions that will trigger production of this letter.	Yes	No	PR1.03.01 PR2.06 PR2.06.01 PR2.06.02
2.	Letter #19 Incomplete information letter	The letter is generated on demand by the provider enrollment specialist where the application requires additional information.	Yes	No	PR1.09
3.	Letter #26 Welcome letter	This letter is generated automatically when a provider's enrollment application is approved by IME.	Yes	No	PR1.03 PR1.03.01
4.	Letter #57 Disenrollment letter	This letter is generated automatically when a provider chooses to disenroll voluntarily.	Yes	No	PR1.03.01 PR2.05.01
5.	Letter #59 Taxonomy Update letter	This letter is generated automatically when IME uses the mass update administration feature to make changes to the provider taxonomy.	Yes	No	PR1.03.01
6.	Letter #90 Denial letter	This letter is generated automatically when an enrollment application is rejected.	Yes	No	PR1.03.01
7.	Letter #109 Information of Provider Termination sent to Client	This letter is generated on demand when the provider's status is inactive. The letter is sent to one or more member.	Yes	Yes	N/A
8.	Letter #111 Termination letter	This letter is automatically generated when a provider is terminated due to inactivity. eCAMS is currently configured to automatically terminate providers after 24 months of no claim activity. This time period can be modified to meet the Department's policy requirements.	Yes	Yes	PR1.03.01 PR2.05.01 PR2.06
9.	Letter #113 Termination Letter due to Expired License	This letter is generated on demand when a provider's business status is "Terminated - License Expired". Team Noridian will modify the letter to allow automatic generation when the system terminates a provider due to license expiration.	Yes	Yes	PR1.03.01 PR2.05.01 PR2.06 PR2.06.02

10.	Letter #114 Termination Letter due to OIG Exclusion	This letter is generated on demand when a provider's business status is "Terminated - OIG Authority". Team Noridian will modify the letter to allow automatic generation when the system terminates a provider due OIG sanction.	Yes	Yes	PR1.03.01 PR2.05.01 PR2.06
11.	Letter #117 EFT Ready letter	This letter is generated automatically when the provider's banking information has successfully cleared testing through the bank automated clearing house (ACH) process. This letter notifies the provider that they will henceforth be paid via bank direct deposit transaction.	Yes	No	PR1.03.01 PR2.05.01
12.	Letter #118 POS Block	N/A	N/A	N/A	N/A
13.	Letter #121 Prescription Drug Volume Survey	N/A	N/A	N/A	N/A
14.	Letter #301 User Login Details letter	This letter is generated automatically when the provider's eCAMS Provider Portal login credentials (domain, user ID and password) are created.	Yes	No	PR1.03.01
15.	Letter #317 QMT Medical Request	This letter is generated on demand when the IME chooses to undertake a quality review of the provider based on a member complaint.	Yes	Yes	PR1.03.01
16.	Letter #318 QMT Medical Second Request	This letter is generated on demand when the provider has already received letter #317 and there has been no response to the letter. The second request letter can only be generated one time.	Yes	Yes	PR1.03.01
17.	Letter #319 QMT Denial Complaint Request	This letter is generated on demand when a member has lodged a complaint concerning denial of service from a provider.	Yes	Yes	PR1.03.01
18.	Letter #320 QMT Denial Complaint Second Request	This letter is generated on demand when the provider has received letter #319 and there has been no response to the letter. The second request letter can only be generated one time.	Yes	Yes	PR1.03.01
19.	Letter #354 Publication Update	This letter is generated on demand to a group of providers selected on the Provider List page. It is used to notify providers of updated program publications.	Yes	Yes	PR1.03.01
20.	Letter #394 POS Block Batch	N/A	N/A	N/A	N/A
21.	Annual Reenrollment Letter	This new letter will be sent to providers on an annual basis to notify them of the requirement to reenroll.	No	Yes	PR3.02 PR.SS.06
22.	First Notification - B Notices	The first notice is sent to solicit correct name and TIN information.	No	Yes	PR4.SS.04

23.	Second Notification - B Notices	This is the second notice which is sent when there is no response to the first notice.	No	Yes	PR4.SS.04
24.	Notification of Appeal Letter	This letter is generated automatically when an appeal is recorded in eCAMS.	Yes	No	PR1.07

Figure 9.1.2.1-13. Provider Letters and Correspondence. eCAMS Provider Management Business Area produces a number of correspondence documents to aid IME in managing provider communications.

Reports Listing

eCAMS produces multiple reports to support the Provider Services business area. Figure 9.1.2.1-14 shows the current and planned reports for IME.

#	Report Name	Description	Available in eCAMS	New Report	Requirement#
1.	835 Authorizations By Provider Report	This report list 835 authorization by provider.	Yes	No	PR3.02.01 PR.SS.20
2.	Print Permission Matrix Report	The report lists the current content of the Provider Permissions Matrix.	Yes	No	PR.SS.20 PR3.02.01
3.	Print Provider Information Report	This is a list of providers which includes the details for each provider and its enrollment status.	Yes	No	PR3.02 PR3.02.01 PR.SS.20
4.	Enrollment Application Referrals and Activity Returns by Provider Type	This report lists applications referred to and returned by other organizations for review as a part of the enrollment process.	Yes	No	PR3.02.01 PR.SS.20
5.	Enrollment Application Referrals/Activity Returns by User	This report provides the same content as the Enrollment Application Referrals and Activity Returns by Provider Type report -- but presents the information by user rather than provider type.	Yes	No	PR3.02.01 PR.SS.20
6.	Provider List by Invalid NPI Report	This report lists NPIs that have been tagged as invalid as a result of synchronization with the NPPES.	Yes	No	PR3.02.01 PR.SS.20
7.	Provider Processing Statistics Modification Requests by Provider Type	This report lists changes to the provider database by provider type.	Yes	No	PR3.02.01 PR.SS.20
8.	Provider Processing Statistics Modification Requests by User	This report lists changes made to the provider database by provider enrollment specialist.	Yes	No	PR3.02.01 PR.SS.20
9.	Provider Processing Statistics New Applications by Provider Type	This report lists new applications processed by provider type.	Yes	No	PR3.02.01 PR.SS.20
10.	Provider Processing Statistics New Applications by User	This report lists new applications processed by provider enrollment specialist.	Yes	No	PR3.02.01 PR.SS.20
11.	Sanctioned-License Expired Pharmacy Providers	This report lists pharmacy providers who are sanctioned or whose licenses have expired.	Yes	No	PR3.02.01 PR.SS.20
12	PM-PE-127 Provider Audit Trail Report	This report contains before and after images of changes to the provider master file.	Yes	No	PR1.01.05 PR3.02.01 PR.SS.07 PR.SS.20

13.	PRV Provider Enrollment Summary Report	This is a daily report of the transaction status counts of all applications and data modifications not complete and those completed during the day. This report is sorted by organizational unit, staff member, and enrollment type.	Yes	No	PR1.02 PR1.08.01 PR3.02.01 PR.SS.20
14.	PRV Transaction Status By Admin, By Staff, By Enrollment Type report	This is a monthly report of the application processing performance of all organizational units. This report collects data on a calendar basis beginning in January of each year, with succeeding months being added to build a year-to-date report, through December.	Yes	No	PR1.02 PR1.08.01 PR3.02.01 PR.SS.20
15.	Provider Pending Enrollments Report	This report will list "In Review" applications that are specifically awaiting additional information from the Provider. The report will use a specific status value identifying that the application is pending due to missing information due from the provider.	No	Yes	PR1.02.11 PR3.02.01 PR.SS.20
16.	Provider/Recipient Ratios by Geographic Region	This on-demand report will provide a summary of the request parameters, the number of members found, and the number of providers found as total numbers and as a ratio. If the user chooses a detailed list, the list of providers appears after the summary data.	No	Yes	PR1.11 PR3.02.01 PR.SS.20
17.	PRV Professional License Expiration Report	Reports providers who have an expired professional license or a professional license that will expire within 31 days (<32 days in the future). The expiration trigger can be easily changed to accommodate shorter or longer advance warning periods.	Yes	No	PR3.02.01 PR.SS.20
18.	Provider Participation Report By Location	Reports provider participation by location.	Yes	No	PR3.02.01 PR.SS.20
19.	Annual 1099 Reporting for Providers	Annual 1099 Reports are prepared and mailed to providers on annual basis; produced through the eCAMS Financial Subsystem (Refer to RFP 9.1.4.5 Financial Management for additional details on the Financial Subsystem).	Yes	No	PR3.07 PR3.02.01 PR.SS.20
20.	Provider Summary Reporting	This new report will be produced as an on-demand report and will report alphabetic and numeric provider lists with subtotals and totals per user requested parameters.	No	Yes	PR3.02.01 PR.SS.10 PR.SS.20

Figure 9.1.2.1-14. eCAMS Provider Reports. eCAMS Provider Management business area produces multiple reports to aid IME in managing provider enrollment and maintenance activity and to support provider outreach activities.

PR1.01

Team Noridian's solution for Provider Management (PR) business area functions is eCAMS. eCAMS supports role based security and limits access to users by domain, user ID, and password. eCAMS maintains three independent, secure, access methods for the PR business area. The method of access depends on the status and type of user. The first type is a provider who has no previous relationship with the Department's Medicaid program and is applying for the first time. The second type of user is a provider who has a prior active relationship with the Department's Medicaid program and who wants to initiate a new enrollment. The third type of user is an IME worker. IME workers may have responsibility for processing enrollment applications submitted on paper, reviewing submitted applications and rendering an approval or denial decision, or providing support to enrolling providers

For providers who have never had a relationship with the Department, an enrollment may be initiated through the IME portal. At the first step of the enrollment process, eCAMS issues a unique enrollment application number to the provider. Using this number and an alternate unique identifier such as the provider's National Provider Identifier (NPI) or federal TIN, the provider may continue to access and update their in-process application until it has been submitted for IME review and approval/denial decision. Once the provider submits the application for IME review, they can view it but they cannot update it.

For providers who successfully enrolled in the Department's Medicaid program, new applications may be initiated through the eCAMS provider portal. Providers must have an IME-issued domain name, user ID, and password to access the eCAMS provider portal. Once logged on to the eCAMS provider portal, the provider may initiate a new enrollment application, update an in-process enrollment application, or perform self-maintenance activity on their approved enrollment data. When initiating a new enrollment, the provider receives a unique application ID. To maintain and submit the new application, the provider uses their assigned domain, user ID, and password to access their data through the secure eCAMS portal. Once logged on, the provider uses the unique application ID to prepare the application for submission. As with a new provider, once the provider submits the application for IME review, they can view it but they cannot update it.

IME PR staff members, who have responsibility for processing enrollment applications submitted on paper, reviewing submitted applications, and rendering an approval or denial decision, or providing support to enrolling providers, use the eCAMS secure portal that provides access to the authorized IME and Department users. Built-in security features allow eCAMS authorized users to view in-process applications and to render approval and denial decisions.

The provider enrollment database is a staging area where eCAMS stores all in-process, approved, and denied applications. When the Department renders an approval decision on an application, the provider's enrollment application data is copied into the enrolled provider database. eCAMS allows IME to maintain security authorization to submit and view enrollment applications separately from the security authorization to view and maintain enrolled provider data.

Team Noridian's response in Section 9.7.2, Requirement SPSS.02, provides a complete discussion of eCAMS security features.

PR1.01.01

Team Noridian's eCAMS solution secures all provider enrollment application data and restricts access to the data based on specific, role-based access rules.

IME can define multiple roles under eCAMS security. In order to access or updated provider enrollment data, a user must have been granted access via eCAMS role-based security. For example, an IME provider enrollment worker, assigned to render approval and denial decisions for enrollment applications, may be given authorization to view any enrollment application and to update the status of a submitted application to "approved" or "denied." An IME provider inquiry and provider services worker may have the ability to view, but not change, any application. Team Noridian's eCAMS solution can control access down to the specific field on a page by defined security role.

Team Noridian's response in Section 9.7.2, Requirement SPSS.02, provides a complete discussion of eCAMS security features.

PR1.01.02

Team Noridian's eCAMS solution secures all provider data and restricts access to the data based on specific, role-based access rules. In order to access or updated provider data, a user must have been granted access via eCAMS role-based security. IME can define multiple roles under eCAMS security.

For example, an IME resolution unit worker needs the ability to view enrolled provider data associated with a suspended claim. However, that worker would not need any update ability for the provider data. Team Noridian's eCAMS solution can control access down to the specific field on a page by defined security role.

PR1.01.03

Team Noridian's eCAMS solution secures all provider data and restricts access to the data based on specific, role-based access rules. In order to access or update provider data, a user must have been granted access via eCAMS role-based security. IME can define multiple roles under eCAMS security. In eCAMS, the ability to update data can be restricted by role, user, business area (e.g., PR), page, and data field. Users must be specifically granted the right to update data. Team Noridian's response in Section 9.7.2, Requirement SPSS.02, provides a complete discussion of eCAMS security features.

PR1.01.04

Team Noridian's eCAMS solution has a rich set of features to support recalling and viewing provider applications. This includes the ability to search and retrieve individual applications and applications sharing certain common attributes. Figure 9.1.2.1-15 shows the eCAMS provider application list. The application list provides information regarding all applications submitted for the Department's Medicaid program.

eCAMS has built-in filters for the following attributes:

- Application Number: The unique eCAMS assigned application identifier
- Application Status: The status of the application, including in process (not yet submitted), in review (undergoing approval/denial decision), approved, and denied
- Enrollment type name: The type of enrollment, including individual, group practice, facility/agency/organization/institution (fac/agncy/orgn/inst), billing agent/clearing house, tribal health services, or managed care organization
- National Provider Identifier (NPI): The unique number assigned by the National Plan and Provider Enumeration System (NPPES)
- Provider name: The provider's first and last name or the organization name submitted on the application
- SSN/FEIN: The individual (SSN) or organizational (FEIN) TIN entered on the application

Authorized users can retrieve applications using wildcard values. For example, selecting the value "Provider Name" and a filter by value of "Grah%" instructs eCAMS to retrieve all applications where organization name or the provider's last name begins with the characters "Grah." Specific values can also be entered to zero in on a specific application. For example, if the NPI is known, the user can select the NPI filter and enter an exact value for the filter by value.

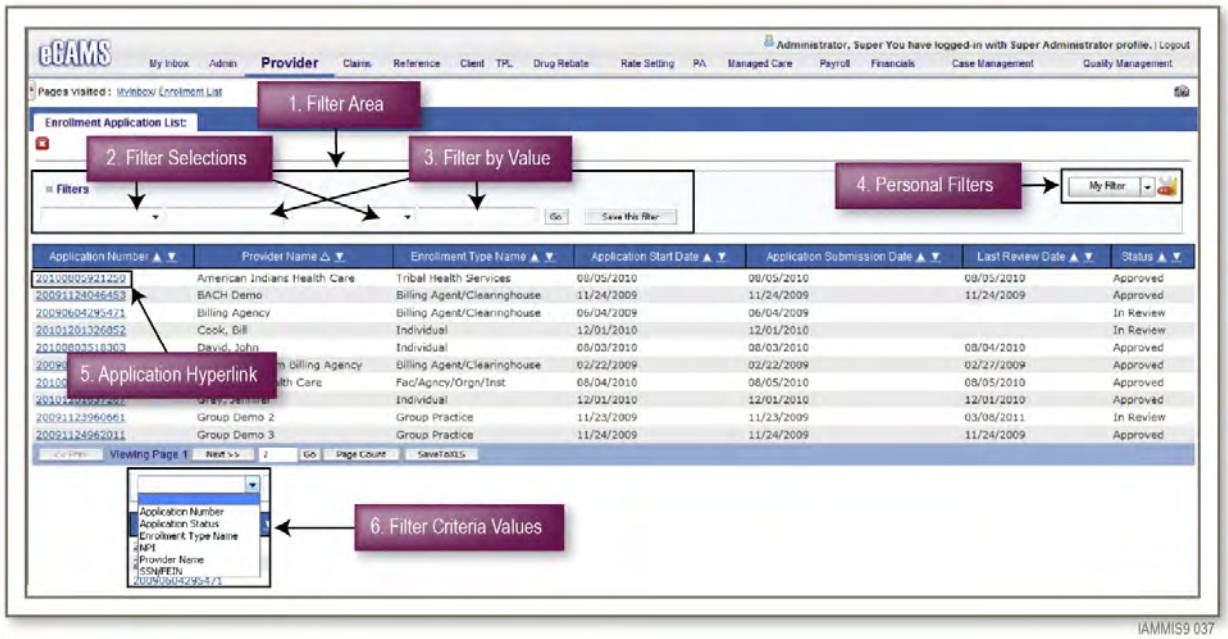

Figure 9.1.2.1-15. Provider Enrollment Application List. Team Noridian's Provider Enrollment Application List function allows IME to quickly locate specific applications.

As shown in Figure 9.1.2.1-15, eCAMS provides two levels of filter selection (2). Searches can be performed using wildcard values or specific values (3). By selecting the application hyperlink, the authorized user can quickly navigate to the specific application they would like to view (5). Favorite filters can be saved using the Save This Filter button in the Filter Area (3) and later reused via the My Filters button (4).

PR1.01.05

Team Noridian's eCAMS processes provider data online and in real-time for both enrollments and ongoing maintenance. When a data change is applied, eCAMS uses rules engine validation to process and edit the request. eCAMS gives the user informative messages for any validation errors encountered. Once the data has been validated, eCAMS places the change into an "In Review" status. Authorized IME Provider Services staff members must review and approve the change before it becomes active in the system. Activation is immediate upon approval of the request.

eCAMS maintains a complete record of the update including:

- Date, time, and user ID requesting the update
- Date, time, and user ID approving or denying the update
- Effective date of the change
- Reason for the approval/denial decision
- Before and after image of the data modified

The history log can be viewed online as shown in Figure 9.1.2.1-16 or it can be viewed in the PM-PE-127 Provider Audit Trail Report as noted in Team Noridian's response in Section 9.1.2.1.2, Approach to Addressing the Provider Management Requirements, Figure 9.1.2.1-14. History retrieved online shows the reason for the change in the Remarks column, Modified Date and Modified By (user ID approving the change), the Effective Date of the change, and the effective date From and To date segment. The Operational Flag shows if the record is active or not. The Status name shows if the change is Approved, Denied, or In Review for decision by the IME Provider Enrollment Unit.

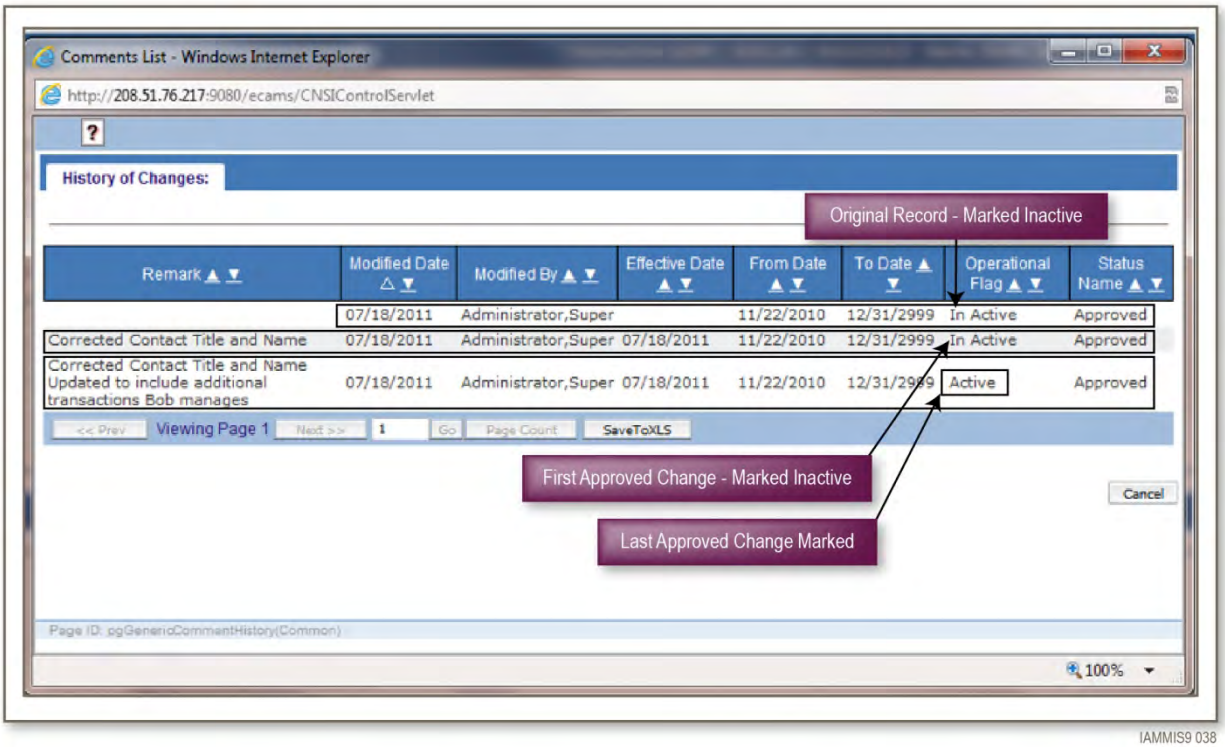

Figure 9.1.2.1-16. History of Changes Online View. eCAMS captures a history of every change made to the data in the provider master file.

PR1.02

For paper enrollment forms, we will have applications scanned into Team Noridian's enterprise document management system (EDMS) system, OnBase, and then dynamically routed via electronic workflow to the Provider Enrollment unit for processing. For providers who prefer self-service capabilities, eCAMS' functionality allows providers to enter or update enrollment information through the provider portal. Full functionality and editing capabilities ensure only complete and accurate applications are accepted and processed. Once in eCAMS, authorized provider enrollment specialists use the built-in workflow management functions to view the current application backlog, identify the enrollment specialist assigned to each application, and determine when the application was last touched.

eCAMS workflow management features include:

- Dynamic real-time routing of newly submitted enrollment requests and maintenance requests in accordance with the Department and IME's defined routing rules
- Automatic notification to assigned staff when a newly submitted application or maintenance request is available to work, as shown in Figure 9.1.2.1-17.

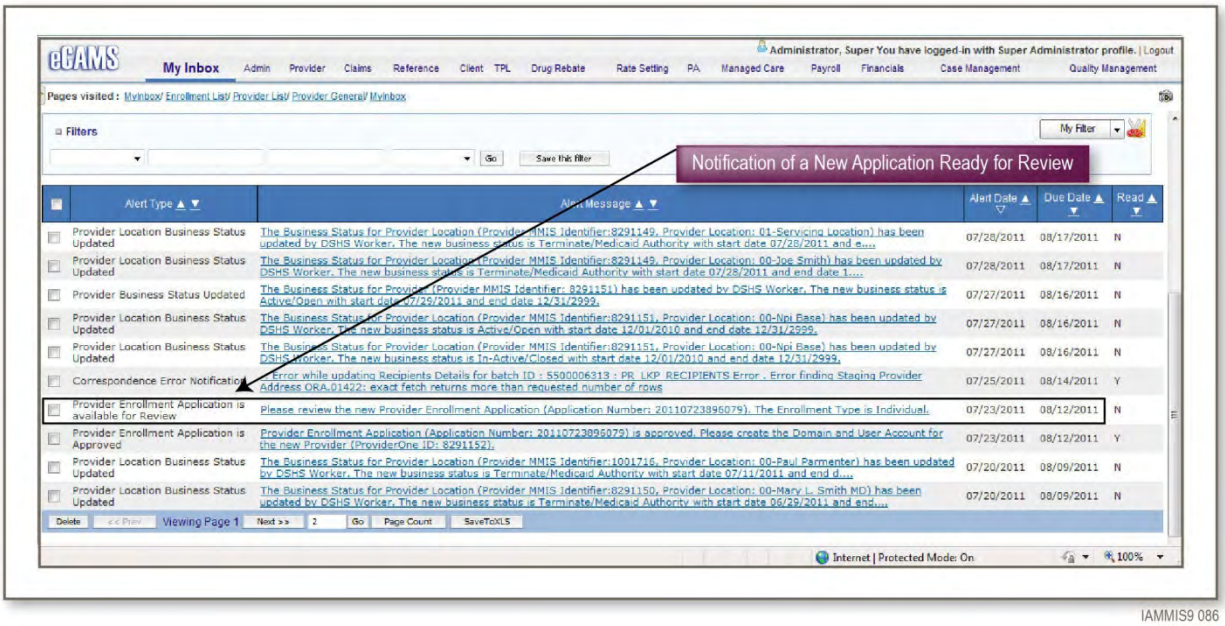

Figure 9.1.2.1-17. Automatic Notification of Newly Submitted Provider Application. eCAMS automatically produces provider enrollment messages and sends them to the enrollment specialists assigned to the category of enrolment activity.

eCAMS provides specific reports to collect provider enrollment and status information. The reports include the PRV Provider Enrollment Summary report and the PRV Transaction Status By Admin, By Staff, By Enrollment Type report.

- The PRV Provider Enrollment Summary report provides a daily report of the transaction status counts of all applications and data modifications not complete and those completed during the day. This report is sorted by organizational unit, staff member, and enrollment type.
- The PRV Transaction Status By Admin, By Staff, By Enrollment Type report provides a monthly report of the application processing performance of all organizational units. This report collects data on a calendar basis beginning in January of each year, with succeeding months being added to build a year-to-date report, through December.

PR1.02.01

eCAMS provider enrollment and maintenance business process uses wizard functions to ensure that all data submitted is complete and accurate. eCAMS wizards use real-time validation and editing to ensure that each application or maintenance request is accurate and complete. The wizards give the enrolling provider a roadmap to complete their application successfully. Throughout the enrollment process, eCAMS performs online, real-time, editing and cross-field validations to ensure that the data entered is correctly formatted and contains data consistent with the type of application the provider is completing. There are different wizards for each general type of enrollment including:

- Individuals (traditional and atypical)
- Groups who may bill for multiple individual providers
- Facilities, agencies, organizations and institutions
- Managed care organizations
- Billing agents
- Tribal health services providers
- Special circumstances providers, such as locum tenens one-time, date limited, and unique situations

Figure 9.1.2.1-18 shows the wizard for an individual provider who has just initiated a new application using the eCAMS provider portal.

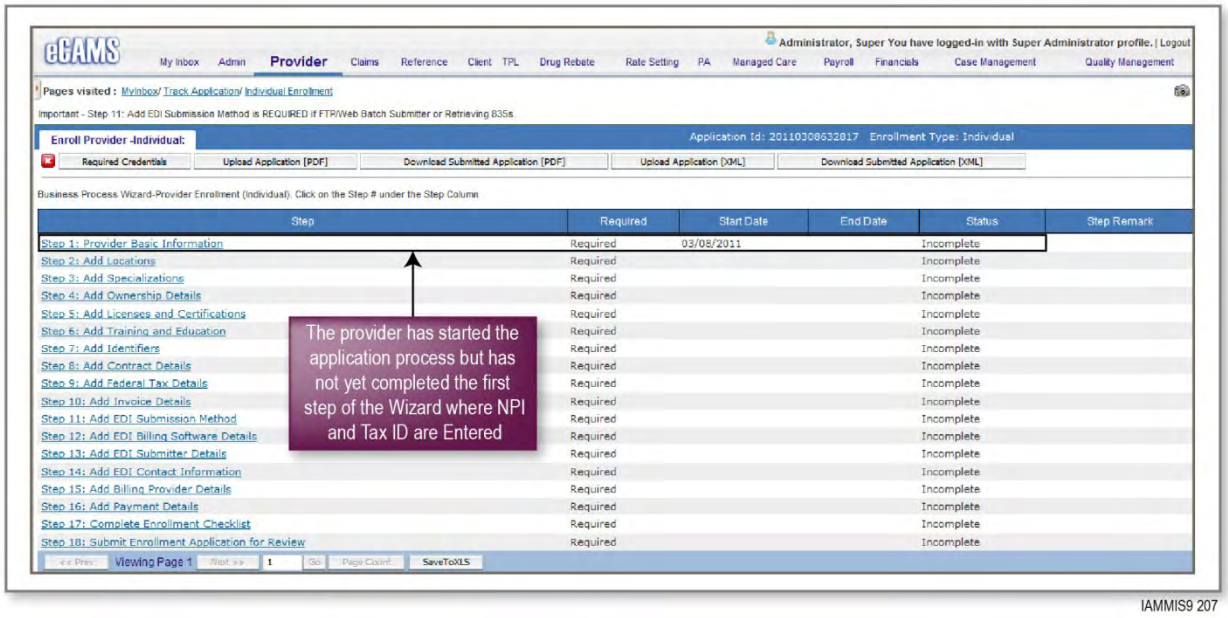

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Figure 9.1.2.1-18. Individual Business Process Wizard (Wizard). The wizard guides the provider through each step of the enrollment process and performs online, real-time, data editing and validation to ensure application completeness and accuracy. In this example, the provider has just started the application process.

eCAMS identifies the required enrollment steps and associated edits and validations based on the enrollment type and the provider type, specialty and program association requested for the enrollment request. For example, on beginning a new application, the first decision the provider must make is to choose a TIN type. eCAMS collects this information in the first step of the wizard - Step 1: Provider Basic Information, as shown in Figure 9.1.2.1-18. For individuals, an SSN must be provided with first name, middle initial and last name. For organizations, an organization name must be provided. The eCAMS editing functionality automatically prevents entry of an organization name for an SSN-based provider and entry of a first/last name for an FEIN-based provider. It disables data entry fields for Organization Name, FEIN, and Organization Business Name when an SSN is chosen. If erroneous data is entered, for example when the provider enters their NPI, it is edited for structural validity and then checked against the database of enrolled providers to ensure that the NPI is not already associated with a previously enrolled provider. eCAMS generates informational messages whenever the data entered is invalid or incomplete, as shown in Figure 9.1.2.1-19.

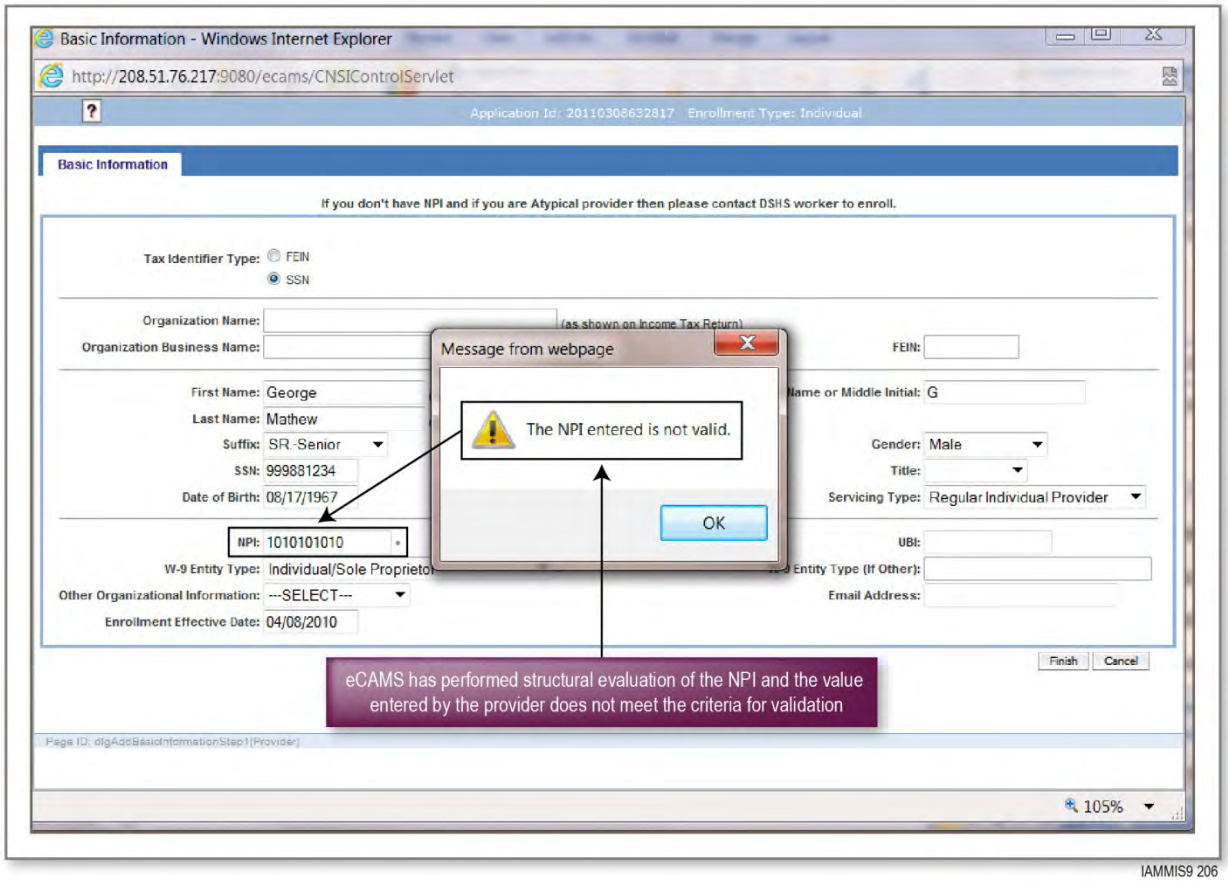

Figure 9.1.2.1-19. eCAMS Provides Online Real-time Edits. Throughout the application process, eCAMS performs format, structure, and data integrity checking. Informational messages are provided whenever an error condition is encountered. In this example, the provider entered a fallacious NPI which failed validation. They cannot complete this step of the application without entering a valid NPI.

A more complete description of the eCAMS wizards is provided in Team Noridian's response in the overview of Section 9.1.2.1.2, Approach to Addressing the Provider Management Requirements.

PR1.02.02

Team Noridian's solution offers support for electronic signatures as allowed by IME, state, and federal regulations. Electronic signatures can be applied within EDMS (OnBase). eCAMS uses a "click and wrap" form of electronic signature where the provider must select a checkbox to indicate acceptance of the application terms and conditions.

PR1.02.03

In addition to eCAMS wizard-based self-service application features, eCAMS supports the ability to upload provider enrollment applications electronically in both PDF and XML formats. Providers can download the application forms and upload them via the provider portal. Figure 9.1.2.1-20 shows the Start New Application page. The enrolling provider can either begin their application by clicking the Submit button or they can choose to download the application form in PDF or XML format and then upload it at a later date. Figure 9.1.2.1-21 shows a partial view of the PDF format application. The application is not registered in eCAMS until the upload process has been completed. Following successful upload, the application is assigned an application ID in the provider application data base. The uploaded file is associated to the user ID and account credentials of the submitting provider. After the provider uploads the application, they can use the wizard to correct any errors or incomplete sections of the

application prior to submitting it for IME review. Figure 9.1.2.1-22 shows the eCAMS enrollment basic information screen following upload of the PDF shown in Figure 9.1.2.1-21. Applications submitted via upload are subject to all of the same validation and editing as an application entered via online via the provider portal.

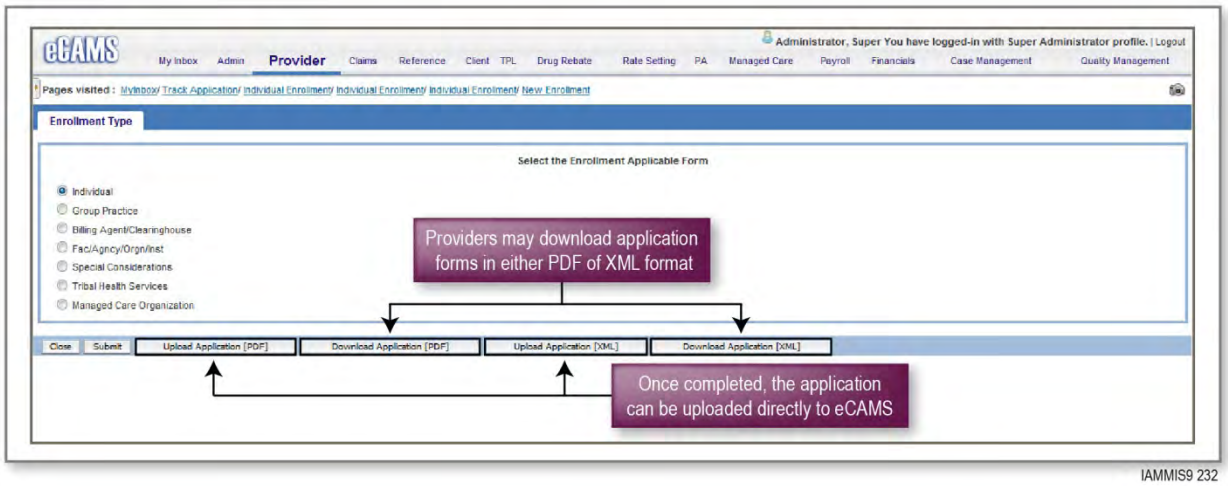

Figure 9.1.2.1-20. New Application Page Showing eCAMS Download and Upload Application Features. Providers may use three different modes to initiate an enrollment in eCAMS: (1) Direct online data entry, (2) download and upload of a PDF formatted application, and (3) download and upload of an XML formatted application.

PROVIDER ENROLLMENT FORM

1. BASIC INFORMATION

Individual (●) Organization ( )

Organization Name: | Organization Business Name: | FEIN:

First Name: Joseph | Middle Initial: K | Last Name: Kelly | Suffix: Jr.

Gender: M (●) F ( ) | SSN: 555555555 | Title: M.D. | Date of Birth: 8/4/1961

Servicing Type: | NPI: 1339887600

W9 Entity Type:

- (●) Individual/Sole Proprietor
- ( ) Partnership
- ( ) Corporation
- ( ) LLC – Partnership
- ( ) LLC - Corporation
- ( ) Governmental Entities
- ( ) Hospital Exempt from Tax or Government Owned
- ( ) Long Term Care Facility Exempt from Tax or Government Owned
- ( ) Other (please specify): _____

Other Organizational Information:

Email Address: | Enrollment Request Date:

2. LOCATION INFORMATION

Location Type: NPI Base Location | Accept New Recipient: Y

Business Name at this location: Kelley Family Practice | End Date:

Contact First Name: Jean | Contact Last Name: Kelley | Fax Number: 4444444444 | Phone Number: 2222222222

Cell Phone Number: | Office Hours: 8:00-5:00 | Other Office Hours: | Email Address: jjkelmed@comcast.net

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Figure 9.1.2.1-21. Excerpt of PDF Application. The provider can download a PDF application form eCAMS and complete it offline. The application can then be uploaded and submitted or updated by the provider using the provider portal.

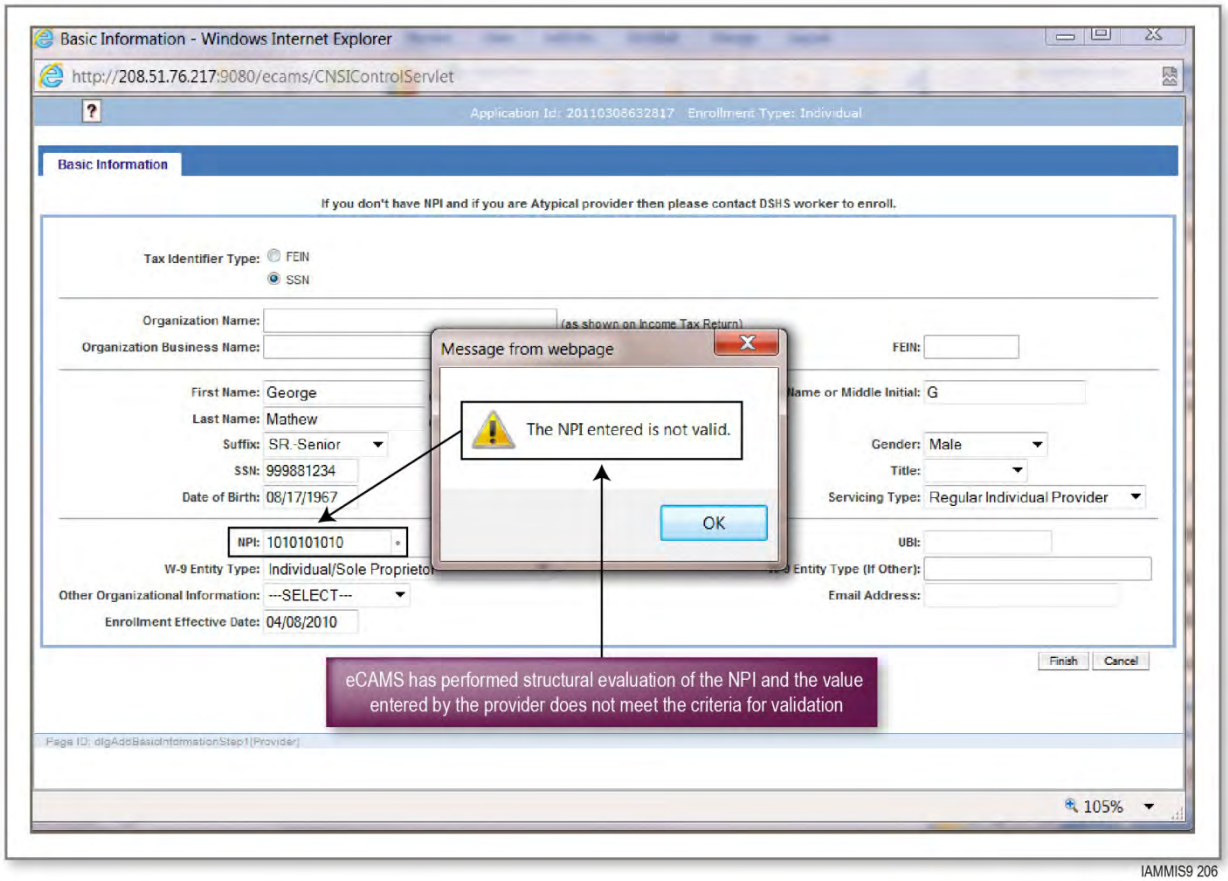

Figure 9.1.2.1-22. Basic Information Page for PDF Application. This figure shows the basic information page as completed in the PDF form shown in the preceding graphic in this series. eCAMS offers multiple, flexible modes of application submission.

PR1.02.04

The eCAMS service oriented architecture platform facilitates communication to disparate data sources to perform extensive sanction review and validation editing. eCAMS interfaces with the CMS excluded provider list (Office of Inspector General [OIG] List of Excluded Individuals and Entities [LEIE]).

PR1.02.05

Through eCAMS, authorized users can manually terminate or suspend provider participation and note the reason for termination or suspension (e.g., sanctioning or licensing authority) in the remarks. The specific wording of the messages can be configured to the Department's specification. Termination may be applied to the provider at a global level affecting all locations where the provider renders service or it may be applied to a specific service address. Figure 9.1.2.1-23 shows the dialog with the new business status "03-Terminate/Medicaid Authority" and the remarks in the “Reason for Business Status Change” field. The requested action is applied to the provider's record in real-time. In this example, all locations are affected.

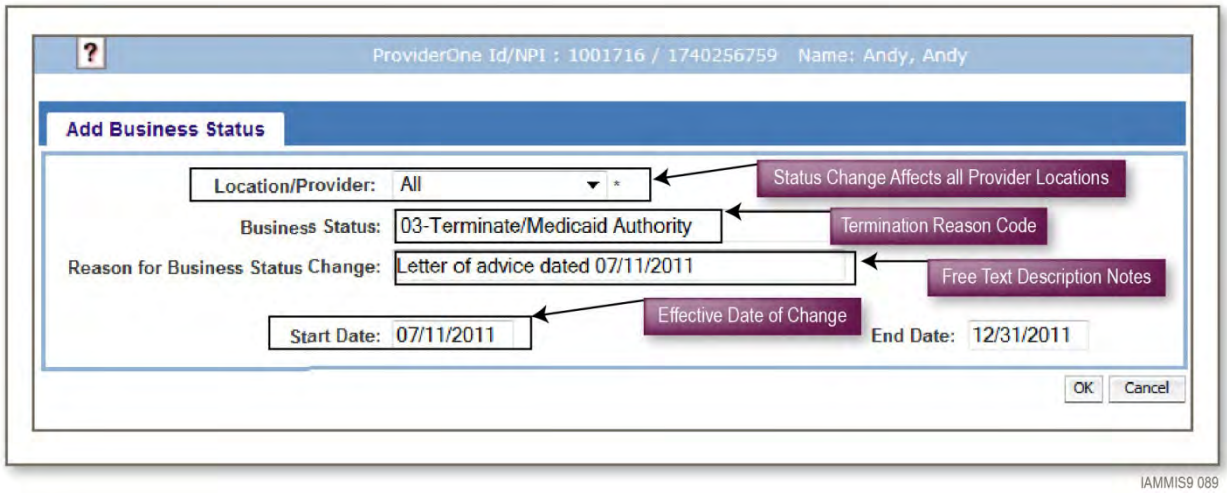

Figure 9.1.2.1-23. Provider Termination by Medicaid Authority. eCAMS can be used to terminate a provider as of a specific Start Date. The Business Status value and the Reason for Business Status Change value provide details on the termination. On saving the change, the new business status is immediately effective in real-time.

Figure 9.1.2.1-24 shows that the termination action has been applied. eCAMS claims adjudication process recognizes and applies this status change immediately in real-time.

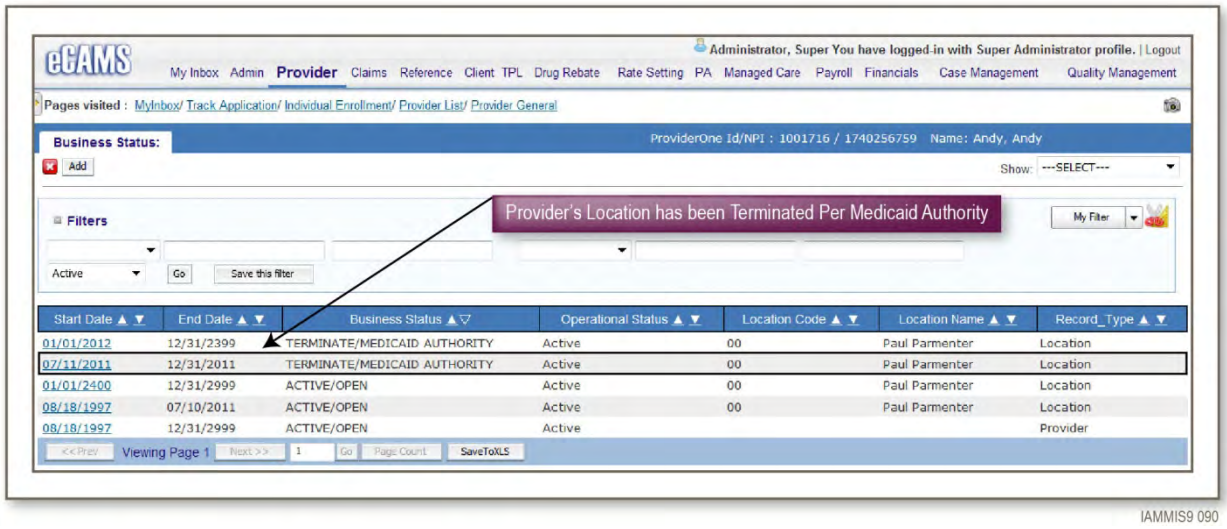

Figure 9.1.2.1-24. Provider Termination by Medicaid Authority. IME can apply the Medicaid Authority termination status using eCAMS to change the provider's active status to "terminated" on the 6/29/10 "Start Date." The eCAMS adjudication process would deny any claims the provider submitted on or after 6/29/2010.

Authorized users may reactivate (manually release) a previously terminated provider. The authorized user follows the same process to release the provider by manually changing the provider's business status to "Active." eCAMS requires the authorized user to enter the effective start- and end-date for the provider's reactivation, a reason for the action, and an optional narrative text description of the action taken. The manual release process must be applied to the provider's overall business status and the business status of the provider's location(s) in order for the provider to submit claims successfully. eCAMS will check the date of service on the claim against the provider's status to determine if the claim should be paid or denied. Additional controls can be applied to set the newly reactivated provider's claims to suspend for

manual review before paying. Please refer to Team Noridian's response in section 9.1.2.1.2, Requirement PR2.02.01, for additional details on the process used to trigger pre- and post payment manual reviews.

PR1.02.06

eCAMS fully supports the required ability to suspend a provider application in a pending status. eCAMS interactive online enrollment application provides structured, online screens with wizards that guide the provider step-by-step through the eCAMS enrollment process. The provider may begin an application and edit while working on it during multiple sessions over several days or weeks depending on the Department's policy. Until the application is submitted, it remains in a suspended state. The eCAMS wizard maintains the completion state of the application and allows the provider to continue exactly where they left off.

When the provider completes the application, the provider submits the application to IME for review and decision. The IME provider enrollment specialist may begin reviewing the application. Like the provider, the enrollment specialist can work on the application during multiple sessions over several days or weeks. Until an approval or denial decision is reached. During the review period, the enrollment specialist can suspend the application while the provider responds to a request for additional information. eCAMS maintains the application in a suspended state until all review processes have been completed and the enrollment specialist records the approval or rejection decision.

PR1.02.07

eCAMS assigns a unique tracking number to each provider enrollment application. eCAMS assigns the tracking number as soon as the provider submits basic identification credentials, including their TIN and NPI if applicable. The unique tracking number remains with the application throughout the enrollment and application review processes. Figure 9.1.2.1-25 shows the basic information capture screen.

