
**WEDI Strategic National Implementation Process (SNIP)
WEDI SNIP ICD10 Workgroup
ICD10 Implementation Sub Workgroup**

White Paper

ICD-10 Implementation

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*Partnering for Electronic Delivery
of Information in Healthcare*

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Document is for Education and Awareness Use Only

1. Introduction

On January 16, 2009 the Department of Health and Human Services (DHHS) published two final rules under the Administrative Simplification provisions of the Health Insurance Portability and Accountability Act (HIPAA). These rules impart changes to Title 45 – Public Welfare, Code of Federal Regulations, Part 162 – Administrative Requirements by mandating the following:

Electronic Transaction Standards:

- ASC X12N 005010 with applicable Errata
- National Council for Prescription Drug Programs (NCPDP) D.0/Batch 1.2
- NCPDP Batch 3.0 for Medicaid Subrogation of Pharmacy Claims

Code Sets:

- International Classification of Diseases, 10th Edition, Clinical Modifications (ICD-10-CM) Diagnosis
- International Classification of Diseases, 10th Edition, Procedure Coding System (ICD-10-PCS) Inpatient Hospital Procedure Coding System

Covered entities (healthcare providers, health plans and healthcare clearinghouses) must comply with the transaction standards as of January 1, 2012 and the code set regulations for dates of service on and after October 1, 2013. The changes to the ASC X12N electronic transactions enable the use of ICD-10 codes in those transactions. The new transactions will be in place for over a year before the ICD-10 codes will be required.

The ICD-10-CM **diagnosis code set** includes significant improvements over the International Classification of Diseases, 9th Edition, Clinical Modifications (ICD-9-CM) in coding primary encounters, external causes of injury, mental disorders, neoplasms, and preventive health. There are currently approximately 14,000 ICD-9 diagnosis codes compared to over 69,368 ICD-10 diagnosis codes. The ICD-10 diagnosis code set reflects advances in medicine and medical technology, as well as accommodating the capture of more detail on socioeconomics, ambulatory care conditions, problems related to lifestyle, and the results of screening tests. It also provides for more space to accommodate future expansions, laterality for specifying which organ or part of the body is involved as well as expanded distinctions and managed care encounters.

The ICD-10-PCS **Procedure Coding System** provides detailed codes to describe complex medical procedures for use on inpatient hospital claims at a much more granular level than its ICD-9 counterpart. It has unique, precise codes to differentiate body parts, surgical approaches, and devices used. It can be used to identify resource consumption differences and outcomes for different procedures and describes precisely what is done to the patient. There are currently approximately 3,800 ICD-9 institutional procedures codes compared to nearly 72,000 ICD-10 institutional procedures codes (PCS). The Current Procedural Terminology (CPT) and Healthcare Common Procedure Coding System (HCPCS) will continue to be the code sets for reporting ambulatory procedures.

This white paper is intended to provide industry guidance on building an Implementation Plan for compliance with the Final Rule regarding ICD-10.

2. How to Use this Document

Since the project lifecycle of “plan, do, act” is inherently repetitive, this document will address each topic from a project methodology framework. Each Section and Sub-Section will expand into further detail where the narrative will address the relevant topic for the entire lifecycle (as opposed to repeating each section to represent the iterative refinement and decomposition of management plans and other project artifacts).

2.1. Definitions

Applied mapping – The refinement of a reference mapping to conform to the needs of a particular application (i.e., data quality, reimbursement, research).

Backward map – Mapping that proceeds from a newer code set to an older code set; i.e., from the ICD-10-CM or PCS code set to the ICD-9-CM code set.

Crosswalk – The specification for the translation of one or more codes within the source code set to one or more codes within the target code set. Crosswalks may also be referred to as "applied maps".

Forward map – Mapping that proceeds from an older code set to a newer code set; i.e., from the ICD-9-CM code set to the ICD-10-CM or PCS code set.

General Equivalency Mappings (GEMs) – A set of flat files developed on behalf of the Centers for Medicare & Medicaid Services (CMS) and National Center for Health Statistics (NCHS) to aid in data mapping and the creation of crosswalks between ICD-9 and ICD-10. These files include proposed generally equivalent mapping of ICD-9 and ICD-10 diagnosis and inpatient hospital procedure codes bi-directionally.

Mapping – Mapping is the process of assigning codes in one ICD code set to approximate equivalent codes in another ICD code set. Mapping is generally accomplished utilizing the GEMs files.

Purpose-built map – A map that has a goal of creating matches that meet an additional purpose besides providing the closest clinical equivalent codes. For example, a reimbursement map is a purpose-built map whose purpose is to achieve equivalent reimbursement under the new code set. It may also be referred to as purpose-driven map or crosswalk.

Reimbursement Map – A purpose-driven crosswalk to provide matches with equivalent reimbursement value. The Reimbursement Mappings developed by CMS were in response to non-Medicare industry requests for a "standard one-to-one reimbursement crosswalk", that is, a temporary mechanism for mapping ICD-10-CM/PCS codes submitted on or after October 1, 2013 back to "reimbursement equivalent" ICD-9-CM codes. Reimbursement maps other than the one developed by CMS would require development using a particular entity's historical coding and reimbursement data.

Reverse lookup – Using a GEM to look up a target system code to see all the codes in the source system that translate to it.

Translation – Translation is the process of mapping codes in one code set as accurately as possible to codes in another code set.

3. Project Governance

The successful management and execution of a large healthcare regulatory initiative such as the ICD-10 implementation is predicated by the governance structure. Governance creates the structure that will guide the implementation. It provides the organization with oversight, control and direction for decision-making by the senior level executives that will facilitate the execution of the implementation.

A Governance structure is comprised of both business and information technology (IT) and Health Information Management (HIM) system subject matter experts (SMEs). The SMEs have experience working directly with operational processes and system policies. The structure should reflect the hierarchy of stakeholders involved in ICD-10 decision making, execution, and program/project management. A typical structure would include an executive sponsor, a steering committee, a project management component and sub-workgroups composed of the impacted areas throughout the organization.

An executive sponsor should be selected who is typically a senior manager. The sponsor, tasked with leading the steering committee, serves as the key executive providing decision making authority for all key decisions related to the business and operations. The Steering Committee is an advisory committee composed of interdisciplinary senior management and/or SMEs who provides guidance on the strategic direction, resolves key issues such as company policies and objectives, and ensures availability of resources both people and financial. In addition, the Steering Committee members spread buy-in throughout the organization. The steering committee members are assigned as owners responsible for their areas of expertise. However, there would only be one designated project owner for the entire company, typically on the business side who reports to the executive sponsor.

Larger organizations may decide develop ICD-10 sub-workgroups (SWG) based on the impacted areas. A typical SWG would be composed of a project team lead, business lead and technical lead. These would typically be resources that are imperative to the implementation of the project since the ICD-10 initiative impacts business, operations and IT components across the organization.

Finally, depending on the organizations size, the executive sponsor may want to establish a project management structure to focus on the project. This would provide a central point of contact within the organization to drive the project forward, developing and managing the project timeline, ensure project activities are being completed on time and on budget, manage communications both external and internal (across disciplinary lines), manage risk and track project issues and decisions.

4. Perform Impact Assessment

Due to the expansive impact of ICD-10 on healthcare organizations, it is strongly recommended that a detailed Impact Assessment be conducted. This will ensure all organizational, process and system impacts are taken into consideration in the implementation project plan.

Addressing the Impact Assessment is beyond the scope of this document. For information regarding Impact Assessments, please refer to the WEDI ICD-10 Impact Assessment Checklist white paper located at www.WEDI.org.