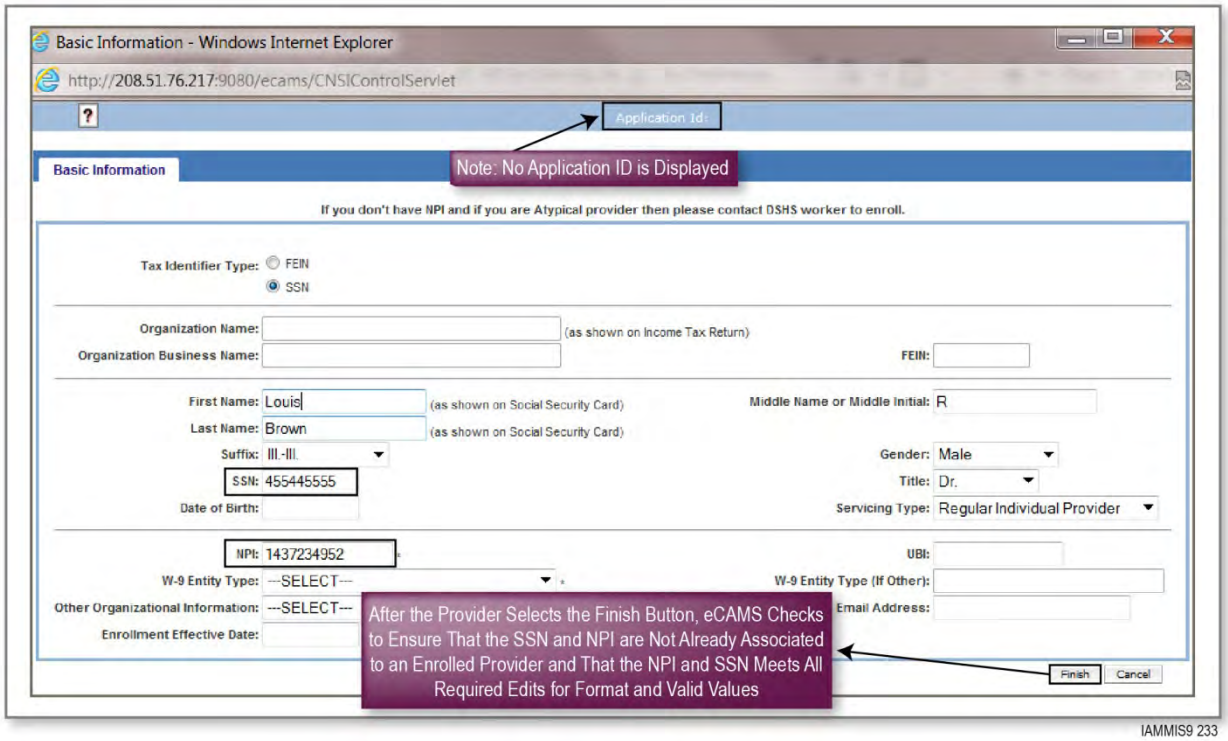

Figure 9.1.2.1-25. eCAMS Basic Information Screen. The eCAMS basic information screen captures essential information about the enrolling provider.

The information is edited for completeness and validity. When these checks are complete, eCAMS checks the enrolled provider database to ensure that the enrollment does not duplicate a provider record already on file. eCAMS issues the enrollment tracking number as soon as the data entered is free of errors and has been validated against the enrolled provider database. This activity occurs in real-time resulting in near instant feedback to the provider. Figure 9.1.2.1-26 shows the screen where eCAMS displays the newly assigned unique tracking number.

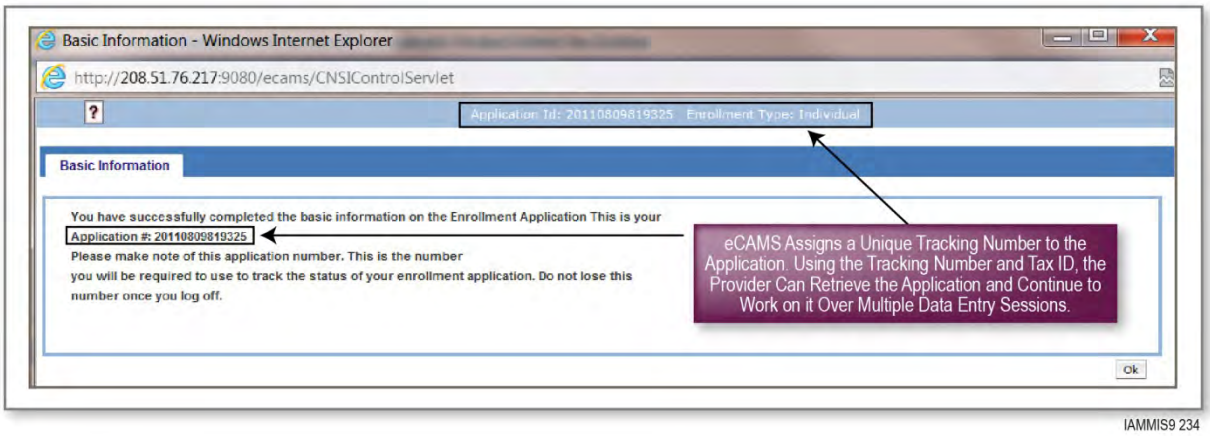

Figure 9.1.2.1-26. eCAMS Assigns Unique Applications IDs. The provider can use the application ID in conjunction with other unique identification (such as NPI) to retrieve their application and work on it over multiple days or weeks until it has been completed.

Figure 9.1.2.1-27 shows an enrollment process screen displaying the unique tracking number. eCAMS displays this unique tracking number on each primary screen of the enrollment process.

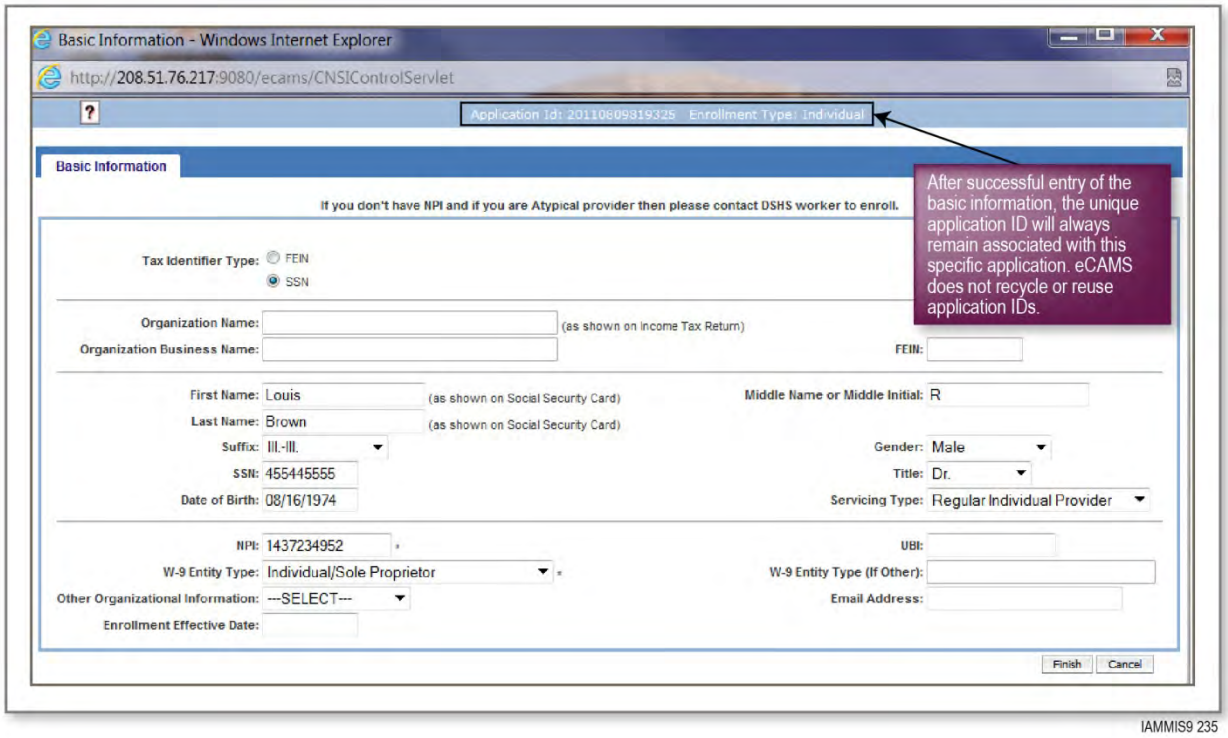

Figure 9.1.2.1-27. eCAMS Unique Application ID. The system-assigned unique application ID is never recycled or reused. This application will always be associated with this unique application ID.

Like enrollment applications, Team Noridian's solution assigns a unique ID to each individual correspondence item. Figure 9.1.2.1-28 shows the correspondence retrieval dialog within eCAMS illustrating the unique identifiers. For IME, the unique IDs will be assigned by the OnBase EDMS.

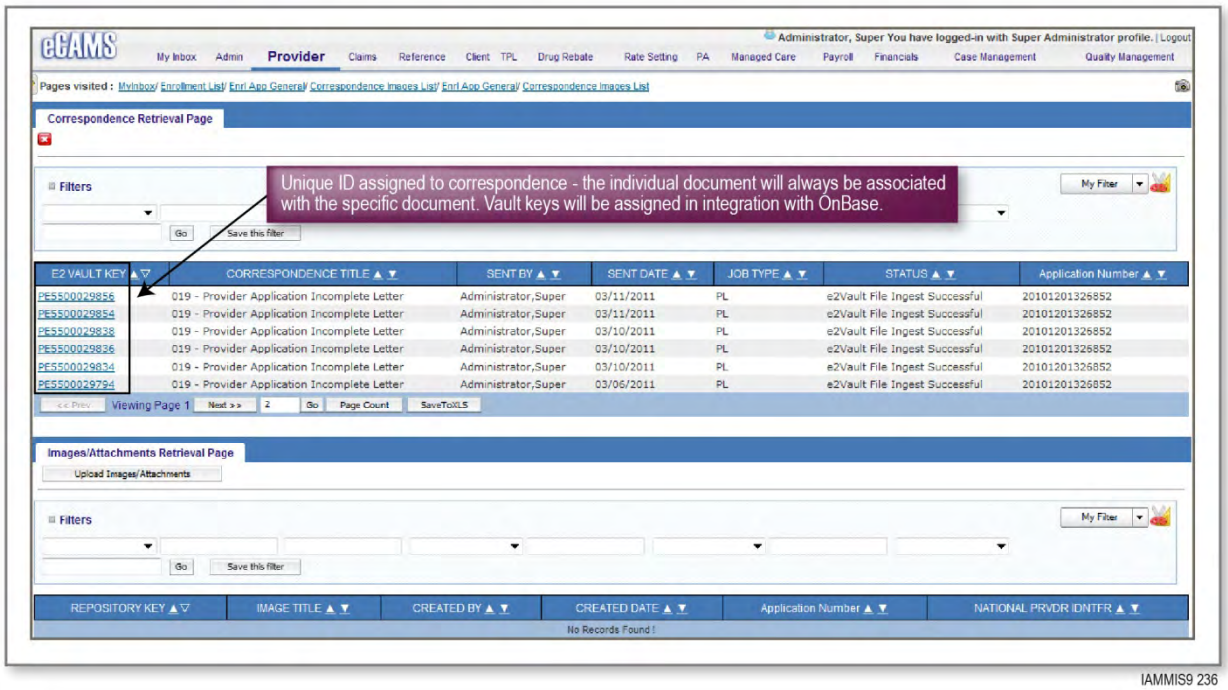

Figure 9.1.2.1-28. eCAMS Unique Correspondence ID. The system assigned correspondence ID is unique and will always be tied to the specific document within the provider's records. The examples shown here are from a previous implementation of eCAMS. The unique document IDs for IME will be integrated with the OnBase system ensuring seamless retrieval from either eCAMS or OnBase.

PR1.02.08

Team Noridian's solution provides the full power of the OnBase EDMS and eCAMS built-in, context-specific, correspondence retrieval. When a provider sends in correspondence or other material via paper or fax, the documents are scanned and stored as an electronic image in OnBase. The documents are coded with specific key-wording that ties the document to the provider. The documents can then be retrieved in eCAMS within the provider enrollment function. When provider enrollment specialists create correspondence using the letter generation functions in eCAMS, the electronic document is automatically tied to the provider's enrollment records and it is also routed to OnBase for later retrieval. The E2 Vault Key shown in Figure 9.1.2.1-29 will be replaced with the unique identifier for the correspondence in OnBase. Within eCAMS, the provider enrollment specialist can retrieve correspondence associated to a provider enrollment application by selecting the "Retrieve Correspondence" button on the Application Review screen, as shown in Figure 9.1.2.1-29.

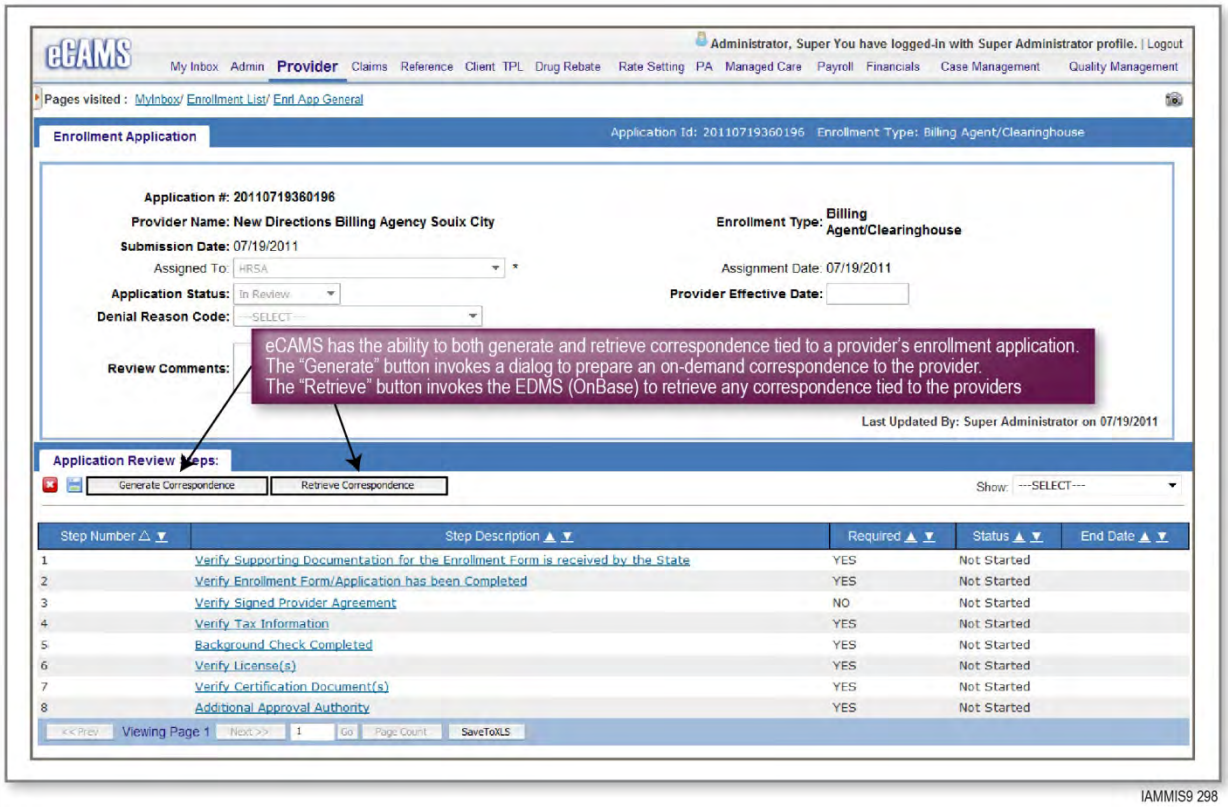

Figure 9.1.2.1-29. Invoking Correspondence Retrieval in Provider Enrollment. The "Retrieve Correspondence" button allows the user to access any enrollment-related correspondence quickly and conveniently within the context of the enrollment application record for the provider.

After selecting the "Retrieve Correspondence" button, eCAMS displays all correspondence and other documents tied to the provider's enrollment record, as shown in Figure 9.1.2.1-30.

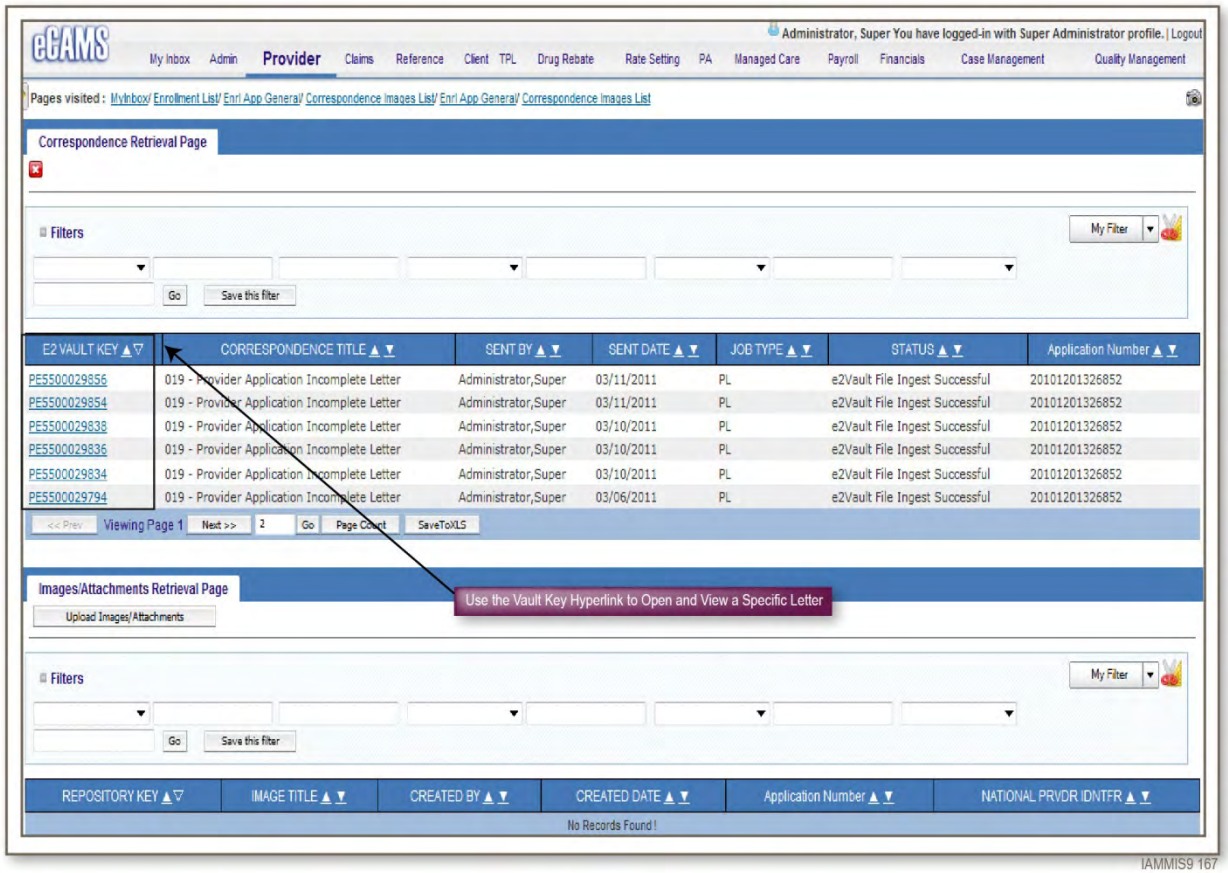

Figure 9.1.2.1-30. Correspondence Retrieval in eCAMS. eCAMS indexes all correspondence tied to a provider's enrollment application and stores it in OnBase for easy retrieval and display. The users then can then search through the list and choose an image to view.

After selection an individual document hyperlink, as shown in Figure 9.1.2.1-30, eCAMS retrieves the PDF image of the correspondence item, as shown in Figure 9.1.2.1-31.

Figure 9.1.2.1-31 shows an example of a letter retrieved through the link.

Health and Recovery Services Administration
P.O. Box 45535 Olympia WA 98504-5535

Washington State Department of Social & Health Services

March 11, 2011

Bill Cook
101 Main Street
Gaithersburg MD 20877

Dear Medicaid Provider:

We have received your enrollment/re-enrollment application but we need additional information to process it:

☑ Missing IRS (Tax ID) Number

Please provide this information and resubmit the entire completed application with all attachments to the address listed below.

Thank you for your interest in the Medicaid program.

Sincerely,
Provider Enrollment
Division of Customer Support
PO Box 45562
Olympia, WA 98504-5562
1-800-562-3022

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Figure 9.1.2.1-31. eCAMS Image Retrieval. Images of correspondence and other documents are easily retrieved in eCAMS. This letter illustrates a condition where the provider's application has been placed into a pending status until the TIN has been supplied.

eCAMS also has the ability to interface directly with the Cisco Customer Relationship Management (CRM) system used by IME to provide integration with provider contact information collected and stored in the CRM system.

PR1.02.09

eCAMS supports identification of incomplete applications. eCAMS wizards provide a step-by-step, interactive, enrollment application. Using the wizards, the provider cannot proceed to the next step in the enrollment process until all predecessor steps have been completed. The provider cannot submit their application until all enrollment steps required by the Department are complete. IME provider enrollment specialists can see all applications that are incomplete by using the eCAMS application list function and filtering for the status value "In Process." Figure 9.1.2.1-32 shows the application list with the search criterion of "In Process." All applications shown in this list are awaiting additional information from the provider and are incomplete. The IME enrollment specialist can sort the returned on Application Start Date to view either newest to oldest or oldest to newest. Additional filter criteria can be entered to zero in on a specific type or on an individual enrollment application. Applications can be retained in eCAMS for a period of time configured to the Department's data retention requirements.

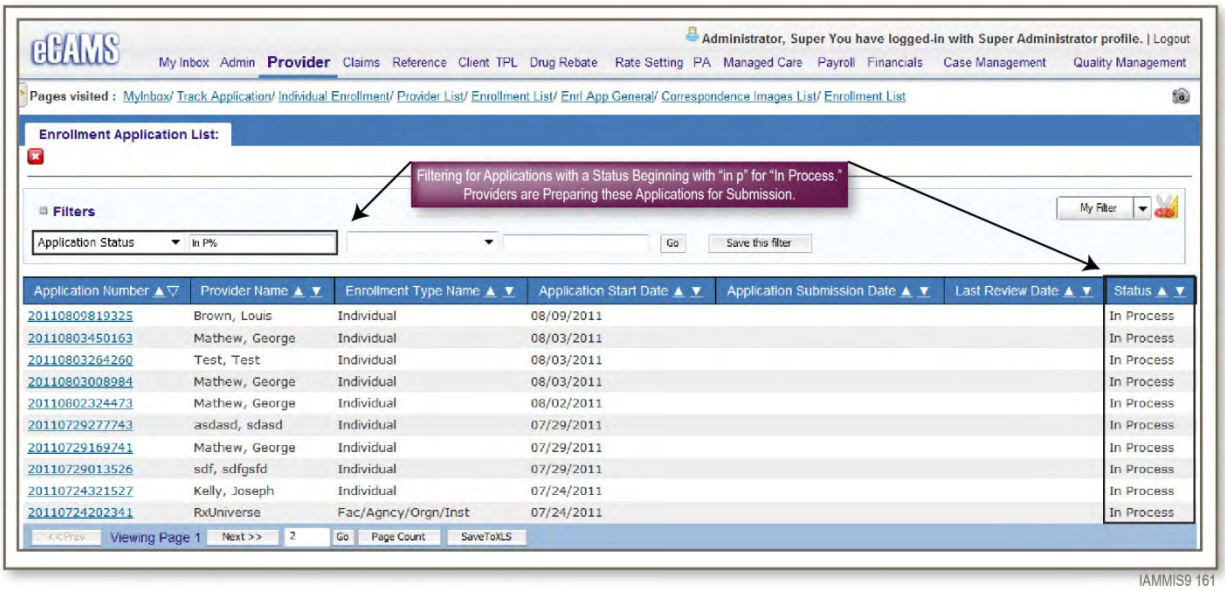

Figure 9.1.2.1-32. Enrollment Application List (Incomplete Enrollments). Using eCAMS Enrollment Application, applications that have been started but not yet submitted for review by filtering on the Application Status filter criteria and using the wildcard value of "in P%". eCAMS returns the list of all incomplete applications.

eCAMS changes the Application Status to "In Review" for applications that are successfully submitted. Using the same search and filter feature, the Enrollment Application List, IME provider enrollment specialists can filter on the applications that are "In Review" to view those that are incomplete from the standpoint of the review and approval process. Figure 9.1.2.1-33 shows list of applications that are incomplete from a review standpoint. Note that in addition to the Application Start Date, the Application Submission Date and the Last Review Date are available on the list page. The Application Submission Date shows the date the provider submitted the application for IME review. The Last Review Date shows the last date an IME enrollment specialist acted on the application.

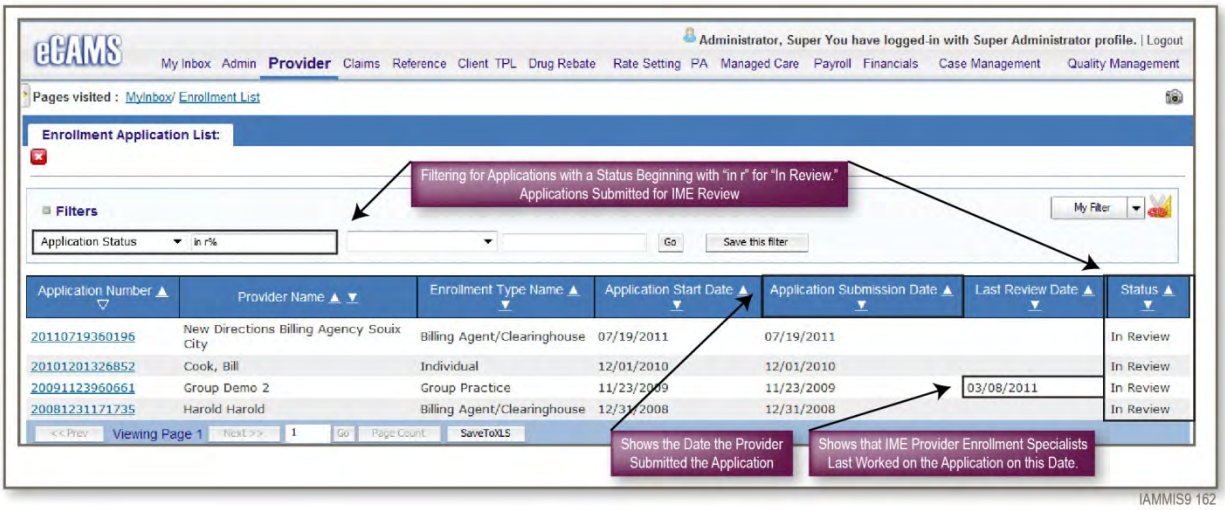

Figure 9.1.2.1-33. eCAMS Application Enrollment List. The provider enrollment specialist uses the application enrollment list to search for groups of applications by status and to select and view specific applications. eCAMS filter capabilities allow selection using wildcard values. Frequently used filters, e.g., applications in an "In Review" status, can be saved and retrieved using the My Filter function on this page.

Throughout the review process, the provider enrollment specialist can identify situations where additional information is needed from the provider. Team Noridian will configure a new report to list "In Review" applications that are specifically awaiting additional information from the Provider. The report will use a specific status value identifying that the application is pending due to missing information due from the provider.

PR1.03

eCAMS provides notifications to provider applicants for all of the following situations:

- Initiation of a new application through a real-time notice
- Submission of a completed application ready for IME review through a real-time notice
- Approval or rejection of an application through automatically generated correspondence

In Team Noridian's response in section 9.1.2.1.2, Requirement PR1.02.07, Figure 9.1.2.1-26, Team Noridian shows an example of the real-time notice eCAMS generates on initiation of a new application. The provider can use the unique application ID to access the application over several days or weeks until all information is complete.

When the provider successfully completes all steps in the application, the provider submits the application for IME review. On submission of the application, the provider receives a real-time notice that the application has been successfully submitted and is now in a pending status awaiting IME review. Figure 9.1.2.1-34 shows the submission success notice.

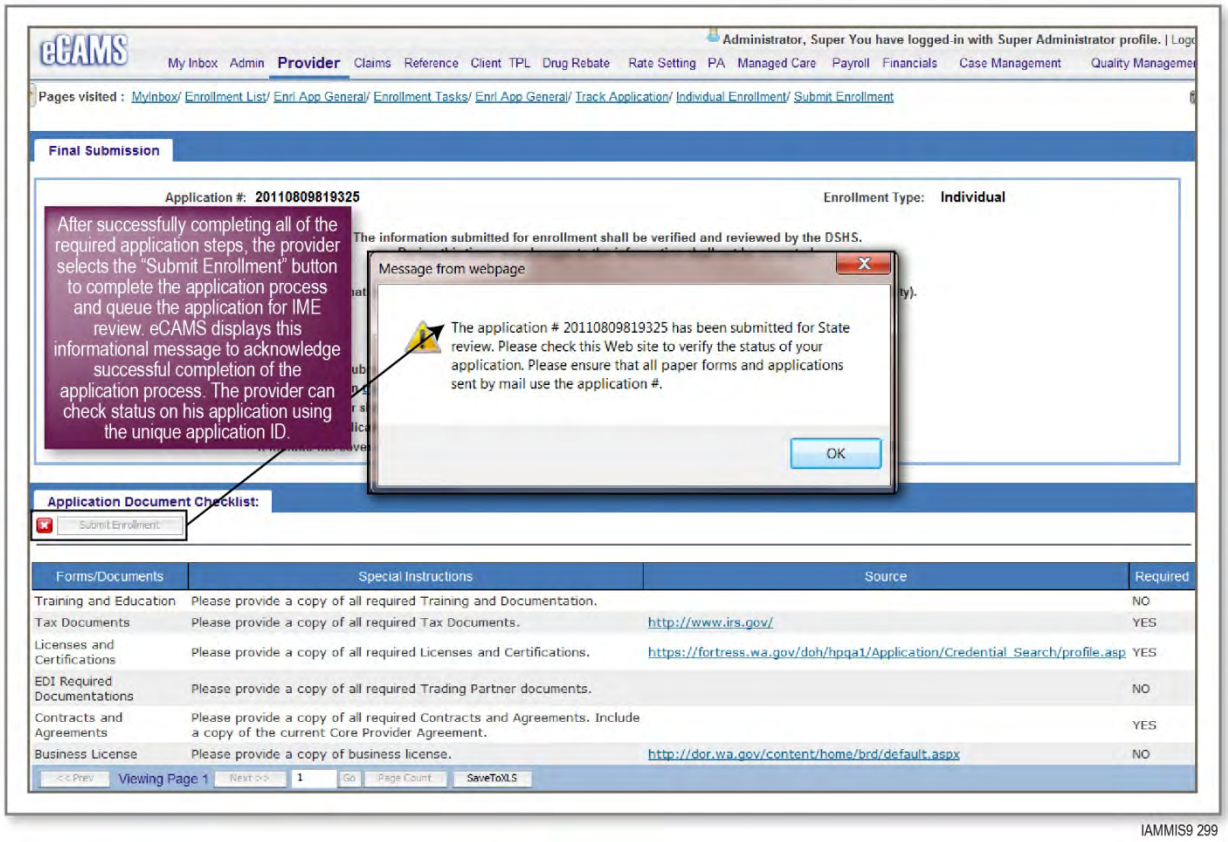

Figure 9.1.2.1-34. Successful Provider Application Submission. eCAMS gives the provider applicant real-time notification that the application has been successfully submitted for IME review.

Throughout the enrollment application review process, the provider enrollment specialist can place the application in a pending status and send notifications to the provider describing the action they must take

to release the application from the pending queue. Refer to Team Noridian's response in section 9.1.2.1.2, Requirement PR1.02.08, Figure 9.1.2.1-31 shows an example of a notice generated for a pending application. After the IME provider enrollment specialist completes the review of the application and reaches a decision to approve or reject the application, eCAMS automatically generates correspondence informing the provider of the decision. Team Noridian will configure the text of the letters to the Department's specifications. When the provider enrollment specialist approves an application, eCAMS copies the approved enrollment information into the enrolled provider database in real-time.

PR1.03.01

eCAMS automatically generates notices to providers for many different situations, including status changes, application approval and denial, maintenance request approval and denial, and license expirations. In Team Noridian's response in section 9.1.2.1.2, Requirement PR1.02.08, we provide a detailed description of some of the notices produced during the enrollment process. In addition to the initiation, submission, approval, and rejection (denial) notifications, eCAMS can produce notices to request additional information and to clarify information already submitted.

After successful enrollment, the provider may request changes to their provider data, such as a change to their fax number or a new location where they render care. eCAMS produces notices to inform the provider of approval or denial of self-service maintenance requests.

For enrolled providers, eCAMS performs a nightly sweep of all enrolled provider data to identify pending expirations for credentials required for the provider’s taxonomies and associated Department programs. The nightly process reviews the credentialing requirements housed in the eCAMS Credentialing Matrix and identifies any required credential that is pending expiration. eCAMS then automatically prepares correspondence to the providers whose credentials are nearing expiration. Credentialing requirements are configured to the Department's specification as a part of the standard implementation process for eCAMS.

PR1.03.02

During the enrollment process, the provider specifies their preferred mode of communication. Figure 9.1.2.1-35 shows the communication preference dialog in eCAMS. In addition to choices for email and standard mail, the provider may also choose delivery to their secure eCAMS web portal inbox - the My Inbox feature of eCAMS. For IME, all communication is routed through OnBase. If the provider selects email as their preferred delivery method, eCAMS validates that a good email address has been entered. Preferences can be recorded at the general provider level and at the individual Address Type for the office location, mailing address, and pay-to address. Team Noridian will develop integration to communicate the provider's preference to OnBase. The Department will be able to use the OnBase system to override or augment the provider's default choice of preferred communication method. The Department can choose to override the provider's preferences for situations requiring a specific mode of delivery or multiple modes of delivery. Team Noridian will modify eCAMS to allow specification of fax as a preferred delivery, including validation that the otherwise optional fax number has been provided.

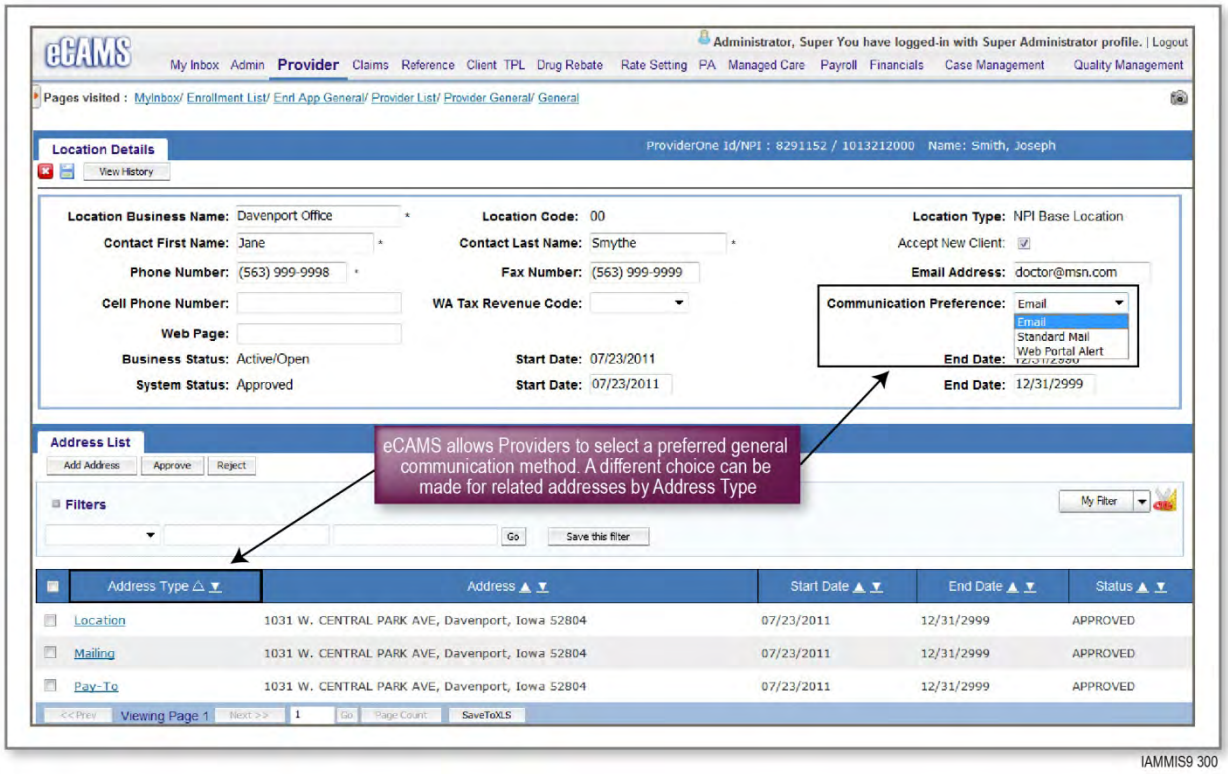

Figure 9.1.2.1-35. Provider Communications Preferences. eCAMS allows the provider to specify a preferred mode of communications during the enrollment process.

PR1.04

In many legacy MMIS systems, a provider had to enroll multiple times to establish credentials to render services as more than one provider type. For example, a provider may be a nurse practitioner (legacy provider type 50), who is also a certified nurse midwife (legacy provider type 38). In this example, eCAMS requires only one enrollment where the appropriate provider types and taxonomies are identified during the single enrollment process. eCAMS ensures that the credentials required for each taxonomy are collected during the enrollment process. This benefits IME providers by simplifying the effort required to enroll in the Department's Medicaid program, resulting in a benefit to IME by having fewer applications to process and fewer maintenance activities to perform. eCAMS' single provider identify also reduces the opportunity for fraudulent enrollments as the NPI and TIN combination can only be used by a single entity. For providers who are not eligible for an NPI, eCAMS assigns a unique Alternate Provider Identifier (API) used like the NPI as a part of the enrollment.

On enrollment, the provider is assigned a unique, never duplicated, internal number that remains associated with the provider's NPI/API and TIN as long as the provider is active in the system. IME can use eCAMS powerful search and filter capabilities to locate providers based on whole or partial taxonomies, in addition to other attributes, such as whole or partial TIN's, NPI/API values, license type, or address. This allows IME to locate groups of providers and identify providers of a given type (or taxonomy).

PR1.04.01

eCAMS wizard checks for possible duplication before the provider receives authorization to enroll. After selecting an enrollment type, the provider must complete the basic information screen. Basic information includes name, TIN type and TIN number, NPI, and full name. Figure 9.1.2.1-36 shows the basic information screen.

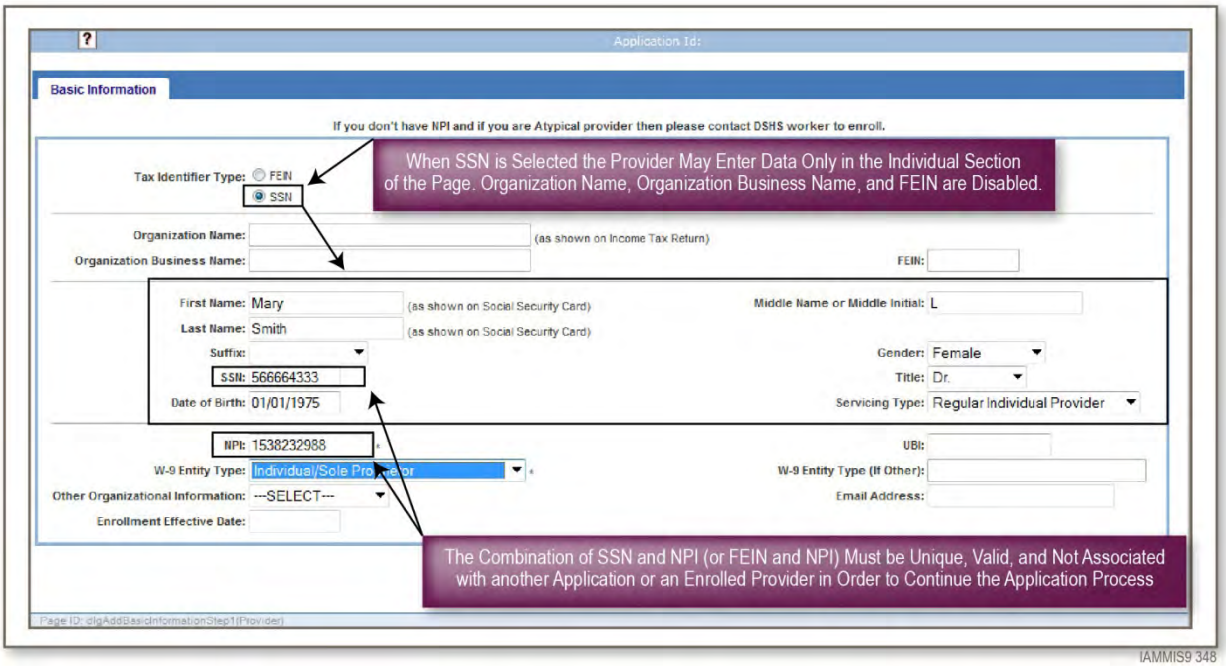

Figure 9.1.2.1-36. Provider Basic Information Screen. eCAMS performs duplicate checking based on key provider identification information.

When the provider submits the data on this screen, eCAMS performs multiple checks before issuing allowing the applicant to continue to the next step in the enrollment process.

- The NPI entered must be valid and verifiable. NPI validation is performed via the Luhn Formula for Modulus 10 “double-add-double” check digit formula that ensures the NPI meets the criteria for validity. Verification is done through the NPPES registry.
- The TIN entered must verifiable through the Social Security Administration (SSA) or the Internal Revenue Service (IRS)
- The TIN/NPI combination cannot already be assigned to an active provider in eCAMS

After passing these duplicate and validation checks, eCAMS issues an application ID and the provider's application is added to the application file.

PR1.05

eCAMS does not allow multiple Internal Provider Numbers during the same or overlapping time periods. Team Noridian understand that there may be situations in the Legacy system and during Data Conversion we will identify such issues and develop conversion rules to correct this problems and retain one and only one provider ID for a given time period.

In eCAMS, internal state-assigned provider numbers are generated by the system. Each system-generated internal provider number is a unique number with no possibility of duplication. eCAMS architecture prevents duplicate enrollments for the same provider. At the time the internal provider number is assigned, eCAMS verifies that the NPI (or API) and TIN combination are not already on file. If the provider is already on file with that specific combination, the enrollment specialist can research and correct the error, and then they can either continue with the enrollment of the new provider as originally submitted or proceed with the enrollment with corrected information. The internal provider number is not assigned until the duplication issue has been resolved.

PR1.06

Through eCAMS integration with OnBase Noridian's solution supports a wide range of communications with providers. Team Noridian captures and retains all inbound and outbound correspondences, imaged attachments, and other documents in the OnBase EDMS repository. OnBase and. eCAMS work together allowing authorized users to retrieve images of all outbound and inbound correspondences and communications. For example, correspondence related to provider enrollment can be retrieved in the Provider Management business process area. Correspondence or communications related to Claims can be retrieved in the Claims business process area. Correspondence and communication is also captured in the Case Management function of the Program Management business process area. In the Case Management function, retrieval is by provider rather than by business context.

Figure 9.1.2.1-37 shows the eCAMS functions to generate and retrieve written communications — all of which are considered correspondence.

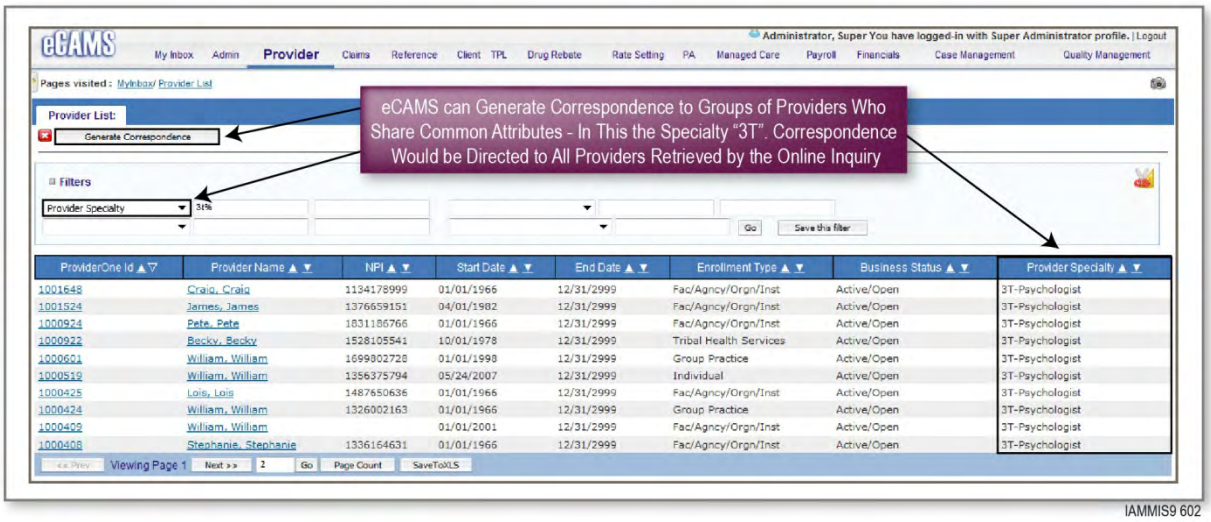

Figure 9.1.2.1-37. Generate and Retrieve Provider Communications. The Provider Details page highlights the Generate Correspondence and Retrieve Correspondence functions. By selecting the Retrieve Correspondence button, the authorized user is transferred to the OnBase repository where they can view any written communication with the selected provider.

Refer to Team Noridian's responses in section 9.1.2.1.2, Requirements PR1.02.07 and PR1.02.08, for additional details on correspondence tracking in eCAMS.

As shown in Figure 9.1.2.1-38, eCAMS has the ability to communicate directly with providers within the Provider portal using the My Reminders function.

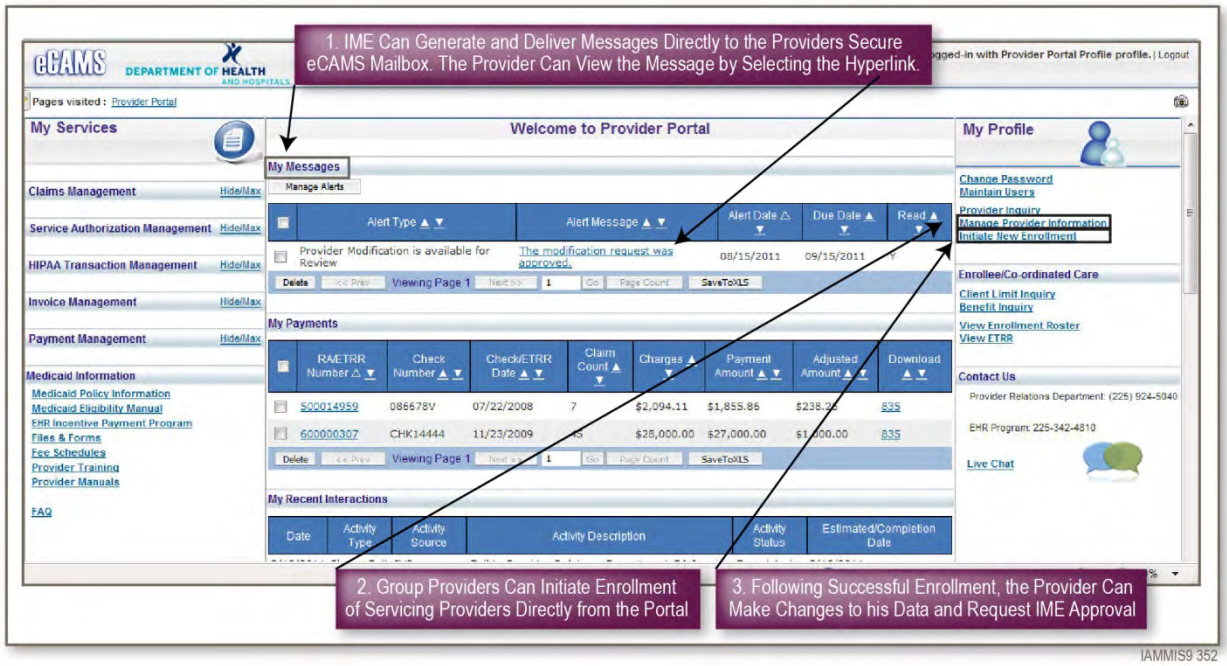

Figure 9.1.2.1-38. eCAMS Secure Self-Service Portal My Inbox. Enrolled providers use this page to access authorized eCAMS features. Through the "My Inbox" feature, IME can deliver secure communications generated within eCAMS.

PR1.06.01

eCAMS supports multiple provider addresses including the addresses for every practice location, the mailing address for every practice location, the billing address for the provider's NPI or API, and the tax address as reported to the IRS. eCAMS captures street addresses in United States Post Service (USPS) approved format, contact names, phone numbers, fax numbers, and email addresses by location. Mailings can be directed to any of the provider's addresses, physical or electronic (email and fax).

Figure 9.1.2.1-39 shows an example of a group of providers selected who share the specialization of Psychologist (3T). By selecting the Generate Correspondence button, authorized users can direct a communication to all of the providers retrieved by the filter criteria.

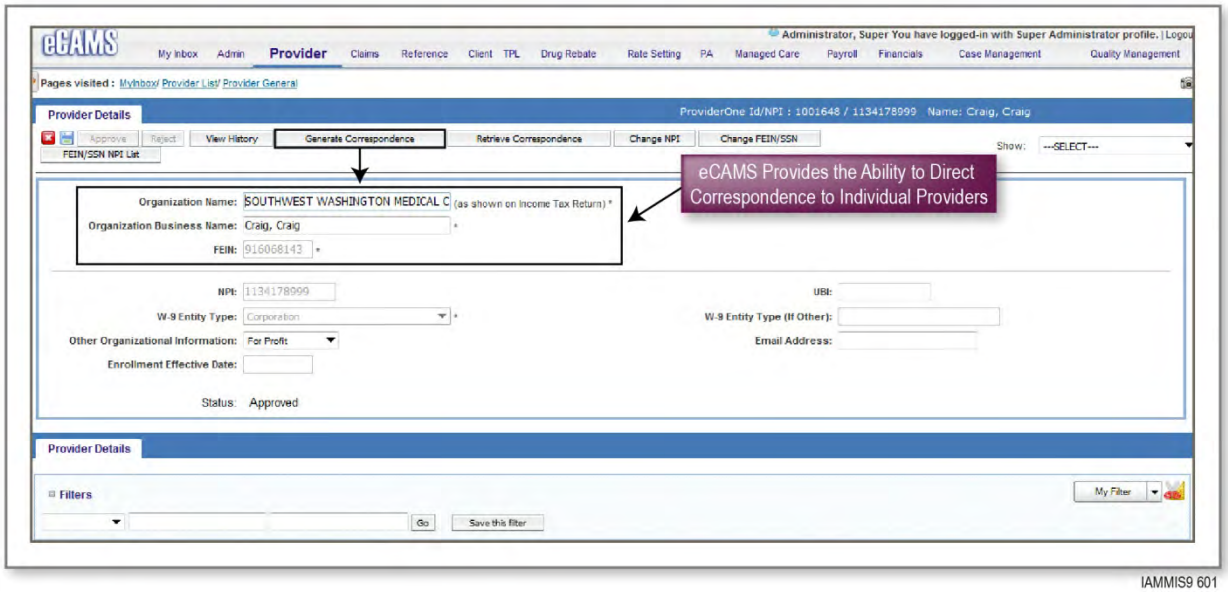

Figure 9.1.2.1-39. eCAMS Group Correspondence. eCAMS can direct communications to groups of providers who share common attributes such as type or specialty. After the user selects the desired filter criteria, eCAMS generates the correspondence all providers selected by the query.