- The WEDI Impact Assessment Sub-Work Group has defined three phases for conducting an Impact Assessment. These are the “Organize”, “Discovery” and “Analyze” phases. Additional information on Impact Assessments for ICD-10 including the WEDI ICD-10 Impact Assessment Checklist white paper and a presentation entitled “Why Do I Need to do an ICD-10 Impact Assessment” can be found on the WEDI website at www.WEDI.org.

4.1. Define Project Vision

The Business must describe what the project is expected to accomplish. This is the precursor to the Scope document and provides direction for the solution.

4.2. Integrate ICD-10 Solution within Enterprise

Before determining a final Scope for the project, the organization should first consider the solution recommendations and Project Vision against the Strategic Business Roadmap as well as the rest of the Enterprise Portfolio to identify and mitigate potentially redundant or conflicting objectives.

5. Project Planning

5.1. Identify Key Stakeholders

Key Stakeholders are those in a leadership position who have a vested interest in the outcome of the project. They may manage resources that will use a solution deployed by the project, or are dependent upon an output of the project or manage resources that will play a key role in the project.

For ICD-10, the Key Stakeholders in an organization may represent a broad cross-section of the business, from business development to clinical resources to those responsible for revenue cycle management and information technology.

5.2. Define Project Structure

The initial project structure is designed specifically to address the Impact Assessment and will evolve as work progresses through the project lifecycle.

5.3. Create Project Plan

The project plan consists of multiple lower level management plans which may be combined into one plan, depending on how an organization manages its projects. It is important to consider each of these independently as they represent critical elements of planning the project. It is also important to keep in mind (and communicate accordingly) that these management plans are iterative in nature and will evolve as the project progresses.

5.3.1. Create a Communication Plan

A well planned project has a well planned communication plan. In the case of ICD-10 implementation, the communication plan should have an internal and external component. A communication plan should incorporate all stakeholder requirements and communication channels. The internal communication plan should consider the organizational structure, culture and interdependences with other projects and initiatives. The external communication plan ensures that the organization has communicated the right message to its business partners. Both plans should identify the stakeholders/audiences, methods, media and frequency.

5.3.2. Create Education and Outreach Plan

Each organization will have to create an education/training **strategy** and a corresponding education and training **plan**. Each of these may be complex due to the number of business processes impacted by diagnosis and procedure codes and the duration of the effort. The training should be tailored appropriately to the target audience and will be iterative throughout the project.

5.3.2.1 The ICD-10 Education/Training Strategy

The education strategy instills structure for education and training within the organization. The strategy should address both the code set training and any training or retraining necessitated by business processes changes that occur as part of ICD-10 implementation. The third component of the strategy addresses external outreach. Outreach to external stakeholders can be used to create support and implementation efficiencies. An effective education strategy builds a foundation and understanding of the coding changes and implementation effort and will continue throughout ICD-10 implementation.

Providers should keep in mind that documentation plays a critical role in ICD-10 implementation due to the higher level of specificity and new concepts found in the code set. Clinicians need training on the code set so that they will have the additional understanding of the documentation requirements that found in ICD-10.

5.3.2.2 The ICD-10 Education/Training Plan

The education plan is used to define, manage and coordinate the educational opportunities associated with ICD-10.

The education plan should address the following:

- Scope—determine the audience(s), content and timetable.
- Explore options- decide what materials to use and which to buy or develop and what to outsource.
- Develop- validate the entire educational program: the process, scheduling and execution, stakeholder acceptance, and the economics of providing the desired training
- Execute- roll out the content for the duration of ICD-10 implementation.
- Evaluate- measure effectiveness of the education program.

Education and training planning should include the following components:

1. Message Development – The messages must be straightforward, informational, and consistent and must communicate information about the code set, anticipated benefits of their implementation and the organization's obligation to comply.
2. Identification of Target Audiences – Defines the internal and external audiences.
3. Obtain/develop tools – The materials used will vary by audience and by the phase of education. Planning is required in order to have the chosen materials available at the right time.
4. Scheduling– Education should begin early in the process and is ongoing, so scheduling is an important part of the plan.
5. Budget – The costs of training and education should be included in the project budget.
6. Assessment Plan – Approach to determining whether education/training has produced the desired outcome.

5.3.2.3 Educational Content

Education is needed on three basic fronts. It is best to first create educational pieces on the transition and the necessity for the transition. Included in this would be education on the value of the code set, timeline for implementation, impact to people, processes and technology and budget implications. Most likely, this educational content would be used early on in the implementation effort.

Actual code set training is the second part of educational content. Code set training ranges from basic code structure overview to intensive ICD-10-CM/PCS training and is available from multiple sources. The education strategy should have determined that ICD-10 training and education will vary by function. The right ICD-10 training will need to be delivered at the right time. One approach is to create ICD-10 training groups based on similar education needs and then develop a targeted training plan including at what point throughout the implementation each group will likely need training, the type of instruction and the delivery method.

Lastly, it will be necessary for many in the organization to understand the translation from one code set to another. Inaccurate coding and translation could have a significant impact on data quality, risk analysis, predictability, contract integrity, processing rules, clinical policies and other key business functions. The substantial differences between ICD-9 and ICD-10 will put coding and translation quality at risk if adequate training is not done.

The 'virtual implementation' methodology has been recommended for training to address these risks. This methodology includes the following components:

- Clinical scenario coding
 - Clinical scenarios chosen to evaluate a diversity of clinical domains and to provide challenges related to known problem areas in coding are presented and the participant is asked to code these clinical scenarios in both ICD-9 and ICD-10.
- ICD-9 to ICD-10 (forward mapping)
 - A set of ICD-9 codes are presented and the participant is asked to translate the ICD-9 codes to the appropriate ICD-10 code(s). These codes are selected to evaluate a diversity of clinical domains and to provide challenges related to known problem areas in 9 to 10 translation.
- ICD-10 to ICD-9 (backwards mapping)
 - A set of ICD-10 codes are presented and the participant is asked to translate the ICD-10 codes to the appropriate ICD-9 code(s). These codes are selected to evaluate a diversity of clinical domains and to provide challenges related to known problem areas in 10 to 9 translation.
- Analysis of results
 - Assessment of consistency in coding and translation patterns for common scenarios and codes.

5.3.3. Create Resource Management Plan

This plan should outline how the project will acquire resources, the known resource requirements, and how the organization will ensure having the right resources available when they are needed. The plan should also outline clear roles & responsibilities for the project team. As the ICD-10 project is not solely an IT project, the types of resources that should be considered will vary from a typical IT project. Some of the staff that would likely need to be involved in the ICD-10 project may include staff from the member enrollment department; clinicians to review and revise medical policy as well as contract staff to review existing contracts to determine if contract changes will be needed for ICD-10

5.3.4. Create Scope and Scope Management Plan

This plan defines the Scope Change Control process for the project.

Defining Scope:

The ICD-10 implementation project is unlike any of the previous HIPAA implementation projects. The impact and scope of previous projects focused primarily on the data interchanges and IT systems in an organization. The ICD-10 project, however, will impact virtually all of the business processes as well as the IT systems in organizations. The scope of this project is vastly greater than other HIPAA projects and must be managed as such. The main planning concern must be to assure the inclusion of all impacted areas.

In both the initial project proposal, and the completed project plan, care must be taken to survey the organization to discover potential impacts. Those staff members who are familiar with the ICD-10 code set changes should be tasked with brainstorming the range of impacts. Several examples of potential impacts would be:

- Customer service representatives must be able to understand changes in coverage and coding to explain payment decisions to both beneficiaries and providers.
- Case managers will need to understand the new coding to make decisions on how best to manage individual beneficiary healthcare.
- Clinical documentation specialists will need to know the requirements to support the new coding set.
- Actuaries will need training on coding to help model new payment processes and predict revenue.