PR1.06.02

eCAMS supports notifications to providers who share common attributes such as:

- Rendering services to a particular benefit plan such as long-term care and home and community based services
- Taxonomy or provider type
- Address component such as county, city, or zip code
- Association to a specific billing provider
- License type
- Re-enrollment cycle

eCAMS can generate notifications in a variety of ways:

- Regularly scheduled jobs for predefined selections of providers, e.g., all of those within a specific county, or all of those who have a particular specialty.
- On demand requests submitted directly within eCAMS based on predefined criteria.
- Ad hoc requests to populations of providers based on on-line queries in eCAMS, e.g., all providers who submitted applications between June 1st and June 12th.

As noted in Team Noridian's responses in section 9.1.2.1.2, Requirements PR1.06 and PR1.06.01, eCAMS supports notification using multiple addresses and communication methods.

PR1.07

Team Noridian's eCAMS solution supports the provider appeals process and is compliant with Federal guidelines for 42 CFR 431.205. The eCAMS Case Management feature allows authorized uses to enter and track provider appeals, including the federal mandate that there be provision for an oral hearing before an impartial decision-maker. Figure 9.1.2.1-40 shows an example of the appeal tracking in eCAMS. The appeal and related actions are recorded and tracked as a part of the provider’s case records. This allows the user to monitor the appeal activity and track the dates for each action from the initial appeal through closure. In this figure, the Source, Case Type, and Case Template show that this is a

provider appeal. eCAMS generates a Notification of Appeal letter, which is included as a part of the Appeal Notification in the Case Review steps shown at the bottom of Figure 9.1.2.1-40.

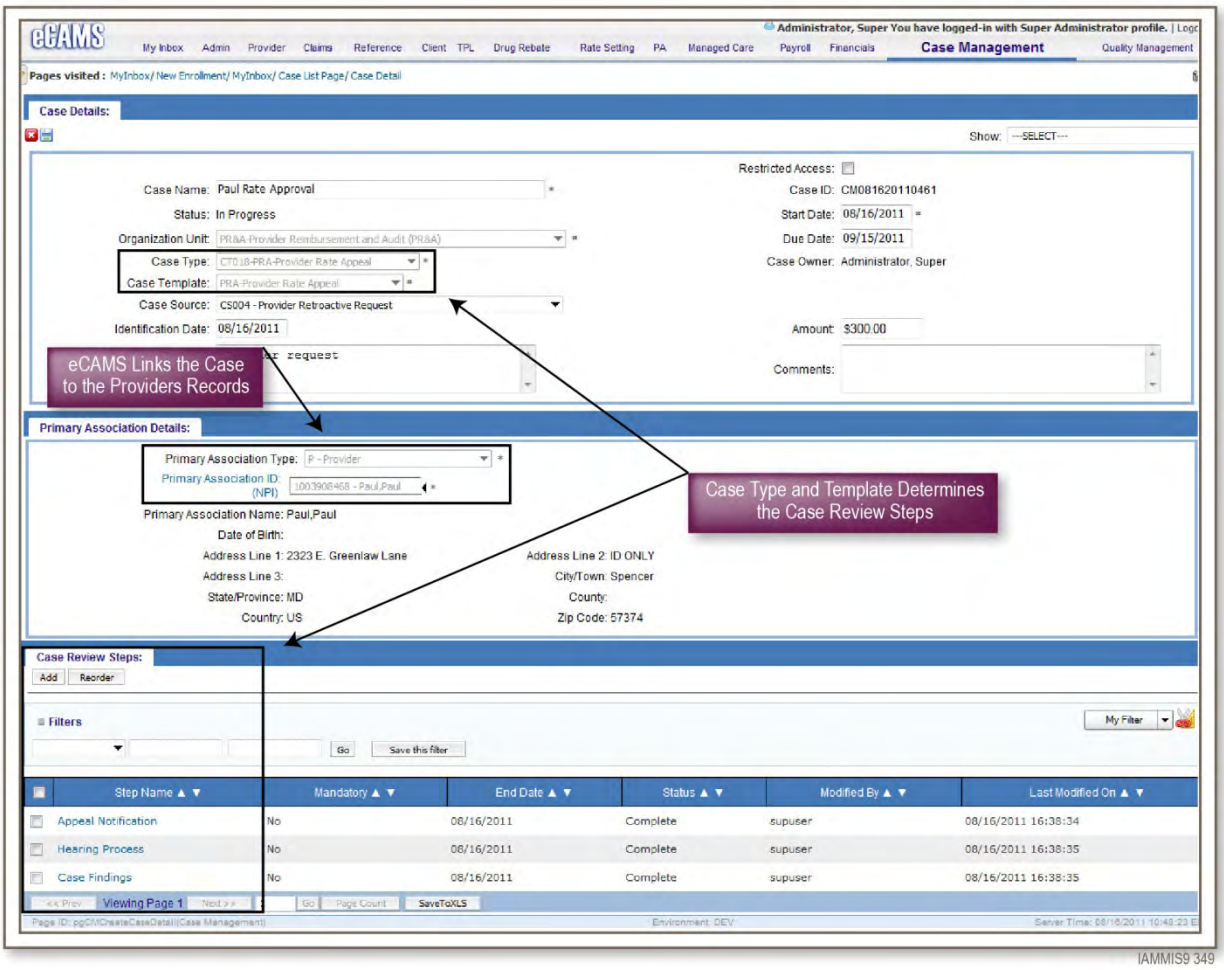

Figure 9.1.2.1-40. Provider Appeal Tracking through Case Management. eCAMS tracks appeal details including screen appeal source, case type, and case template for a provider appeal and where the notification of appeal letter generation will appear in the case review steps.

PR1.08

eCAMS maintains date-specific provider enrollment and demographic data. eCAMS captures:

- Request date and time and the requestor (user ID or interfacing system source)
- Requested effective from-date and through-date
- Approval date and time, approver (user ID), and approval comments
- Approved effective from-date and through-date for current and historical date spans

The above information can be viewed through eCAMS history pages associated with each data capture area. Figure 9.1.2.1-41 shows the provider's basic information with the history of changes to the data on this page. Date-specific from- and through-dates ensure the provider's claims are adjudicated with the enrollment data in approved for use on the claim date-of service.

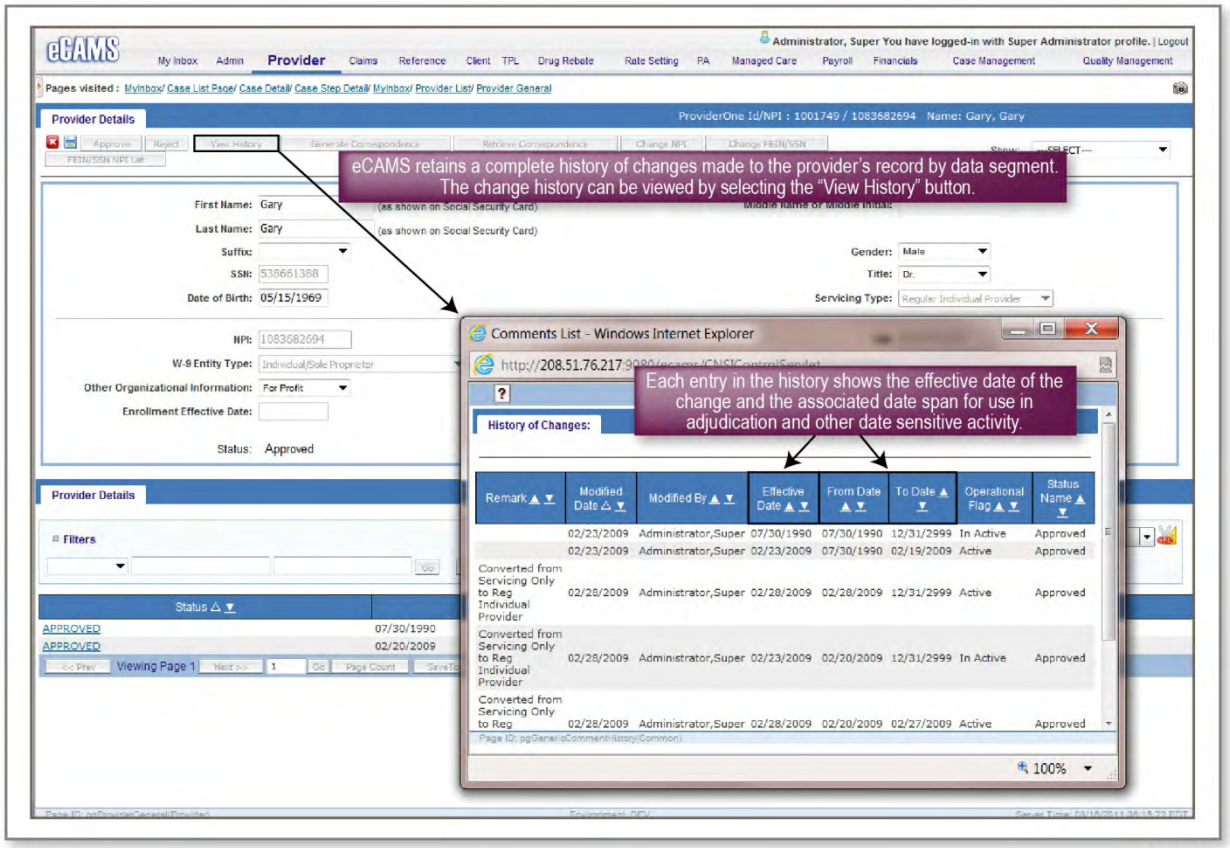

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Figure 9.1.2.1-41. Provider Basic Information with Change History. The View History feature shows each entry's effective date and date span (from and to date) enabling the user to easily identify the conditions applicable to a claim on the date of service and to use this information during the adjudication process ensuring the claim is correctly priced.

PR1.08.01

eCAMS provides specific reports to collect provider enrollment and status information. The reports include the PRV Provider Enrollment Summary report and the PRV Transaction Status By Admin, By Staff, By Enrollment Type report.

The PRV Provider Enrollment Summary report provides a daily report of the transaction status counts of all applications and data modifications not complete and those completed during the day. This report is sorted by organizational unit, staff member, and enrollment type.

The PRV Transaction Status By Admin, By Staff, By Enrollment Type report provides a monthly report of the application processing performance of all organizational units. This report collects data on a calendar basis beginning in January of each year, with succeeding months being added to build a year-to-date report, through December.

Team Noridian's response in section 9.1.2.1.2 Approach to Addressing the Provider Management System Requirements provides a complete list of eCAMS provider reports.

PR1.08.02

eCAMS tracks all enrollment application denials in the provider database. eCAMS uses the provider database to house all provider applications including denied applications. Figure 9.1.2.1-42 shows the

eCAMS application list filtered for denied applications. All applications are retained in the provider database in accordance with the Department's data retention requirements.

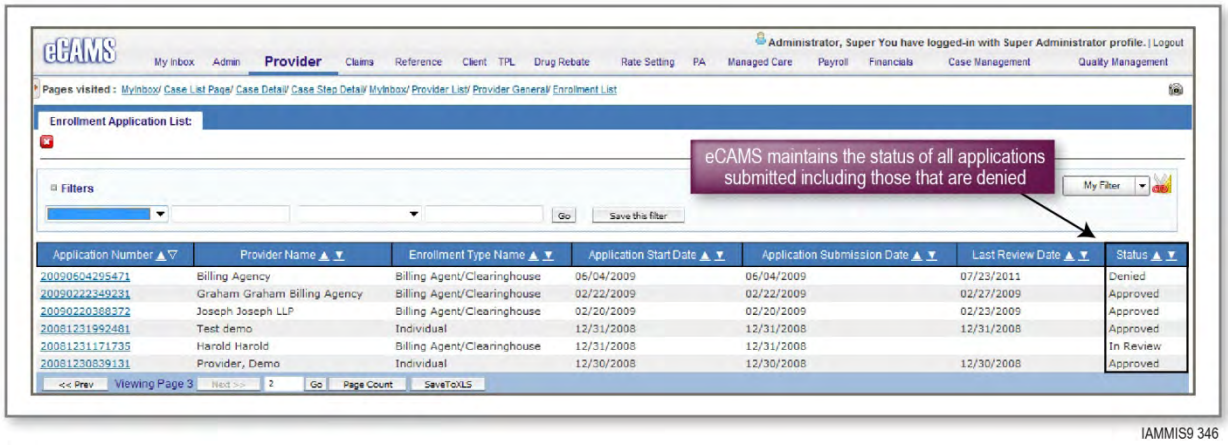

Figure 9.1.2.1-42. Enrollment Application List Showing Denied Applications. eCAMS retains all applications, whether approved or denied.

PR1.09

eCAMS automatically generates notifications and correspondence when key changes in the provider's status occur. Specific conditions include:

- On successful initiation of a new application
- On successful submission of a new application
- When an application approval or rejection (denial) decision is rendered

Throughout the enrollment approval process, IME can generate correspondence and notifications to the provider on an ad-hoc basis using the Generate Correspondence function within the Enrollment Approval function. Figure 9.1.2.1-29 in Team Noridian's response in section 9.1.2.1.2, Requirement PR1.02.08, shows an example of how the generate and retrieve correspondence functions are used during the application review process.

PR1.10

eCAMS uses DOC1 to prepare all correspondence sent to providers. After the correspondence has been generated, Team Noridian will use the robust document management features of the OnBase EDMS to track all IME information sent to enrolled providers. All outbound communications will be tied to the provider's enrollment ID. The Team Noridian solution will provide full integration between eCAMS and OnBase to ensure that provider communications generated through eCAMS are sent to the OnBase EDMS and tied to the provider's enrollment ID. Integration between eCAMS and OnBase will also give authorized IME users the ability to view provider communications either through OnBase or in eCAMS.

PR1.11

eCAMS Managed Care business process area's Contract Definition function includes information tied to provider and recipient ratios. It enables users to view available enrollment slots by geographical area and search this information to perform network assessments. eCAMS also supports managed care provider network information. Authorized users can view this information and identify the available capacity for new recipient assignment to the provider network by geographical location. Figure 9.1.2.1-43 shows a sample screenshot.

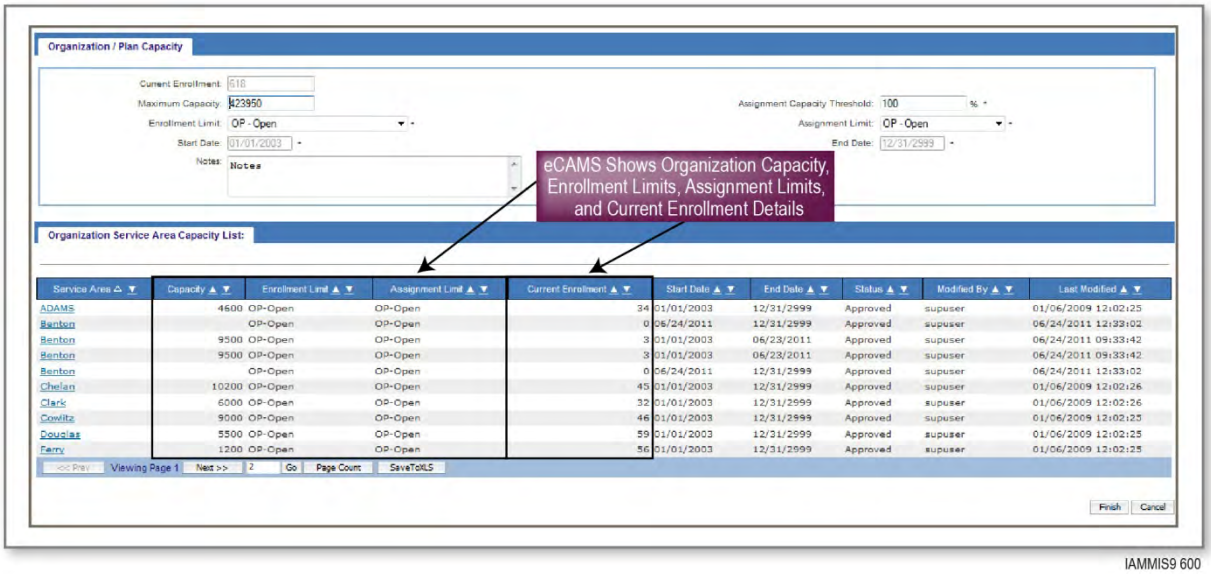

Figure 9.1.2.1-43. Managed Care Program Capacity. The eCAMS Managed Care Capacity feature shows the service area and the associated capacity

Team Noridian will build a new on-demand report to address provider/recipient ratios by geographic region. Geographic region parameters will include town, county, zip code, and/or census-designated place (CDP) for unincorporated areas. To request the report, the authorized user must provide the member's location parameter. The user then selects either a specific set of taxonomies or indicates all providers should be included. The user specifies whether only summary data is needed or a detailed listing of providers. The report provides a summary of the request parameters, the number of members found, and the number of providers found as total numbers and as a ratio. If the user chooses a detailed list, the list of providers appears after the summary data.

eCAMS already has a rich set of capabilities to support actions performed to determine the adequacy of the Medicaid provider network. eCAMS provides the user with the ability to perform both ad hoc and repetitive inquiries using multiple filter sets. The Provider Management business process area has three primary filters and one secondary filter, as shown in Figure 9.1.2.1-44. In this figure, the three primary filters are labeled “1,” “2,” and “3,” and the secondary filter is labeled “4.”

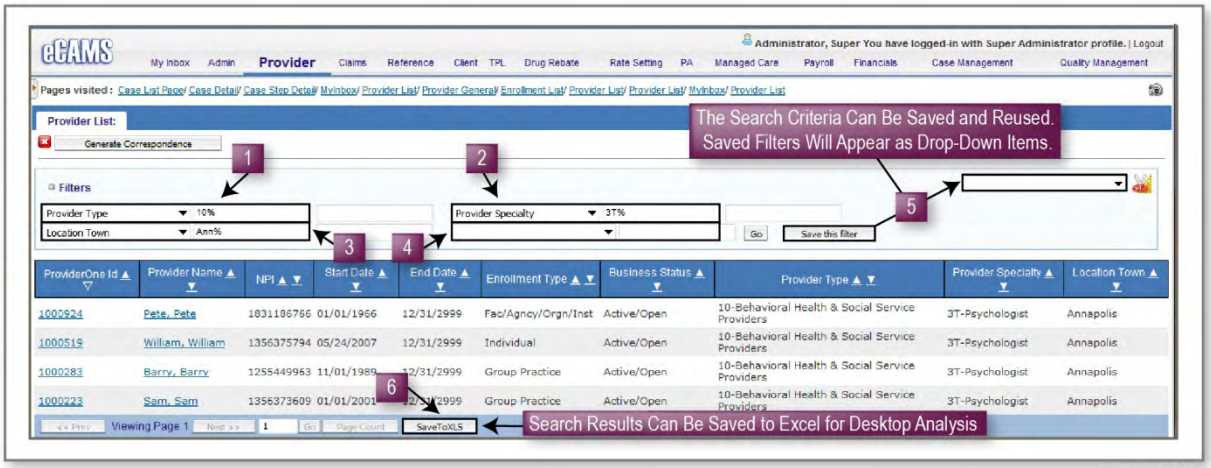

Figure 9.1.2.1-44. Provider List Page Showing Filter Capability. This screen highlights the three major filters (1, 2, and 3), the secondary filter (4), the Save this Filter and My Filter retrievals (5), and Save to XLS (6) features.

Used in combination, the filters shown in Figure 9.1.2.1-44 allow the user to perform sophisticated searches, including taxonomy by city, by county, or by zip code within the city or county. Searches can be performed on full or partial data. In Figure 9.1.2.1-44, the wild card symbol "%" has been used to request a list of providers with NPIs that begin with "1." The user has the ability to save favorite search criteria by selecting the Save This Filter button (5 in Figure 9.1.2.1-44). Saved filters are retrieved under the My Filter dropdown. The list retrieved may be exported to Excel (6 in Figure 9.1.2.1-44) for additional analysis using the Save to XLS button.

As currently implemented, eCAMS has primary filters for:

- Contract number
- Business status
- Date as an individual date value or as a from-to date range
- Group code
- Indicator type
- License or Certification type
- State
- Town
- NPI
- Organization detail
- Name
- Taxonomy components for:
- Provider type
- Specialty
- Subspecialty
- System assigned provider number
- SSN/FEIN
- Administration/program
- Specialization end reason
- Universal business ID
- W-9 organization type

As currently implemented, eCAMS has secondary filters for:

- State check-writing system number
- Adult day care home number
- Agency ID
- DEA number
- Program ID
- Foster care home number
- National Association of Boards of Pharmacy (NABP) number
- Legacy MMIS provider ID number
- Legacy social service program provider ID number

Team Noridian will configure this feature to IME's specifications during the DDI Construction phase. This will include new filters for zip code and CDP.

PR1.12

eCAMS differentiates between individual names and organization or corporation names. eCAMS differentiates between individual names and organization names based on the type of tax identifier supplied when the enrollment process is initiated. During the first step of starting a new enrollment, the provider must specify if they are enrolling as an individual or as an organization. Figure 9.1.2.1-36 in Team Noridian's response in section 9.1.2.1.2, Requirement PR1.04.01, shows the first data entry screen presented to the provider during the enrollment process. The first decision the provider must make is to choose a TIN type. For individuals, an SSN must be provided with first name, middle initial and last name. For organizations, an organization name must be provided. The eCAMS editing functionality automatically prevents entry of an organization name for an SSN-based provider and entry of a first/last name for an FEIN-based provider. eCAMS disables data entry for Organization Name, FEIN, and Organization Business Name when an SSN is chosen.

eCAMS fully supports flexible full and partial name searches on provider name (last name or organization). Team Noridian's response in section 9.1.2.1.2, Requirement PR1.11, for additional discussion and example of available provider search criteria and filtering capabilities within eCAMS.

PR1.SS.01

eCAMS verifies all provider address information at the point of data entry in real-time. Address validation is done using the Group-1 UNC product. eCAMS notifies the provider or enrollment specialist if the address does not meet USPS standards. The user then has the opportunity to correct the address and re-validate it or override the validation. This minimizes the possibility of erroneous addresses while allowing the capability to manage unique situations. Any address errors detected must be corrected before eCAMS allows the provider to store the address. This ensures all addresses conform to USPS standards eCAMS will accept and store an invalid address when the editing is overridden. eCAMS will flag the overridden address as invalid.

PR1.SS.02

eCAMS interfaces with pharmacy point-of-sale (POS) systems. The pharmacy providers would enroll in the Department's program using eCAMS provider enrollment functions. eCAMS is already configured to accept pharmacy-specific details such as retail store number, NABP Number, 340B indicator, pharmacy type (retail/mail order), volume indicator, and unit dose indicator. On approval the provider details are sent via interface to the POS system. The POS provider would then register the provider in their system and return the POS provider identifier to eCAMS. Any changes recorded on the enrolled provider record would be automatically transmitted in real-time to the POS system to ensure only the most accurate and current information is available for processing POS claims.

PR2.01

eCAMS supports screening of applications and ongoing provider updates. When a provider submits an application, the eCAMS system automatically generates checks against the appropriate licensing organization, e.g., the National Plan and Provider Enumeration System (NPPES) for the NPI, the National Association of Boards of Pharmacy (NABP) for the NABP identifier. The eCAMS provider application process ensures that an application cannot be submitted for review until all required credential information has been entered and validated. eCAMS credentialing matrix houses all required credentials by program, provider taxonomy, provider type, and specialty.

Team Noridian can configure Routine team visits as an element of the required credentials in credentialing matrix. This would allow eCAMS to trigger notification of the need for a site visit automatically. Details concerning the scheduling and results of the site visit would be stored under the provider's case in eCAMS Case Management function. Team Noridian's response in section 9.1.2.1.2, Requirement PR1.07, Figure 9.1.2.1-40, provides additional detail concerning the Case Management functions.

PR2.02

After successful enrollment, any changes to the provider's credentials undergo the same validations applied during enrollment as described in Team Noridian's response in section 9.1.2.1.2, Requirement PR2.01. On a nightly basis, eCAMS performs an automatic sweep of all enrolled provider data to identify pending expirations for credentials required for the provider’s taxonomies and associated Department programs. The nightly process reviews the credentialing requirements housed in the eCAMS Credentialing Matrix and identifies any required credential that is pending expiration. eCAMS then automatically prepares correspondence to the providers whose credentials are nearing expiration. Credentialing requirements are configured to the Department's specification as a part of the standard implementation process for eCAMS.

PR2.02.01

Team Noridian will configure two new indicators to be used in claims processing. The indicators will be set to "yes" or "no" values and will support all conditions noted in this requirement. The default value for both indicators will be initialized to a "no" value. Assuming a clean claim not suspended for any other reason, the new indicators would cause the claim to either suspend for pre-payment review or be flagged for pay and chase follow-up. Figure 9.1.2.1-45 shows outcomes for the provider's claims based on the two new indicators.

New Provider Indicators for Prepayment and Post Payment Review		
Indicator Type	Indicator Value	eCAMS Action
Prepayment Review Required	No	Adjudicate normally
	Yes	Automatically suspend all claims for pre-payment review
Post payment Review Required	No	Pay normally
	Yes	Flag for pay and chase prior to payment

Figure 9.1.2.1-45.Prepayment and Post Payment Review Indicators. Using eCAMS easy to configure indicators, special processing conditions can be identified for special processing in the Claims function of eCAMS.

Setting the new indicators is a very straightforward process. The provider enrollment specialist completes the Add Indicator dialog by selecting the indicator type and setting the value of the indicator and its effective start- and end-date. The indicators can be used to very control processes in other areas of the system such as during Claims Adjudication. After adding the new indicator, the request for the change must be approved by an authorized approver. As a part of the approval process, eCAMS captures the

reason for the addition of the indicator, along with the user ID and date of addition. Figure 9.1.2.1-46 shows an example of a newly approved indicator along with the history showing the reason for the change. The new indicator is then immediately available to eCAMS Claims adjudication in real-time

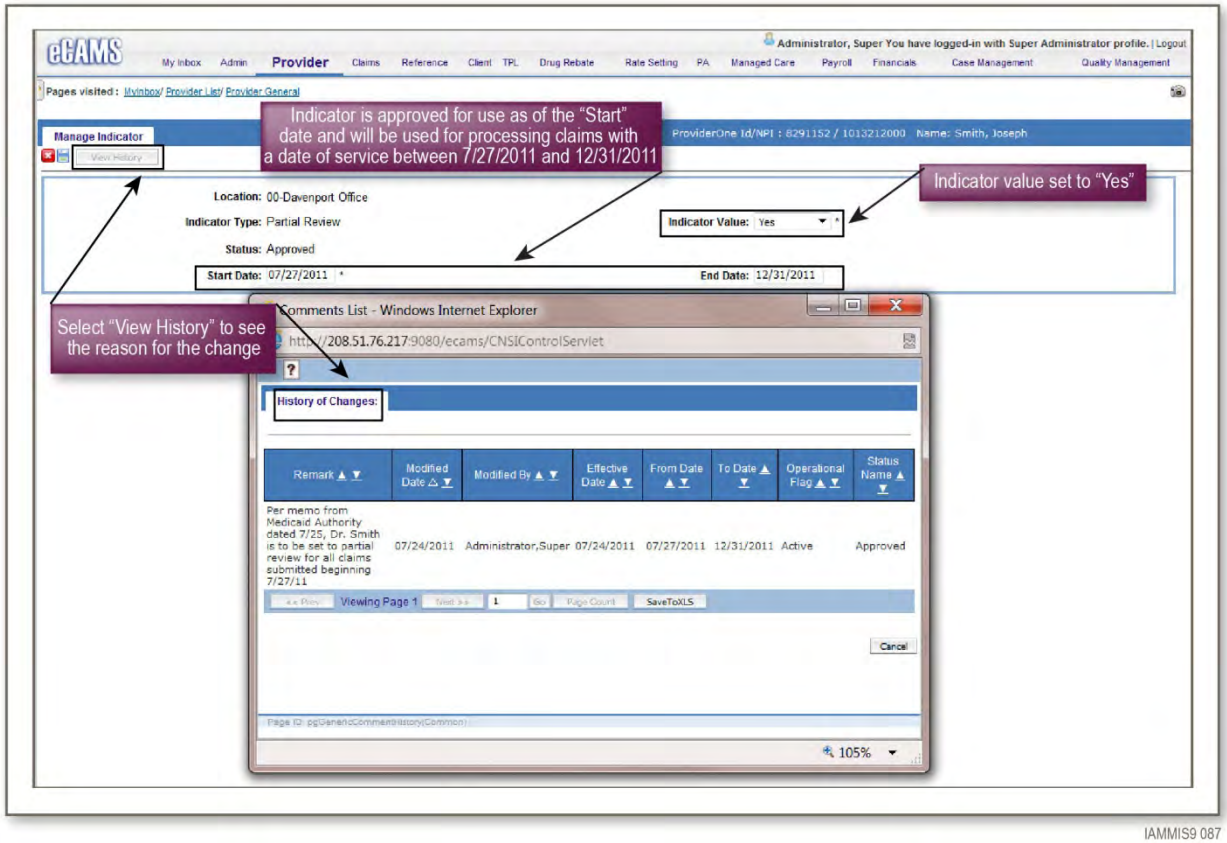

Figure 9.1.2.1-46. Approved New Indicators with History. During the approval process, eCAMS captures the reason for the change, the date and time of the change and the effective start- and end-date for the change. Using eCAMS View History function, authorized users can view the history.

PR2.03

The Operations Management business process areas and Care Management business process areas use eCAMS integrated provider data to perform their activities. Claims will not be paid if the provider data fails to support the provider's eligibility to perform or deliver the claimed services. Prior authorizations will not be allowed if the provider is not eligible to perform or deliver the planned service. The ongoing validation of eligibility is managed through edits that check the eligibility of the provider on the date of service of the claim for the service specified.

PR2.04

The eCAMS Provider Management business process area interfaces with the Online Survey Certification and Reporting (OSCAR) data base to validate CLIA certification levels. The CLIA certification level is stored on the provider's database record and is used in claims adjudication to ensure payment only for those specific procedures that the laboratory is authorized to perform.

PR2.04.01

The eCAMS Provider Management business process area interfaces with the Online Survey Certification and Reporting (OSCAR) data base to validate CLIA numbers during enrollment and for subsequent maintenance activities. CLIA certification number and status are a permanent part of the provider's record

in the database. After initial enrollment, every change made to the provider's CLIA certification is tagged with the effective from- and through-date period. Overlapping effective date periods are not allowed in the system for the CLIA certification number. The certification level in effect on the date of service of the claim is the one applied during adjudication. Use of the CLIA certification level in claims adjudication ensures payment only for those specific procedures on the dates when they are authorized.

PR2.04.02

The eCAMS Provider Management business process area interfaces with the Online Survey Certification and Reporting (OSCAR) data base to validate CLIA certification levels. Validation is performed during enrollment and again when any change is received from OSCAR.

PR2.05

The eCAMS Provider Management business process area can store multiple alternate identifiers, which allows for cross-referencing information with federal and other state agencies. Figure 9.1.2.1-47 shows a sample of the types of alternate identifiers that can be captured. Team Noridian will configure the list of allowable alternate identifier types as a part of DDI.

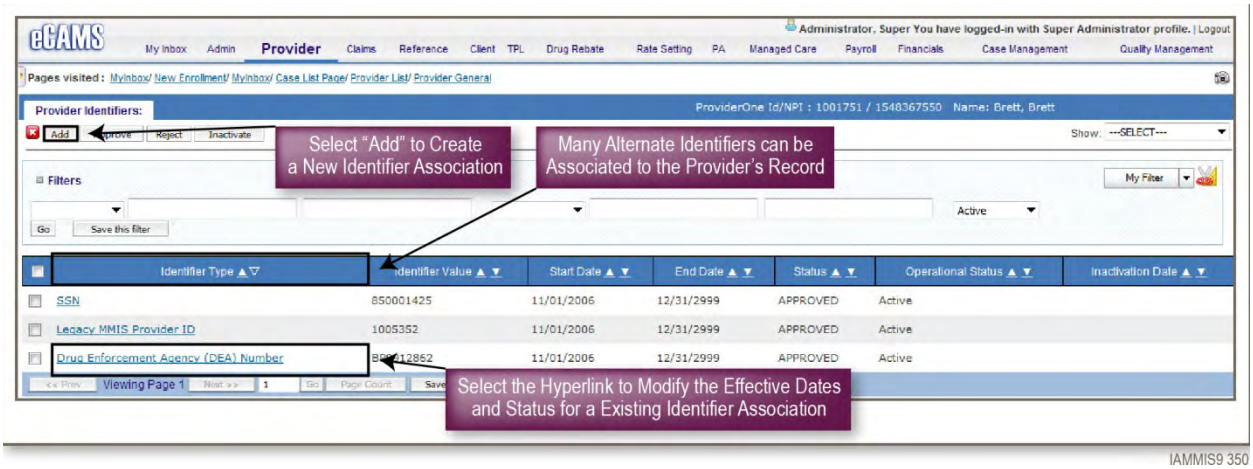

Figure 9.1.2.1-47. Provider Alternate Identifiers. eCAMS links an enrolling provider's identity with their identity elsewhere, such as in the state vendor payment system or their legacy MMIS ID.

The eCAMS Alternate Identifiers feature allows such relationships to be identified and recorded and, later, to be used to perform validations for data submitted via the interface.

For sanction information, eCAMS uses business status values to indicate the source and type of the sanction as shown in Figure 9.1.2.1-48 which illustrates the application of an OIG sanction. Business status values are searchable fields and can be used to retrieve populations of providers sharing a specific business value status. Team Noridian will configure a new list page to show the sanctions and sanction history for the provider. One of the sanctions will be identified with the provider's disenrollment status as shown in Figure 9.1.2.1-48. Team Noridian will configure the list of allowable sanction identifiers as a part of DDI.

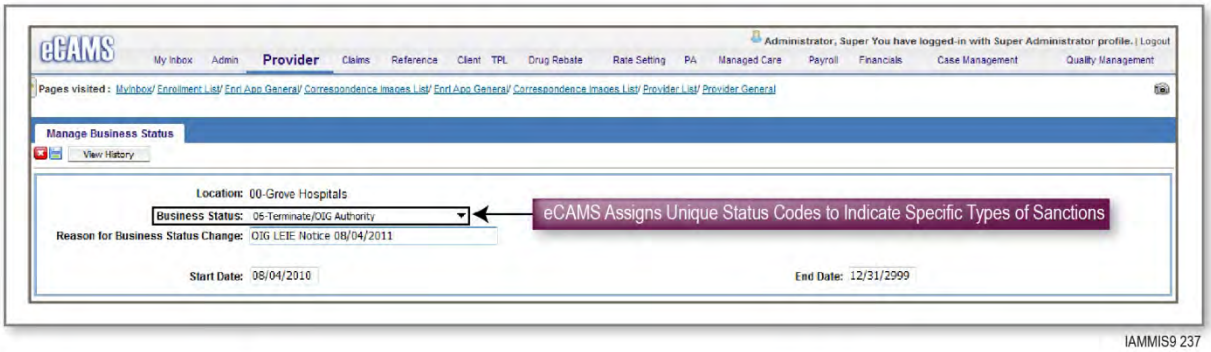

Figure 9.1.2.1-48. Application of an OIG Sanction. eCAMS uses unique status values to capture sanction details. The business status values are searchable from the Provider List page allowing easy identification of all providers sharing a specific type of sanction.

Sanction actions may also be tracked through the related Case in the Case Management feature of eCAMS. Team Noridian's response in section 9.1.2.1.2, Requirement PR1.07, for further discussion of Case Management for providers.

PR2.05.01

eCAMS supports interfaces and validation of providers for all of the following:

- NPPES - NPI
- OSCAR - CLIA
- IRS and SSA TIN verification
- Iowa Board of Medicine
- Social Security Administration - (Death notices)
- Automated Clearing House (ACH) Deposit Information - Banking details provided on enrollment for ACH payments
- Drug enforcement agency - (DEA) numbers
- Office of Inspector General (OIG) List of Excluded Individuals and Entities (LEIE)
- NABP/NCPDP Pharmacy Provider Numbers
- Occupational Licensing Boards (new)
- State Sanction Organizations (new)
- State HIE Organization (new)

Key information entered on the provider's enrollment application is matched for all of the above as applicable to the type of enrollment. Following initial validation and enrollment approval, any change to the provider's database record triggers re-validation of the required credentials.

Team Noridian will develop a new process to automatically generate termination notices and either automatically terminate the provider or suspend the termination status change for IME approval depending on the type of condition identified.

Several other interfaces related to provider management are supported in eCAMS Financials Business Area. These interfaces include Annual 1099s in both paper and electronic format, banking transaction information including valid and invalid debit card and electronic funds transfer details.

PR2.06

On a nightly basis, eCAMS performs an automatic sweep of all enrolled provider data to identify pending expirations for credentials required for the provider’s taxonomies and associated Department programs. The nightly process reviews the credentialing requirements housed in the eCAMS Credentialing Matrix and identifies any required credential that is pending expiration. eCAMS then automatically prepares

correspondence to the providers whose credentials are nearing expiration. Credentialing requirements are configured to the Department's specification as a part of the standard implementation process for eCAMS.

PR2.06.01

eCAMS automatically prepares correspondence to providers whose credentials are nearing expiration. Credentialing requirements are configured to the Department's specification as a part of the standard implementation process for eCAMS. Advance notice are be configured individually by credential type. This allows renewal notices to be customized to the conditions applicable to the type of credential. For example, renewal of a nursing home license may require a site visit than must be requested at least three months prior to the expiration of the facility license. Renewal of a medical license may require only six weeks of advance warning.

PR2.06.02

Team Noridian will modify the nightly credential review process described in our responses in section 9.1.2.1.2, Requirements PR2.02, PR2.06, and PR2.06.01. The modified process will generate a pending termination letter to the provider and an alert of pending termination to the Provider Services unit.

PR2.06.03

eCAMS has the capability to allow update to credential end-dates, including the end-date for licenses. Authorized user may update the license end date using the Manage License/Certification screen shown in Figure 9.1.2.1-49. eCAMS maintains a history of all changes to the license including the date of the change, the user making the change, the date the change was approved, and the start and end effective dates.

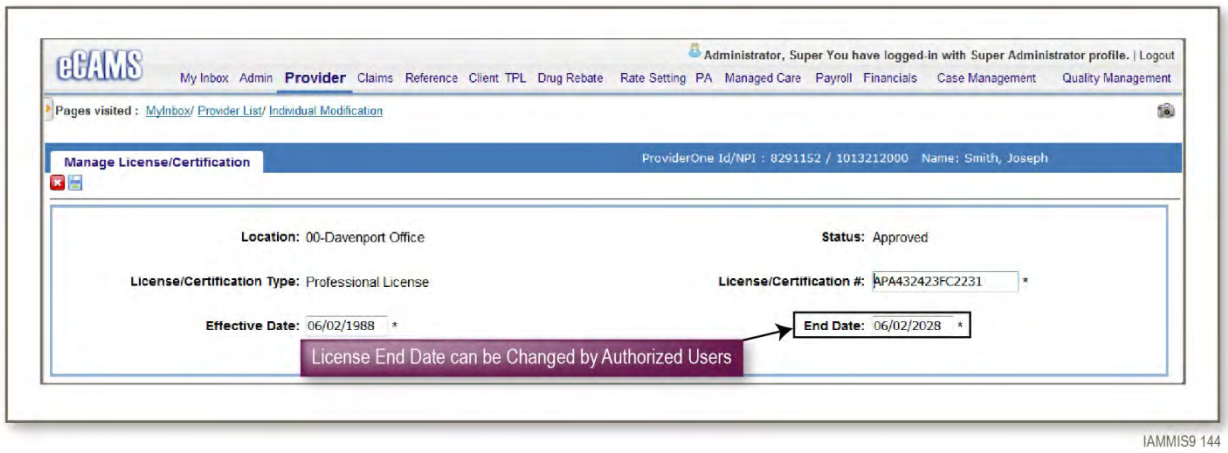

Figure 9.1.2.1-49. Manage Provider Licenses and Certifications. eCAMS allows authorized users to update license end dates.

PR2.07

eCAMS maintains rates for code sets. This includes provider-specific rates, program-specific rates, taxonomy rate, Diagnosis related Group (DRG) rate, recipient-specific rate, and ASC group rates. As shown in Figure 9.1.2.1-50, CAMS supports the following pricing methodologies for fee-for-service (FFS) and managed care organization (MCO) programs:

- FFS rate methodology (Per Diem & Percentage of Charge)
- Prospective payment system (PPS) methodology based on:
  - DRG rates for inpatient
  - APC rates for outpatient
- Managed care rate methodology

All rates have specific effective start- and end-date spans. eCAMS is able to select the correct rate to apply based on the type of rate needed and the date of service of the related claim.

Figure 9.1.2.1-50. Rate Setting Options Available in eCAMS. eCAMS offers a wide variety of methods to support rate setting activity.

PR2.07.01

In eCAMS, Provider rate segments are maintained in the Rate Setting business process area, and only authorized users are allowed to make any changes. Rate segments are date driven, and each segment has a start date, end date, and effective date. As shown in Figure 9.1.2.1-51 and Figure 9.1.2.1-52, eCAMS maintains the rate segment. Each from- and to-date can have a different value. Figure 9.1.2.1-53 shows the history/audit trail of the changes to the rate segment.

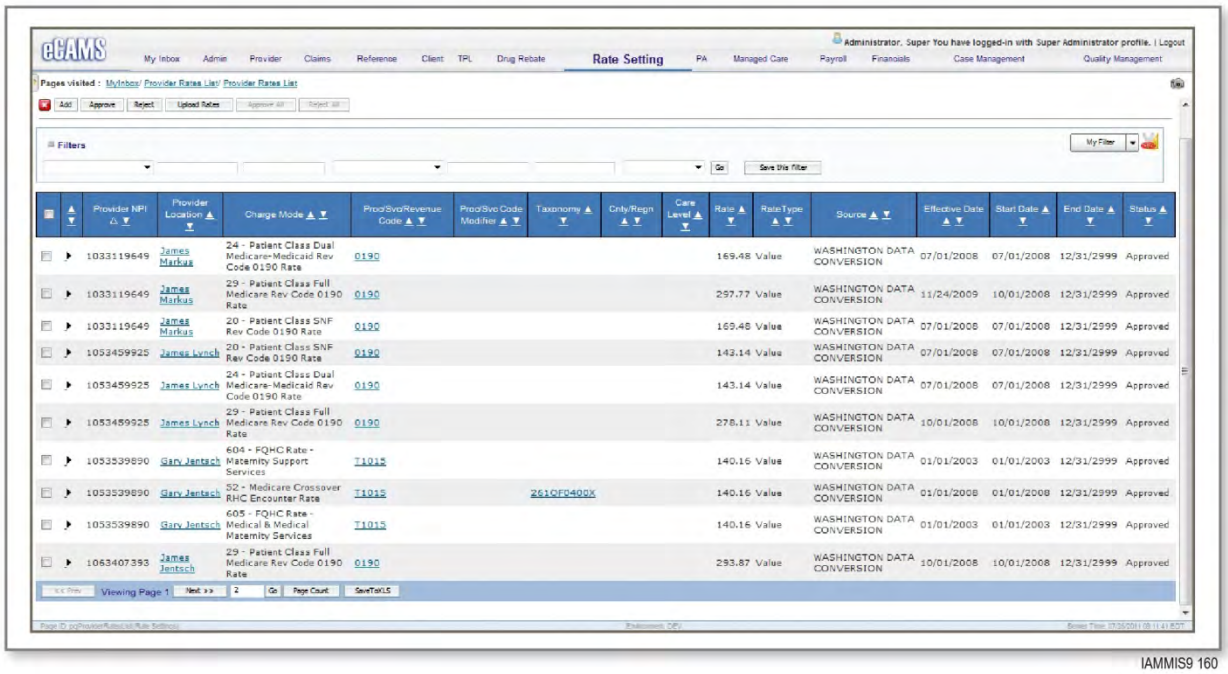

Figure 9.1.2.1-51. Rates List. eCAMS rate list shows different rates stored in the database. Search and filter capabilities allow the user to quickly find the rate they are interested in viewing.

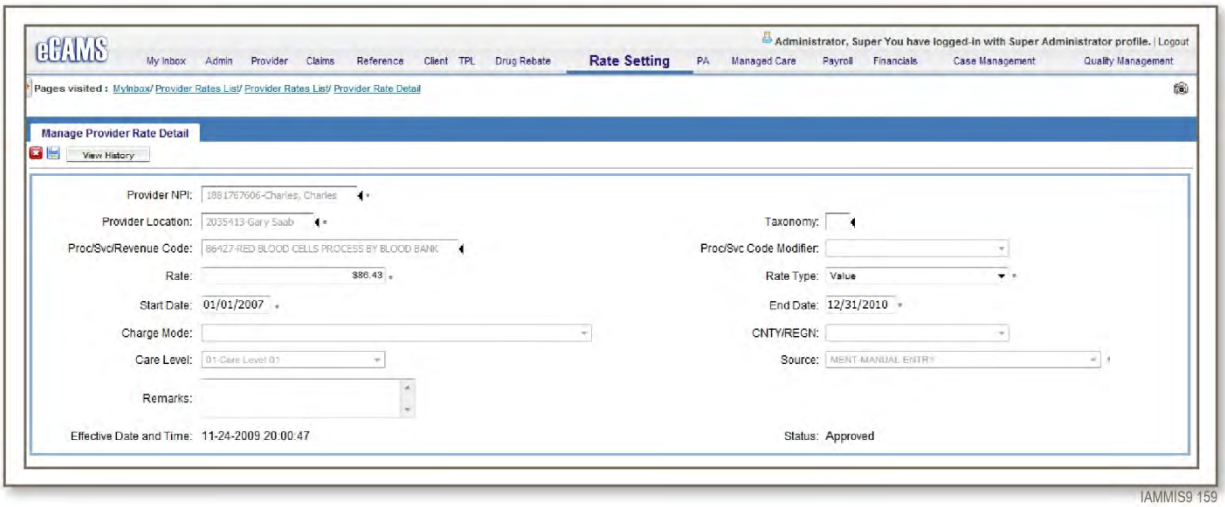

Figure 9.1.2.1-52. View Rate Details. By selecting a rate from the list page shown in the preceding graphic in this series the user can view the specific details for that rate.

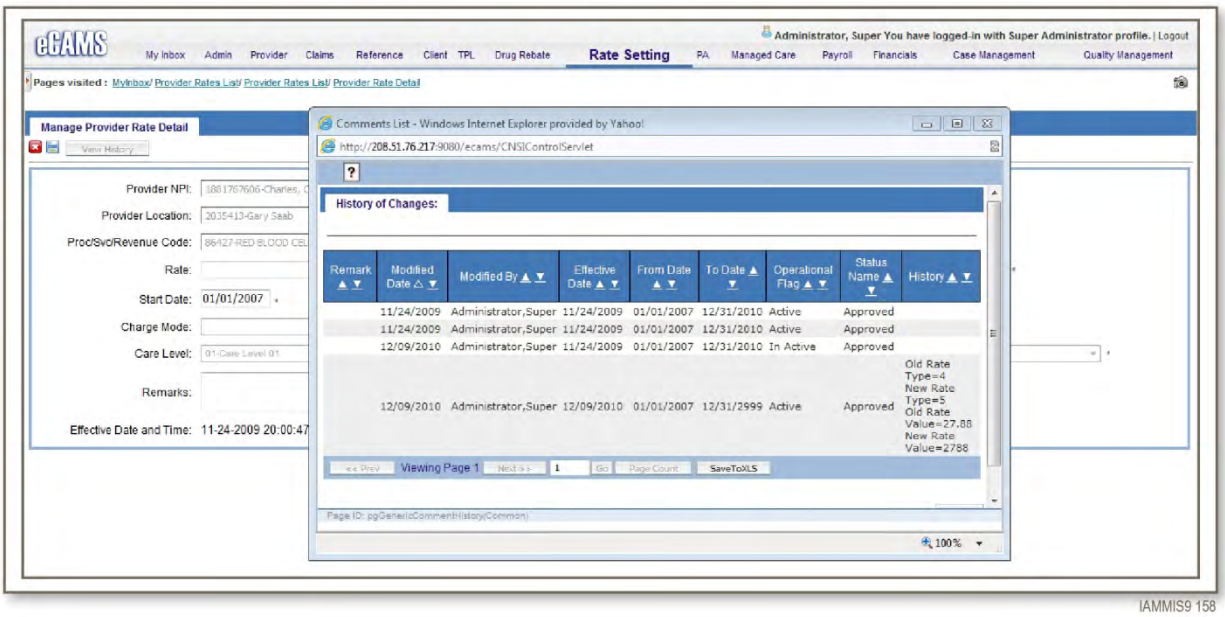

Figure 9.1.2.1-53. Rate Setting History. eCAMS shows the complete history of the rate including the approval date, effective data span, and before and after values.

PR2.SS.01

eCAMS maintains coverage and restriction information through benefit plans and programs and supports factors such as procedure, revenue, diagnosis, surgical, modifiers, place of service, provider type, taxonomy, claim type, bill type, and recipient aid category to define service coverage and restrictions.

Service limitations are defined and maintained through online screens, as identified in Figure 9.1.2.1-54.

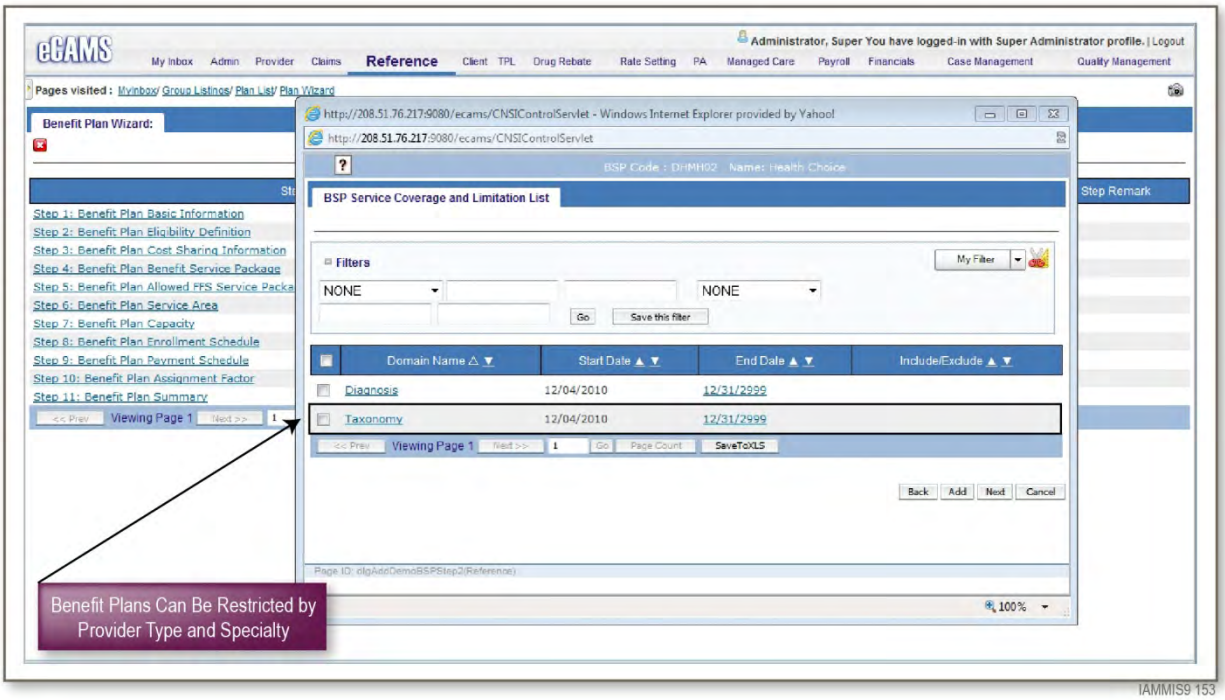

Figure 9.1.2.1-54. Configurable Service Limitation. eCAMS provides support for limiting certain provider types within a benefit plan to support Benefit Plan Restrictions.

PR2.SS.02

eCAMS supports multiple addresses for providers, including the following:

- NPI base location address
- Mailing address
- Pay-to address
- Multiple office location addresses
- EDI contact address
- EDI software provider address
- Tax statement address

In addition to capturing USPS-approved addresses, eCAMS can capture contact information for each address, including:

- Contact name
- Contact role
- Contact phone numbers
- Location and contact phone numbers
- Location fax numbers

PR2.SS.03

The eCAMS provider rate screens support a wide array of filters to search for codes, and the online Excel export option can be used for firsthand reporting to handle inquiry requests. The export functionality is available in all code sets and in rate screens, including provider rates. Figure 9.1.2.1-55 shows eCAMS online rate list page. Filter and search capabilities allow the user to zero-in on the specific rates they are interested in viewing.

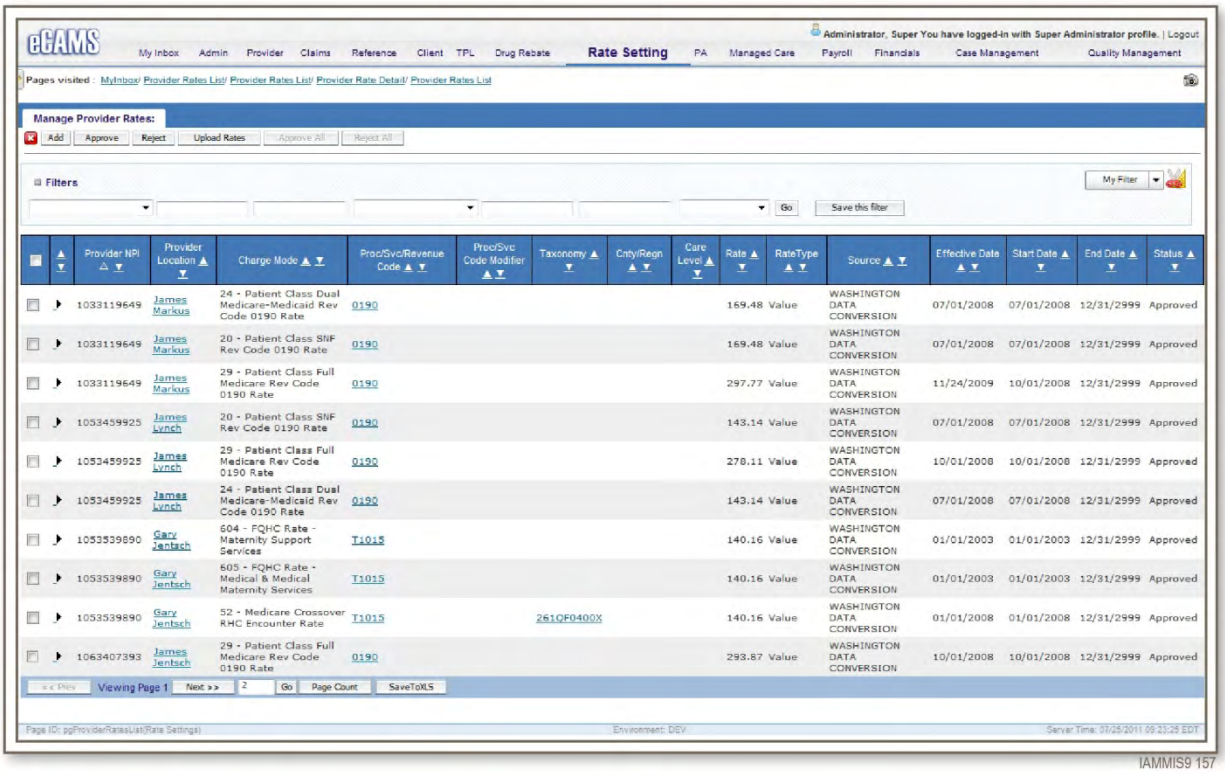

Figure 9.1.2.1-55. View Rates. eCAMS maintains the complete historical view of all Provider rates, including but not limited to, rate amounts, effective dates, end dates.

PR2.SS.04

eCAMS captures bed counts for all facility enrollments. During the enrollment process, bed count must be entered. An error message is given to the enrolling provider if they try to bypass entry of the bed count information as shown in Figure 9.1.2.1-56.

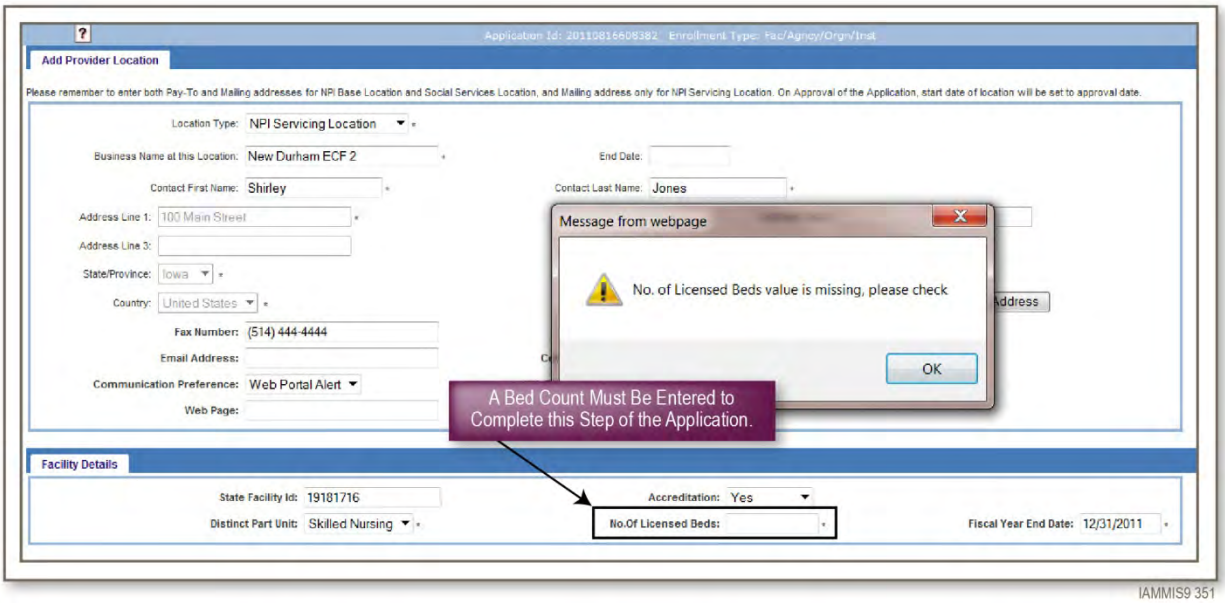

Figure 9.1.2.1-56. Provider Facility Bed Counts. eCAMS Requires Bed Counts for Facility Enrollments and will prevent submission of an application without the required bed count details.

PR2.SS.05

eCAMS credentialing matrix stores a list of required documentation for each type of provider by taxonomy, provider type, and specialty. Documentation can include licenses, certifications, training, and other documentation such as proof of malpractice insurance. On enrollment, the provider must have all required credentials. Every credential has an effective date span including a start and an end date. Each night, eCAMS performs a sweep of the enrollment database to identify credentials nearing expiration and credentials that have expired. If a credential expires, eCAMS automatically terminates (end-dates) the related specialty on the provider's file in the database. This ensures that all end dates are linked in the system. eCAMS claims processing has immediate access to the provider's specialization status and will deny claims as of the specialty end-date.

PR2.SS.06

eCAMS credentialing matrix stores a list of required document for each type of provider by taxonomy, provider type, and specialty. For atypical providers, the credentialing matrix is configured for only those documents required for the specialty. The license component of the credentialing matrix can be set to "required," "not required," or "optional," depending on the provider type and specialty. Team Noridian configures the credentialing matrix to IME specifications as a part of routine implementation activities.

PR2.SS.07

eCAMS is an integrated system. System functions dependent on valid enrolled provider information, such as claims adjudication and prior authorization, perform real-time validation of submitted provider details to ensure that the provider details submitted are active as of the date of service. This includes validation checks for the billing provider and the servicing provider. The billing provider cannot choose to bill for an individual provider not enrolled in the system. Figure 9.1.2.1-57 shows the eCAMS feature used to associate other enrolled providers to the billing provider.

As a part of the enrollment process for billing providers, they identify the servicing providers with whom they have a relationship. eCAMS ensures that the relationships are bi-directionally valid tying the billing provider to the servicing provider and vice-versa. Figure 9.1.2.1-58 shows how eCAMS displays the list of provider linked to the billing provider.

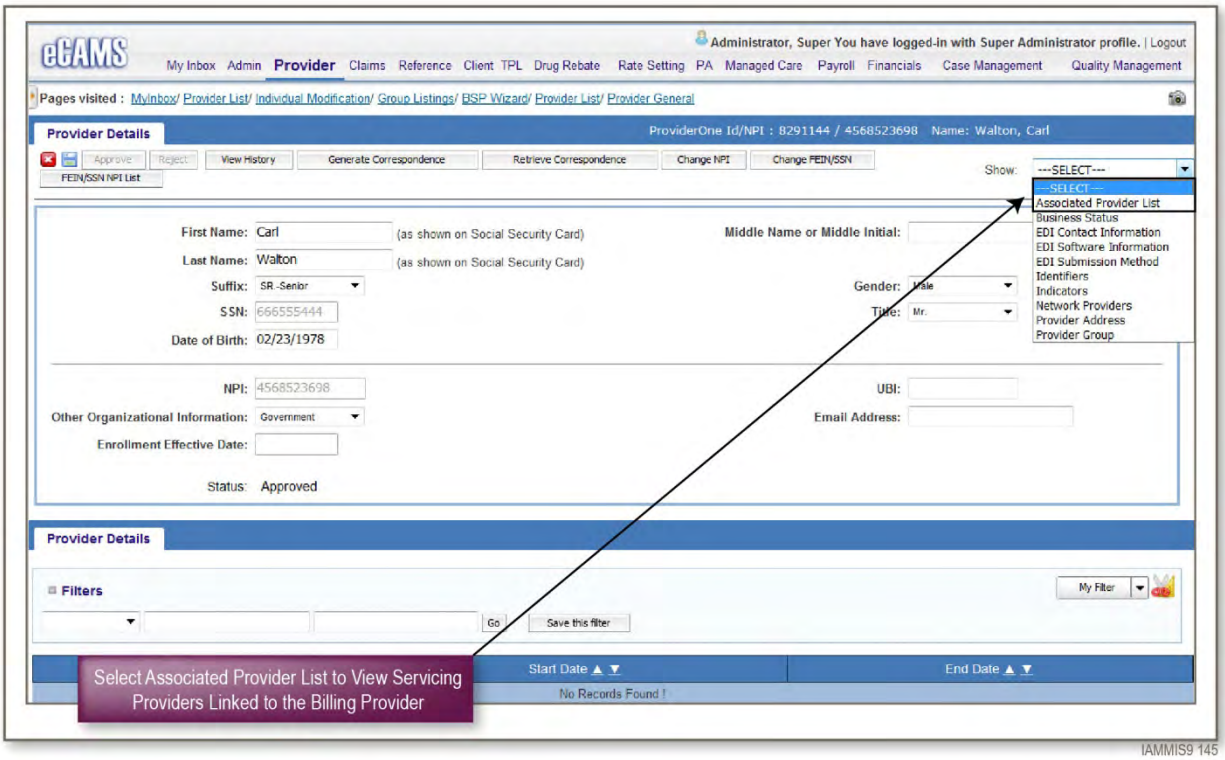

Figure 9.1.2.1-57. Billing Providers - Associated Servicing Providers. eCAMS allows authorized users easy access to view any servicing providers tied to a billing provider. The user selects the billing provider's database record and then uses the "Show" option to select "Associated Provider List".

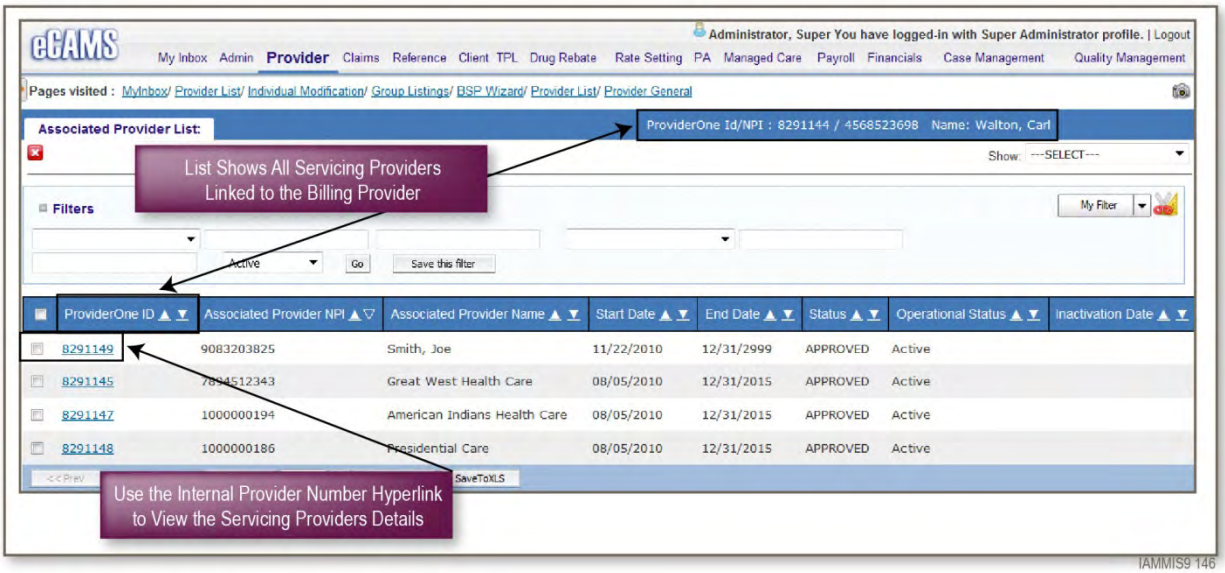

Figure 9.1.2.1-58. Associated Provider List. eCAMS Associated Provider List shows all individual providers tied to a billing provider. Using the hyperlink, authorized users can view the details of the associated provider. All relationships have start- and end-date spans and must be approved and active to be valid for claims submission and payment.

PR2.SS.08

eCAMS supports automated criminal background checks for providers. As part of the enrollment process, background checks are performed against the Delinquent Provider List supplied by the OIG LEIE files. Please refer to Team Noridian's responses to section 9.1.2.1.2, Requirements PR1.02.04, PR2.05.01, PR3.01, PR3.SS.05, PR3.SS.05, and PR.SS.17, for related information on processing sanctions and other conditions that would potentially result in disenrollment or suspension.

Team Noridian would work with the Provider Services contractor to establish processes and data exchange to facilitate the specific type of criminal background checks that ate conducted by the IME.

PR2.SS.09

eCAMS data structures support data elements to capture geographic location. Also, as noted in Team Noridian's response in section 9.1.2.1.2, Requirement PR1.11, eCAMS is being modified to support storage and association Census Designated Plan (CDP) code for unincorporated areas. The geographic codes will appear on the all provider address locations including NPI base address, alternate service locations, and mailing addresses.

PR2.SS.10

eCAMS wizards differentiate provider enrollment rules by provider type, and program, claim submission method, preferred payment method, billing relationships, and ownership relationships and geographic area. Using the wizards, a unique combination of rules will apply to each provider's enrollment details.

PR3.01

eCAMS accepts and validates all user entries necessary for initial enrollment and subsequent maintenance of provider information. eCAMS validates data entered in real-time and provides informational messages to the users when any errors are encountered. Data entered via online screens must meet both format and content requirements. For example, when entering an NPI, eCAMS first validates that the information entered is a numeric value exactly ten digits in length. After validating format, eCAMS performs additional validation to ensure that the NPI entered is compliant with NPPES-defined structure by applying the Luhn Formula for Modulus 10 “double-add-double” check digit formula. After validation, the NPI is then verified against the NPPES registry to ensure that the number is assigned and associated to the identified provider. eCAMS applies similar validation and verification for many other data elements.

eCAMS accepts transactions to update and maintain provider information through online screens, PDF and XML submissions, and interfaces. eCAMS applies interface data to the provider file based on confidence matching logic. When the transaction meets exact match criteria, eCAMS updates the data and notes the source of the update along with the date, and associated effective date span. eCAMS queues suspected matches review and resolution by the provider enrollment unit. Depending on the source of the data, unmatched records are either rejected or ignored. eCAMS currently accepts interface data for DEA, CLIA, OIG LEIE sanctions, and SSA Death Match data.

PR3.01.01

eCAMS collects and maintains information in the provider database for all of the following:

- Sanction information by source and effective date span as a business status value at both the provider and provider location levels
- Accreditation information by type and effective date span as attributes of credentials such as licenses, certifications, education and training
- Provider links to Taxpayer Identification Number (TIN) and parent organizations as ownership relationships

- Inactive and active filters for each logical segment of data, e.g., licenses or addresses as status values for each data segment with retrievable history showing the active and inactive data spans
- Care management and or lock-in restrictions using features of the Client business area
- Case load assignments using features of the Managed Care business area
- License number and licensure status along with associated renewal history and effective date span
- Restrictions for payments (no payment for surgeries) using indicators and provider groups
- Flag for Electronic Funds Transfer (EFT) information including secure collection of American Bankers Association (ABA) routing transit number and account number to be used for payments.
- Flag for electronic claim submission including self-submission via web-portal, self-submission via secure FTP, third party billing agent submission, and online data entry using eCAMS Direct Data Entry screens for professional, institutional, and dental claims
- Drug Enforcement Administration (DEA) license number along with renewal history and effective date span
- County for all provider addresses including service locations, mailings addresses, and pay-to addresses. County information is validated to USPS standards based on the street addresses provided.
- Email contact information for each location

Team Noridian will configure a new indicator to capture the required "Pay for performance (P4P)" indicator as a part of standard system configuration.

PR3.02

eCAMS currently supports inquiries to access and extract different types of information pertaining to providers. This information can be accessed using eCAMS online screens (list pages) using search and filter criteria. The resulting lists can be exported to Microsoft Excel for additional analysis. This capability has been described in detail in response to requirement PR1.11 (please see Figure 9.1.2.1-44). Users can save their favorite filters/queries so they don't have to recreate them every time. The different types of information that can be accessed within eCAMS via the filter are as follows:

- The current status of the provider’s records
- Alphabetical provider listing
- Numeric provider listing by NPI or Internal eCAMS ID
- Provider rate table listing
- Provider "group affiliation" listing
- Provider specialty (i.e., taxonomy) listing

Team Noridian will develop inquires to access, extract, and report a provider listing by category of service (h).

Team Noridian will configure eCAMS to produce an annual re-certification notice (e).

The preconfigured eCAMS "Print Provider Information Report" also includes most of the details listed above. It is produced as an alphabetical provider directory listing.

PR3.02.01

As shown in Figure 9.1.2.1-59, four levels of filtering are available (1-4). The resulting report can be stored and retrieved on demand using the store filter and my filters features (5). The list can also be exported to Microsoft Excel (6) for further analysis or to incorporate into technical documents as shown in the next graphic in this series. In this example, the user has chosen to save the filter for later reuse under the name "Psy Annapolis" (5).

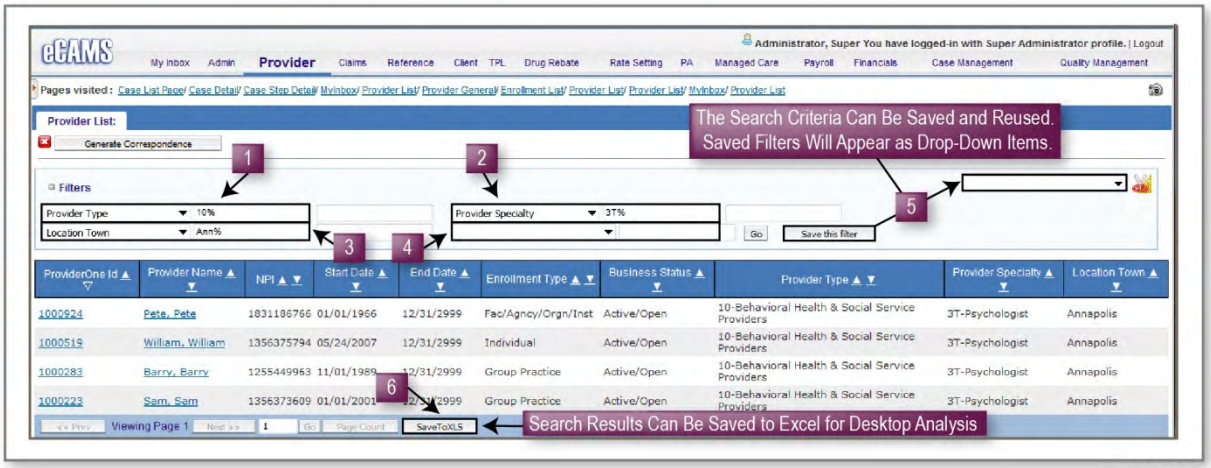

Figure 9.1.2.1-59. eCAMS User-Defined Reporting. eCAMS gives authorized users the ability to configure virtually any unique report they would like to create based on search and filter criteria.

Figure 9.1.2.1-60 shows an example of the data retrieved as shown in Figure 9.1.2.1-59 as it appears when exported to Microsoft Excel.

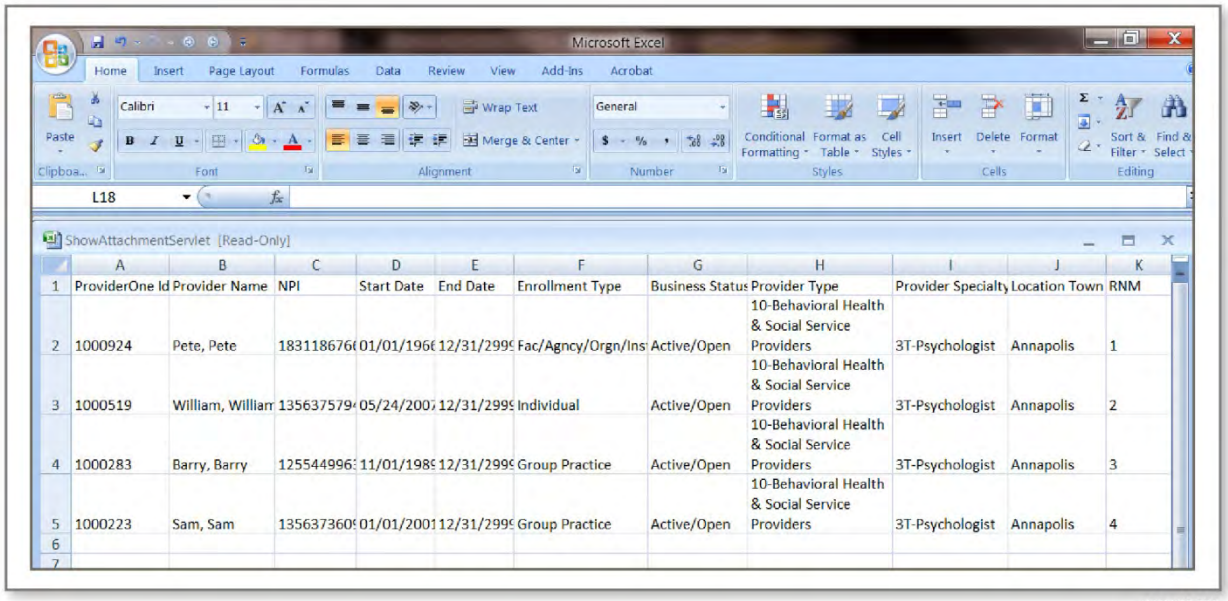

Figure 9.1.2.1-60. Integration with Excel. Data retrieved via custom filter can be saved to Excel for further analysis.

The eCAMS reporting solution also produces several standard production reports to support the Provider Management business area. A description of all the available reports may be found in Section 9.1.4 under the Program Management business area.

PR3.03

eCAMS accepts transactions to update and maintain provider information through online screens, PDF and XML submissions, and interfaces. eCAMS applies interface data to the provider file based on confidence matching logic. When the transaction meets exact match criteria, eCAMS updates the data and notes the source of the update along with the date, and associated effective date span. eCAMS queues suspected matches for review and resolution by the provider enrollment unit. Depending on the source of

the data, unmatched records are either rejected or ignored. eCAMS currently accepts interface data for DEA, CLIA, OIG LEIE sanctions, and SSA Death Match data.

When a suspected match is detected during the interface process, eCAMS generates an alert to the appropriate provider enrollment specialist. The alert contains information allowing the provider enrollment specialist to locate the suspended transaction, review it, and either accept or reject the update. When manual intervention is required, the provider enrollment specialist enters a reason for the decision. The history of the updates and reason information can be retrieved using the View History feature.

For all interfaces, eCAMS maintains a history of the interface including when it was received and if application was successful or unsuccessful - completely or in part. This includes a record of errors encountered in applying the data. For each interface, eCAMS maintains contact information so that the appropriate internal and external support people can be contacted for problem resolution issues.

PR3.04

eCAMS maintains current and historical provider address information for multiple address types. eCAMS captures the following types of provider addresses in USPS compliant format:

- NPI base location address
- Mailing address
- Pay-to address
- Multiple office location addresses
- EDI contact address
- EDI software provider address
- Tax statement address

eCAMS associates an effective start and end date with each address. eCAMS retains historical addresses in the system for the data-retention period defined by the Department. Authorized users can view historical addresses information by selecting the View History function on the Location screen as shown in Figure 9.1.2.1-61.

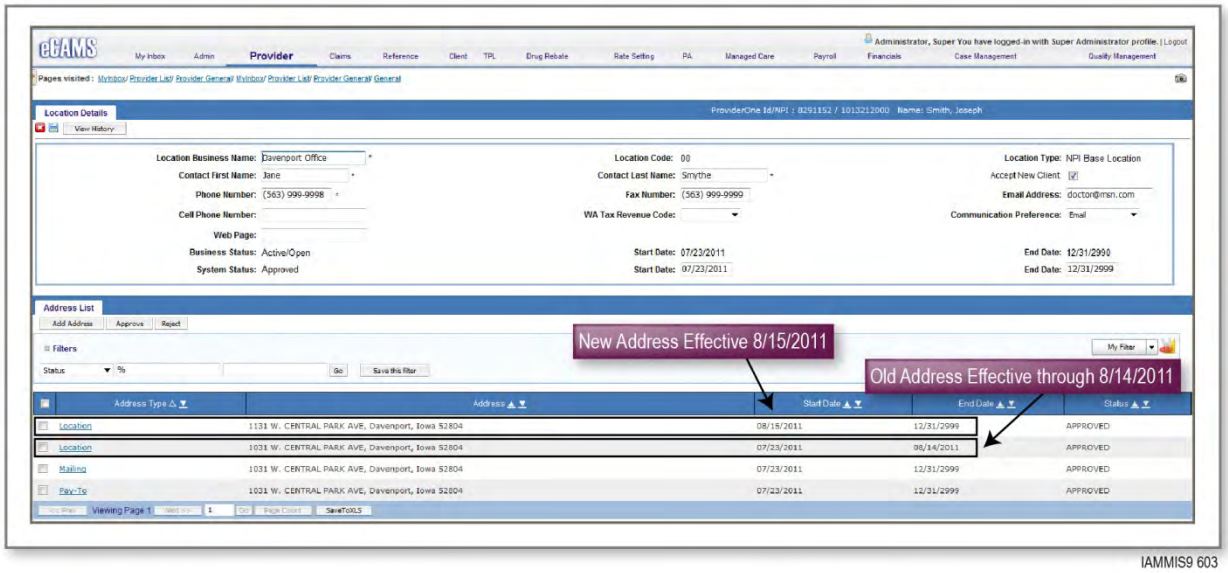

Figure 9.1.2.1-61. Provider Address History. Using the view history function, the authorized user can see the complete history of address changes for any address included in the provider's records by filtering for records in all status values using the percent sign (%) wildcard.

PR3.05

eCAMS maintains a complete audit trail of changes made to any data stored in the Provider business area. Audit trail entries include:

- Remark – A free-form text entry field that allows the user to provider a narrative statement concerning the action taken
- Date Modified – The date the change was applied to the system
- Modified By – User ID of the person or system acting on the change
- Effective date – The date eCAMS began using the updated information
- From date – The beginning date of the effective date span
- To date – The end date of the effective date span
- Operational Flag – An indicator that shows whether the system is actively using the information (Active) or has been "soft-deleted" and is retained only for historical purposes (In Active)

The history of approval and denied changes will be retained in the eCAMS system for the time period specified by IME. Figure 9.1.2.1-62 shows an example.

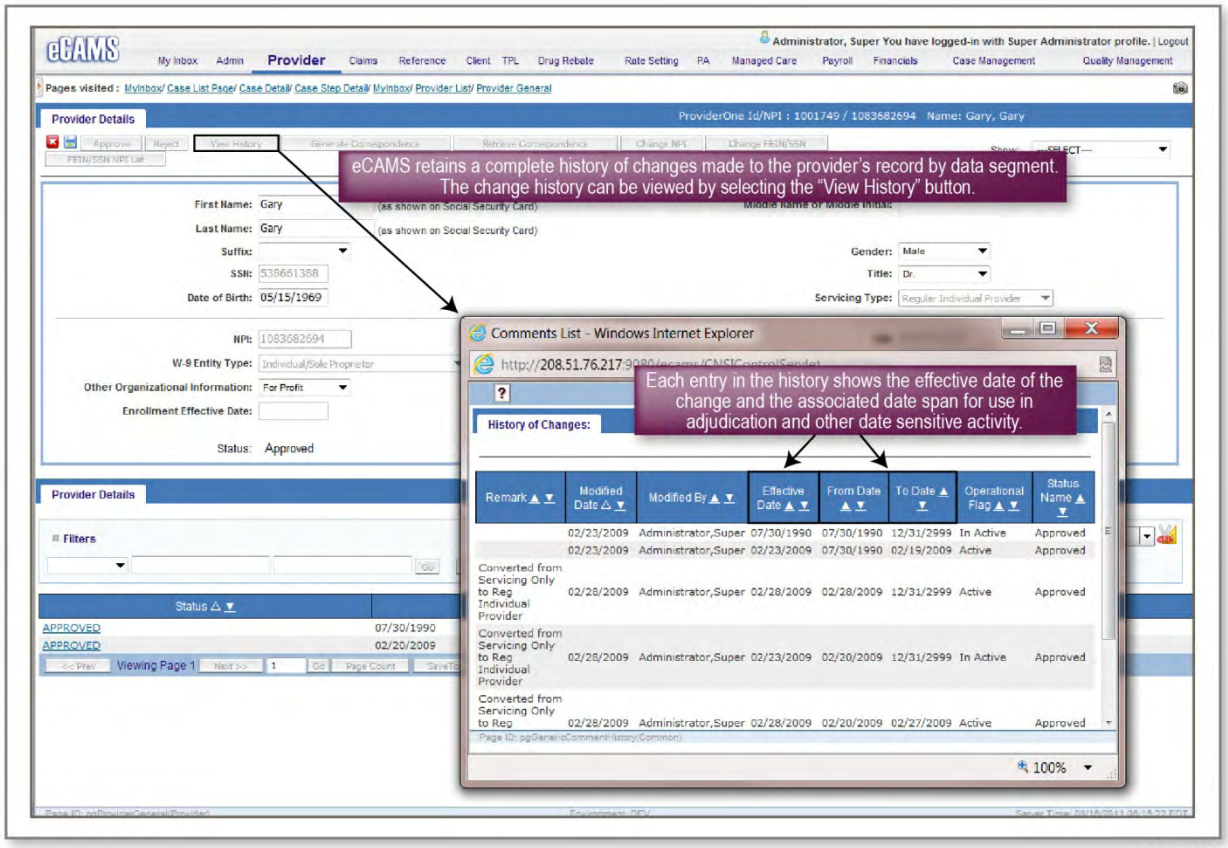

Figure 9.1.2.1-62.History Audit Trail in eCAMS. Authorized users can use eCAMS simple, context-sensitive, online, historical, audit trail feature to review the history of changes for any data segment in the database.

PR3.05.01

eCAMS has a full-featured and searchable audit trail in the form of a history for each area of data entry. History information is available by selecting the "History" button, which retrieves a history of all the changes applied to the data on that page, as shown in Figure 9.1.2.1-62 in Team Noridian's response to

the preceding requirement in this section (section 9.1.2.1.2, Requirement 3.05). Figure 9.1.2.1-62 shows the history of changes for the provider's business status. Similar history information is available for every Provider business area dialog. This allows authorized users to zero in quickly on the date the change was made, who made the change, and the time period for which it is being actively applied in eCAMS. Details include the following:

- Remark — A free-form text entry field that allows the user to provider a narrative statement concerning the action taken
- Date Modified — The date the change was applied to the system
- Modified By — User ID of the person or system acting on the change
- Effective date — The date eCAMS began using the updated information
- From date — The beginning date of the effective date span
- To date — The end date of the effective date span
- Operational Flag – An indicator that shows whether the system is actively using the information (Active) or has been "soft-deleted" and is retained only for historical purposes (In Active)

In Figure 9.1.2.1-62, the data value that changed is the last entry on the History list. This column shows the data value associated with the change. In this case, the provider converted from a "servicing only" provider to a regular individual provider. Servicing only provider cannot bill directly. Their services must be billed through a group or facility provider. As a regular individual provider, this provider may bill directly or continue to bill through their group associations.

PR3.07

eCAMS maintains financial data including current and prior year Form 1099-reported amounts in the Financials business process area. Figure 9.1.2.1-63 shows the eCAMS 1099 list page. Authorized users can filter for the current year or prior years. The information for a specific provider can be viewed by selecting the Entity Identifier hyperlink for the specific provider. Figure 9.1.2.1-64 shows the detail page eCAMS displays when the authorized user selects the hyperlink.

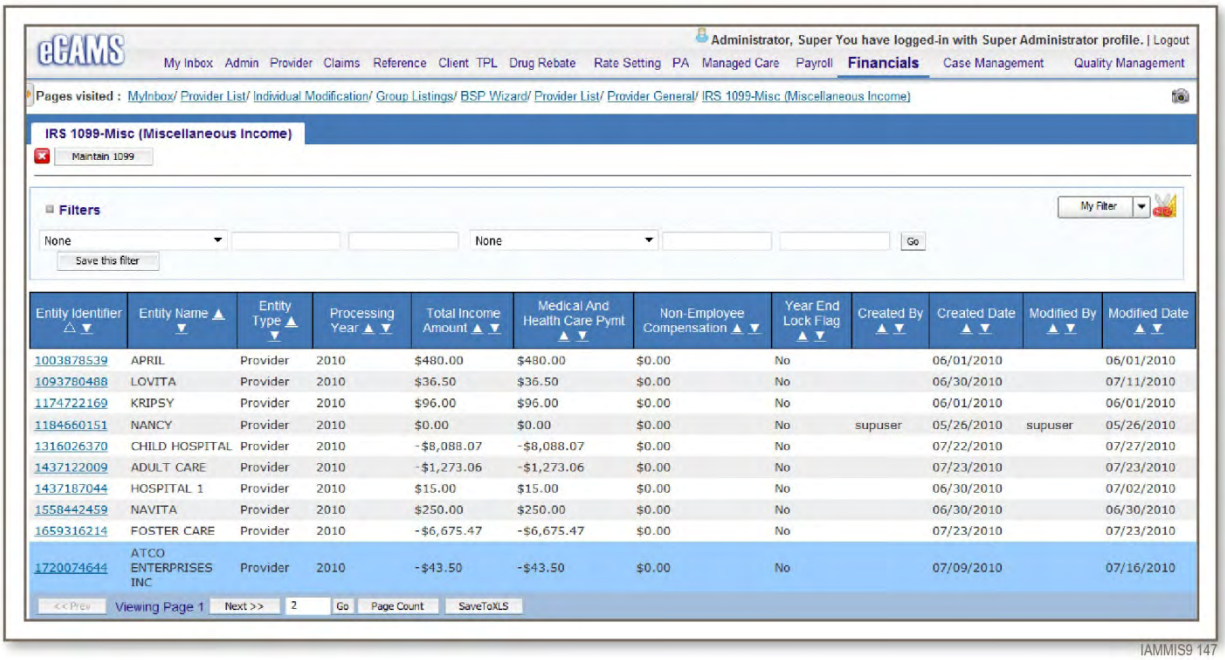

Figure 9.1.2.1-63. Provider 1099 List. eCAMS Financial business area allows authorized users to view current and historical 1099 details. By selecting the Entity Identifier hyperlink, the authorized user can view 1099 details for that provider.

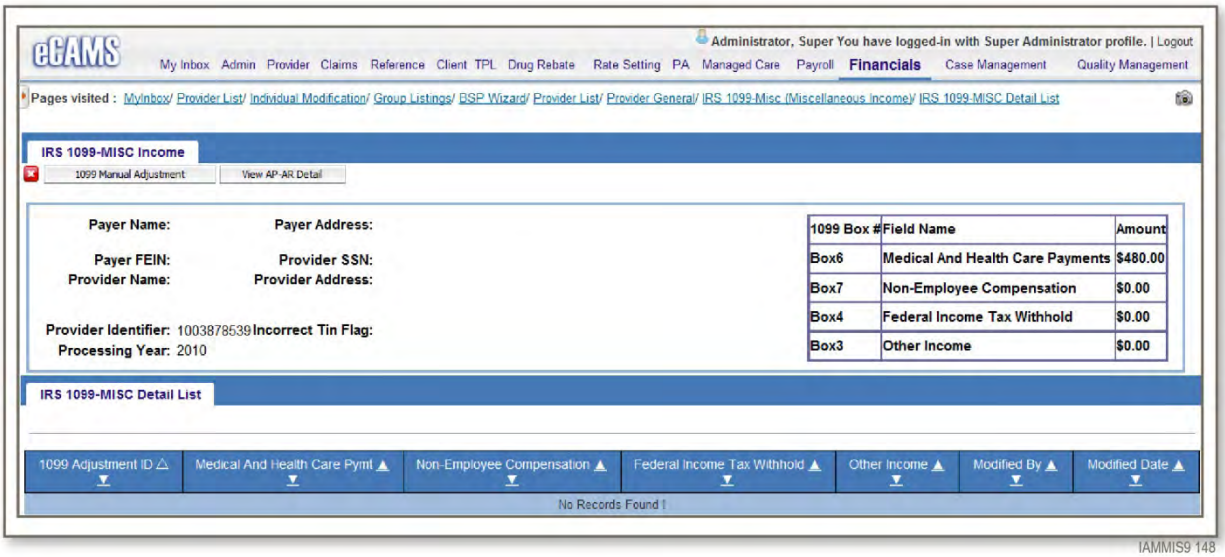

Figure 9.1.2.1-64. eCAMS Form 1099 Page. eCAMS stores retrievable tax information in its Finance business process area for providers who receive taxable payments. This sample screen shot shows Form 1099 income for a specific provider.

PR3.08

eCAMS maintains multiple types of links between providers and other entities including

- **Billing and Servicing Providers.** Providers may be linked through a billing-to-servicing provider relationship in which the billing provider bills for, and receives payment for, services rendered by the servicing provider. For providers enrolling with an enrollment type of “Group Provider” current eCAMS implementations require at least one servicing provider associated to the group to complete the enrollment process. The linkage must be done between two enrolled entities using the NPI.
- **Provider and Ownership Interests.** Providers may be linked through ownership via TIN. The relationships can be displayed to authorized users. This also provides the ability to see the primary organization and its related sub-parts.
- **Program and Provider.** As a part of the enrollment process, providers may enroll to serve specific State programs as long as they meet the appropriate credentialing criteria. This relationship is identified by the "Specialization" dialog in eCAMS. Once the program is identified, eCAMS guides the remaining steps of the application to the specifications of the selected program. A provider may enroll to serve multiple programs in a single enrollment in eCAMS.
- **Members and Providers via Lock-in.** Providers can be tied to specific beneficiaries through the lock-in function of the Member business area.
- **Provider and Billing Agent.** Providers may specify multiple billing agents who are authorized to submit claims on their behalf. Both the provider and the billing agent must be enrolled in eCAMS.

Team Noridian will configure new association type to support linkage between an enrolled provider and a MCO and to define the MCO’s network. Links between providers can also be maintained through the eCAMS Case Management function. Links between providers can be established and maintained through a shared “alternate identifier” such as a “chain ID.” Team Noridian will configure “Chain ID” as new alternate identifier as a part of standard implementation activity.

PR3.09

eCAMS can do mass updates to provider information based on taxonomy components (e.g., provider type, specialty, and subspecialty) and program associations through the Provider Administration function. Figure 9.1.2.1-65 shows examples of the mass indicator add feature that allows an authorized user to add

a standard indicator to all providers with the taxonomy 207PH0002. eCAMS also supports mass actions for an entire taxonomy group or a subset of the group to add or delete taxonomies based on the twice-yearly update of valid taxonomy values, and to perform mass inserts or updates of programs associated to taxonomies.

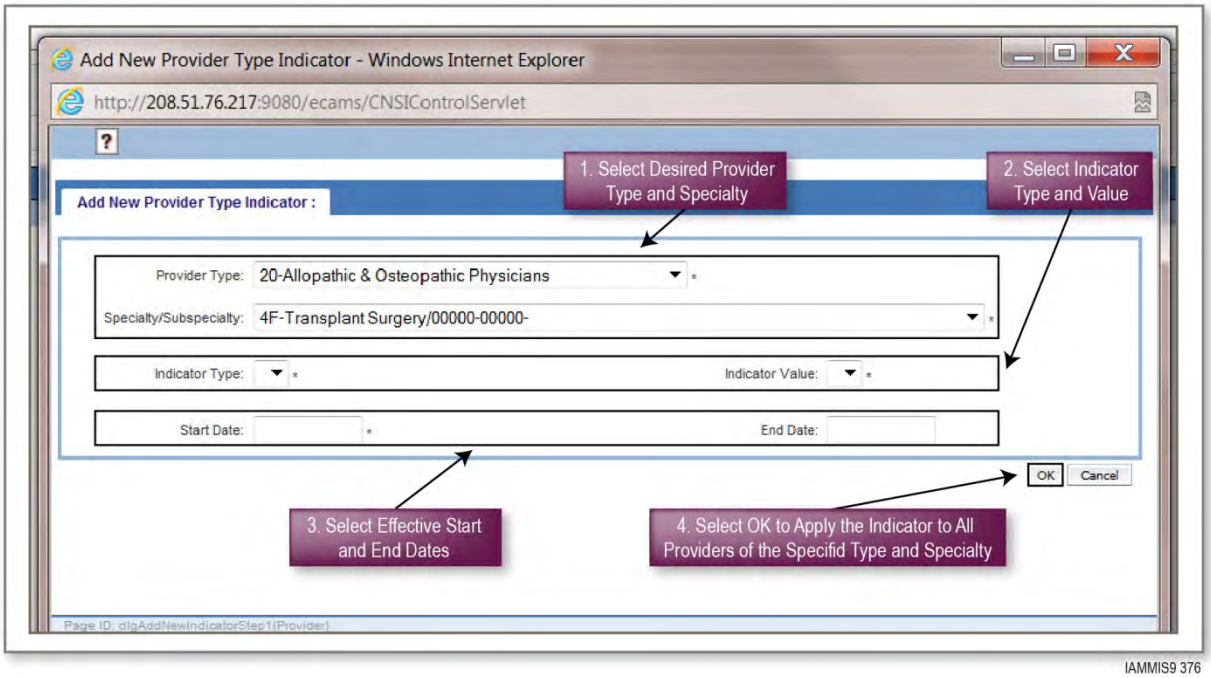

Figure 9.1.2.1-65. Provider Administration – Mass Add Provider Type Indicator. eCAMS can add global indicators to all providers who share a taxonomy and can be used to remove the "Cost Avoid" indicator from all providers who share the same taxonomy value.

Team Noridian will configure the list of available indicators and values as a part of the standard DDI process.

PR3.09.01

eCAMS supports application of mass updates to provider-specific rates. Authorized users can upload multiple rate adjustments by selecting the Upload Rates button on the Manage Provider Rates page, as shown in Figure 9.1.2.1-66. Mass adjustments can also be applied by provider type and specialty using the Taxonomy Rate adjustments.

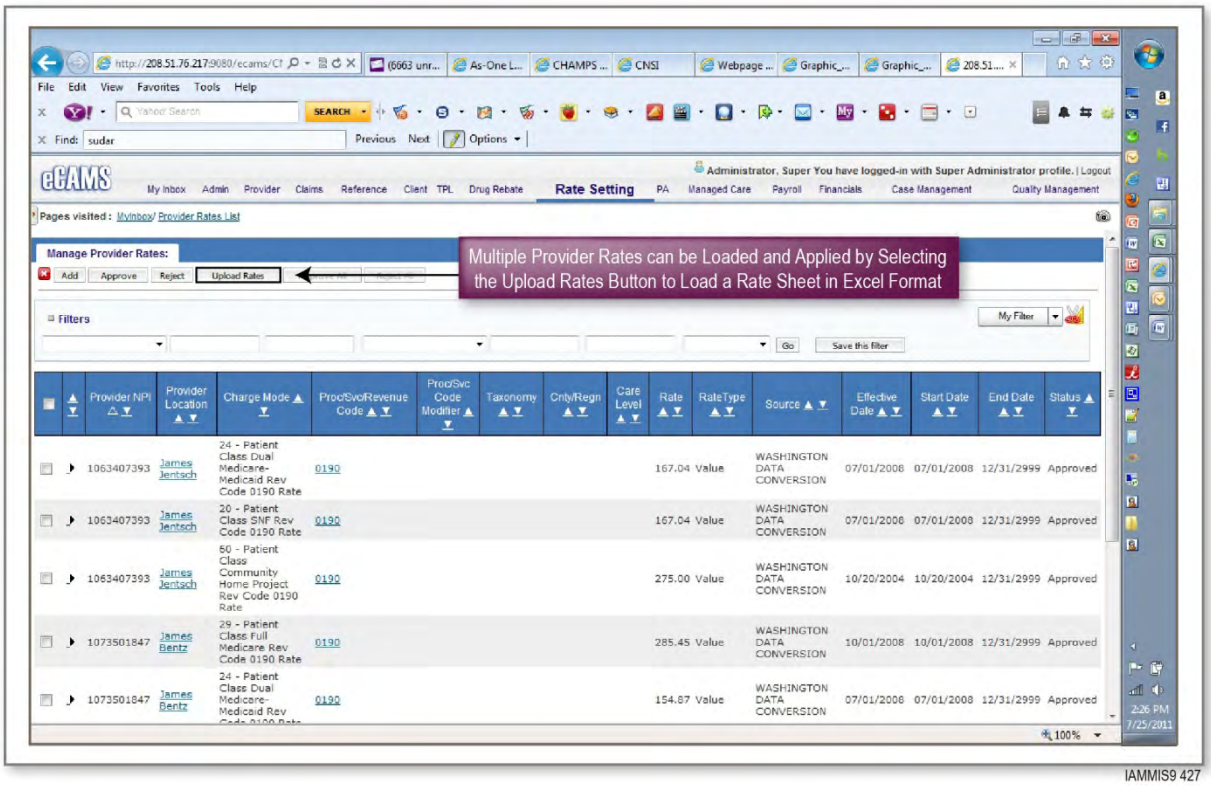

Figure 9.1.2.1-66. Mass Update of Provider Rates. eCAMS allows authorized users to apply mass updates to provider rates by uploading a rate adjustment spreadsheet. The rate sheet contains affected provider ids, revised rate information, and start and end dates for the rate change.