These examples show that this expanded scope impacts both health plans and providers, and provides an indication of the breadth of the impacts.

Scope Change Control Process:

Throughout the duration of the project the project scope should be discussed and adjusted as determined by the steering committee. The scope of the project can expand (creep) beyond the original objectives and goals, impacting the project in positive or negative ways. If project work is requiring resources to extend beyond their original allocation to the project, the project scope has crept. For example, a vendor installs an upgrade that requires additional work on the vendor side due to an added software feature. This translates to a project deliverable for your organization. Even if the new feature/functionality is an added benefit to the organization, the project has crept beyond the original plan, consequently scope creep. Managing the project deliverables and budget are just as important as the management of scope creep.

To address scope creep, any time additional features, functionality or process improvements are added to the scope (original objectives) and require additional resources, those requests/additions should be routed through a formal approval process. Scope changes should be taken seriously, can over extend resources and deflate budgets. By keeping a close watch on the project goals and objectives, team members can mitigate issues that may negatively impact the overall project.

5.3.5. Identify Risks and Create Risk Management Plan

This process should identify risks and outline how the project will manage risk, measure and rank risk as well as set acceptable guidelines for responding to risks if they occur. Include known risks and add newly discovered risks as the project progresses. Risks can be both negative and positive (opportunities). Also, they may have varying impacts on the project or organization.

Examples of risks may include:

- Availability of resources and subject matter experts to support the project before and after implementation
- Overall ability to communicate about the project internally and externally to stakeholders regarding readiness and testing
- Complex information technology changes associated with interfaces and on-going project prioritization
- Project expense budgets and financial management
- Sequencing of project activities

In addition to identifying risks, healthcare organizations should develop a risk management plan that includes the type of risk, source/symptom of the risk, its impact/consequence, and the related response that includes the mitigation and contingency plans. Organizations need to understand their risks associated with the transition and regularly monitor the status of implementation activities to ensure that project tasks are achieved according to schedule. Risks can occur during various phases of the project.

Create and maintain a Risk/Issue log that contains the following:

- Develop an Escalation process
- Create and maintain a Risk/Issue log
 - ID #
 - Risk/Issue Name
 - Description
 - Type (schedule/resource) or (internal/external) or (focus area)
 - Owner

- Rank/Priority
- Probability of Occurrence
- Severity – Impact
- Open Date
- Status Date
- Closed Date
- Status (i.e., New, In Process, Pending, Closed)
- Mitigation Approach
- Progress Notes

Healthcare organizations need to grasp the total impact of the changes required for the transition to ICD-10 and start their remediation efforts as early as possible. The numerous changes facing organizations over the next three to five years will require planning, resources, and coordination at an unprecedented level. With careful planning, management, and reporting, the effort required for organizations to achieve the desired level of ICD-10 compliance and their ability to measure project success will increase. Organizations will only focus on completing the implementation without taking advantage of available opportunities to improve processes and reduce costs. Acknowledgment of ICD-10 as an emerging risk is important to gain organizational momentum.

5.3.6. Create Vendor Management Plan

Because the changes coming with ICD-10 impact so many business areas within healthcare organizations, vendor management for ICD-10 compliance is likely to involve multiple systems and services vendors. A health plan may, for example, have changes required in adjudication, medical management, reporting and correspondence systems as well as in the systems used by its outsourced utilization review, vision, dental and behavioral health vendors.

This complexity makes it essential to put a strategy in place to manage the communication and coordination with all vendors in order to ensure adequate end-to-end testing prior to the compliance date. There may also be interdependencies between and among vendors due to software interfaces which must be understood and remediated correctly in order for the project to be successful and avoid disruption to the business.

As part of your ICD-10 project you should also plan to review your contracts with all vendors impacted by the change in code sets. If the vendor provides software which supports your business and uses ICD-9 codes you need to determine whether a new version is required to meet ICD-10 compliance. If a version upgrade is required will it be provided as part of a maintenance contract, or will you be charged for a new system? Determine when the software will be available, as these dates will affect your test planning process.

Many of these same questions apply to vendors which supply services to your organization. Physician practices, for example, often outsource billing to third party vendors and uninterrupted revenue depends on the vendor's readiness. If you have not received information from all of your systems and services vendors about their plans for ICD-10 compliance, contacting them for a status report should be done as early as possible in your planning.

5.4. Hold Project Kickoff

As soon as the structure for your project is in place, it is important to assemble the team to synchronize assumptions and expectations. A formal kickoff is an effective way to achieve this and should not be omitted from an ICD-10 compliance project.

5.5. Create High Level Business Requirements

At the very highest level, the organization needs to describe explicitly what the requirements of the project are. There will be wide variability in the high level business requirements across organizations, with some seeking minimal compliance with the ICD-10 mandates while others seek to optimize certain business processes as part of the ICD-10 project. The scope will be constrained by these high level business requirements; therefore, agreement among users and documentation of the scope is imperative.

One of the considerations in developing the high level business requirements will be to establish an overall direction for the program, often referred to as a set of guiding principles. Key questions that an organization must face at this point include that organization's definition of compliance (often described using precise business rules to address possible compliant & non-compliant scenarios), the intent to remediate systems (update native processing) versus a workaround solution (sometimes referred to as "map and wrap" or "Crosswalking") and the organization's position regarding revenue or cost neutrality (aggressive approaches to realizing bottom line benefits versus an attempt to maintain the status quo). These topics each merit considerable thought and planning on their own but are beyond the scope of this paper to address. For remediation versus workaround options, please refer to work products produced by the WEDI Crosswalk Sub Workgroup. The issue of revenue or cost neutrality will be addressed in future WEDI Implementation Sub Workgroup work products.

5.6. Identify / Elaborate Business Functional Requirements

The business of healthcare is not radically changing due to ICD-10; rather it is the available data that is changing. The use of native ICD-10 data will result in fewer process changes and workarounds to accommodate changes in the data will likely be the source of many new requirements. Regardless of the remediation approach the high level business requirements will launch the detailed functional requirements.

Each functional area identified in the impact analysis phase should be included in drafting requirements. Joint Application Requirements (JAR) sessions can be used to drive out the high level requirements, but recognize that data level requirements will need focused SME level input and validation.

Three areas that will require close examination when drafting ICD-10 requirements are reporting, data inputs and business rules.

Reporting:

It is important to gather all reporting requirements. Often overlooked is the fact that underlying data in a report may be derived from ICD codes. This is an easy miss for many entities, particularly where they run ad hoc reports and do not realize that the underlying data may be derived from ICD codes. Business areas whose processes may not change with ICD-10 must still carefully review their reports.

Data Inputs:

The other area where impacts may not be obvious if business processes are not changing is the data inputs or interfaces that support their business. In cases where the business processes are impacted, business scenarios (use cases) can assist in identifying the new data requirements.

Business Rules:

The most granular of all requirements are the business rules. ICD-10 requires the review of many business rules, especially those embedded in program code. Even the most knowledgeable SMEs in an organization will not likely be able to identify all rules requiring review. Business rules mining may

be necessary to find all the instances of ICD codes used in logic. Automated “code crawlers” may help with the identification of the location of the codes, but the necessary changes to business rules will still require analysis to define requirements.

The requirements for these business rule changes will be driven by decisions on mapping of codes for equivalence between ICD-9 and ICD-10 and other interpretation decisions of the organization. There will be no one-size-fits-all solution and no magical crosswalk solution. Each covered entity has systems, processes and policies which can differ widely from other organizations. Once an organization’s ICD-10 solution approach is defined and decisions are made about any necessary code mapping, then changes to the business rules can be defined as requirements.