PR3.10

eCAMS can maintain multiple indicators. Team Noridian will configure indicators to designate providers who are FFS, MCO, or other. The indicators will be added through the Add Indicators page shown in Figure 9.1.2.1-67. eCAMS is preconfigured with more than 100 unique indicator types including an indicator for Managed Care PCP. Team Noridian will configure a new indicator to identify fee-for-service providers and MCO network only providers.

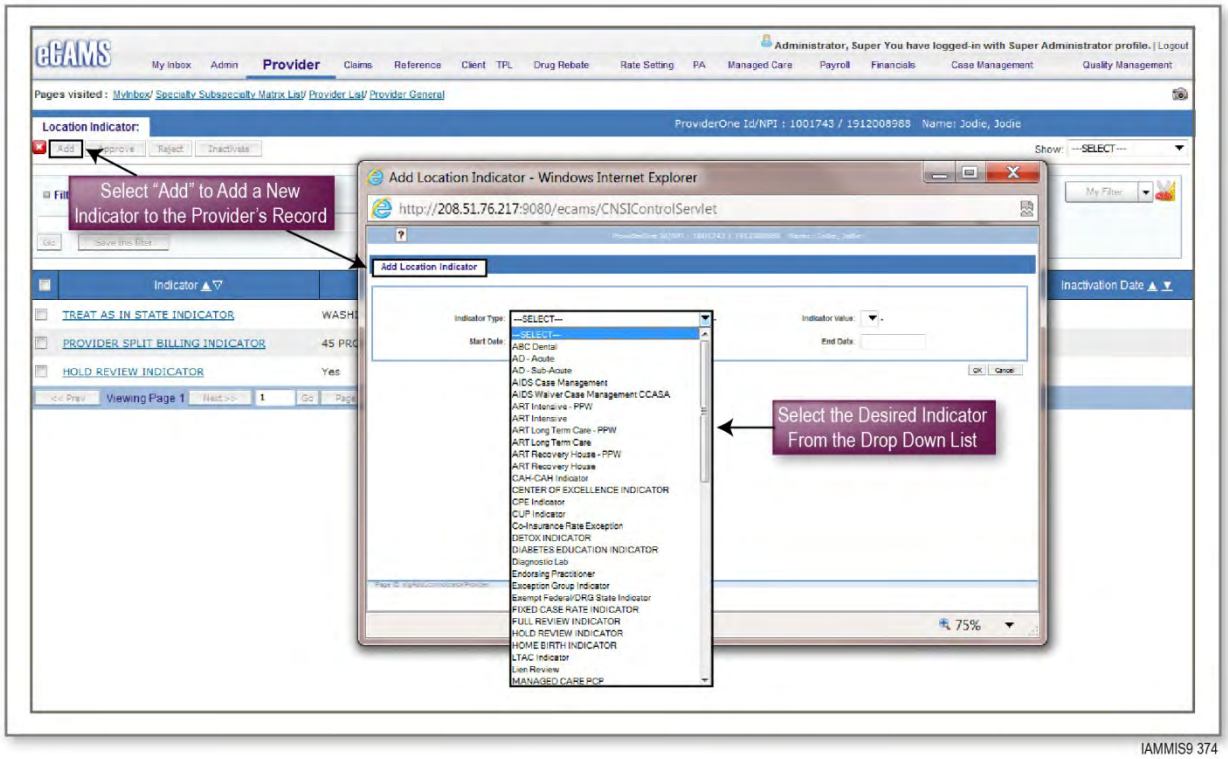

Figure 9.1.2.1-67. Add Provider Indicators. eCAMS Add Indicators dialog allows enrollment specialists to set certain indicators on the provider's record to facilitate adjudication of claims. This figure shows only a sample of the available indicators.

PR3.11

eCAMS maintains information on providers who are using EFTs or EDI. During enrollment, these details are captured via the wizard.

Electronic Funds Transfer (EFT). Figure 9.1.2.1-68 shows the enrollment dialog for capturing payment details. eCAMS supports electronic and paper payment and remittance advice delivery modes. In the dialog shown in Figure 9.1.2.1-68, the provider must elect either EFT (Direct Deposit) or Paper Check. If the provider selects EFT, eCAMS activates the middle panel of this page to collect the bank account information for the provider. After initial entry, the system suppresses all but the last four digits of the account number. Upon approval of the provider's enrollment application, this information is passed to the State's system for validation and verification. Upon successful verification, the provider will be paid using EFT. Note that this dialog also allows the provider to specify how they would like to receive remittance advices.

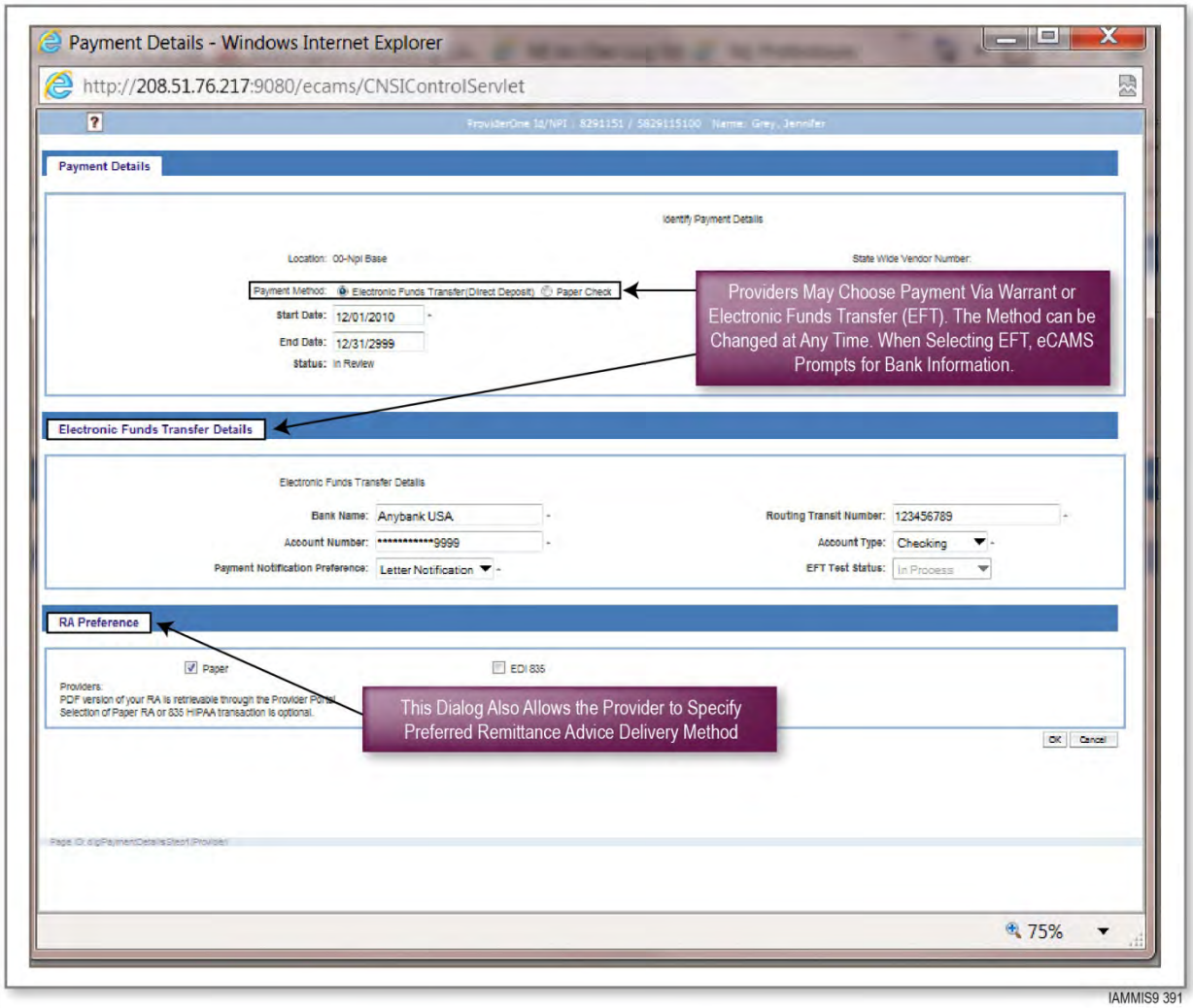

Figure 9.1.2.1-68. Provider Payment Preferences. In this example the provider has elected electronic payment. Note that the checking account number displays only the last four digits of the account number. IME may choose to enact policy to disable a provider's ability to select the paper option to better control and reduce operating costs.

EDI Claims Submission. eCAMS allows providers to choose the methods of electronic submission they would like to use as shown in Figure 9.1.2.1-69. Based on rules in the wizard and in the credentialing matrix, the ability to submit electronically can be restricted to only those providers who both have an NPI and have submitted a trading partner agreement. The sample screen shown in Figure 9.1.2.1-69 shows the following choices:

- Web Batch – Enables the provider to submit transaction batches directly through the Provider portal
- File Transfer Protocol (FTP) Secured Batch – Allows the provider to submit files to an FTP server, where eCAMS automatically picks them up for validation
- Web Interactive – Lets the provider perform claims data entry directly through the Provider portal
- Billing Agent/Clearinghouse – Allows the provider to specify a third-party claim submitter

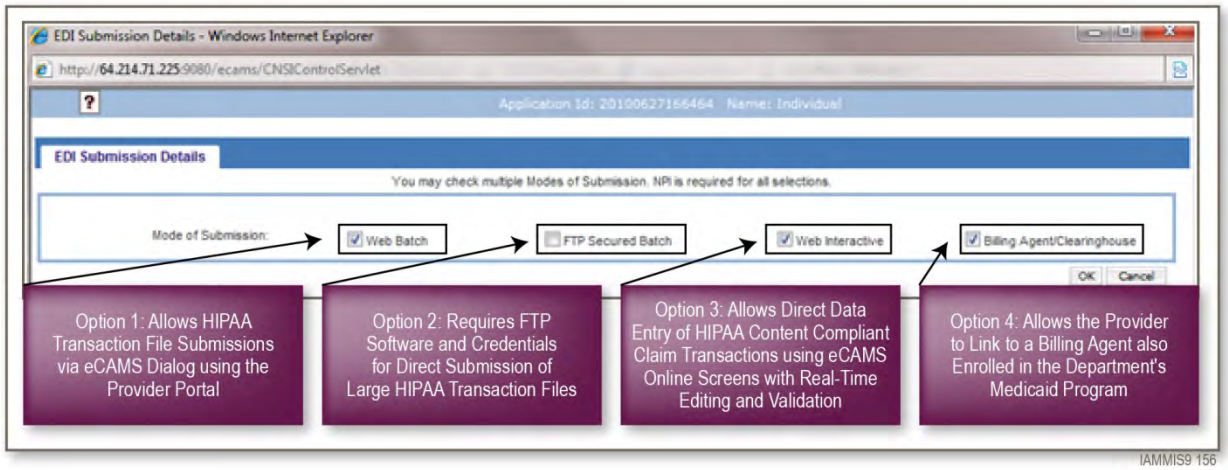

Figure 9.1.2.1-69. EDI Submission Details. eCAMS supports multiple methods of EDI submission — Self -submission methods include Web batch (Option 1), FTP secured batch(Option 2), and Web interactive Direct Data Entry (Option 3). Providers may also choose to appoint a third-part billing agent or clearinghouse (Option 4).

Depending on the choices the provider makes on the EDI Submission Details dialog (Figure 9.1.2.1-69) the wizard will designate additional steps in the enrollment process as required. For providers electing to self submit EDI transactions either through web batch or secure FTP, eCAMS will require that the provider specify the software product and protocols they use for EDI transactions. Having this level of detail available on the provider database, IME has the information needed to facilitate EDI-related problem resolution and troubleshooting.

If the provider chose Billing Agent/Clearinghouse in the dialog shown in Figure 9.1.2.1-69, they must complete dialogs identifying the billing agent or clearinghouse and designate outbound transaction receipt permissions for the billing agent/clearinghouse. eCAMS allows providers to delegate authority for receipt of outbound EDI transactions. In the delegation process, the provider selects the billing agent and the outbound transactions that the billing agent may receive on the provider's behalf. The provider can also name specific contacts designated to handle questions or issues about one or more selected EDI transaction. EDI contact information may be designated as required or optional depending on the Department's policies.

All EDI-related data can be collected during the enrollment process. The exact same features are available through post-enrollment maintenance functions. An authorized provider enrollment user can add or change EFT and EDI features at any time at the request of the provider.

PR3.SS.01

eCAMS interfaces with the SSA Death Registry. eCAMS performs confidence matching to determine if there is an exact match or suspected match based on SSN, full name, and address. If there is an exact match and the provider is not already terminated, eCAMS automatically terminates the provider's enrollment effective on the date of death reported. eCAMS notes the SSA as the source of the action and provides the reason code of "11 - Terminate/Deceased" as shown in Figure 9.1.2.1-70. For a suspected match, eCAMS issues an alert to the provider enrollment unit. The authorized provider enrollment specialist reviews the information may either complete approve and apply the termination status or reject it if it is erroneous.

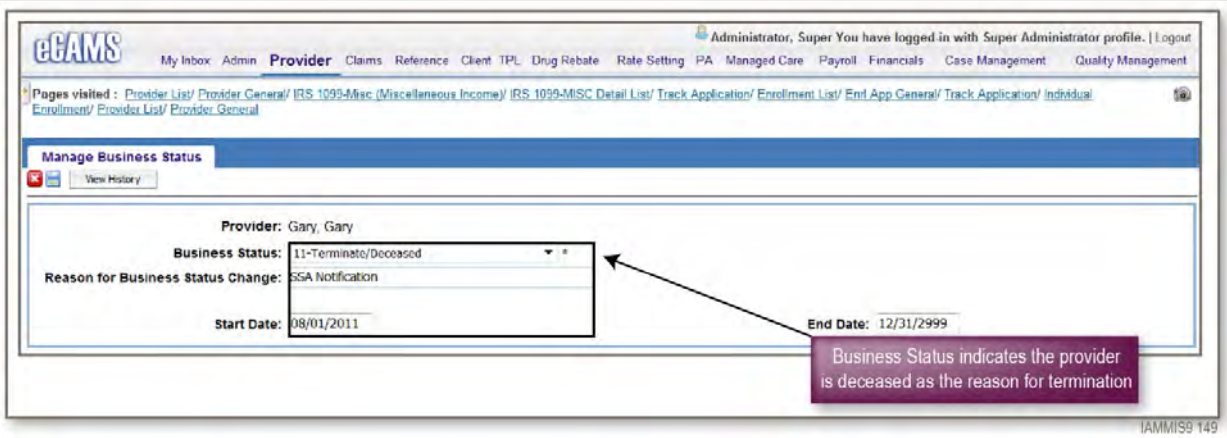

Figure 9.1.2.1-70.Termination/Deceased Provider. eCAMS captures a specific provider status value for deceased providers. This status prevents any claims from for the provider as of the start date shown on the application of the termination status value.

PR3.SS.02

eCAMS retains all provider records in the provider database for a period of time specified by IME regardless of the business status of the provider. Providers who have been terminated or inactivated may be reactivated in the system by authorized users. This is accomplished by end-dating the previous business status for the provider and adding a new, active, business status as shown in Figure 9.1.2.1-71.

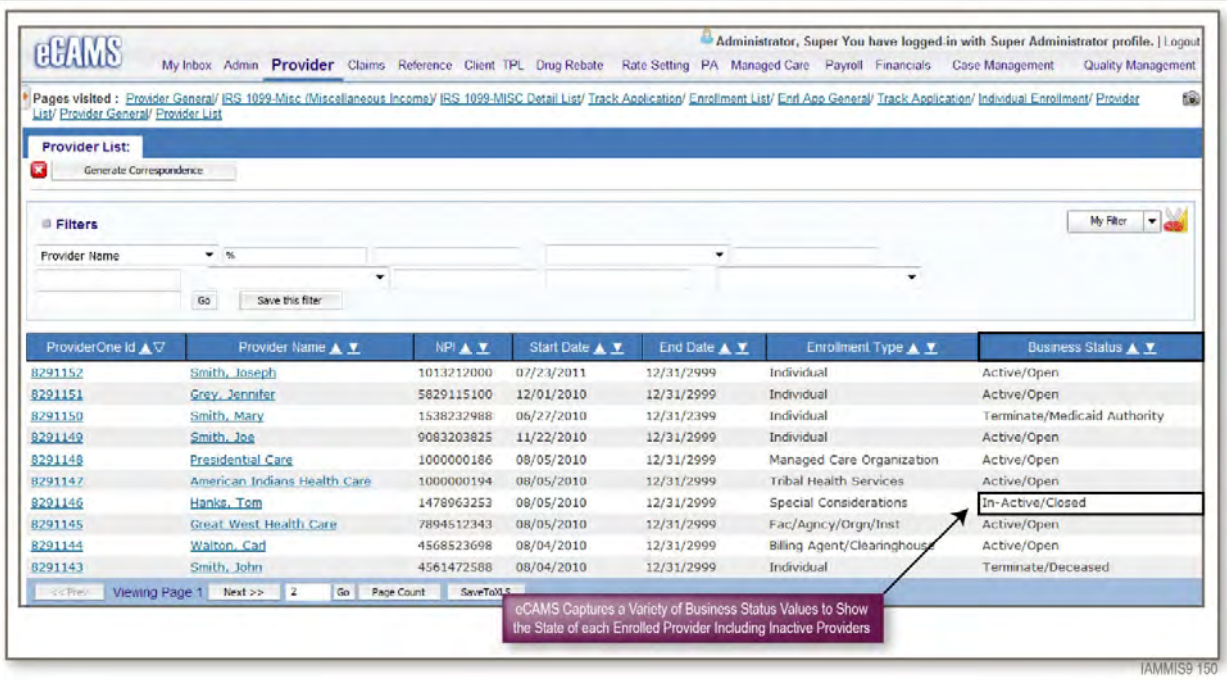

Figure 9.1.2.1-71. Provider List Showing Inactive Provider. In this example the second provider on the list is inactive as of December 1, 2010.

After an authorized user approves the change to provider's business status (Active/Open), the provider's records are immediately reactivated in eCAMS as shown in Figure 9.1.2.1-72.

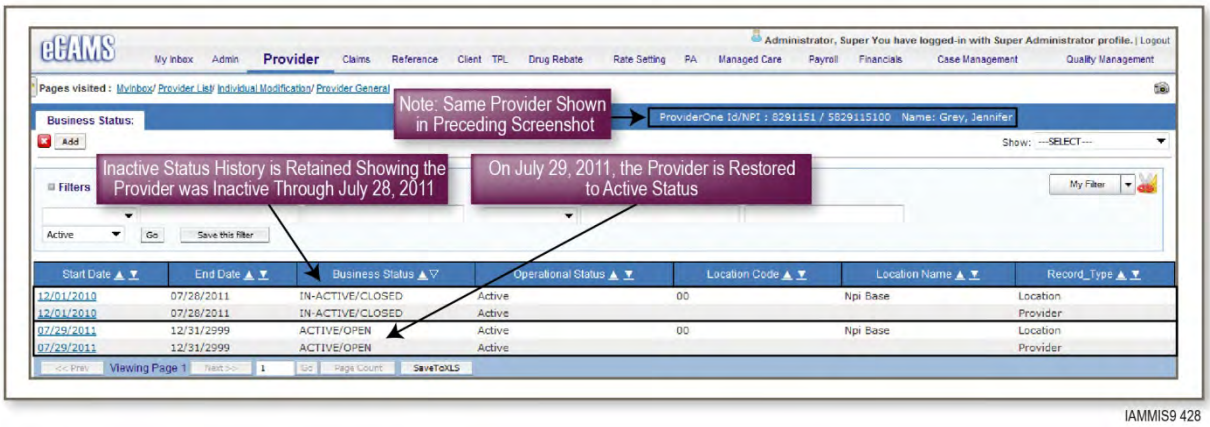

Figure 9.1.2.1-72. Reactivate Inactive Provider. In this example, the provider requests reactivation as of July 27, 2011. The request has been applied and both the Provider and the providers NPI base location have been reactivated. The inactive time span is also captured as a part of the status history.

PR3.SS.03

eCAMS will retain a minimum of five years of provider demographic information, rates, and claim payment history for online inquiry by the contractor and authorized IME staff. Data retention will conform to IME specification. All information stored in the eCAMS database includes the effective date span which specifies both the start- and end-date for the related data.

PR3.SS.04

eCAMS supports this requirement by provider hold and provider withhold indicators on the provider file. The hold can be placed at the provider level or at the invoice level. Whenever a hold is placed at the provider level, the provider is not included in the payment file. Figure 9.1.2.1-73 shows a Provider Hold Review Indicator that is awaiting approval.

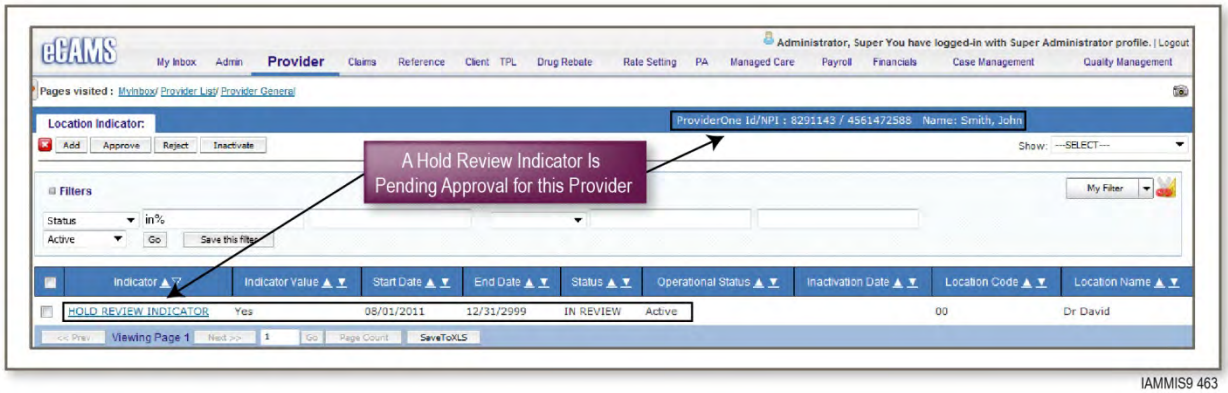

Figure 9.1.2.1-73. Provider Hold Review Indicator. After approving the Provider Hold Review Indicator, the Claims business area will cause any claims to suspend with a Hold Review edit.

Whenever a hold is placed at the invoice level, only the invoice which is on hold is not included in the payment file. eCAMS provides functionality to hold the provider payments along with a workflow for process that notifies the supervisor about the hold that is placed. The supervisor can either approve or reject the hold. Figure 9.1.2.1-74 shows the Payment Hold Detail page, which allows the user to place payments on hold and identify the reason and expiration time for the hold, if the approval is not completed.

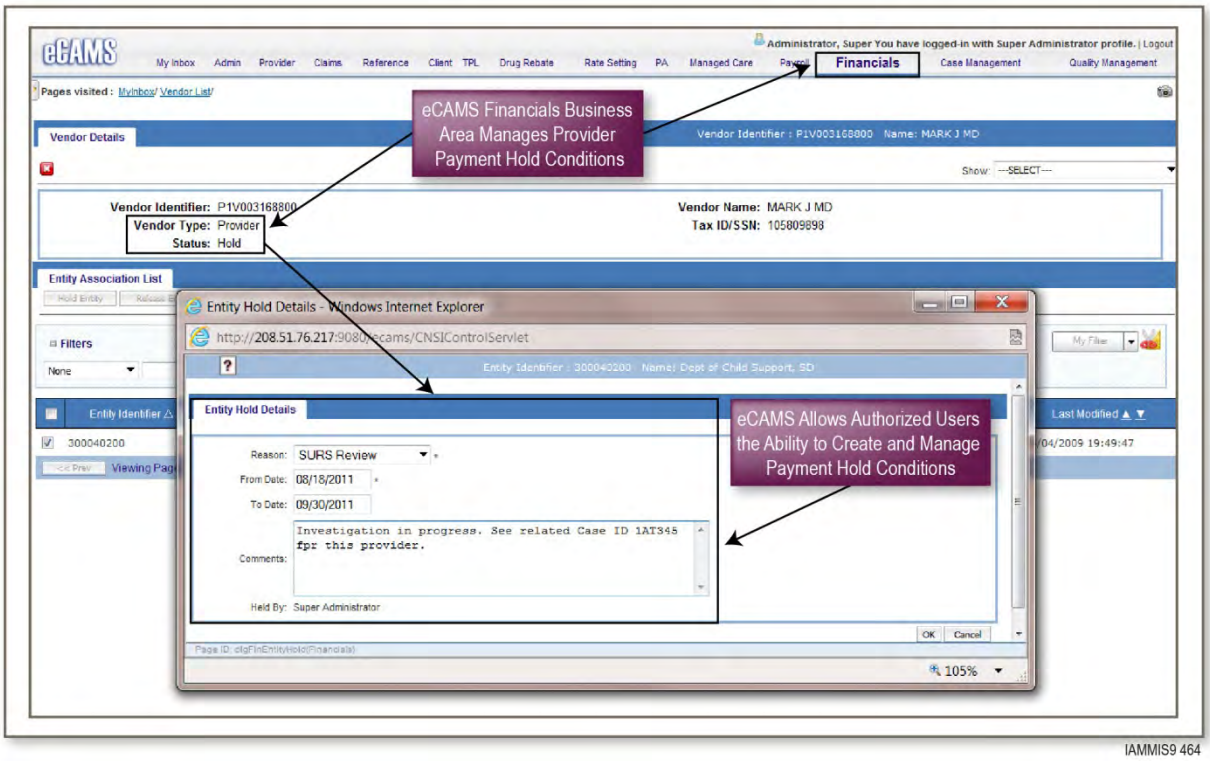

Figure 9.1.2.1-74. eCAMS Finance Payment Hold Detail. The eCAMS Payment Hold Detail screen allows users to hold provider payments.

eCAMS provides authorized users with the functionality to setup up payment withholds at the provider level. Payment withholds can be based on either a fixed amount or percentage. Based on the withhold setup, appropriate amounts are withheld from the provider payments of adjudicated claims in each payment cycle. After completing the settlement process with the provider, authorized users can release or end-date the withhold condition which then releases. Once the withhold condition is released or end-dated all withheld amounts are released for payment to the provider.

PR3.SS.05

eCAMS identifies pending disenrollment actions for providers under the following circumstances:

- Any required credential expires
- 100% match on provider information with the SSA Death Registry including Name, TIN, and full address
- 100% match on provider information with the OIG LEIE sanction file including Name, TIN, and full address

When any of these conditions are detected as a result of interface processing or nightly credential review, eCAMS generates a notification to Provider Services. eCAMS supports automatic disenrollment based on all three of these conditions.

PR3.SS.06

eCAMS provider database supports the data structures required to identify providers who are using electronic health records including their certification numbers from the EHR system.

PR4.01

eCAMS captures and maintains an NPI for any provider enrolling with a provider type and specialty (taxonomy) set up to require the NPI as in the credentialing matrix. When NPI is a required value, the provider cannot complete the application process without submitting a valid and verifiable NPI. eCAMS performs Validity checking using via Luhn Formula for Modulus 10 “double-add-double” check digit formula that ensures the NPI meets the criteria for validity. Verification is done through the NPPES registry.

PR4.02

eCAMS accepts NPI as the standard identifier in all HIPAA transactions such as the 837 P/I/D, 278 and 276. All current implementations of eCAMS are fully compliant with the use of NPI as the primary identifier.

PR4.03

eCAMS interfaces with the NPPES and has the flexibility to interact with the NPPES using both batch and real-time interfaces. Validation and verification of the NPI using NPPES is performed during initial enrollment and when any change to the NPI is recorded.

PR4.04

eCAMS automatically assigns atypical provider numbers using a “5” in the first position as recommended by the Enumerator. The leading digit “5” has been reserved by the Enumerator for local state use. The atypical provider ID is based on the provider's unique identifier in the eCAMS system so there is no possibility assigning the same atypical provider ID to two different providers.

PR4.05

eCAMS is designed to consolidate multiple legacy Medicaid Provider IDs for the same provider under that provider’s new NPI. The legacy IDs are recorded as alternated identifiers for the new consolidated provider record.

eCAMS has been configured to enroll each NPI as a separate provider. Sub-part organizations are linked through common ownership and tax identifier (e.g., FEIN).

PR4.SS.01

eCAMS conforms to HIPAA requirements for submission of data on all HIPAA transactions, including the submission of the NPI and provider taxonomies. eCAMS currently accepts the NPI in all standard electronic transactions mandated under HIPAA for both primary and secondary NPIs.

PR4.SS.02

Team Noridian will modify eCAMS to support random selection of a sample of providers for audit purposes. Authorized users will be able to enter criteria including the number of providers to be included in the sample. The random function in Oracle will support this new feature.

PR4.SS.03

eCAMS produces a real-time alert when an atypical provider ID is already on file and an attempt is made to reuse that atypical ID with a different TIN. eCAMS architecture allows multiple program/provider type/specialty combinations under a single enrollment preventing the conditions that lead to multiple enrollments for a single provider. As noted in Team Noridian's response in section 9.1.2.1.2, Requirement PR4.04, the algorithm used to assign atypical provider IDs prevents duplication.

PR4.SS.04

Team Noridian will modify eCAMS to send out first and second B notices. The first notice is sent for the purpose of soliciting a correct name/TIN combination. The first and second B notices can be sent by November 15, so the issue can be resolved no later than December 31 each year. Any CP2100 or CP2100A notices received from IRS would be handled by the Provider Services contractor. Scanned versions of these notices would be stored in OnBase.

PR.SS.01

Team Noridian will develop new functionality in eCAMS to support an online inquiry for year-to-date claims submittal and payment summary inquiry by provider. The online inquiry will display information for paid and denied claims, and payment generated, year to date, based on the calendar year.

PR.SS.02

eCAMS has the flexibility to change, add, or end-date provider type categories. These changes can be applied as mass changes to the provider database. eCAMS maintains a history of the changes with effective date spans. Changes can be back dated by authorized users where appropriate and allowed by IME policies.

PR.SS.03

In Team Noridian's responses in section 9.1.2.1.2, Requirements PR2.SS.02 and PR3.04, Team Noridian describes eCAMS provider address capture capabilities. eCAMS currently supports all addressing functions required with the exception of a corporate address. Team Noridian will add a new type of address to manage the requirement for a corporate address. This address type will be added to the available addresses as shown in Figure 9.1.2.1-75. Figure 9.1.2.1-75 shows the location, mailing, and pay-to address. Contact name, phone number, fax number and e-mail addresses are stored separately for each type of address.

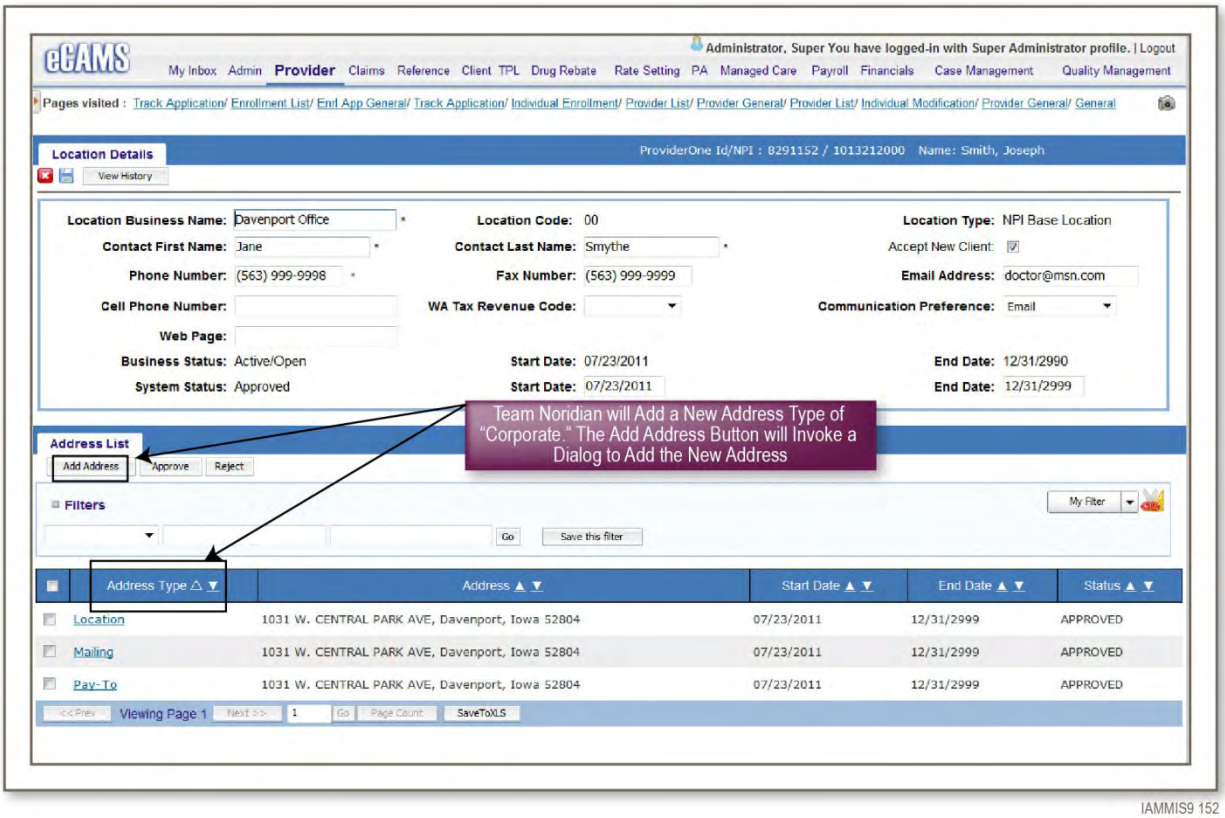

Figure 9.1.2.1-75. Corporate Address. eCAMS will be modified to allow a corporate address to be recorded on the provider's file.

PR.SS.04

Team Noridian will configure new alternate identifier types to hold the vendor code field for HMO or MediPASS. The new alternate identifiers may be required or optionally entered during enrollment through subsequent provider database maintenance. Refer to Team Noridian's response in section 9.1.2.1.2, Requirement PR3.08, for additional information concerning alternate identifiers.

PR.SS.05

eCAMS has the ability to allow definition of new provider types. Rates can be tied to the new provider types and benefit plans can be configured to restrict services for the new provider types. Provider types are defined by entering a local taxonomy in the Reference business area of eCAMS. An example of this is shown in Figure 9.1.2.1-76. The newly defined provider type can be assigned to providers and rates as soon as it is approved by an authorized user.

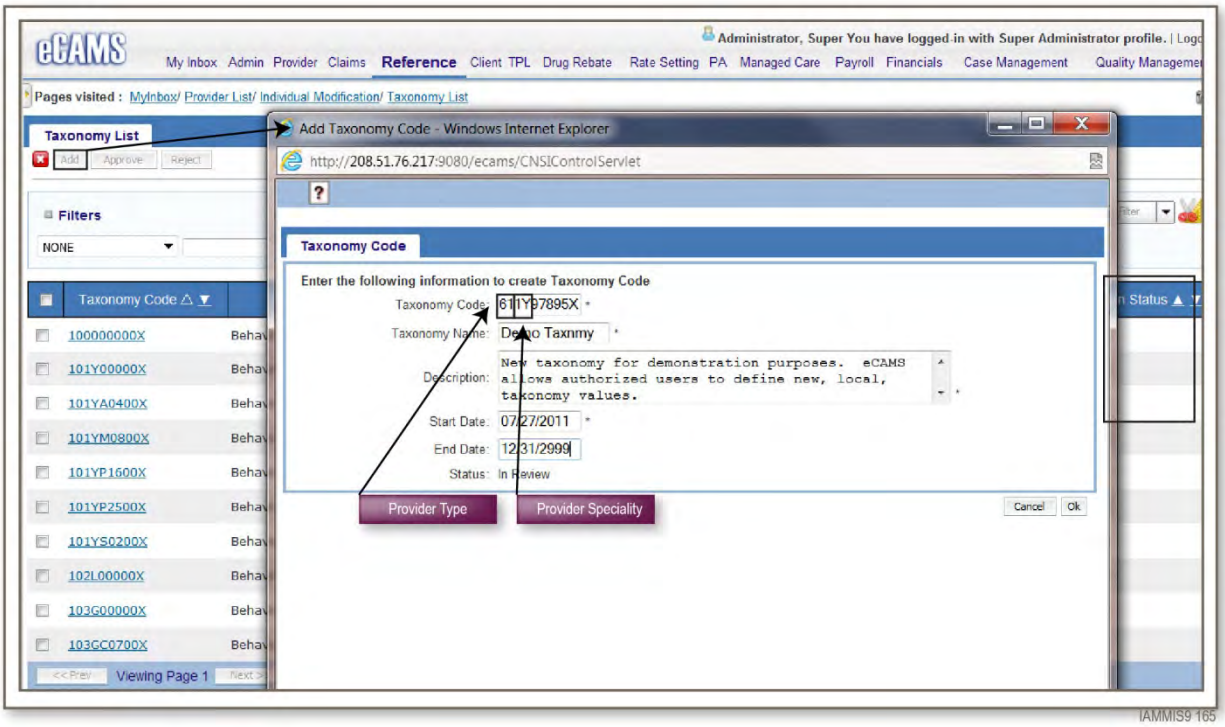

Figure 9.1.2.1-76. Defining New Provider Types. eCAMS gives authorized users the ability to dynamically add new provider types. This is a feature of the Reference business area in eCAMS.

eCAMS also has the ability to control situational parameters for providers using "group" associations. Using the eCAMS Reference business area group definition feature, a group can be defined for the purposes of applying a unique rate. Group definitions can restrict services typically allowed for a provider type. Group definitions can also permit billing for services not typically allowed for a provider type. Figure 9.1.2.1-77 shows eCAMS Group Definition dialog. Figure 9.1.2.1-78 shows the association of a provider to the defined group.

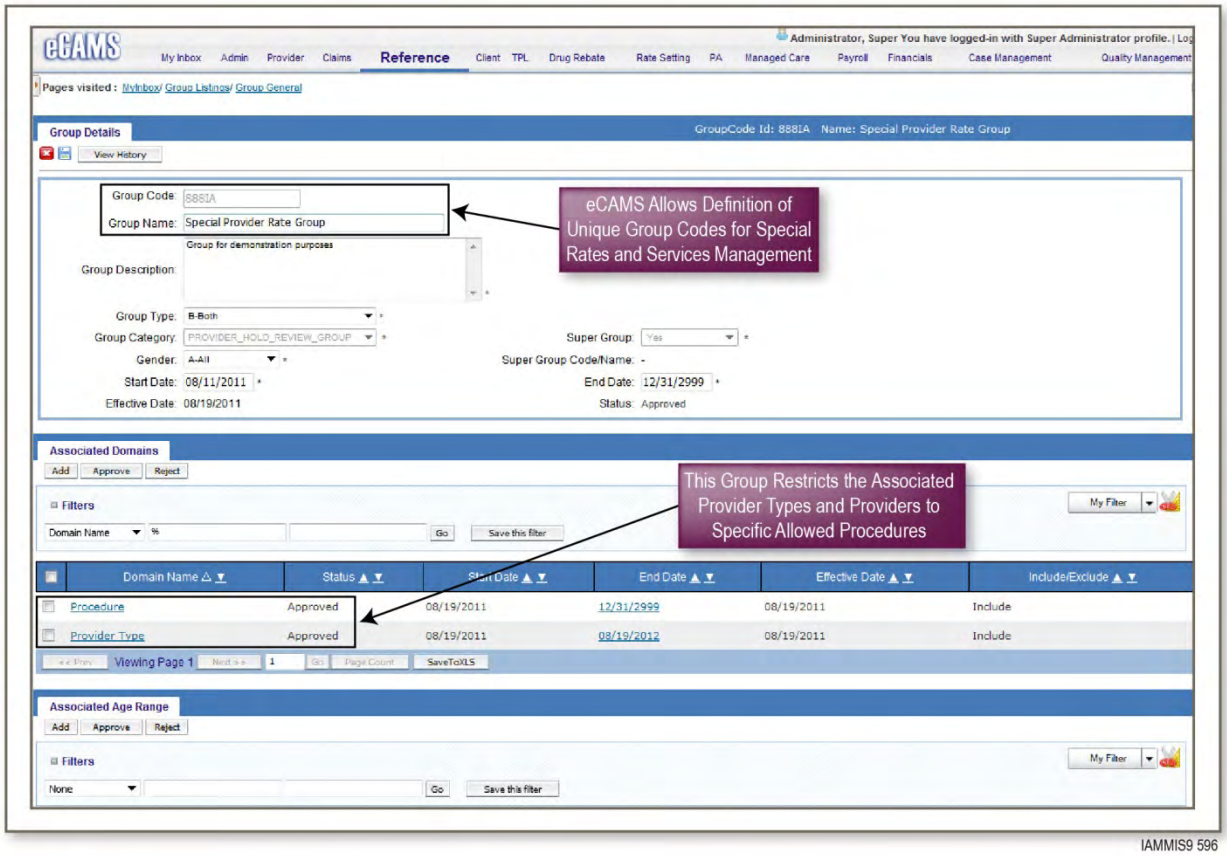

Figure 9.1.2.1-77. Provider Group Definition. Group Definitions in the Reference business area allow authorized users to restrict or enhance allowed procedures for specific providers without having to define new provider types and specialties. Groups can also be used to set specific rates for defined populations of providers.

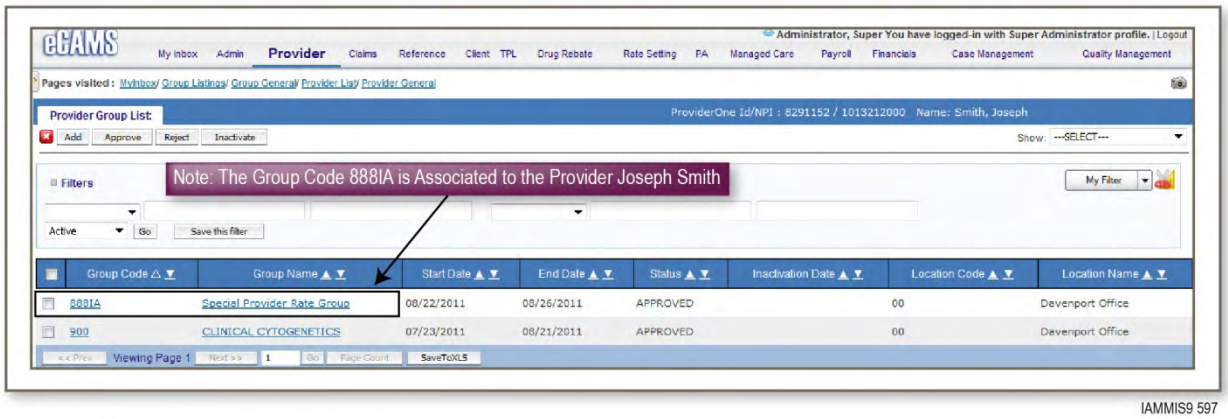

Figure 9.1.2.1-78. Provider Group Association. After defining and approving the new group, specific providers can be linked to the group code. The group code can be set up to allow or restrict specific procedures or apply unique rates for the associated providers.

PR.SS.06

eCAMS credentialing matrix can house a reenrollment credential that is set to expire in accordance with the IME standard reenrollment period. As expiration of the credential nears, eCAMS will automatically

issue a notice to the provider to remind them of the requirement to reenroll. Providers who fail to enroll as required may be automatically terminated in eCAMS as of the expiration date of the reenrollment period.

PR.SS.07

eCAMS produces a daily report (PM-PE-127 Provider Audit Trail Report) showing the before and after image of changes made to the provider database. Refer to Team Noridian's response in section 9.1.2.1.2, Approach to Addressing the Provider Management System Requirements, Figure 9.1.2.1-14, for a complete list of reports produced by the Provider Management business area.

PR.SS.08

eCAMS provides the ability to use built-in search and filter criteria to select providers based on attribute sets defined by the user. eCAMS can then select addressing information and merge with predefined, on-demand, letters. The selection criteria can include the type of address (e.g., location, mailing, pay-to or corporate).

PR.SS.09

eCAMS Finance business area supports liens applied to providers including lien amount, deduction amount and assignment to payees. Refer to Team Noridian's response in section 9.1 4.3, Requirement FI.SS.46, for a more complete discussion of this feature. eCAMS allows the authorized user to create a lien deduction and specify the processing rules for the deduction. The user also has the ability to access an existing deduction and modify the details. The lien payments are made to the appropriate lien holder as defined through the lien set up process.

PR.SS.10

Team Noridian will develop a new on-demand report to produce alphabetic and numeric provider lists with subtotals and totals. The report will allow IME to identify the selection parameters for provider inclusion to include provider type, specialty, county, zip code, and enrollment status.

PR.SS.11

All rate setting features support the data architecture defined in the eCAMS database. Rates can be defined by any of the following types:

- Individual provider
- Benefit program
- eCAMS group definition
- Service (procedure or revenue code)
- Member
- Provider taxonomy
- Diagnosis Related Group (DRG).

All rate dialogs include the ability to specify:

- Program
- Procedure Codes
- Procedure Modifier Code
- Rate
- Rate type (factor, percentage of charges, or value)
- Start- and end-date span for the rate
- Charge mode
- Geographical location applicable by city or region
- Care level
- Rate source (online data entry, bulk upload or conversion)
- Comments

Each rate also has a system maintained effective date and status.

The different rate types have additional attributes as appropriate to the type of rate (e.g., taxonomy codes for provider taxonomy rates, and NPIs for provider rates). All data elements used to determine the applicable rate are present in the eCAMS database.

PR.SS.12

Team Noridian will develop an interface to accept licensure data from occupational licensing entities. The interface parameters will include the confidence matching criteria to be used when applying the interfaced data. Matching criteria will include data fields that either residing on both eCAMS and the interfacing occupational licensing entity's files or can be readily derived using data available on the interfacing systems.

PR.SS.13

Team Noridian will develop a new interface to accept and synchronize data with the statewide provider directory Health Information Exchange. eCAMS is preconfigured to interface with state medical licensing boards. Team Noridian will modify the existing licensure interface to accommodate the Iowa licensing board.

PR.SS.14

eCAMS accepts enrollment information in both XML format and through PDF applications. Either format can be uploaded. Both formats accept NPI. Please refer to Team Noridian's response in section 9.1.2.1.2, Requirement PR1.02.03, for a discussion of this feature. The PDF process, including submission of an NPI, is shown in Figure 9.1.2.1-20, Figure 9.1.2.1-21, and Figure 9.1.2.1-22.

PR.SS.15

eCAMS supports a variety of online editable rate screens as shown in Figure 9.1.2.1-79. Rate setting functionality it includes the ability to set rates by provider, program, group, service code, enrollee, taxonomy, and DRG code rate screens. The rate functionalities include functionalities to approve and reject entered rates. In addition, the rate functionalities have the capability to upload rates through an Excel sheet.

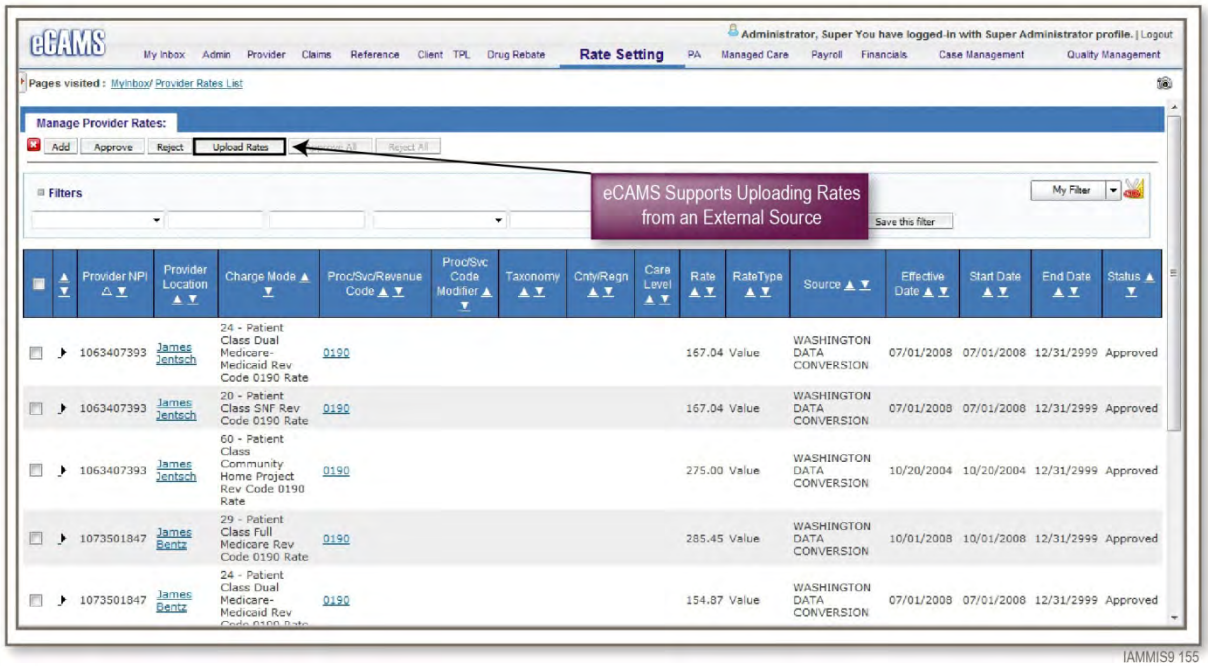

Figure 9.1.2.1-79. Manage Provider Rates. eCAMS Rate Setting features support rate setting for individual providers, groups of providers who share a taxonomy and other modes such as predefined group, DRG, and enrollee.

PR.SS.16

eCAMS sweeps the provider database on a nightly basis looking for credentials that are nearing expiration. The triggers can be set at the 90-day mark to notify the contractor of upcoming credential expirations. eCAMS automatically formats and sends an internal alert to one or more identified users when the trigger condition has been met. Multiple triggers can be set for a single event (credential expirations).

PR.SS.17

eCAMS is designed to automatically interface with the OIG LEIE sanctions file. Team Noridian will build a new interface to accept information from state sanctioning organizations.

PR.SS.18

Team Noridian will develop a provider edit to be invoked when entering a "pay-to" address. The edit will display an error message indicating that a non-US address cannot be used for the pay-to location. The system will not allow the pay-to address to be stored.

PR.SS.19

eCAMS allows multiple provider status codes for the same and overlapping timeframes. Status codes can be set individually by practice location or managed care contract. Status codes can also be set at the specialization level. Specialization is the unique combination of program (e.g., ABC Dental) and provider type and specialty (e.g., dentistry/pediatric dentistry). eCAMS architecture supports a single enrollment for the provider's unique NPI (or API) and TIN combination. Multiple practice locations may be specified under the single enrollment. Multiple specializations can be defined and associated independently to each location. This reduces work for the provider enrollment specialist at the same time as it provides a very granular level of control over the provider's relationship with IME.

PR.SS.20

eCAMS maintains inputs and outputs to support all of the required elements. Figure 9.1.2.1-80 shows a mapping to the required inputs and Figure 9.1.2.1-81 shows the required outputs.

Inputs	
a. Provider enrollment data.	eCAMS accepts enrollment data through direct online data entry, through uploaded PDF enrollment applications, and through XML file submission. Data can be applied to either a new enrollment application or to maintenance of an enrolled provider's database record. Inputs can be accepted via provider self-service and through IME provider enrollment specialists.
b. Provider demographic changes.	eCAMS accepts provider demographic changes through direct online data entry, through uploaded PDF enrollment applications, and through XML file submission. Inputs can be accepted via provider self-service and through IME provider enrollment specialists, and through interfaces.
c. Provider rate changes.	eCAMS accepts provider rate changes through direct online data entry by an authorized user or through file upload via the rate setting business area.
d. State and federal licensing and certification documentation.	eCAMS accepts federal and state licensing and certification documentation through interfaces and direct data entry. Automatic validation against the licensing organization is performed for any data entered online.
e. Provider sanction listings.	eCAMS accepts sanction information from the OIG's LEIE interface and is being modified to support interface to State sanctioning organizations.

Figure 9.1.2.1-80. eCAMS Inputs. eCAMS accepts inputs from a variety of sources to maintain the most up-to-date provider records.

Outputs	
a. Daily, monthly and on request reports and address labels.	eCAMS produces multiple reports including daily, monthly and on request reports. Provider reports are summarized in Team Noridian's responses in section 9.1.2.1.2, Approach to Addressing the Provider Management Requirements, Figure 9.1.2.1-14. Team Noridian will configure Address Label reports as a part of standard DDI activity.
b. Daily provider files.	eCAMS supports daily inbound and outbound provider interfaces and data extracts. Provider interfaces are summarized in Team Noridian's responses in section 9.1.2.1.2, Approach to Addressing the Provider Management Requirements, Figure 9.1.2.1-11 and Figure 9.1.2.1-12.
c. Produce and deliver to the IME all reports requested by the IME from the provider data maintenance function, at the specified frequency, medium and delivery destination.	eCAMS support daily report production. IME will manage the delivery of reports as specified to the requested destinations.
d. Remittance advices in electronic format and X12N 835.	eCAMS prepares Remittance Advices in paper, PDF, and X12N 835 formats.
e. Annual 1099s, on federally approved forms and mail to providers.	eCAMS Financials business area prepares Annual 1099 forms.
f. Group mailings and provider labels based on selection parameters such as provider type, zip code, specialty, county and special program participation.	eCAMS support group mailings based on selection parameters such as provider type, zip code, specialty and program participation.
g. Report identifying any providers who have changed practice arrangements (e.g., from group to individual of from one business to another) by provider type as requested by the IME.	Activities for changing practice arrangements or specializations (provider type) must be reviewed and approved by authorized IME users. Team Noridian will configure a new report, a subset of the audit trail report.
h. Data required for rate setting as required by IME.	eCAMS supports multiple types of rates.

Figure 9.1.2.1-81. eCAMS Outputs. eCAMS produces multiple outputs to support the daily operation of the Provider Management business area.

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9.1.3 Operations Management Business Area

This business area includes the system requirements for claims receipt and adjudication, reference data management, prior authorization management and third party liability management.

9.1.3.1 Claims Receipt

9.1.3.1.1 Claims Receipt (CR) System Requirements Table

CR	Claims Receipt Requirements - MMIS	A	B	C	D	E
CR1.01	Capture accurately all input into the system in the timeframe required by IME.	Yes	Yes			Section 9.1.3.1.2, Requirement # CR1.01
CR1.02	Provide and maintain interfaces with designated entities as required by IME.	Yes	Yes			Section 9.1.3.1.2, Requirement # CR1.02
CR1.02.01	Assign each claim a unique identifier upon its entering the system.	Yes	Yes			Section 9.1.3.1.2, Requirement # CR1.02.01
CR1.03	Accept and use the common hospital paper billing form developed by the National Uniform Billing Committee (NUBC) for non-electronic claims.	Yes	Yes			Section 9.1.3.1.2, Requirement # CR1.03
CR1.04	Accept and use the common non-institutional paper claim form developed by the National Uniform Claim Committee (NUCC) for non-electronic claims.	Yes	Yes			Section 9.1.3.1.2, Requirement # CR1.04
CR1.05	Accept and use the common dental paper billing form developed by the American Dental Association (ADA) for non-electronic claims.	Yes	Yes			Section 9.1.3.1.2, Requirement # CR1.05
CR1.06	Control, track and reconcile captured claims to validate that all claims received are processed.	Yes	Yes			Section 9.1.3.1.2, Requirement # CR1.06
CR1.07	Provide the ability to identify claims input for control and balancing hardcopy and electronic media.	Yes	Yes			Section 9.1.3.1.2, Requirement # CR1.07
CR1.08	Provide and maintain a data entry system that includes but is not limited to hardcopy claims and claim adjustment and or voids which provide for field validity edits and pre-editing for: a. Provider number. b. Member ID number. c. Procedure codes. d. Diagnosis codes.	Yes	Yes			Section 9.1.3.1.2, Requirement # CR1.08
CR1.09	Produce an electronic image of hardcopy claims and claims-related documents and perform quality control procedures to verify that the electronic image is legible and meets quality standards.	Yes	Yes			Section 9.1.3.1.2, Requirement # CR1.09
CR1.10	Screen and capture electronic images, date-stamps, assign unique control numbers, batch hardcopy claim forms and attachments, adjustment and or void forms and updated turnaround documents.	Yes	Yes			Section 9.1.3.1.2, Requirement # CR1.10
CR1.11	Log each batch into an automated batch control system.	Yes	Yes			Section 9.1.3.1.2, Requirement # CR1.11
CR1.12	Provide the ability to identify claim entry statistics to assess performance compliance.	Yes	Yes			Section 9.1.3.1.2, Requirement # CR1.12
CR1.13	Provide a unique submitter number for each billing service or submitter that transmits electronic or paper claims to the MMIS for a single provider or multiple providers.	Yes	Yes			Section 9.1.3.1.2, Requirement # CR1.13
CR1.14	Provide an attachment indicator field on all electronic media claims to be used by the submitter to identify claims for which attachments are being submitted separately.	Yes	Yes			Section 9.1.3.1.2, Requirement # CR1.14

CR	Claims Receipt Requirements - MMIS	A	B	C	D	E
CR1.14.01	Provide the ability to tie the electronic claim to all related paper claim images, attachments and adjustments that are submitted for the claim.	Yes	Yes			Section 9.1.3.1.2, Requirement # CR1.14.01
CR1.14.02	Receive and process electronic attachments and apply them to one or more claims based on IME rules.	Yes	Yes			Section 9.1.3.1.2, Requirement # CR1.14.02
CR1.14.03	Provide the capability to accept attachments to any transactions (e.g., claim, prior authorization, eligibility) and apply an attachment indicator in the MMIS.	Yes	Yes			Section 9.1.3.1.2, Requirement # CR1.14.03
CR1.16	Support testing of new provider claims submission systems by allowing providers to submit electronic claims test files that are processed through the adjudication cycle without impact on system data.	Yes	Yes			Section 9.1.3.1.2, Requirement # CR1.16
CR1.17	Identify any incomplete claim batches that fail to balance to control counts.	Yes	Yes			Section 9.1.3.1.2, Requirement # CR1.17
CR1.17.01	Provide a return transmission that verifies the number of claims received and accepted.	Yes	Yes			Section 9.1.3.1.2, Requirement # CR1.17.01
CR1.17.02	Maintain electronic data interchange (EDI) transmission logs of all transactions (i.e., successful or failed).	Yes	Yes			Section 9.1.3.1.2, Requirement # CR1.17.02
CR1.18	Provide and maintain the capability to process standard financial transactions, including recoupments and payouts which cover more than one claim and or service.	Yes	Yes			Section 9.1.3.1.2, Requirement # CR1.18
CR1.SS.01	Accept pharmacy claims from the POS.	Yes	Yes			Section 9.1.3.1.2, Requirement # CR1.SS.01
CR1.SS.02	Provide the capability for authorized IME users to directly enter a claim online when IME deems necessary.	Yes	Yes			Section 9.1.3.1.2, Requirement # CR1.SS.02
CR1.SS.03	Record time and date and user in the record for any online updates.	Yes	Yes			Section 9.1.3.1.2, Requirement # CR1.SS.03
CR1.SS.04	Provide the edit capability to check for correct provider number when the provider submits the claim (e.g., at the front end).	Yes	Yes			Section 9.1.3.1.2, Requirement # CR1.SS.04
CR1.SS.05	At a minimum, accept the following types of electronic claims: electronic batch, individual electronic, DDE and paper claims converted to electronic by an imaging process.	Yes	Yes			Section 9.1.3.1.2, Requirement # CR1.SS.05
CR1.SS.06	Provide the capability to edit for potential duplicate services across all claim types as defined by IME.	Yes	Yes			Section 9.1.3.1.2, Requirement # CR1.SS.06
CR1.SS.07	Report all claim lines billed by a provider as a single claim, or HIPAA transaction, by a provider, as a single claim document, to users and providers.	Yes	Yes			Section 9.1.3.1.2, Requirement # CR1.SS.07
CR1.SS.08	Provide the ability to process all claims real-time.	Yes	Yes			Section 9.1.3.1.2, Requirement # CR1.SS.08
CR1.SS.09	Support a customized (reduced data requirements) online claim submission feature for waivered services, and other entities not covered by HIPAA.	Yes	No	SM	500	Section 9.1.3.1.2, Requirement # CR1.SS.09
CR1.SS.10	Provide and maintain a data entry system that accepts and stores all data elements deemed necessary by IME including but not limited to the following: a. Provider type. b. Specialty. c. Sub-specialty.	Yes	Yes			Section 9.1.3.1.2, Requirement # CR1.SS.10

CR	Claims Receipt Requirements - MMIS	A	B	C	D	E
	d. Member age and or gender restrictions. e. Prior authorization required. f. Modifiers. g. Place of service. h. Co-payment indicators (overrides). i. Eligibility aid category. j. Family planning indicator. k. Claim type. l. Emergency indicator. m. Units of service. n. Tooth number or letter and or quadrant. o. National billing uniform editor code set. p. Care management authorization number.					
CR1.SS.11	Produce a summary of EDI transmissions daily.	Yes	Yes			Section 9.1.3.1.2, Requirement # CR1.SS.11
CR1.SS.12	Provide the capability to respond with appropriate acknowledgement transactions such as the TA1, 997, 999 and 277CA as directed by IME.	Yes	No	SM	500	Section 9.1.3.1.2, Requirement # CR1.SS.12
CR2.01	Accept, record, store and retrieve documents submitted with, or in reference to, claim submission activity including but not limited to the following: a. Operative reports. b. Occupational, physical and speech therapy reports. c. Durable Medical Equipment (DME) serial number, cost and warranty data. d. Manufacturer's tracking data for implants. e. Waivers and demonstration specific requirements.	Yes	Yes			Section 9.1.3.1.2, Requirement # CR2.01
CR2.02	Receive claim attachments associated with electronic media or paper claims and auto-archives or forwards to appropriate operational area for processing.	Yes	Yes			Section 9.1.3.1.2, Requirement # CR2.02
CR2.03	Accept Medicare crossover claims for Medicare coinsurance and deductible or Medicare Explanation of Benefits (EOB) claims attachments.	Yes	Yes			Section 9.1.3.1.2, Requirement # CR2.03
CR2.03.01	Provide the capability to accept and process Medicare and other carrier crossovers electronically at the claim and line level.	Yes	Yes			Section 9.1.3.1.2, Requirement # CR2.03.01
CR2.04	Accept prior authorization attachments such as: a. Surgical and or anesthesia reports. b. Medical records. c. X-rays and or images. d. Orthodontic study models. e. LTC prior authorizations. f. Other items required by IME.	Yes	Yes			Section 9.1.3.1.2, Requirement # CR2.04
CR2.05	Accept other claim related inputs to the MMIS including but not limited to the following: a. Sterilization, abortion and hysterectomy consent forms. b. Manual or automated medical expenditure transactions which have been processed outside of the MMIS (e.g., spenddown). c. Non claim-specific financial transactions such as fraud and abuse settlements, insurance recoveries and cash receipts. d. Electronic cost reports. e. Disproportionate share reports. f. Any other inputs required for services under the state's approved plan.	Yes	Yes			Section 9.1.3.1.2, Requirement # CR2.05
CR2.05.01	Accept and process all standard data that can be submitted on any claim or claim type.	Yes	Yes			Section 9.1.3.1.2, Requirement # CR2.05.01

CR	Claims Receipt Requirements - MMIS	A	B	C	D	E
CR3.01	Provide system support for the sending and receiving of electronic claims transactions containing valid codes required by 45 CFR Parts 160 and 162 as follows: a. Retail pharmacy drug claims (NCPDP) in POS only. b. Dental health care claims 12N 837D including voids and replacements. c. Professional health care claims 12N 837P including voids and replacements. d. Institutional health care claims 12N 837I including voids and replacement. e. Coordination of benefits data when applicable. f. Future claims attachments required under HIPAA.	Yes	No	SM	500	Section 9.1.3.1.2, Requirement # CR3.01
CR3.01.01	Receive standardized managed care encounters in 837 formats.	Yes	Yes			Section 9.1.3.1.2, Requirement # CR3.01.01
CR3.02	Provide secure HIPAA compliant software and documentation for use by providers to submit electronic claims.	Yes	Yes			Section 9.1.3.1.2, Requirement # CR3.02
CR3.03	Process batch 837 claims rejecting only individual bad claims and accepting all others.	Yes	Yes			Section 9.1.3.1.2, Requirement # CR3.03
CR3.04	Employ an electronic tracking mechanism to locate archived source documents or to purge source documents in accordance with HIPAA security provisions.	Yes	Yes			Section 9.1.3.1.2, Requirement # CR3.04
CR3.SS.01	Provide capability to perform front-end edits to claims prior to acceptance with IME-defined edits that include but are not limited to the following: a. Checking provider enrollment. b. Member enrollment. c. Revenue codes. d. Prior authorization number. e. Procedure codes. f. Diagnosis codes. g. Send rejection notification to the provider if the claim fails any of these edits and create a log of all rejected claims.	Yes	Yes			Section 9.1.3.1.2, Requirement # CR3.SS.01
CR3.SS.02	Provide capability to ensure that all electronic claims submitters are enrolled within the system and every provider for whom claims are submitted is registered as having an agreement with the submitter.	Yes	Yes			Section 9.1.3.1.2, Requirement # CR3.SS.02
CR3.SS.03	Provide the capability to track and document all changes to system edits.	Yes	Yes			Section 9.1.3.1.2, Requirement # CR3.SS.03
CR3.SS.04	Provide the capability to produce a claim in hardcopy and electronic format.	Yes	No	SM	300	Section 9.1.3.1.2, Requirement # CR3.SS.04
CR.SS.01	Provide an Enterprise Application Integration (EAI) translator and EDI integrated mapping software that: a. Offers flexible mapping functionality supporting all required formats and transactions. b. Allow for both structure and information to be extracted directly from database tables. c. Provide the ability to assemble, validate, encrypt and transport batches of data to and from providers and other interface partners. d. Accept, code, decode and transmit all mandated HIPAA healthcare transactions. e. Provide support for automatically re-submitting the transaction in the event that it encounters an error. IME will define the number of attempts that the system will process before the transaction is considered failed. f. Capture any errors that result during transmission, store the information and notify the sender that the transaction failed. g. Analyze and reject improperly formatted HIPAA healthcare transactions. h. Allow for the quick implementation of all new transactions.	Yes	Yes			Section 9.1.3.1.2, Requirement # CR.SS.01

CR	Claims Receipt Requirements - MMIS	A	B	C	D	E
CR.SS.02	Provide capability to produce custom EDI reports regarding: a. Transactions submitted by transaction type. b. Transactions received by transaction type. c. Cumulative reports over time to support forecasting.	Yes	Yes			Section 9.1.3.1.2, Requirement # CR3.SS.02
CR.SS.03	Accept and use the state targeted medical care paper billing form for non-electronic claims.	Yes	No	SM	500	Section 9.1.3.1.2, Requirement # CR3.SS.03
CR.SS.04	Assign a unique transaction control number to each transaction and control all transactions throughout the processing cycle. Assign the transaction control number of the claim to all associated attachments such as consent forms, documentation showing medical necessity, claim adjustments and prior authorization requests in a timely manner.	Yes	Yes			Section 9.1.3.1.2, Requirement # CR3.SS.04

As shown in Figure 9.1.3.1-1, Team Noridian has reviewed and analyzed all of the requirements in the related section of the RFP, and provided an overall summary of how our solution meets the requirements based on existing capability and required modification, as well as the total number of DDI hours needed to develop those capabilities not currently existing in the system.

Column	Column Description	Column Summary
Column A	Team Noridian agrees to meet the requirements as stated.	100%
Column B	Team Noridian's existing capability in eCAMS solution meets the requirements.	93%
Column C	Team Noridian will modify the eCAMS solution to meets the requirements.	7%
Column D	Team Noridian's effort to modify the eCAMS solution to meet the requirements.	2300 Effort Hours

Figure 9.1.3.1-1. Demonstrated Compliance of Team Noridian's Solution to the RFP Requirements. Our solution will meet all of the RFP requirements by either using existing system capability or configuring and modifying the eCAMS system.

9.1.3.1.2 Approach to Addressing the Claims Receipt Requirements

The eCAMS claims receipt business process area provides a robust, comprehensive, and configurable solution to accept, track, and retrieve health care claims and other EDI transactions and related attachments. Team Noridian's solution is compliant with established HIPAA standards and supports X12 versions 4010 and 5010. This solution provides appropriate feedback to the provider communities on the status of their submitted electronic data interchange (EDI) batches and direct data entry (DDE) claims both through EDI transaction responses (TA1, 997, 999, and 835) and through eCAMS online screens.

Overview of Claims Receipt

Figure 9.1.3.1-2 shows the business architecture of eCAMS claims receipt business process area and its interaction with other business process area in eCAMS. The claims receipt business process area consists of the following sub-process areas:

- Electronic claims receipt
- Non-electronic claims receipt
- Attachment receipt
- DDE claims receipt

As illustrated in Figure 9.1.3.1-2, this business process area interacts with various other eCAMS business process areas while accepting and loading the claims in eCAMS.

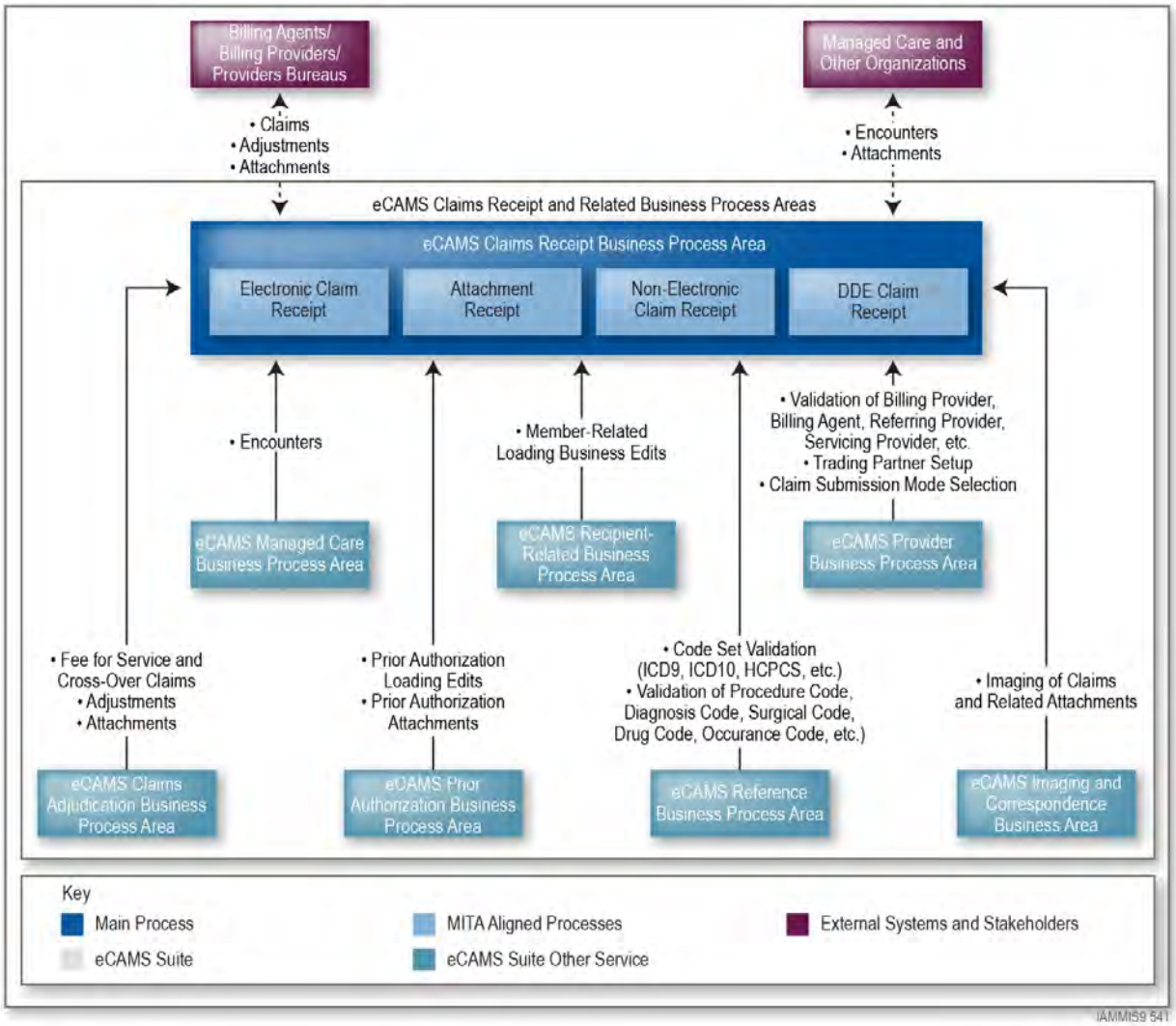

Figure 9.1.3.1-2. Claims Receipt Business Architecture. eCAMS provides the capability to receive and process all types of claim transactions.

Figure 9.1.3.1-3 displays a conceptual overview of Team Noridian's solution with respect to claims receipt. It consists of the following business process areas.

- Manage Trading Partner
- EDI Gateway
- EDI Services
- DDE
- EDI File Upload
- Imaging and Correspondence

Manage Trading Partner. The manage trading partner component handles the trading partner registration and setup for all submitters of HIPAA EDI transactions. Team Noridian presently supports Iowa providers and their trading partners' registration and testing through use of our Total OnBoarding (TOB) trading partner registration and testing management solution. Continuing the use of TOB for the MMIS and MMIS Operations contract builds on the flexibility and agility of our new MMIS while creating a continuity of experience for EDI providers and trading partners. TOB provides a user-friendly,

Web-based interface that supports ease of registration and testing of transaction while producing reporting that is easy to interpret.

On initial registration, all submitters are registered in test mode. This enables the submitters to test their EDI transactions. TOB manages the receipt and validation of all registration paperwork and builds the test account. Test transactions submitted by trading partners are edited and transaction disposition reporting is generated to convey errors that would cause a file to be rejected. Trading partners continue to submit test transactions and are able to review their reports through TOB's self-service interface.

After successful testing, the submitters are certified for production mode. After receiving this certification, the submitters may submit claims and other HIPAA transactions to the production IME environment. Registration information gathered through TOB will interface with the EDI Gateway and Edifecs translation products to minimize transition effort and simplify submission for trading partners. In addition, the production manage trading partner components validate all received electronic files to ensure that the files are submitted by registered trading partners.

Figure 9.1.3.1-3 depicts the conceptual architecture supporting the collection of EDI transactions.

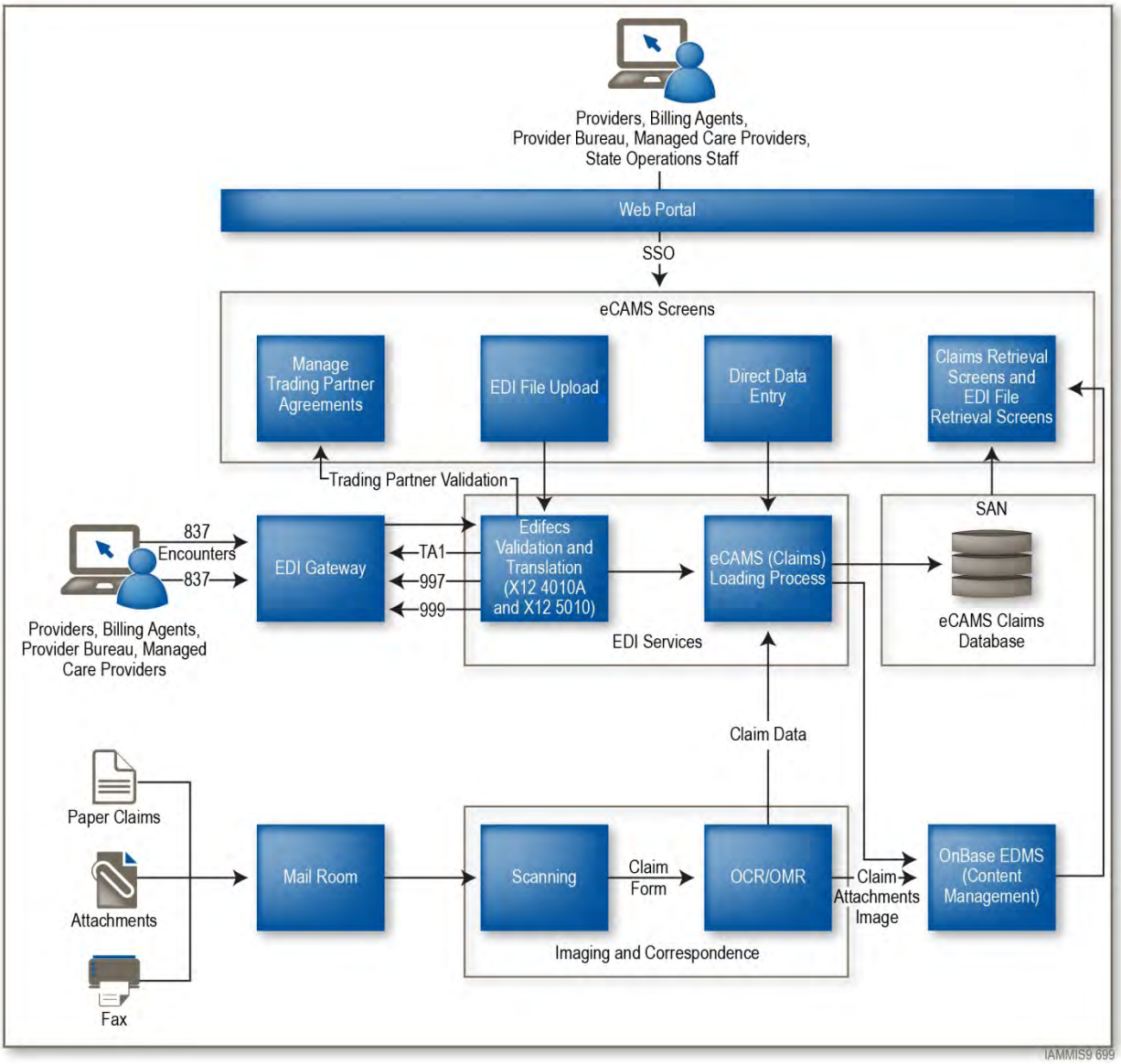

Figure 9.1.3.1-3. Claims Receipt Conceptual Architecture. The eCAMS Claims Receipt solution is robust, highly scalable, and based on a service-oriented model using distributed systems architecture.

Team Noridian's solution aligns with the MITA architecture. The eCAMS Claims Receipt business process area is under the Operations Management business process of the MITA business architecture.

EDI Gateway. The EDI Gateway is a secure FTP site where providers can submit electronic claims and adjustments. The EDI Gateway handles receipt of all EDI HIPAA batch transactions into MMIS. Following is the list of EDI formats in which claims and adjustments are accepted in eCAMS:

- 837 Institutional 4010A and 5010 (fee for service, encounters, crossover)
- 837 Professional 4010A and 5010 (fee for service, encounters, crossover)
- 837 Dental 4010A and 5010 (fee for service, encounters, crossover)

On successful trading partner registration, each provider will be granted access to EDI Gateway. Submitted claim files are transferred from the secure FTP to an internal file server. Acknowledgment transactions such as the TA1 and the 997 and 999 will be accessible to providers in the EDI Gateway for

their submitted inbound transactions. The EDI Gateway also serves as a place for providers to download HIPAA EDI outbound transactions such as 835, 277, and 277U.

EDI Services. This eCAMS business process area is responsible for loading all HIPAA EDI batch files. This consists of two business process areas and associated system components:

- **Edifecs Validation and Translation.** This component is used for validating the electronic claims and EDI transactions for X12 syntactical and HIPAA implementation-specific rules. Team Noridian's solution uses Edifecs for validation. After the inbound file is pushed to the internal file server from the EDI Gateway, the Edifecs validation process kicks off to validate the file against the Strategic National Implementation Process (SNIP) Type 1 to 7. Acknowledgment transactions such as TA1 and the 997 and 999 are created at the end of validation and pushed to the EDI Gateway. eCAMS also creates proprietary acknowledgment files that render HIPAA acknowledgments in a user readable form to assist operations personnel during their provider calls. After successful validation, Edifecs Translation converts the HIPAA file to proprietary Intermediate Record Layout (IRL) format. Use of COTS products such as Edifecs helps Department to leverage the advantages of proven solutions in providing effective services to the provider community.
- **eCAMS (Claims) Loading Process.** The IRL file is picked up by the eCAMS Loading Process. This process acts as a centralized service to load all media types of claims, adjustments, and voids into MMIS. During this process, claims, adjustments, and voids are subjected to a list of business rules called as loading business edits. The list of loading business edits is easily configurable. The eCAMS Loading Process uses distributed systems architecture, and the throughput can be throttled per Department's SLMs. This process also can be scheduled in accordance with the claims adjudication cycles and traffic in MMIS. This process links claim files with the associated attachments within Department-specified SLMs. All EDI batch files are stored in SAN and archived in eCAMS-Content Management (CM) for a period that Department specifies. This process also has recovery mechanisms to identify and reload claims that failed in the loading process.

Direct Data Entry. eCAMS provides a variety of options to enter all types of claims into the new MMIS. One such option is the online DDE process using the Claims DDE screen. Providers, billing agents, and clearinghouses can key in claims data using online screens. Data is edited for validity as it is entered. Error messages are returned to the user when error conditions are encountered thereby giving the user the opportunity to correct the error at the point of input. This prevents the acceptance of incorrect data into the system and reduces the need for providers to return to a previous screen to make corrections. All DDE entries are converted to IRL files and sent to the EDI Services – eCAMS Loading Process that loads the claim into MMIS.

EDI File Upload. Providers can also submit electronic claim batch files through eCAMS online screens. This is accomplished by uploading a HIPAA batch file through the EDI File Upload screen, as shown in Figure 9.1.3.1-4. During this process, eCAMS uploads the HIPAA file to the internal file server from where EDI Services – Edifecs Validation and Translation kicks off. On successful file upload providers can retrieve their acknowledgments (TA1, 997, 999) using the EDI File Retrieval screen. This screen is also used to retrieve EDI files that are stored internally in the EDI File Storage in SAN.

Imaging and Correspondence. Team Noridian's solution accepts paper claims from Medicaid providers. eCAMS accepts the following paper claim formats:

- Institutional (UB-92, UB-04, CMS 1450 [UB-92])
- Professional (CMS 1500)
- Dental (American Dental Association [ADA] 1994, 2000, and/or 2004)

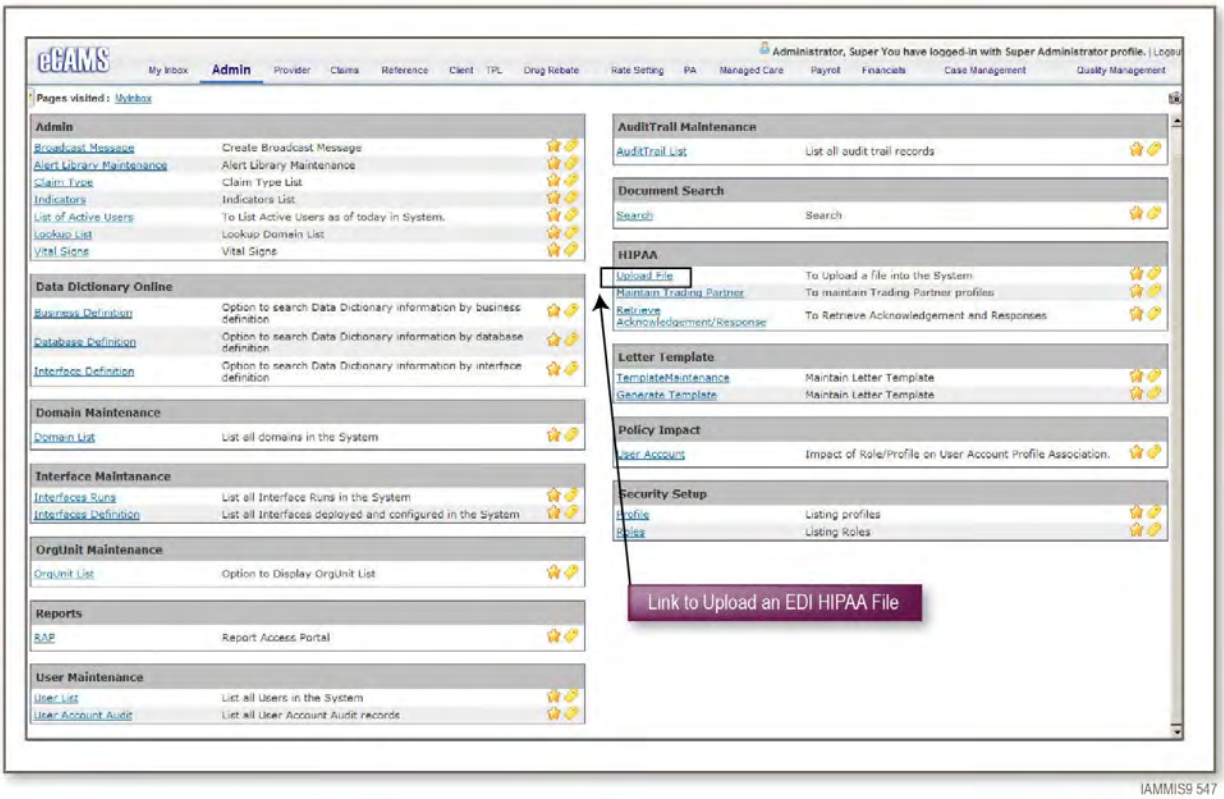

Figure 9.1.3.1-4. eCAMS Screen Showing Links to Upload an EDI HIPAA File. By providing a link to upload an EDI file in eCAMS, Team Noridian's solution provides better customer service to Department's providers.

The paper forms received in the mailroom and via fax are scanned and converted into an electronic data format. An overview of the paper claims and adjustments intake process volume is shown in Figure 9.1.3.1-5. Emdeon Transform classifies and batches the scanned images and processes the document through optical character recognition (OCR) to produce the claim text in an electronic format. OCR falling below the defined threshold is manually keyed. The electronic claim text file (which is in IRL format) is then sent to EDI Services. The image of the actual paper claim or any claim attachments is loaded in the OnBase repository. Authorized users can access claim attachments while viewing the claims in eCAMS screens through the Claims Retrieval screen. Team Noridian's solution accepts electronic and hard copy attachments. Emdeon Transform is used for converting the hard-copy claims and attachments to images, which are stored in the OnBase repository. Attachments are linked to the original claims using attachment control numbers and are retrieved through eCAMS screens. eCAMS allows for edit processing to consider the existence of attachments sent by the submitter as part of the business rule. When an edit determines that the service requires additional documentation and the claim does not indicate the documentation has been sent, the system will automatically send an online tickler to the billing provider's inbox notifying the provider of the need for additional information in order to process the claim. This notice will appear the next time the provider logs into eCAMS screens. The system will automatically generate letters for the non-electronic community of providers. The claim being adjudicated will be recycled each day, based on user configurable time periods established on the error table, until either it is able to identify that the attachment was received or the time period established for the claim recycle has been met. If the attachment is available, the claim is suspended for manual review of the attachment. If the attachment has not been received, the disposition of the claim will be set to deny.

The eCAMS claims receipt business process area is an industry proven solution, having been successfully implemented in multiple states. It will enable Department to handle high volumes of claims and related transactions.

Claims Metrics	IA MMIS Need	MI MMIS (CHAMPS)	WA MMIS (ProviderOne)	ME MMIS (MECMS)
FFS Claims	15.5 million	20 million	36 million	8 million
Encounters	826,740	36 million	10.6 million	3.6 million
DDE	N/A	360,000	3.9 million	N/A
Paper	1.8 million	300,000	4.6 million	3.1 million

Figure 9.1.3.1-5. Yearly Comparables – eCAMS Implementations – Claims Loading Volume. Team Noridian's solution is an industry-proven solution that can handle large volumes of claims and related transactions.

Benefit to Department

Team Noridian's approach to claims receipt presents the Department with significant benefits, such as those summarized in Figure 9.1.3.1-6.

Features of eCAMS Claims Receipt	Benefits to Department
EDI Gateway	Provides enhanced security of EDI files and PHI data
Edifecs Validation and Translation	Reduces the implementation effort through use of COTS and uses the advantages of the industry accepted solution Provides the ability to support multiple HIPAA versions (4010 and 5010)
EDI Services	Uses a service-oriented model and acts a centralized location for loading claims from various media Offers ease of maintenance Provides a component that is highly scalable because this service-oriented model uses distributed systems architecture
Claims Direct Data Entry	Offers ease of claim entry Reduces claim suspension by validating the claim entries as they are entered
Manage Trading Partner	Offers better provider outreach by enabling providers to test their HIPAA transactions in test mode Reduces probability of file rejection due to HIPAA validations in production
eCAMS Operations Dashboard	Provides real-time update on system performance Offers better production monitoring and alert generation
Imaging	Provides automation of paper claims, adjustments, and voids receipt Provides automatic linkage between attachments and their associated claims
eCAMS File Upload	Offers ease of claim file submission for low-volume/small business providers

Figure 9.1.3.1-6. Features and Benefits Table. Team Noridian's eCAMS Claims Receipt approach offers significant benefits to Department.

CR1.01

eCAMS accepts all types of claims, adjustments, and attachments. eCAMS is configurable to load the claims within established service level agreement by the Department. This is applicable to all types of claims: Paper, electronic and online Direct Date Entry (DDE). eCAMS stores all the information from the input as either processing or situational data element. Processing elements are used by the Department for adjudication of a claim. Situational elements (e.g., billing provider address) are information that may not be used by that Department for adjudication of claims. eCAMS stores the situational information and facilitates an online screen to view the situational information.

For paper based claims, Team Noridian will scan claims and attachments through the Emdeon Transform Suite that is in use in Iowa today. The claims will pass through OCR/ICR for data extraction. Attachments will be automatically tied to the claim they are submitted with. Team Noridian will scan all claims and attachments within 24 hours of receipt, minus holidays and weekends. As claims pass through the OCR/ICR process, a confidence threshold must be met for the data to be considered accurate. Any field that the system does not have the confidence threshold met will be presented to users for verification.

Users are able to accept what the system extracted, or change the value. After verification is complete, the extracted data from claims will be uploaded into eCAMS for processing. Extracted data along with claim images will also be sent at the same time to the OnBase system. Users will be able to view claims and attachments from the eCAMS claims screen by clicking a link that will launch the image(s) from OnBase allowing a seamless experience for the user.

Multiple control reports are in place which will trigger alerts to operations staff on any failures during loading. These reports will provide information about the nature of the failure and the count of business units affected due to the failure. These validations will ensure that the claims are loaded as per the service level agreement by the Department and appropriate information are provided to the Department in case of failure. These control reports are part of eCAMS implementation in Washington and Michigan.

CR1.02

Team Noridian has extensive experience in Washington and Michigan interfacing eCAMS with designated entities like providers, billing agents, POS systems, CMS feeds, and other business-to-business partners. We have created numerous interfaces in both our implementations. The use of an interface-based strategy allows Team Noridian the ability to implement these interfaces during the start-up and implementation phase. These interfaces are managed by the enterprise service bus (ESB) and orchestration engine, EXACT. The use of EXACT automates the execution of the interfaces based on the frequency with which they are required to be executed during operations. EXACT manages the execution of interface files sent by external systems to ensure that the interface is executed on time and successfully transmitted to the receiving system. It also controls the receipt of interfaces from systems external to eCAMS by monitoring for the presence of the inbound interface at the time it is expected. EXACT continues to monitor for the interface for some predetermined period of time, which can vary by interface. If the interface is received during the period, EXACT will transfer the interface file into eCAMS where it is loaded into the appropriate eCAMS business process area. If the interface is not generated by eCAMS or received by eCAMS within the allocated time period, the system will notify the system operations staff that there may be a problem with the interface. The system operations staff are able to view EXACT processing statistics through our dashboard, HealthBeat such as if an interface is successfully transferred from eCAMS or successfully received for loading to eCAMS.

Team Noridian will use its experience in the areas of interfaces in Washington and Michigan to integrate eCAMS with the designated entities as required by the Department.

CR1.02.01

All claims and encounters are assigned a unique transaction control number (TCN). TCNs are the single identifier to track and maintain claims. The TCN contains intelligence to identify the media of the claim (paper, EDI, DDE); invoice type information such as professional, institutional, and dental; the date it was received; and the batch number information if it was a paper claim.

eCAMS accepts claims attachments. These are linked to claims using an attachment control number. In the case of EDI transactions, the identifier present in the HIPAA file will be used to associate the attachment with the actual claim TCN. In the case of DDE, attachments can be uploaded in the eCAMS screens and will be linked to the claim TCN. After linking, the TCN can be used as a unique identifier to retrieve claims and their associated attachments in eCAMS EDMS. TCN is also used for linking adjustments and their associated claims (Parent TCN). Figure 9.1.3.1-7 displays the TCN for all claims.

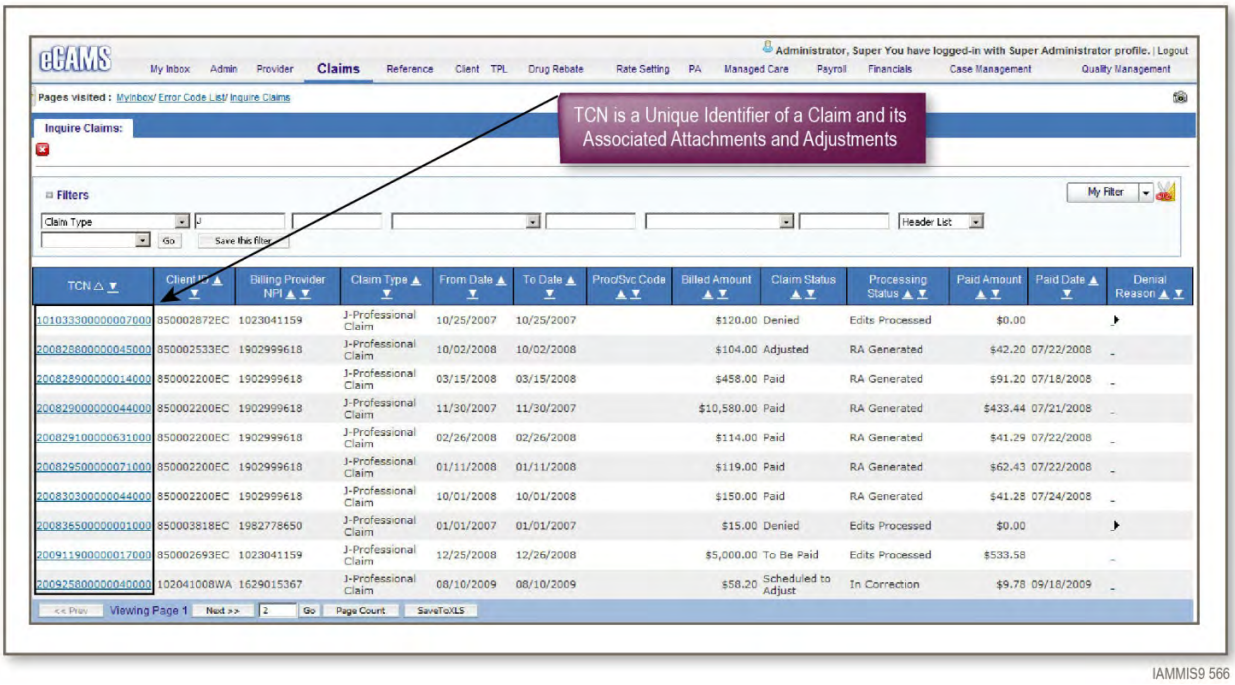

Figure 9.1.3.1-7. Claims Inquiry Screen Displaying the TCN. Assigning a TCN helps in better traceability of claims and their associated attachments within eCAMS.

CR1.03

Current institutional paper billing forms developed by the National Uniform Billing Committee (NUBC) (UB-04) will be scanned and converted to electronic image like any other claim form in eCAMS. Team Noridian uses the Emdeon Transform Suite Document Imaging and OCR/ICR to process images of handwritten, typewritten, or printed text from the UB-04, CMS 1500, and ADA claims forms into text files. This text file is fed into eCAMS, and the eCAMS EDI Services uploads this text file into the eCAMS claims table. Figure 9.1.3.1-8 identifies the overall flow of the paper claim, adjustments, and void forms and supporting attachment documents through the scanning and imaging process.

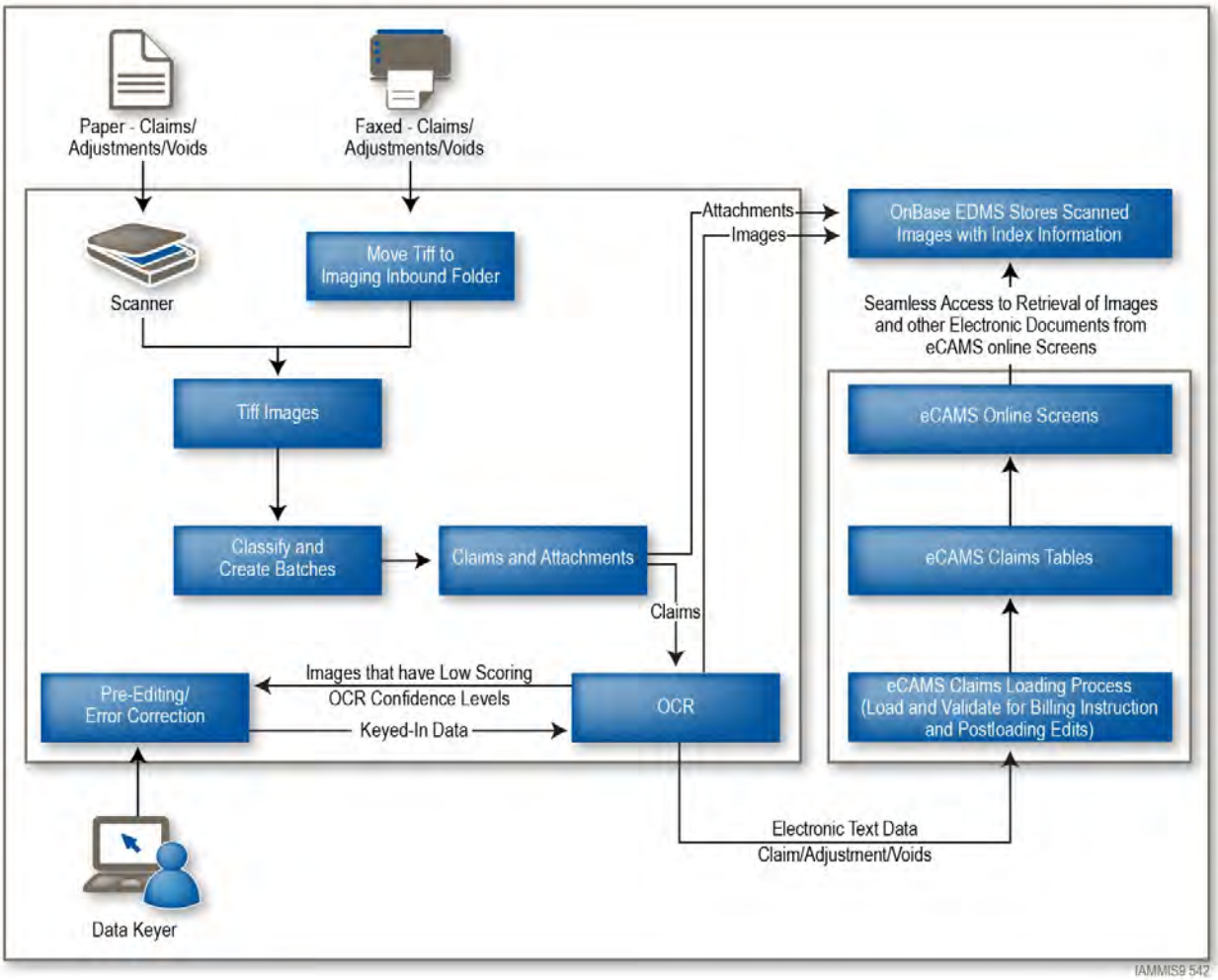

Figure 9.1.3.1-8. Scanning and Imaging Process. This non-electronic claim, adjustment, and attachment intake workflow uses automated processes with minimal manual intervention and focuses on quality and service level metrics.

CR1.04

eCAMS accepts the current non-institutional paper claim form developed by the National Uniform Claim Committee (NUCC) for non-electronic claims (CMS 1500) and has the necessary EDI infrastructure to support future formats. The loading process for CMS 1500 forms is illustrated in Figure 9.1.3.1-8 (presented in our response to CR1.03).

Team Noridian has been using the Emdeon Transform Suite, formerly known as the Dakota Imaging Transform Suite, for nearly 20 years of scanning and extracting data from paper claims. It is currently in use in Iowa Medicaid, Medicare Parts A and B, and Blue Cross/Blue Shield of North Dakota to process all institutional and non-institutional paper claims. In the Medicare implementation, we currently scan nearly 100,000 imaged pages a month, consisting of approximately 20,000 claims.

CR1.05

eCAMS accepts the current dental paper billing form developed by the ADA and has the necessary EDI infrastructure to support future formats. The loading process for ADA forms is illustrated in Figure 9.1.3.1-8 (presented in our response to CR1.03).

CR1.06

eCAMS contains a set of monitors and controls to track the claims and ensure proper balancing between the inbound and outbound HIPAA EDI transactions. The controls employ automated and manual interventions to ensure that none of the claims in a particular queue are dropped. For each of the claim statuses, there are checkpoints set up to monitor that the claim is being handed off appropriately to the next step.

eCAMS also reconciles all processed claims and encounters through a series of data control reports. The control reports reconcile the EDI transactions received to the corresponding loaded claim records. EDI file loading status, claim process status timelines, and claim type counts including encounters and batch control numbers are some of the types of information used to ensure that all submitted claims are processed. Scheduled reports are generated for each of the aforementioned categories. Each of these reports is stored over a specified period, distributed, or available on demand. This feature-rich component allows authorized users to have online access to reports and permits local printing of an entire report or any portion of the report.

Team Noridian's solution provides an online dashboard feature to facilitate access to the operations statistics including the claims processing trends, suspend queue workloads, and aged claim status. The operations reports also identify the aged claims that have been in the system for more than 15, 30 and 45 days. Team Noridian's operations team investigates the reason for the delays and takes appropriate action to resolve and release those claims. We will duly notify the Department for any action that requires the attention of Department. Figure 9.1.3.1-9 is a sample report for the loading process and highlights the various claim types and encounters being loaded. The report shows the invoice type and the status of each area. The status will serve as a checkpoint to reconcile the count of how many were entered into the system and the subsequent hand-off to the next step.

Every claim entering the system is assigned a TCN which is an intelligent identifier. The first two digits indicate the source of the claim such as EDI, paper etc. The scheduled reports group data by claim source to ensure that each claim is accounted for. For paper based claims, the data is reconciled with information collected within OnBase to ensure that all claims have been accounted for. Emdeon's Transform output files contain a list of each claim that was processed through the system. OnBase creates a verification report for each job that it processes. Within this verification report, OnBase keeps a count of all identified documents as well as noting any unidentified records. These values are able to be compared to eCAMS and Transform reports to ensure all claims are reconciled from scanning to upload in the MMIS.

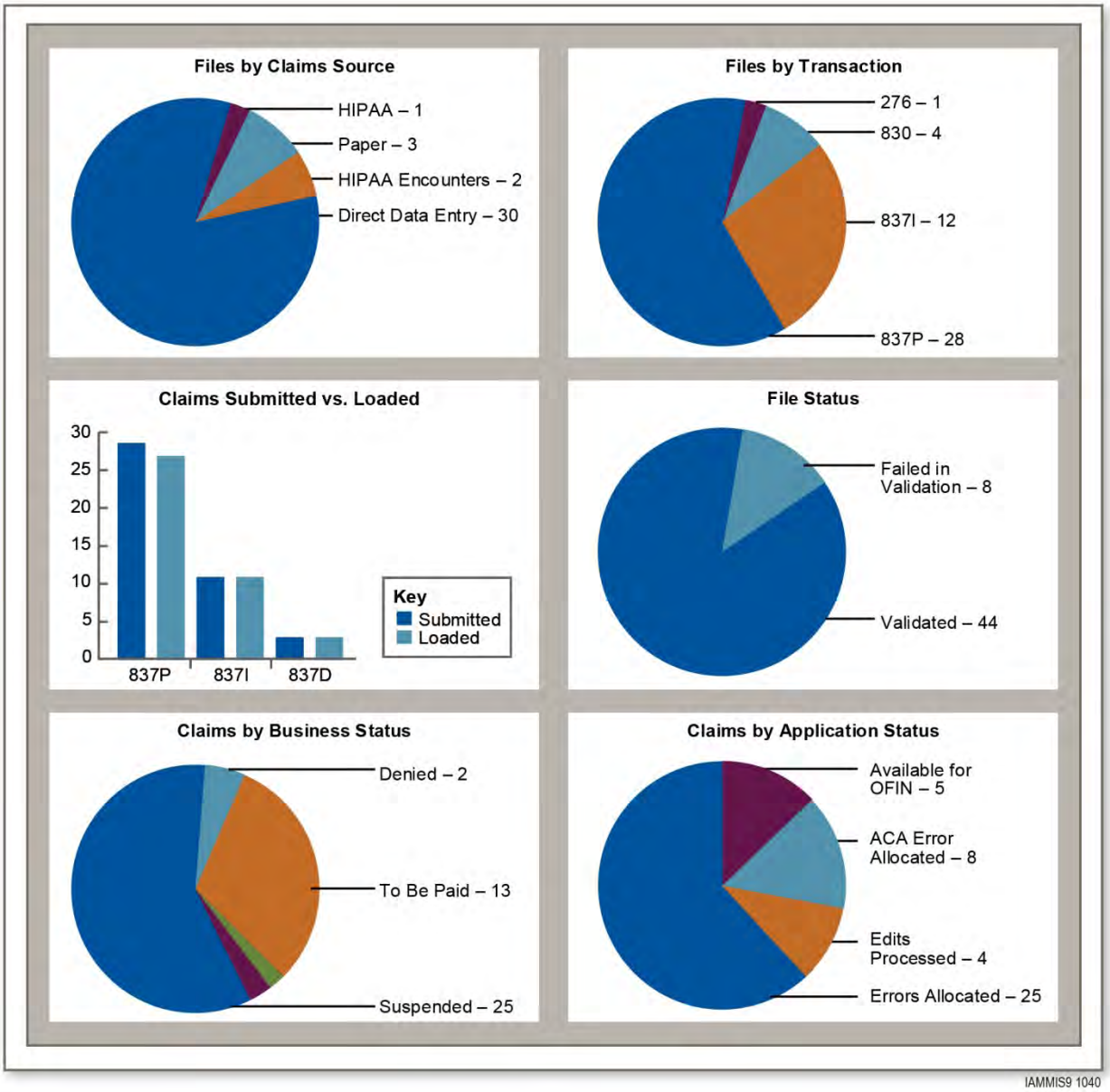

Figure 9.1.3.1-9. eCAMS Operations Dashboard. The eCAMS claims dashboard enables operations staff to be more efficient and to respond quickly to any issues/opportunities.

CR1.07

All claims in eCAMS will be associated with its claim source code (Paper, EDI, and DDE). This claim source code will help identify the input source of the claims. Input sources include EDI Batch, DDE, paper, and EDI File Upload. This source code is used in control reports to reconcile with the claim count from the subsequent processes and help perform input source-specific editing. This source code also provides an audit trail of the input of these claims and can help generate source-specific audit reports.

Figure 9.1.3.1-10 shows where the claim source is displayed.

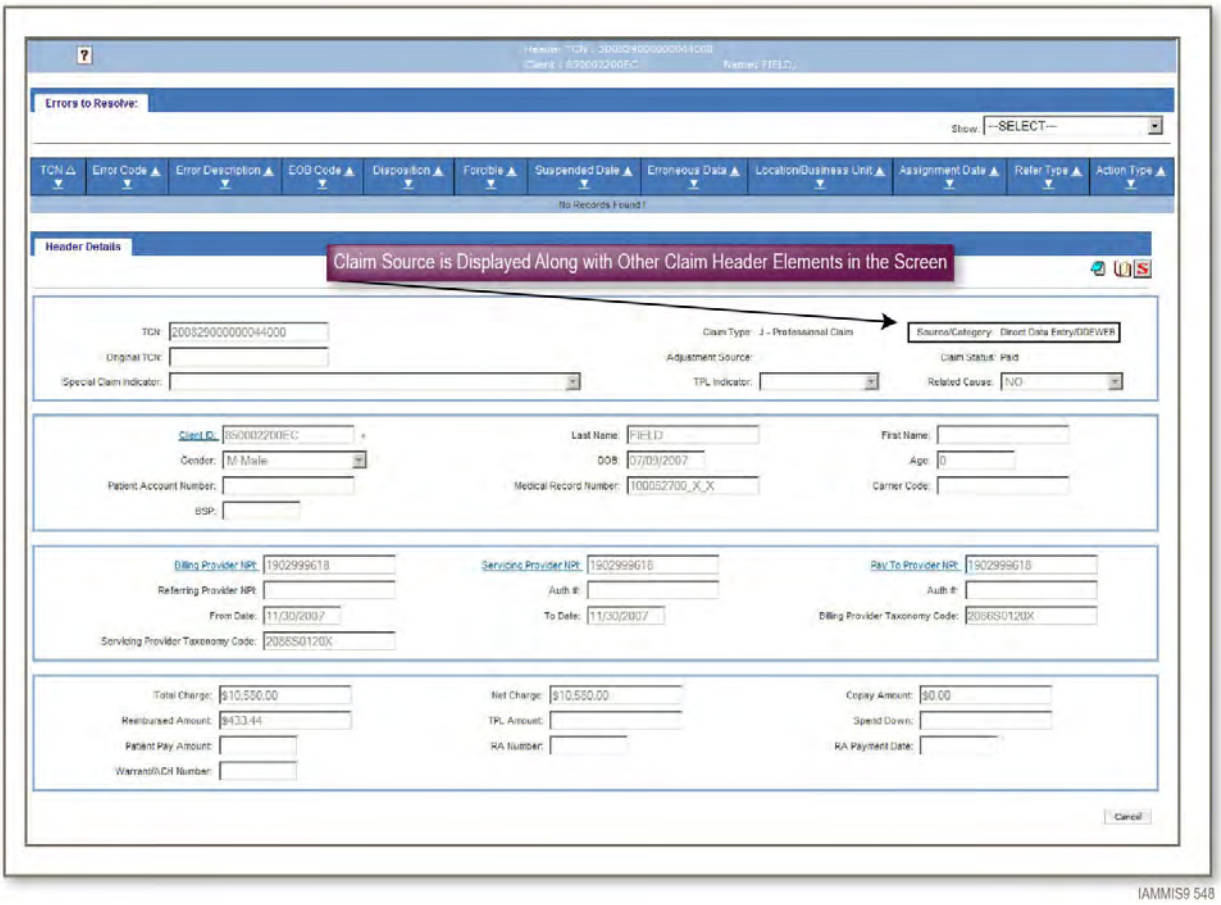

Figure 9.1.3.1-10. eCAMS Screens Displaying Claim Source. The eCAMS screens are designed based on principles of User Interface Design (UID); "claim input source" is identified as a key element that needs to be visible (the Visibility Principle of UID) to the user in the header section of claims screens to ensure claim source traceability.

CR1.08

Team Noridian's solution includes Emdeon Transform Suite, which orchestrates the optical character recognition (OCR), intelligent character recognition (ICR), and optimal mark recognition (OMR) capabilities for claims, adjustments, and voids. If OCR for a claim falls below the defined confidence level, the claim is manually pre-edited. This confidence level validation and editing can be performed on any claims field and includes provider ID, provider NPI, member ID, procedure codes, and diagnosis codes. After pre-editing, electronic text of the claim is created and sent to the EDI Services – eCAMS Loading Process, where the claim fields, subject to validation against loading business edits, are loaded into eCAMS.

CR1.09

Team Noridian's solution uses Emdeon Transform Suite, which is an industry proven product to produce electronic images of all hard-copy claims, adjustments, voids, and related documents. Appropriate control procedures are in place to check the image count against the count of forms received in the system. Emdeon Transform validates the electronic image against established quality standards in terms of clarity and accuracy. Any images failing to meet establish quality standards will be subject to manual intervention and correction. The Emdeon Suite with Emdeon Transform autocorrects skewed documents up to 20 degrees of skew and adjusts document resolution. Team Noridian sets document resolutions

depending on document type, and from experience, we have determined that 300 dpi works best for black and white images.

CR1.10

All hardcopy claims and all scanned images are stored within the system. All images are stamped with the date and time on their entry in the MMIS. Team Noridian's document imaging and workflow management solution batches all the hard-copy claims, adjustments, voids, and their associated attachments and assigns a unique control number. This ensures consistency and integrity of documents. These batches are scanned and the images are indexed and stored in OnBase.

CR1.11

Team Noridian's solution groups the input into multiple batches based on a set of predefined criteria. For example, all UB04 forms are batched together and sent to a separate workflow than that for CMS 1500 forms. Once the batches are identified, each form or attachment is logged into the automated batch control system by Emdeon Transform Suite. This is useful in forwarding the forms to appropriate workflows and, hence, improves traceability.

CR1.12

eCAMS has a comprehensive monitoring system, HealthBeat, which monitors all HIPAA transactions including claims entry. These claims go through various stages within MMIS before the final response generation. The data that the system monitors includes start and end time for every stage through which a claim passes, throughput at different times of the day, and the daily volume processed.

HealthBeat runs around the clock and provides a real-time view of all claims loading using various kinds of visual displays. These views help identify how the system is performing for various transactions with respect to the defined performance-related service level metrics.

Figures 9.1.3.1-11 and 9.1.3.1-12 illustrate claims loading volume and throughput, respectively.

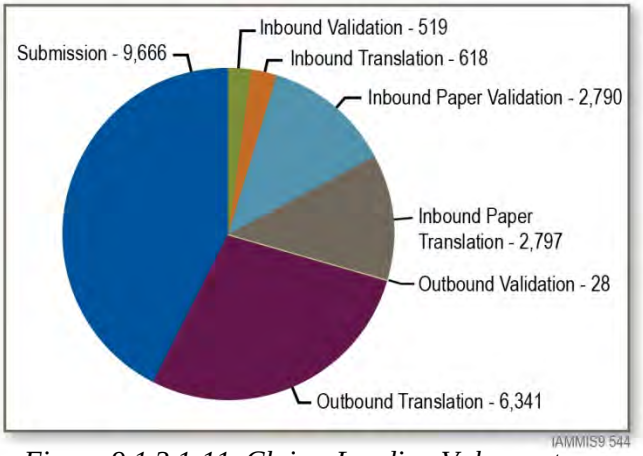

Figure 9.1.3.1-11. Claims Loading Volume at Various Stages. Claims loading volume at various phases will provide more insight on the expected load for the subsequent adjudication, payment cycle, and remittance advice (RA) processes.

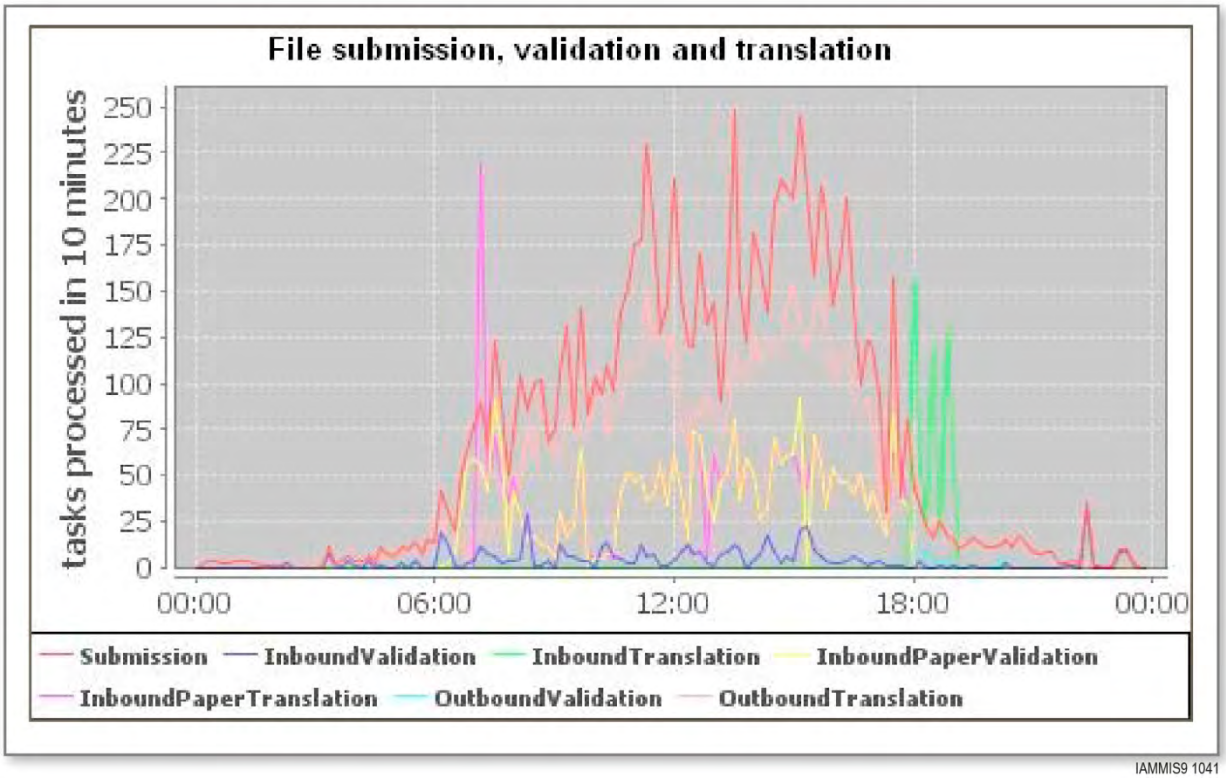

Figure 9.1.3.1-12. Claims Loading Throughput at Various Stages. Team Noridian's solution provides throughput for submission, validation, translation, and loading phases of the Claims Receipt business process area, which will enable operations personnel to easily identify bottlenecks in the end-to-end life cycle.

Our eCAMS solution has a performance dashboard where various statistics can be generated for performance and business-related purposes. Access to this dashboard will be given to authorized users to monitor the health of MMIS.

CR1.13

eCAMS allows users to establish trading partners in conformance with HIPAA standards. All submitters of EDI transactions including electronic claims will be given a unique Trading Partner Identifier (TP ID). Prior to allowing electronic claim submission capability, providers must submit test claims in accordance with HIPAA and State guidelines using their TP ID in the EDI test environment. Once the testing is completed and compliant with State implementation guidelines, the transaction mode of submission for that submitter will be marked for production submission.

Figure 9.1.3.1-13 identifies the provider trading partner profile list with "Mode of Submission" for each HIPAA EDI transaction including an 837. The TP ID is displayed under the column "Sender/Receiver Identifier."

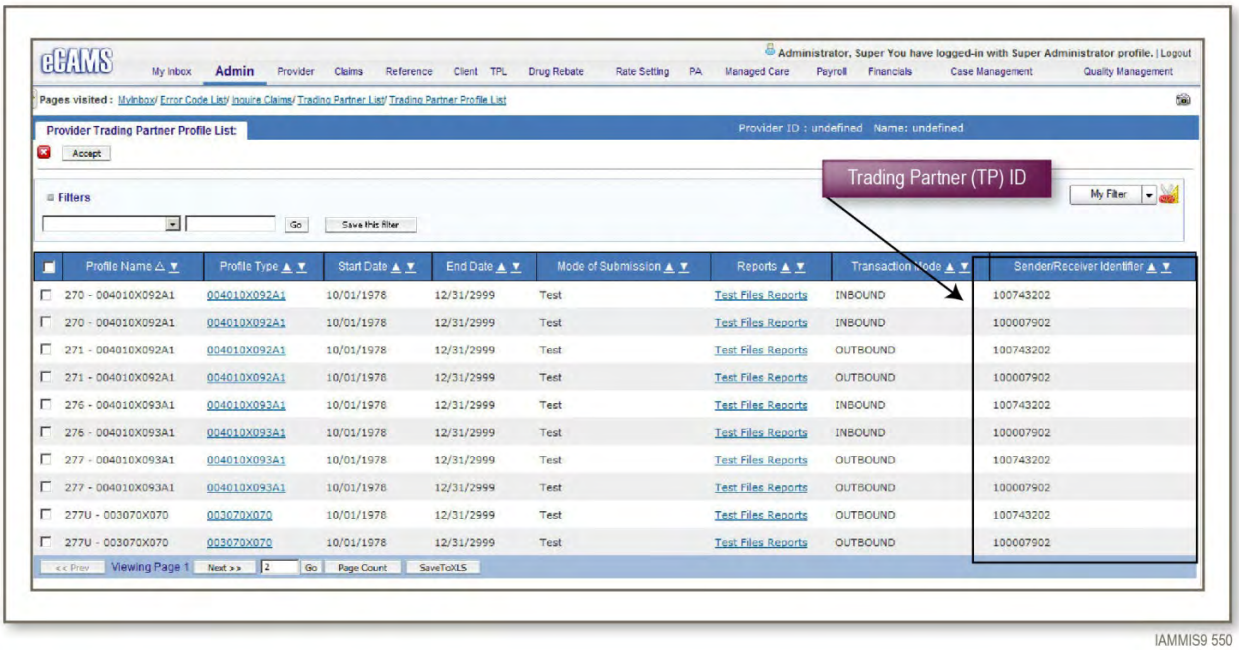

Figure 9.1.3.1-13. eCAMS Trading Partner Screen. The eCAMS Trading Partner screen provides better understanding of the trading partner process to operations/fiscal agent users and submitters.

CR1.14

All electronic media claims will have placeholders for attachments in accordance with HIPAA X12N 4010 and 5010 standards. Providers can use these placeholders to identify claims with attachments and pass the attachment control numbers in the electronic claims. eCAMS uses this attachment control number to link the claims with their associated attachments, which are submitted separately. Once an attachment is received, it is indexed with appropriate information, such as related claim number and PA number, and uploaded into OnBase EDMS. Online users have the flexibility to retrieve the attachment through online screens to perform their work functions. Figure 9.1.3.1-14 presents an eCAMS screen showing a sample claim and the link to its attachments.

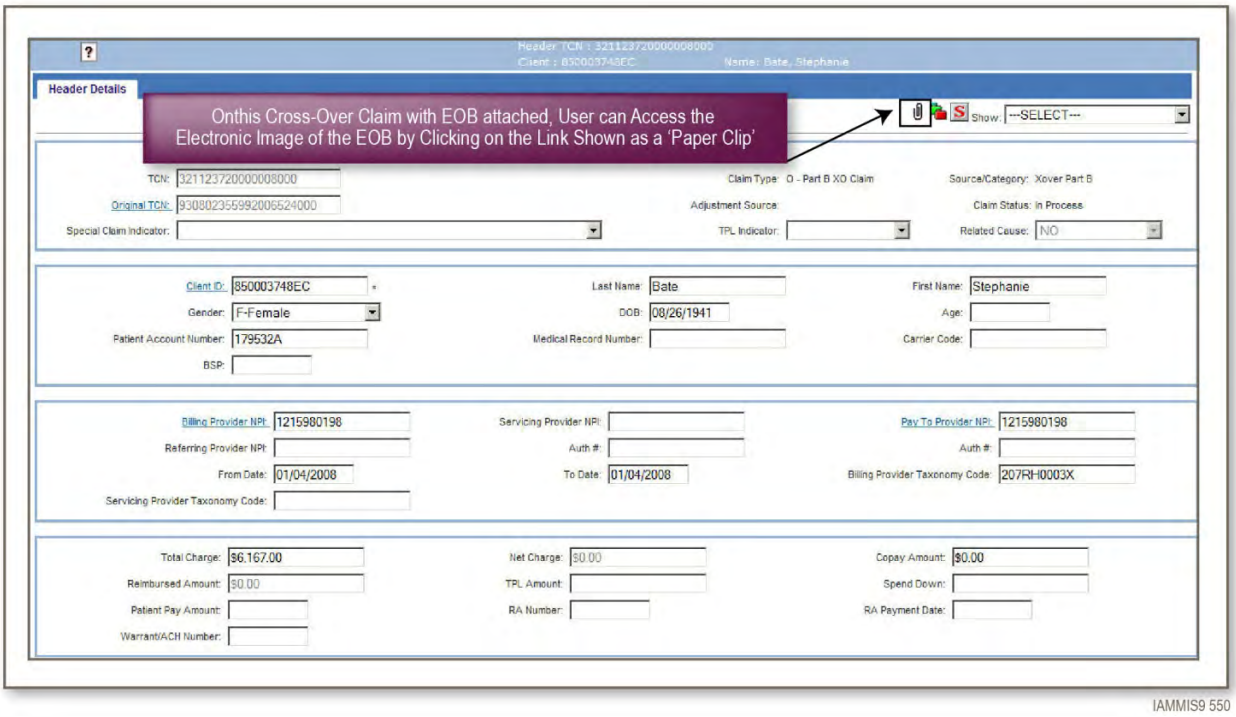

Figure 9.1.3.1-14. Claims Screen Showing a Link to an Attachment. Displaying the attachment along with claims data in the screens improves user friendliness and increases the productivity of operations and operations staff in adjudicating a claim.

CR1.14.01

Team Noridian's solution provides the ability to link electronic claim to all related images, attachments and adjustments.

- **Linkage between claim and associated paper claim image.** Team Noridian's solution uses the Emdeon Transform Suite for Document Imaging and Scanning. The Emdeon Transform suite produces an image of the actual claim and will be stored in OnBase EDMS. eCAMS links the paper claims image and the loaded claim using an internal control number. Department and providers can retrieve the image of the claim while viewing the claims in eCAMS claim retrieval screens. This is implemented in Washington's MMIS.
- **Linkage between claim and associated adjustments.** eCAMS has three attributes associated with each claim document – TCN, Parent TCN, and Original TCN. When a claim is submitted the first time (fresh claim), the claim is populated with all three attributes with the same value (e.g., T1). If a replacement (adjustment/void) is submitted, the TCN value would be T2, but the original and parent TCN values would remain T1. If another replacement is made for TCN T2, the TCN value would be T3. The original TCN value would be T1 and the Parent TCN value T2. Figure 9.1.3.1-15 show how eCAMS lets users get the original TCN from the inquiry list screen. These TCN's are used to link claims with their associated adjustments. This is implemented in both Washington and Michigan MMIS.

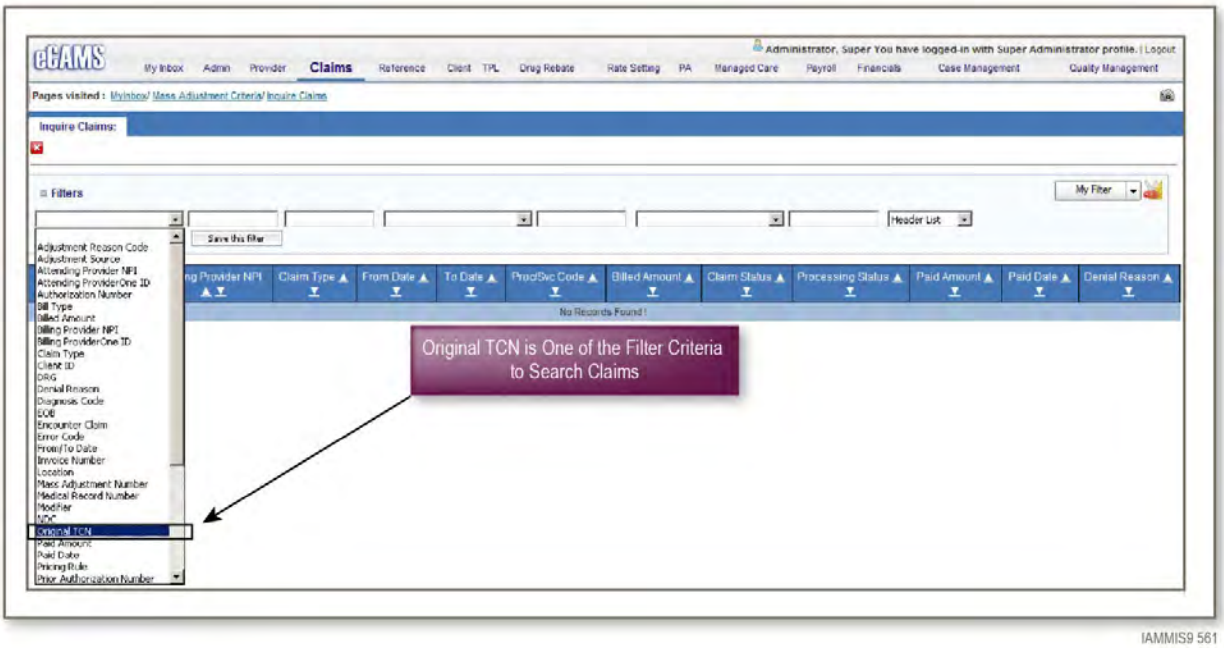

Figure 9.1.3.1-15. Claims Inquiry with Original TCN. This screen shows how to search a claim by using an original TCN.

- **Linkage between claims and attachments.** Team Noridian's solution accepts attachments electronically and via hard copy. Team Noridian's solution has a multitude of options to link attachments with their claims by using either TCN, attachment control number, or bar codes or key elements such as billing provider, subscriber, or dates of service in the attachment. Claims adjudication personnel can look at the attachments if needed using the eCAMS screens, which will display the image from OnBase EDMS. Team Noridian's workflow for attachment receipt is automated with minimal manual intervention. This is implemented in Washington MMIS.

CR1.14.02

As mentioned in response to CR1.14.01, claims and their associated attachments are linked through attachment control numbers along with other index information pertaining to the attachment. eCAMS loads the claims and attachment control numbers received as a part of the claim and then runs an asynchronous process to associate the attachments with the claims received. While users are entering DDE claims, they are provided with an option to upload attachments. Figure 9.1.3.1-16 is the confirmation message to users about submitting backup documentation. Figure 9.1.3.1-17 shows the types of attachments available in eCAMS. On selecting the attachments, eCAMS creates a cover letter with TCN, provider ID, and member ID and creates a bar code in the document. Providers can print the cover sheet in Figure 9.1.3.1-18 with the bar codes and submit their attachments in hard copy along with the cover sheet with bar code.

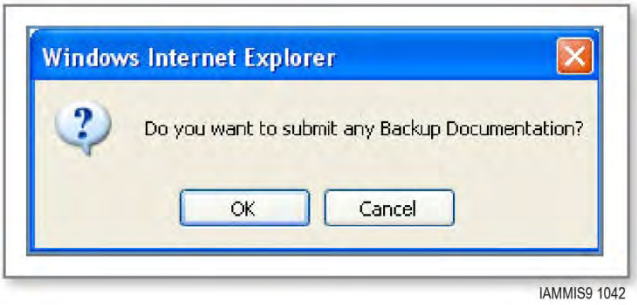

Figure 9.1.3.1-16. The eCAMS Screen Request for Backup Documentation. Team Noridian's solution provides the ability to support backup documentation during claims submission.

eCAMS adds more flexibility by providing an option to upload multiple attachments for a given claim and can link the attachment to the specific service line item in the claim. On receipt of attachments, eCAMS uses the bar code to link the attachment with the original claim.

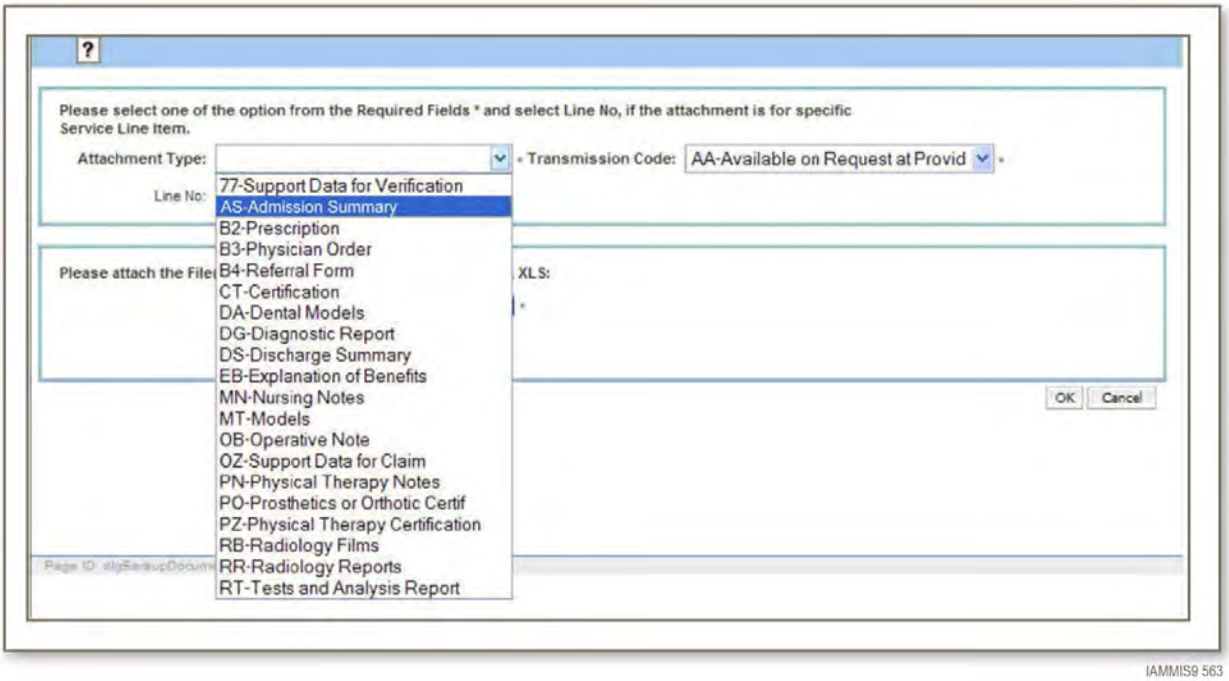

Figure 9.1.3.1-17. eCAMS Screen Showing Different Types of Attachments. The associated data structure provides flexibility in configuring attachments where attachment types may be added or deleted.

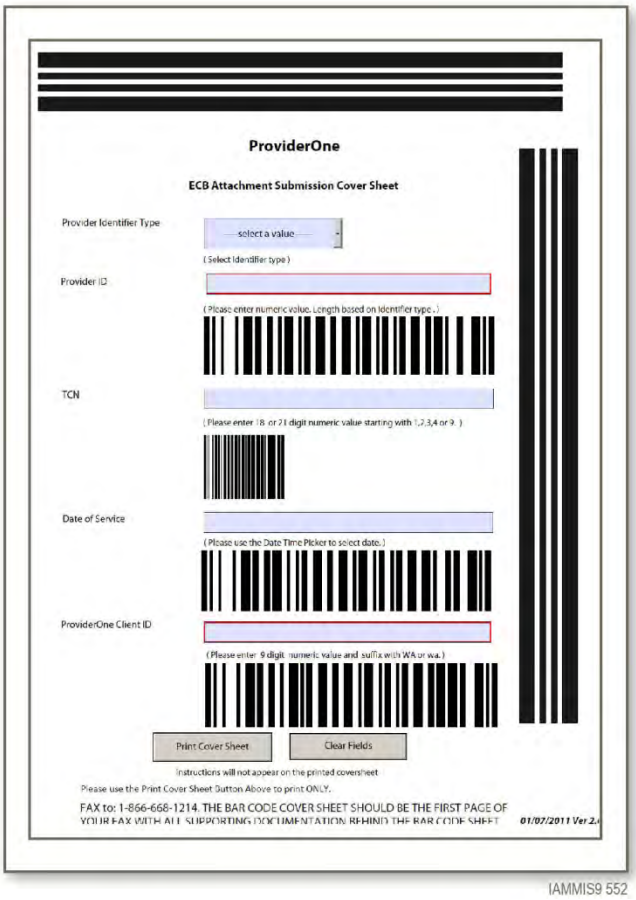

Figure 9.1.3.1-18. eCAMS Screen Showing Bar Code. eCAMS generates bar codes for several attributes on the claim to guarantee an accurate association.

Bar codes are used to automatically link the attachments with the claims on receipt of these attachments into MMIS. Team Noridian has successfully implemented the Bar Code functionality in Washington MMIS.

CR1.14.03

Team Noridian's solution accepts EDI transactions and loads attachments indicators in accordance with HIPAA X12N 4010A and 5010 standards. Providers can use these indicators to identify claims with attachments and pass the attachment control numbers in the electronic claims. The attachment control number is loaded along with other claim information as part of the eCAMS loading process. eCAMS uses this attachment control number to link the claims with their associated attachments, which are submitted separately. Once an attachment is received, it is indexed with appropriate information, such as related claim number and PA number, and uploaded into OnBase EDMS. Online users have the flexibility to retrieve the attachment through online screens to perform their work functions. Figure 9.1.3.1-19 presents an eCAMS screen showing a sample claim and the link to its attachments.

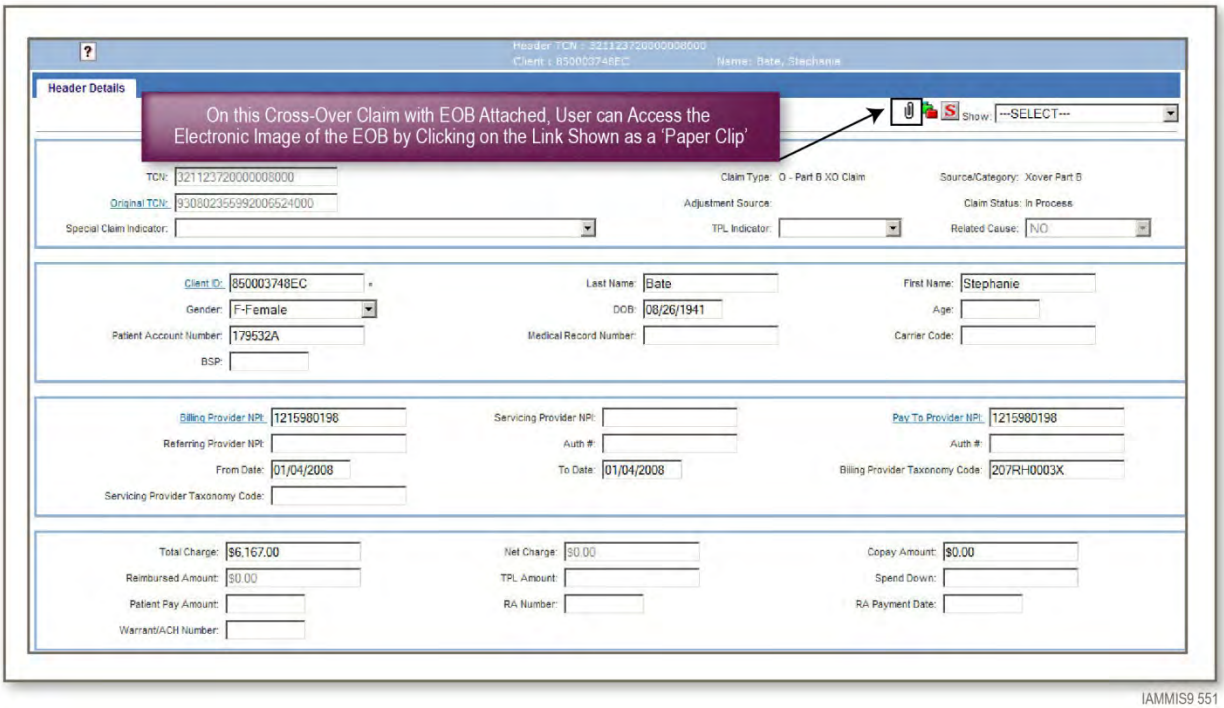

Figure 9.1.3.1-19. eCAMS Claims Screen Showing a Link to an Attachment. Displaying the attachment along with claims data in the screens improves user friendliness and increases the productivity of operations and fiscal agent personnel in adjudicating a claim.

CR1.16

Team Noridian will use TOB for trading partner registration and testing management for initial EDI transaction testing. Iowa providers and their trading partners are presently using TOB for registration today; access to trading partner data will simplify the transition process as trading partners will not be required to re-register or re-test at the outset of the operations phase for this contract. Trading partners have expressed their satisfaction with this tool as it has dramatically simplified the process of trading partner registration, improving what used to be a largely manual process taking up to 15 days to an automated process now taking three days or fewer. Providers or their trading partners are not allowed to submit production transactions until they have been fully tested and their transactions approved. Figure 9.1.3.1-20 shows that TOB maintains a record of how many HIPAA transactions have been tested for each NPI for which a trading partner has tested and been granted production status.

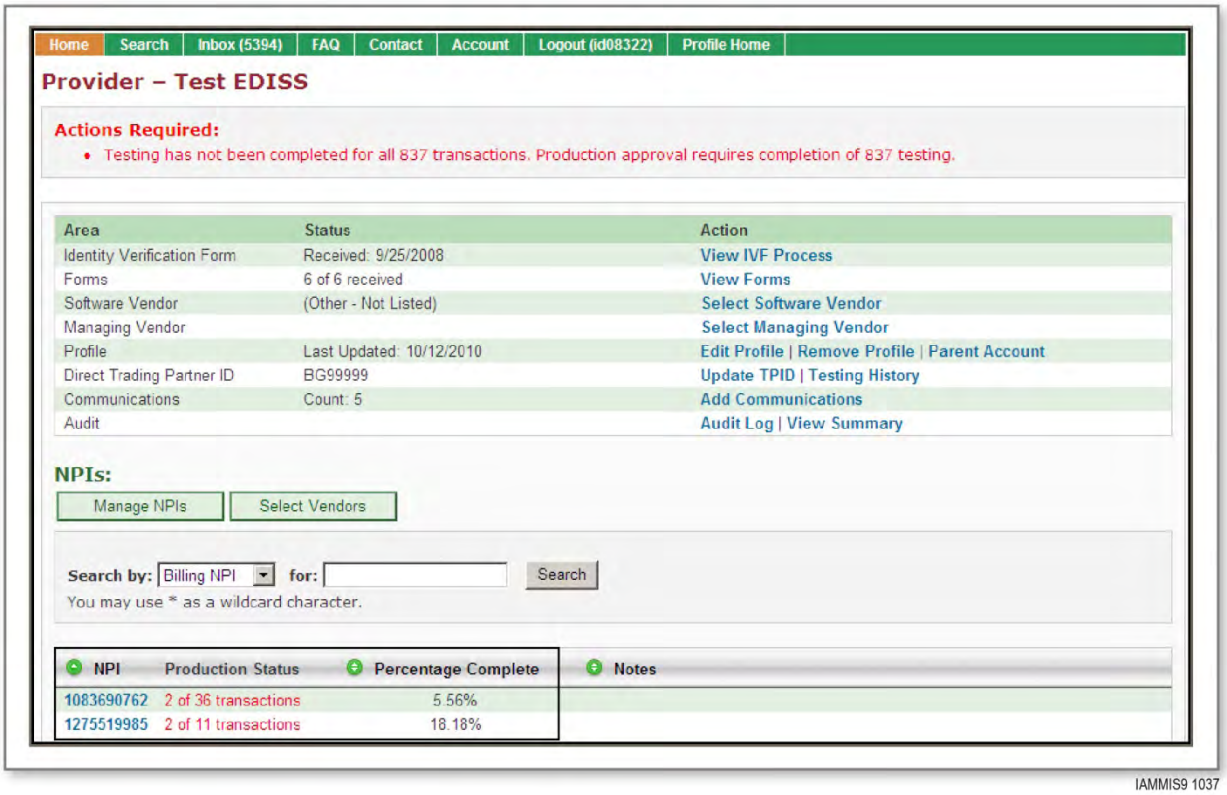

Figure 9.1.3.1-20. TOB Home Page. Trading partner testing status is tracked from the home page of TOB for each NPI that a trading partner manages.

Trading partners are presented easy to interpret reports through TOB that describe any errors present in their transactions. This allows trading partners to continue testing in a self-service fashion, allowing them to submit transactions as their schedule allows without dependence on availability of Team Noridian staff to review testing results. When a trading partner has submitted error free EDI transactions they are presented a test results page confirming the accuracy of the file. Figure 9.1.3.1-21 shows the results of a file that has passed all editing for all nine of the claims sent in that transaction.

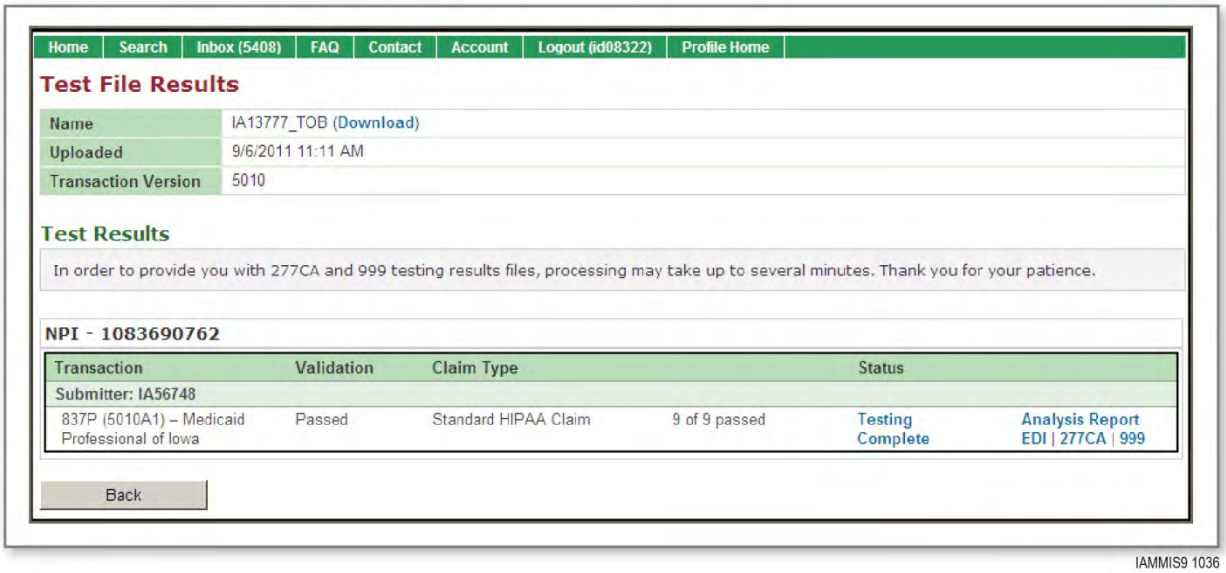

Figure 9.1.3.1-21. TOB Test Results Page. Trading partners are given status of their transactions within moments of submission of their test file.

Submission of test files will not impact production system data because this entire process is occurring in the test environment. After successful loading and generation of outbound transactions, the provider will be certified and the mode of claim submission will be modified to "Production." All providers, after successful certification, can submit their transactions through the EDI gateway or Web Portal in the new MMIS production system.

CR1.17

Each claim batch will be assigned a status on entry into eCAMS. If all the claims in the batch are loaded, then the status of the batch will be "successfully loaded." If the batch is not loaded or partially loaded, periodic monitors will help identify the batches with these statuses. These batches will be recovered after fixing or bypassing the error, and eCAMS has the capability to load only the claims that were not loaded during the previous time.

CR1.17.01

eCAMS produces acknowledgment transactions like TA1, 999, and 997 on receipt of inbound EDI transactions (837, 270, 276, 278). These acknowledgment transactions will be sent to the submitter of an EDI claim which will provide information on the number interchange segments (ISA-ISE), group segments (GS-GE) and transaction sets (ST-SE) that are successfully accepted and rejected. Reject reason codes along with the reason for rejection will be present for rejected transactions. EDI files that fail in SNIP Type 1 and/or SNIP Type 2 validation are rejected at the Transaction Set (TS) level rather than the Group Sender (GS) level. This ensures that, rather than rejecting all the claims within the GS, the number of claims rejected is kept to a minimum. Since the claim count is present within the TS, using the transaction acknowledgment status the submitters can verify the number of claims accepted and rejected by the Department against the total claims submitted by them.

CR1.17.02

eCAMS audits all the EDI transactions right from the point of receipt into eCAMS. This audit log provides valuable information like the submitter, transaction type, file name, file size, date and time the file was submitted, status of the transaction (like successfully validated, translated, loaded etc), number of business units (claims) present in the file and acknowledgment status. This log information is also used to

feed eCAMS HealthBeat which is and operations dashboard that will provide the metrics and status of EDI transactions processed by eCAMS.

CR1.18

eCAMS has the ability to do mass adjustment, resurrection, and recoupment of claims. Figure 9.1.3.1-22 displays the screen where the user can define criteria to initiate a mass adjustment batch request and then choose an action: adjustment, resurrection, or recoupment.

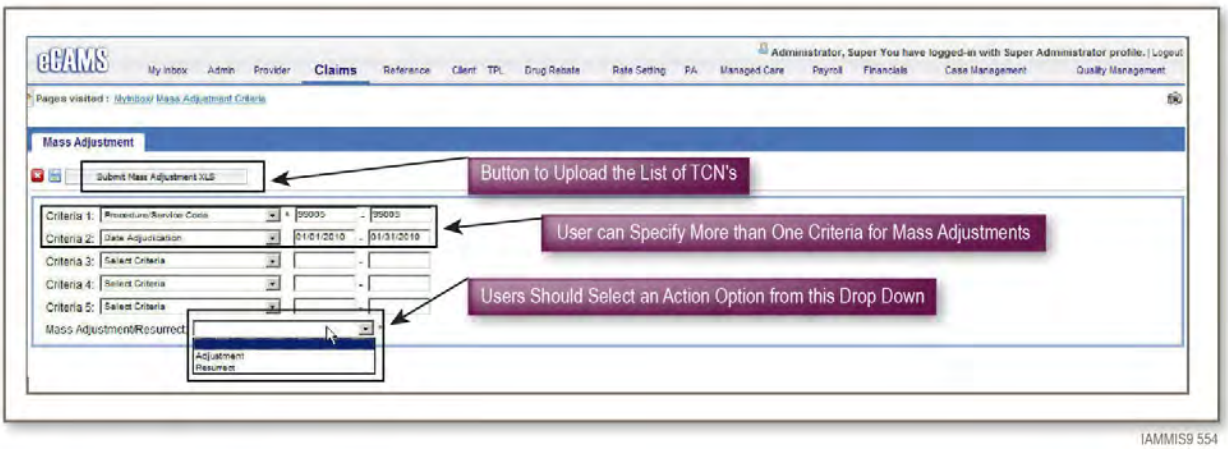

Figure 9.1.3.1-22. Mass Adjustment/Resurrection Initiation. eCAMS allows the users to upload a list of TCN's which increases efficiency.

eCAMS provides a capability for the user to review the impacted claims before applying the change. After the mass adjustment batch is initiated, the user can choose to hold the claims for review before finalizing the change. The user can then further approve or reject the adjustment at each claim level. Please refer to our response to Requirement CA1.19 above for details.

A user can also initiate a gross adjustment (i.e., pay out or recoupment) using the gross adjustment screens. Figure 9.1.3.1-23 depicts a similar screen in eCAMS with various options, such as payout, take back, and cash application.

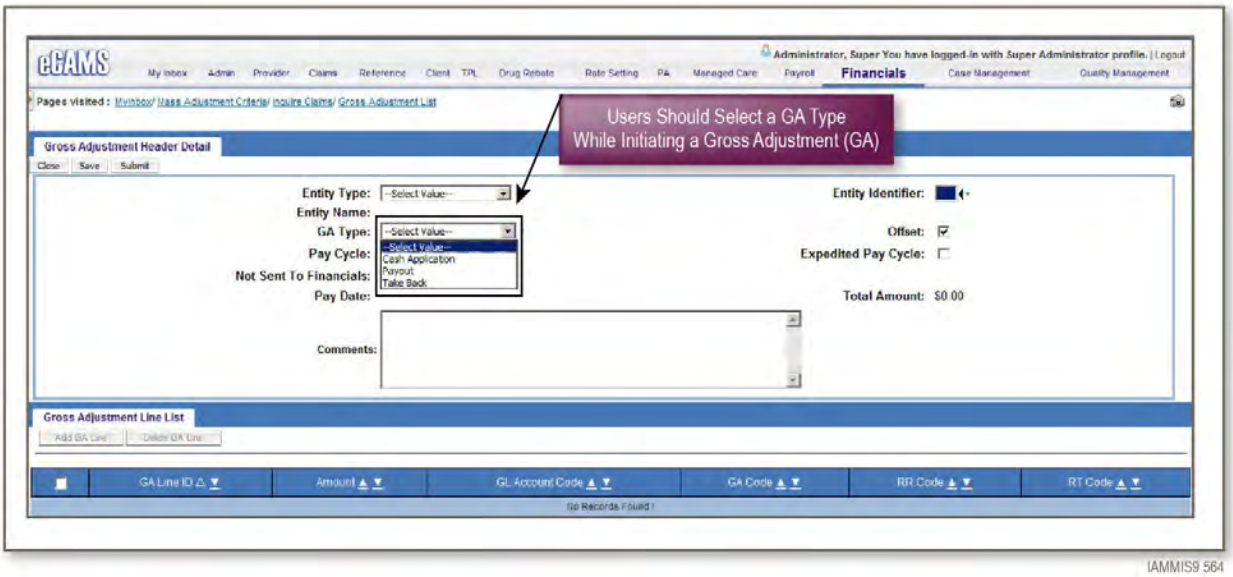

Figure 9.1.3.1-23. Gross Adjustment Initiation. eCAMS provides the Gross Adjustments functionality to enable easy processing of non-claim transactions.

CR1.SS.01

eCAMS claims business process area support accepting and loading POS claims from an external source, storing pharmacy claims, displaying them in the eCAMS claims screens and processing the POS claims in the weekly financial schedule. The eCAMS system will receive the pharmacy claims from the POS on a daily interface after the end of the day. These claims will be loaded into eCAMS using the interface loading routines. The design of the POS claims loading interface will be documented in the interface design document and approved by the Department. Typically the POS claim numbers are than the rest of the other claims types in the system. The claims loading process will be tuned to handle loading large volume of claims quickly and create detailed loading reports of warnings and errors during the process. The loaded claims are available in the eCAMS OLTP database and can be queried and view along with the rest of the claims in the eCAMS database. The Pharmacy claims will be accessible in a view only mode through the screens. Once the POS claims are loaded they will be processed through the account code assignment process and marked for the weekly financial payment processing. The claims will processed along with rest of the claims in the weekly payment cycle which will create the payment records and generate the RA and 837 documents for the individual providers.

CR1.SS.02

eCAMS online DDE screens can be used to enter claims online. This screen can be accessed by authorized Department users to directly enter the claim. Data is edited for validity as it is entered. Error messages are returned to the user when error conditions are encountered thereby giving the user the opportunity to correct the error at the point of input. This prevents the acceptance of incorrect data into the system and reduces the need for providers to return to a previous screen to make corrections. This functionality is successfully implemented in both Washington and Michigan MMIS systems.

CR1.SS.03

eCAMS records time, date and the user of all the user generated transactions through online screens. This audit log will improve the traceability for any activity performed through online screens. This model is successfully implemented in both Washington and Michigan MMIS.

CR1.SS.04

eCAMS provides the capability of front-end editing as the data is entered in DDE screens. This front end edit is applicable to key claim parameters like member ID, all types of providers (like billing provider, service provider, referring provider, pay-to provider), service dates, diagnosis codes and procedure codes. This front end editing feature is part of eCAMS implementation in both Washington and Michigan MMIS. Figure 9.1.3.1-24 shows an example of the system error pop-up when a provider enters invalid date in the "from service date" field on a claim.

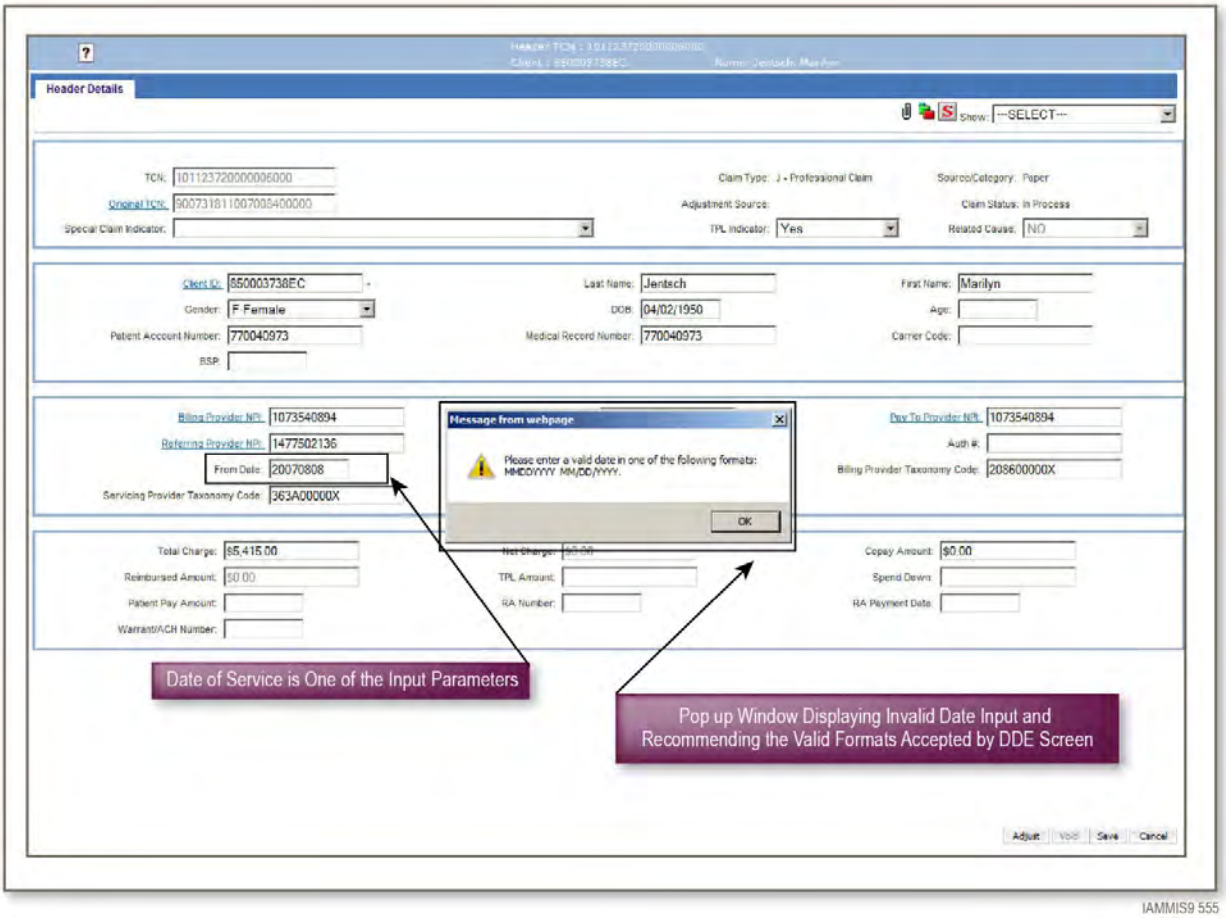

Figure 9.1.3.1-24. Invalid Date Data Type Editing. eCAMS applies an invalid date edit using an error pop-up, which is one of the upfront edits that save system time and resources.

CR1.SS.05

eCAMS accepts following types of electronic claims

- **Electronic Batch.** This is 837 X12 transaction batch transaction.
- **Individual Electronic.** This is 837 X12 transaction with a single individual claim in it.
- **Paper.** Paper claims received go through OCR/ICR processing with a flat file of the extracted data being electronically submitted to eCAMS for processing.
- **DDE.** Direct data entry claims using eCAMS online screens.

All these claims are part of eCAMS implementation in Washington and Michigan.

CR1.SS.06

eCAMS provides functionality for users to define exact duplicate and suspect(potential) duplicate edit criteria, and allows users to manage it online. This configurable definition of criteria support configuring current claim type vs. history claim type as a criterion that lets the user drive the adjudication system to execute duplicate claim edits across claim types. Because Professional, Institutional, and Pharmacy have dedicated claim type codes in eCAMS, duplicate logic that includes services is completely configurable. Figure 9.1.3.1-25 demonstrates how users can select the claim attributes to be included in the suspect duplicate criteria.

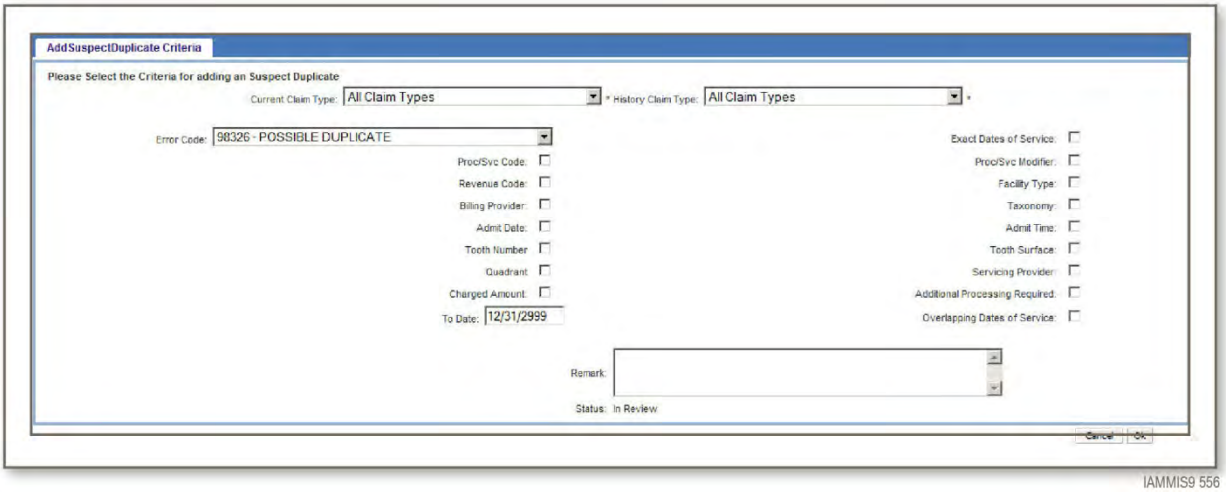

Figure 9.1.3.1-25. "Possible Duplicate" Criteria Setup. eCAMS possible duplicate criteria options (the check boxes) can be configured by a business user via online screens.

CR1.SS.07

A single claim document consists of a claim header with multiple claim lines. eCAMS accepts claims lines as per X12 implementation guide specifications. If a provider submits multiple lines in a claim, then all claim lines will be displayed in eCAMS online screen under a single claim to both IME authorized users and providers. This is applicable to HIPAA claims submitted through HIPAA transactions, DDE, and paper claims

CR1.SS.08

eCAMS processes claims using the continuous flow processing model, meaning that it constantly adjudicates claims and can define queue priorities. For example, the encounter claim processing can be set to a lower priority as compared with claims that are submitted through DDE. eCAMS can process all claims, including online claims, in near real-time and is governed by the queue priority. The eCAMS table-driven (Monitor_Server_X_batch table) process allows for the processing of claim/encounters in batches.

CR1.SS.09

eCAMS supports the functionality of submitting online DDE claims. Team Noridian will work with the Deparment to identify the list of required waivered services and will create a customized screen (with reduced data requirements) to support online claim submission of waivered services and other entities not covered by HIPAA.

CR1.SS.10

eCAMS captures and stores all of the following data elements (which are all the elements listed from “a” through “p” in the requirement) within the database. Most of these data elements are configured in the system or derived during certain processes.

- Provider Type (derived from Provider information)
- Speciality (derived from Provider information)
- Sub-speciality (derived from Provider information)
- Member age and or gender restrictions (derived from Member and Procedure Code)
- Prior authorization required (derived from Procedure Code)
- Modifiers (captured from submitted claim)
- Place of service (captured from submitted claim)
- Co-payment indicators(overrides) (derived from Member information)
- Eligibility aid category (derived from Member and Procedure Code information)
- Family planning indicator (derived from Member and Procedure Code information)
- claim type (derived from Provider and claim source information)
- Emergency indicator (derived from Procedure Code)
- Units of service (captured from claim)
- Tooth number or letter and or quadrant (captured from claim)
- National billing uniform editor code set (stored in the Reference tables)
- Care management authorization number (derived from the claim information)

CR1.SS.11

eCAMS produces multiple reports to report the summary of daily EDI transmission and alert operations staff in cases of operations issues. Team Noridian's solution has multiple monitors and triggers in place to perform health checks of the new MMIS. As part of eCAMS, daily EDI reports will be generated, which will have a summary of all types of inbound and outbound transactions, count of business units per file, and their statuses (like success or failure). This report will be emailed to EDI operations and the Department staff. Weekly summary reports are stored as part of eCAMS HealtBeat and accessed through online screens. This report generation is implemented in both Michigan and Washington.

CR1.SS.12

eCAMS uses the Edifecs COTS product for validating HIPAA EDI files. Two types of acknowledgments are sent out to providers.

- TA1 is generated to report ISA/ISE level validation.
- 997 and 999 is generated to report Functional Group (GS/GE) and SNIP Type 1 through 7 validations. Enabling and disabling SNIP Type validation is at the discretion of IME. However, we recommend enabling only SNIP Type 1, 2 and 7 based on our experiences in Michigan and Washington.

Team Noridian's solution can be modified to generate a 277CA transaction if the Department chose to use this transaction as part of the New MMIS. eCAMS architecture is configurable enough accommodate this transaction seamlessly to our Claims Receipt business process area.

CR2.01

eCAMS accepts common attachments such as operative reports; x-rays; occupational, physical, and speech therapy reports; and durable medical equipment (DME) and implant-related attachments. Team Noridian’s solution can be tailored to accept documents such as manufacturer’s tracking data for implants and waivers and demonstration-specific requirements. These attachments will be accepted in hard copy, sent to Emdeon Suite for imaging, and stored in OnBase EDMS. Team Noridian’s solution can be

modified to accept X12 HIPAA 275 transactions for accepting claims attachments. At this time, the 275 standard is only published as a notice of proposed rulemaking (NPRM). If 275s are published as a final rule prior to contract signing, Team Noridian will implement the 275 as part of MMIS. Figure 9.1.3.1-26 shows the attachment flow.

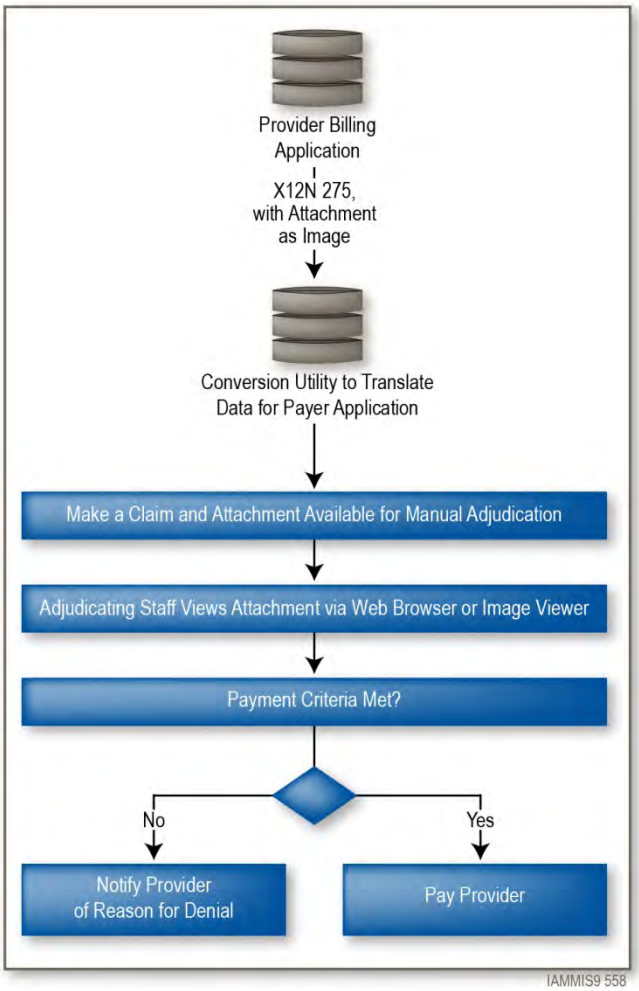

Figure 9.1.3.1-26. X12 275 Conceptual Attachment Flow in Team Noridian's Solution. The addition of X12N 275 enables the Department support of clinical interoperability and encourages providers to move toward electronic transmission of healthcare claims and related attachments.

CR2.02

Team Noridian's solution accepts attachments for electronic and paper claims. OnBase is used to store images of claims attachments. These images will be accessible to the adjudication staff through eCAMS screens. Attachments are scanned using Emdeon Transform Suite and archived in OnBase. Scanned images are forward to the appropriate operational area for processing. If the clarity of the image falls below established limits, it will be forwarded to manual verification and correction. A workflow process is in place that will trigger communications back to submitters of attachments to rectify the error and/or send acknowledgments for successful receipt of attachments.

CR2.03

eCAMS accepts Medicare and Medicare Advantage plan crossover claims and Medicare EOB claims attachments. The Emdeon Transform Suite solution creates the electronic images and OnBase workflow management solution indexes the electronic images and stores the attachments. These attachments are linked to the claims within the established service level metrics by the Department and can be retrieved from the eCAMS screens.

CR2.03.01

As mentioned in CR2.03, eCAMS accepts Medicare crossover claims which consists of both claim header and claim line. eCAMS also accepts crossovers from other carriers electronically. Crossover receipt functionality is successfully implemented in both Washington and Michigan.

CR2.04

eCAMS accepts prior authorization attachments such as surgical/anesthesia reports, medical records, x-rays and images, and any other attachments that are required by State and federal rules. Attachments related to prescription drugs and orthodontic study models will be accepted in accordance with the Department specification. Emdeon Suite is used for imaging and OnBase EDMS stores the electronic images. These attachments will be made available during the adjudication of the claim using eCAMS screens.

CR2.05

eCAMS accepts multiple attachment forms related to sterilization, abortion, and hysterectomy consent forms. Manual or automated medical expenditure transactions that have been processed outside of the MMIS will be accepted in both paper and electronic format. Team Noridian's solution accepts non-claim-specific financial transactions such as fraud and abuse settlements, insurance recoveries, and cash receipts. Reports related to electronic cost and disproportionate share will be accepted by the claims receipt business process area.

eCAMS also accepts other attachments and claim inputs related to drug rebate and very low birth weights. Emdeon Suite is used for imaging and OnBase EDMS stores the electronic images. These attachments will be made available during the adjudication of the claim using eCAMS screens. Team Noridian will work Department staff to identify other inputs required for services under Department's approved plan.

CR2.05.01

eCAMS accepts all types of claims, adjustments, and attachments. eCAMS stores all the information from the input as either processing or situational. Processing elements are used by Department for adjudication of a claim. Situational elements (e.g., billing provider address) are information that may not be used by Department for adjudication of claims. eCAMS stores the situational information and facilitates an online screen to view the situational information. All attachments are processed by our Emdeon Suite imaging system and linked to associated claims, and can be viewed from claims screens.

CR3.01

eCAMS supports the following X12 4010 and X12 5010 HIPAA EDI transaction sets as required by 45 CFR Parts 160 and 162.

- 270 – Eligibility, coverage, or benefit inquiry
- 271 – Eligibility, coverage, or benefit information
- 276 – Electronic claim submission system request
- 277 – Electronic claim submission system response
- 834 – Benefit enrollment and maintenance
- 835 – Healthcare claim payment advice
- 837D – Healthcare claim — dental
- 837I – Healthcare claim — institutional
- 837P – Healthcare claim — professional
- 997 – Functional acknowledgment
- 999 – Functional acknowledgment
- TA1 – Interchange acknowledgment
- 278 – Prior Authorization Request
- 278 – Prior Authorization Response

eCAMS accepts coordination of benefits data in an 837 transaction and accepts crossover claims from COBCs. As discussed in response to CR2.01, Team Noridian's solution can be modified to accept X12 HIPAA 275 transactions to accept claims attachments. At this time, the 275 standard is only published as a NPRM. Once the 275 transaction is mandated, Team Noridian will work with Department to determine a suitable timeframe (based on the agreed upon project work plan) for implementation.

CR3.01.01

eCAMS accepts 837 P/D/I encounter files. The EDI Services-eCAMS loading process loads the encounter data into MMIS. The loaded encounters are run through further business processes and an Encounter Transaction Response Report is sent to the submitters of encounters. These encounters can be accessed through eCAMS online screens.

CR3.02

eCAMS provides secure, Internet-based HIPAA-compliant functionality to upload EDI files. Providers can access these online functionalities using SSO and HTTPS (Secure HTTP) protocol. Training documentation is provided on the Web and it includes provider billing instruction and trading partner agreements (TPA). Figure 9.1.3.1-27 identifies such user instructions developed and made available over the Web for the Michigan MMIS implementation. Figures 9.1.3.1-28 and 9.1.3.1-29 demonstrate providers' ability to upload HIPAA EDI files through eCAMS online screens.

Figure 9.1.3.1-27. Support for Provider Companion Guides and Trading Partner Agreement (TPA) Instructions on the Web (Sample from CHAMPS). Team Noridian's experience developing documentation will offer enhanced clarity on HIPAA EDI implementation.

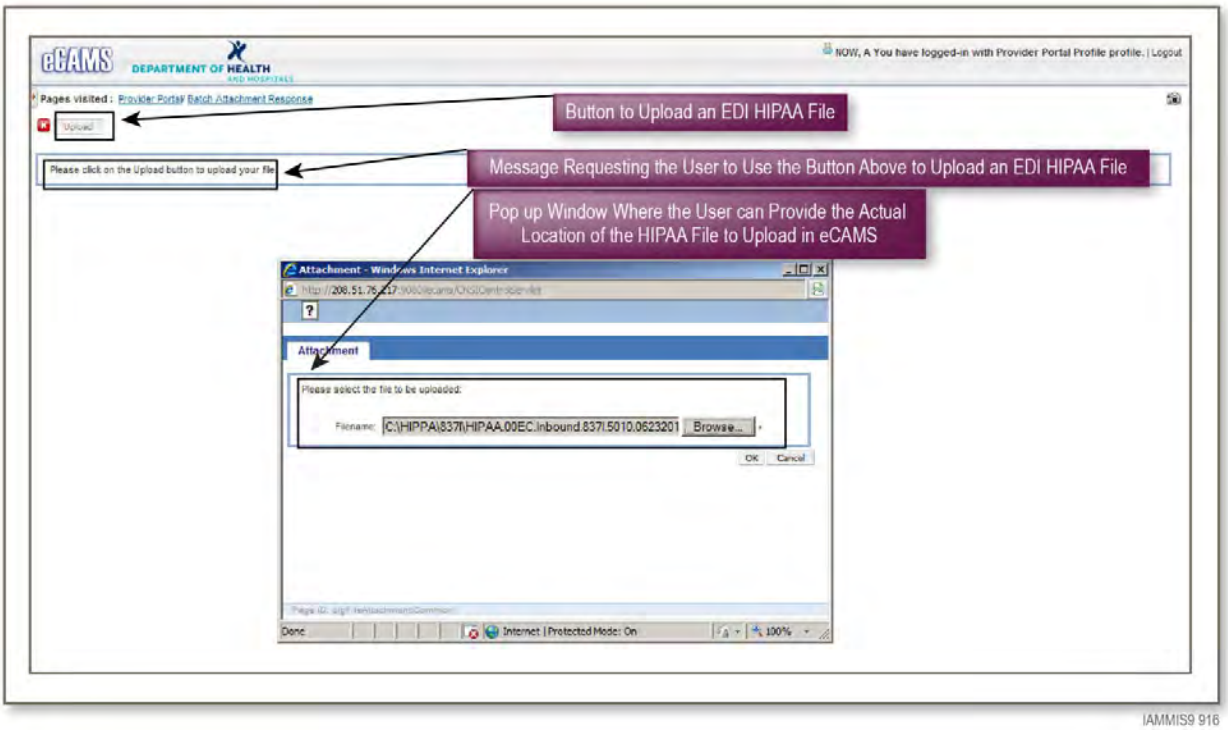

Figure 9.1.3.1-28. eCAMS Screen Requesting User to Upload an EDI File. The eCAMS Provider portal is secure, uses HTTPS protocol, and is compliant with HIPAA regulations.

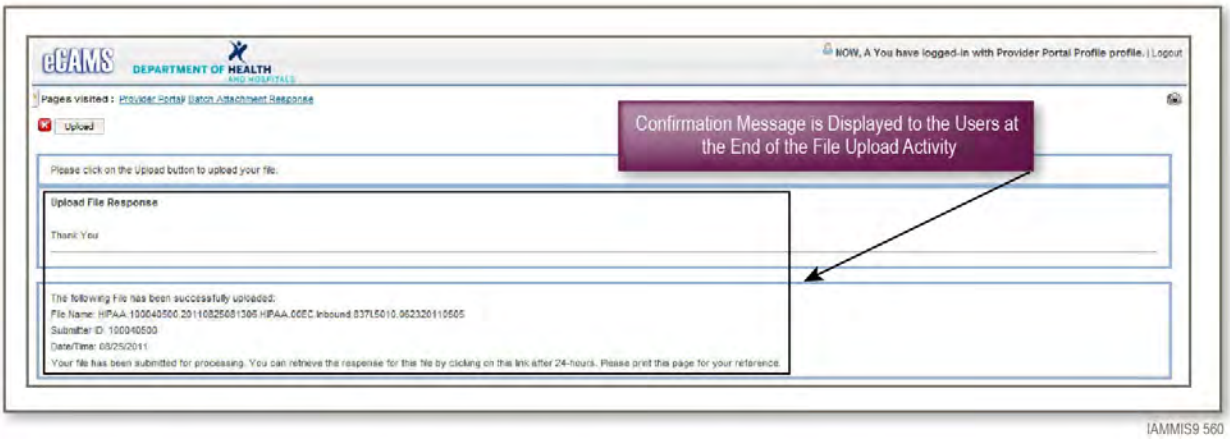

Figure 9.1.3.1-29. eCAMS Screen Showing Confirmation of File Upload and Responding with the Next Course of Actions. Team Noridian's solution provides real-time feedback to providers on the acceptance of EDI files.

CR3.03

eCAMS provides an electronic claims submission solution that allows for a variety of submission methods. Providers can submit EDI claims through Secure FTP (SFTP). Providers are also able to submit HIPAA standard claim transactions directly through eCAMS. This is accomplished by uploading a HIPAA batch file. Below are the various types of 837 claims accepted in eCAMS:

- Fee for service (Professional/Institutional/Dental)
- Encounters (Professional/Institutional/Dental)
- Crossovers (Professional/Institutional/Dental)

eCAMS employs Edifecs for HIPAA validations and it can perform seven levels of editing as outlined below. Team Noridian recommends Levels 1 and 2 to be mandatory while the remaining can be turned to optional. EDI files that fail in Type 1 and/or Type 2 validation are rejected at the Transaction Set (TS) level rather than the Group Sender (GS) level. This ensures that, rather than rejecting all the claims within the GS, the number of claims rejected is kept to a minimum

- Level 1: Integrity Testing
  - Testing valid segments
  - Segment order
  - Element attributes
  - Testing numeric or alphanumeric data elements
  - Validating X12 syntax and compliance with X12 rules
- Level 2: Requirement Testing
  - Testing implementation guide-specific requirements (e.g., repeat counts; used and unused codes, elements, and segments; required or intra-segment situational data elements such as non-medical code sets as laid out in the implementation guide; and values noted via an X12 code list or table)
- Level 3: Balancing
  - Testing field totals
  - Record or segment counts
  - Financial balancing of claims or remittance advice
  - Balancing summary fields
- Level 4: Situational Testing
  - Testing of specific inter-segment situations (e.g., if the transaction is an inpatient claim, a date of admission must be present)
- Level 5: Code Set Testing
  - Testing for valid code set values (e.g., CPT, CDT3, NDC, ICD9)
- Level 6: Line of Business Testing
  - Specialized testing required by certain healthcare specialties, such as chiropractic, ambulance, and durable medical equipment
- Level 7: Trading Partner Testing
  - Edits according to implementation guides that are unique and specific to a payer (e.g., Medicare, Medicaid)

CR3.04

Team Noridian's mailroom area is responsible for storing all the source documents in secure physical storage. Each document is scanned and will have an imprinted unique identifier on the top of each page. This identifier will include the Julian date, scan batch, and page number. As staff start to scan documents, they have a physical box with a unique identifier at the scanning station. The unique identifier of the box is stored as a keyword on each document. These keywords are made available in OnBase, allowing a user to link an electronic document back to a specific archive box. Using the imprinted information on the top of each page, they can quickly identify within the box the exact pages that they are viewing online. The combination of archive box number and the imprinted information allows for staff to locate the archived source documents for information retrieval of purging in accordance with the Department specification and need. The storage and purge process will abide by the rules of HIPAA security provisions.

CR3.SS.01

eCAMS provides the capability of front-end editing. This front-end edit is applicable to key claim parameters but not limited to the following: Member (checking for member enrollment), all types of providers (checking provider enrollment), revenue codes, prior authorization number (check prior authorization number), revenue codes, diagnosis codes, procedure codes.

Notifications will be sent to providers if the claim fails any of these edits. eCAMS audits all the transactions and stores the log of all rejected claims.

CR3.SS.02

eCAMS has a separate Manage Trading Partner module. During the provider enrollment process, all providers will be subject to trading partner registration. On successful registration, providers will be given access to submit electronic HIPAA X12 transactions. On receipt of claims, EDI Services – Edifecs Validator validates the ISA sender ID and GS sender ID with the Manage Trading Partner module to determine whether the submitter of a file is a valid trading partner of the submitted HIPAA X12 transaction. If the validation is successful, the claim is sent through the remaining process and loaded into MMIS. If the validation fails, the batch file is rejected and appropriate acknowledgments, such as TA1, 997, and 999, are sent depending on the level (Interchange or Functional Group) of failure.

CR3.SS.03

eCAMS claim receipt business area has two types of system edits: X12 validation edits and system edits.

- X12 validation edits are part of Edifecs and are used to validate files against SNIP Types. These edits are built into Edifecs and we can generate a report which provides the list of edits along with their history and their effective dates.
- System Edits are edits that come into picture when the claim either loaded or adjudicated. All these edits are available through online screens and eCAMS supports the maintenance of edit codes through online screens and is configurable to support disposition codes, recycle counts, denial reason codes and their effective dates.

The Edit Maintenance screen also has the flexibility to vary dispositions for single edit codes based on invoice types and claim types. The hierarchy flows of edits are defined in RuleIT, while the pricing rule hierarchy for a given code is maintained through eCAMS online screens. Figure 9.1.3.1-30 depicts error code maintenance functionality. Audit trail of all modifications to these edits are captured in eCAMS database. The audit trail also captures the user and time of modification to edits.

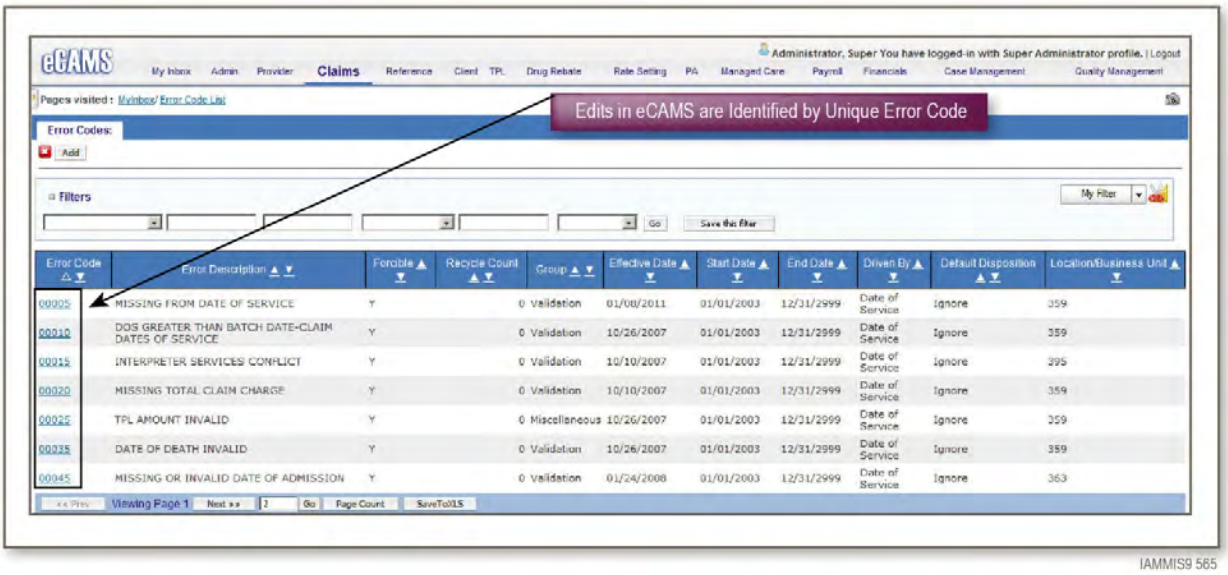

Figure 9.1.3.1-30. Error Code Maintenance List Page. Date-driven edit/error code maintenance functionality with the flexibility to control error disposition.

CR3.SS.04

eCAMS has the capability produce a hardcopy of any claim present in eCAMS. This is done by over laying the claim values in one of the below paper claim formats.

- Institutional (UB-92, UB-04, CMS 1450 [UB-92])
- Professional (CMS 1500)
- Dental (American Dental Association [ADA] 1994, 2000, and/or 2004)

CR.SS.01

The eCAMS claims receipt business area uses the Edifecs COTS product. Below are the various features of Edifecs, which is an industry proven best-of-breed solution in the marketplace.

- Edifecs Translator component provides flexible mapping functionality (EDI integrated mapping software) that supports all required X12 formats and transactions. X12 formats can be converted to custom made Intermediated Record Layout (IRL) format and the vice versa. This Edifecs translator component is part of eCAMS 5010 implementation in Michigan and Washington.
- Edifecs Validator component validates the Health care transactions for SNIP Type 1 through 7 and rejects improperly formatted transactions by creating appropriate TA1, 999 and 997 acknowledgment transactions.
- EDI Gateway component of the Claims Receipt Business area has the following features
- Provides the ability to assemble, encrypt and transport batches of X12 transaction data to and from providers. For inbound X12 transactions, the data is subject to validation in Edifecs on receipt. In case of outbound, only successfully validated X12 transactions from Edifecs are pushed from the EDI gateway to providers.
- Is a secure FTP site where all the providers can place the files for loading. There are multiple automated jobs which will push the files from the FTP site to eCAMS for loading. In case of any failure, the system will retry based on the configurable number of times and will move the file to error directory and will alert the operations staff. All failures during transmission are captured in the separate log along with reason for failure. No file will be left stranded in the EDI gateway. Any file uploaded in EDI Gateway will be pushed into eCAMS. Edifecs COTS products will allow only valid

X12 files for further processing and rejects all the other files by creating appropriate acknowledgments.

eCAMS Claims Receipt Business area uses COTS and distributed system architecture which enables Team Noridian to quickly implement new transactions.

CR.SS.02

eCAMS provides the capability to produce custom EDI reports. These reports are not limited to the following.

- Transactions submitted by transaction type
- Transactions received by transaction type
- Cumulative reports over time to support forecasting

During loading process, valuable metrics about the file and other meta data information is stored in the eCAMS tables. These tables are then accessed by eCAMS HealthBeat (which is an operations dashboard) to produce various custom reports and perform forecasting and trending of data.

CR.SS.03

Team Noridian's solution accepts paper claims from Medicaid providers. eCAMS accepts the following paper claim formats:

- Institutional (UB-92, UB-04, CMS 1450 [UB-92])
- Professional (CMS 1500)
- Dental (American Dental Association [ADA] 1994, 2000, and/or 2004)

Team Noridian's solution can be modified to accept state targeted medical care paper billing forms for non-electronic claims. Emdeon Transform Suite will be used to scan and OCR the medical care paper billing form. Then the claim will be loaded in eCAMS and tied to the actual image of the paper claim.

CR.SS.04

All claims and encounters in eCAMS have a unique TCN. TCNs are the single identifier to track and maintain claims. The TCN contains intelligence to identify the media of the claim (paper, EDI, DDE); invoice type information such as professional, institutional, and dental; the date it was received; and the batch number information if it was a paper claim.

eCAMS accepts claims attachments. These are linked to claims using an attachment control number. In the case of EDI transactions, the attachment control number present in the HIPAA file will be used to associate the attachment with the actual claim TCN. In the case of DDE, attachments can be uploaded in the eCAMS screens and will be linked to the claim TCN. After linking, the TCN can be used as a unique identifier to retrieve claims and their associated attachments like consent forms, documentation showing medical necessity, claim adjustments and prior authorization requests. Figure 9.1.3.1-31 displays the TCN for all claims.

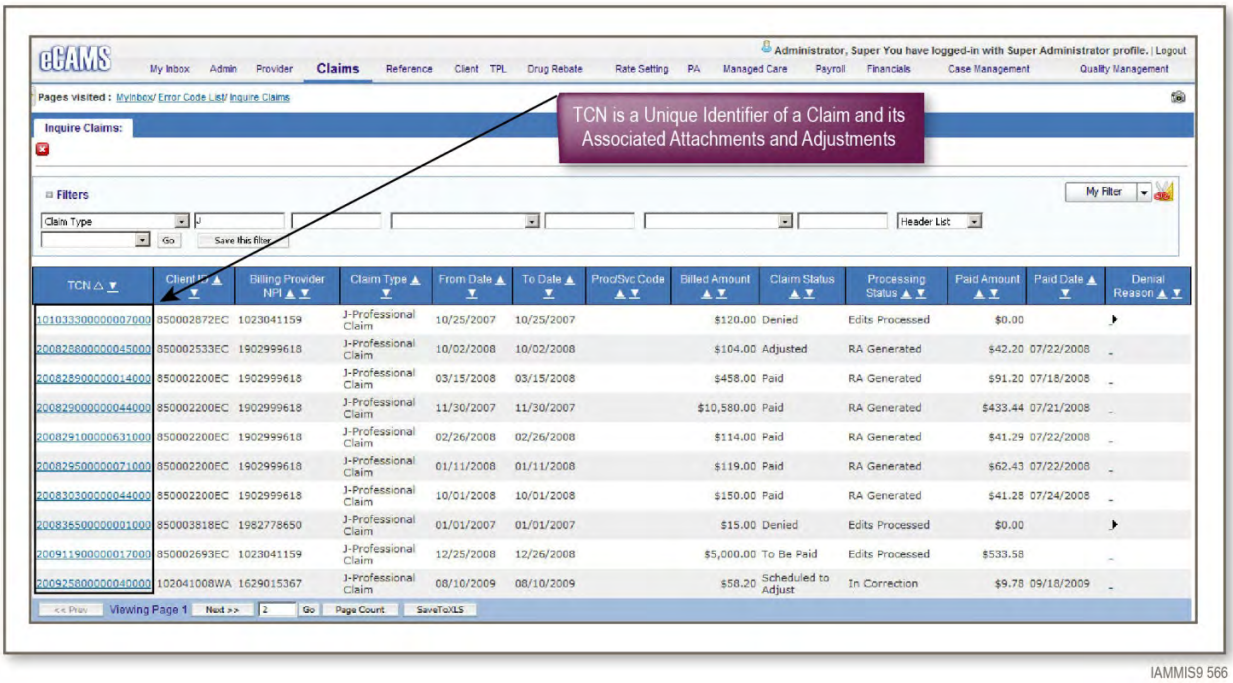

Figure 9.1.3.1-31. Claims Inquiry Screen Displaying the TCN. TCN helps in better traceability of claims and their associated attachments within eCAMS.

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9.1.3.2 Claims Adjudication

9.1.3.2.1 Claims Adjudication (CA) System Requirements Table

CA	Claims Adjudication Requirements - MMIS	A	B	C	D	E
CA1.01	Track all claims within the processing period paid, suspended, pending or denied.	Yes	Yes			Section 9.1.3.2.2, Requirement # CA1.01
CA1.01.01	Reconcile prepaid services with actual expenses for Consumer Choice Option (CCO) and automatically generate adjustment claim.	Yes	No	SM	240	Section 9.1.3.2.2, Requirement # CA1.01.01
CA1.02	Suspend claims with exceptions and or errors and routes for correction to the organizational entity that will resolve the exception and or error unless automatically resolved. The organizational entity will resolve the claim based upon the state's criteria.	Yes	Yes			Section 9.1.3.2.2, Requirement # CA1.02
CA1.02.01	Suspend and review as required by IME those specific members, providers, procedure codes or provider types placed on prepayment review by IME.	Yes	No	COTS	160	Section 9.1.3.2.2, Requirement # CA1.02.01
CA1.02.02	Allow for the user defined suspension of claims by variable parameters (e.g., member, provider, date range, procedure, benefit limits, benefit plans).	Yes	Yes			Section 9.1.3.2.2, Requirement # CA1.02.02
CA1.03	Verify that suspended transactions have valid error and or exception codes.	Yes	Yes			Section 9.1.3.2.2, Requirement # CA1.03
CA1.04	Track claims flagged for investigative follow-up because of third party discrepancies.	Yes	Yes			Section 9.1.3.2.2, Requirement # CA1.04
CA1.05	Generate audit trails for all claims and maintain audit trail history.	Yes	Yes			Section 9.1.3.2.2, Requirement # CA1.05
CA1.05.01	Generate and maintain audit trails for all claims activity including add, update, inquiry and or delete.	Yes	Yes			Section 9.1.3.2.2, Requirement # CA1.05.01
CA1.06	Verify that all claims for services approved or disallowed are properly flagged as paid or denied.	Yes	Yes			Section 9.1.3.2.2, Requirement # CA1.06
CA1.07	Document and report on the time lapse of claims payment flagging or otherwise noting clean claims (error free) that are delayed over 30 days. See 447.45 CFR for timely claims payment requirements.	Yes	Yes			Section 9.1.3.2.2, Requirement # CA1.07
CA1.08	Provide prompt response to inquiries regarding the status of any claim through a variety of appropriate technologies, track and monitor responses to the inquiries. Process electronic claim status request and response transactions ANSI Accredited Standards Committee (ASC) X12N 276 277) required by 45 CFR Part 162.	Yes	Yes			Section 9.1.3.2.2, Requirement # CA1.08
CA1.09	Provide claims history for use by Program Management and Program Integrity.	Yes	Yes			Section 9.1.3.2.2, Requirement # CA1.09
CA1.10	Assign claim status (i.e., approved, denied, pended, rejected) based on the state's criteria.	Yes	No	COTS	60	Section 9.1.3.2.2, Requirement # CA1.10
CA1.11	Verify that claim correction activities have entered only valid override code(s) or manual prices.	Yes	Yes			Section 9.1.3.2.2, Requirement # CA1.11
CA1.11.01	Process payment for any specific claim(s) as directed by IME on an exception basis using edit override codes and a security system approved by IME.	Yes	Yes			Section 9.1.3.2.2, Requirement # CA1.11.01
CA1.11.02	Provide the ability to accumulate and report statistics on why claims edits are overridden.	Yes	No	COTS	120	Section 9.1.3.2.2, Requirement # CA1.11.02

CA	Claims Adjudication Requirements - MMIS	A	B	C	D	E
CA1.11.03	Provide the capability to track payments for each member in total and to limit payments to any combination of benefit plans based on total services or an overall dollar ceiling as set by rules in the benefit plan administration rules engine.	Yes	No	SM	160	Section 9.1.3.2.2, Requirement # CA1.11.03
CA1.12	Identify and hierarchically assigns status and disposition of claims (i.e., suspend or deny) that fail edits based on the edit disposition record.	Yes	Yes			Section 9.1.3.2.2, Requirement # CA1.12
CA1.13	Identify and track all edits and audits posted to the claim in a processing period.	Yes	Yes			Section 9.1.3.2.2, Requirement # CA1.13
CA1.13.01	Provide the capability to configure and apply all edits and audits with a rules engine.	Yes	Yes			Section 9.1.3.2.2, Requirement # CA1.13.01
CA1.13.02	Allow unlimited edits to any claim as defined by IME. Provide the capability to limit the number of errors on a single claim before denying the claim.	Yes	Yes			Section 9.1.3.2.2, Requirement # CA1.13.02
CA1.14	Provide and maintain for each error code, a resolution code, an override, force or deny indicator and the date that the error was resolved, forced and or denied.	Yes	Yes			Section 9.1.3.2.2, Requirement # CA1.14
CA1.SS.01	Provide the ability to process a claims payment file daily, weekly and as specified by IME.	Yes	Yes			Section 9.1.3.2.2, Requirement # CA1.SS.01
CA1.SS.02	Provide the capability to stamp the date, federal report code and state account code at the claim and line level of each claim.	Yes	Yes			Section 9.1.3.2.2, Requirement # CA1.SS.02
CA1.SS.03	Apply edits to prevent payments for services covered under a waiver program to a Medicaid provider who does not have a provider agreement.	Yes	No	COTS	120	Section 9.1.3.2.2, Requirement # CA1.SS.03
CA1.SS.04	Provide the ability to process a corrected claim through all edits and audits after corrections are applied to a rejected claim.	Yes	Yes			Section 9.1.3.2.2, Requirement # CA1.SS.04
CA1.SS.05	Provide the ability to store in the MMIS claims processed through the POS.	Yes	No	SM	200	Section 9.1.3.2.2, Requirement # CA1.SS.05
CA2.01	Verify all fields defined as numeric contain only numeric data.	Yes	Yes			Section 9.1.3.2.2, Requirement # CA2.01
CA2.01.01	Support claim adjudication based on HIPAA standard code sets in effect on the date of service.	Yes	Yes			Section 9.1.3.2.2, Requirement # CA2.01.01
CA2.02	Verify all fields defined as alphabetic contain only alphabetic data.	Yes	Yes			Section 9.1.3.2.2, Requirement # CA2.02
CA2.02.01	Support claim adjudication based on HIPAA procedure modifiers in effect on the date of service (i.e., the ability to bring in all modifiers and use a hierarchy defined by IME).	Yes	No	SM	120	Section 9.1.3.2.2, Requirement # CA2.02.01
CA2.03	Verify all dates are valid and reasonable.	Yes	Yes			Section 9.1.3.2.2, Requirement # CA2.03
CA2.04	Verify all data items which can be obtained by mathematical manipulation of other data items, agree with the results of that manipulation.	Yes	Yes			Section 9.1.3.2.2, Requirement # CA2.04
CA2.05	Verify all coded data items consist of valid codes (e.g., procedure codes, diagnosis codes, service codes) that are within the valid code set under HIPAA Transactions and Code Sets (TCS) and are covered by the state plan.	Yes	Yes			Section 9.1.3.2.2, Requirement # CA2.05
CA2.06	Verify any data item that contains self-checking digits (e.g., member ID number, NPI number) passes the specified check-digit test.	Yes	No	SM	320	Section 9.1.3.2.2, Requirement # CA2.06