5.7. Identify / Elaborate Non Functional Requirements

Many requirements cannot easily be attributed to a specific business function but are no less important to the business. Non-functional requirements often impact administrative costs (e.g., the amount of time it takes to process a transaction). Even milliseconds can have a significant impact on the overall cost of a transaction when you think about volume. Extra calls to other systems, such as a crosswalk or other ETL (extract, transform and load) processes will increase the time it takes to execute a transaction. This is a valid concern for those choosing to insulate their systems using a crosswalk.

Non-functional requirements can be gathered along with or immediately after functional business requirements are gathered. They should include but not limited to:

- Accessibility
- Performance / response time
- Availability (service level agreement)
- Platform compatibility
- Quality (e.g., faults discovered, faults delivered, fault removal efficacy)
- Efficiency (resource consumption for given load)
- Effectiveness
- Resilience
- Extensibility
- Resource constraints (e.g., processor speed)
- Memory, bandwidth, etc.
- Legal and licensing issues
- Response time
- Interoperability
- Robustness
- Maintainability
- Scalability
- Etc.

6. Execute Project

6.1. Execute the Software Development Life Cycle (SDLC)

Technical implementations will differ greatly based on the organization’s architecture and processes. It is not within the scope of this White Paper to address this in detail. Some areas of key concern with an ICD-10 Implementation Plan include the following.

Develop Architecture Approach / High Level Design:

Because the impact of ICD-10 is so broad, it is critical that IT leadership pay close attention to how the implementation will be integrated with the existing IT architecture as well as how it should align with the IT strategic roadmap.

Develop Detailed Design and Define System Interfaces:

Because of the complex nature of ICD-10, it will likely be necessary to document interface assumptions between systems to ensure developers do not build incompatible solutions. These interfaces will need to be managed carefully as parallel projects deploy changes to ICD-10 impacted systems over the life of the program.

Build Environments:

Environment builds for this project will be particularly complex as the Environment Coordinators will need to consider vendor upgrades, downstream systems and data warehouse interfaces. Additionally, the test cycle will run longer than a typical project and this could impact Release Planning for the enterprise.

6.2. Develop Business Process Solutions

During the development of high level requirements it will become clear where business process remediation will need to occur. This may be in the form of work-arounds to accommodate a process that needs to change due to a solution constraint; however, most will be purely an outcome of the transition.

6.2.1. Determining the Universe of Business Functions that Need Remediation

The requirements of the transition will include a review of medical policies, clinical guidelines, servicing manuals, provider contracts, etc. – anywhere ICD codes are used will need a translation and expansion of the existing ICD-9 to include ICD-10. This includes reference documentation and all types and kinds of business rules that include codes such as:

- Processes for adjusting a claim
- Calculating pay for performance
- Determination of quality measures reporting
- Application of medical policy
- Out of area manual pricing
- Coordination of benefits
- Utilization management
- Cost containment edits
- Benefit classes
- Provider contracting rate sheets
- Etc.

Artifacts need to be assessed for the appropriate remediation strategy. Many of the artifacts may have critical policy implications and cannot be remediated in a silo.

NOTE:

- Even if a Health Plan chooses to insulate many core processes, at a minimum, there is still a need to forward translate for clinical purposes.

6.2.2. Business Remediation Steps

The magnitude of these efforts should not be underestimated. Contract revisions, denial conditions, utilization management criteria, etc. can have far reaching impacts and can be a very time consuming effort. The following steps are recommended:

- Gather policies, guidelines, and any artifacts that contain ICD codes.
- Assess each artifact for:
 - criticality
 - universe of codes that exist in the artifact
 - owner
 - dependencies or successors
- Prioritize based on the importance to the business and broadness of impacts.
- Document universe of forward mapped codes that need to be reviewed for agreement.
- Translate codes and add to a single source of truth (Book of Record described below).
- Assess possible impacts of mapping in light of risk to altering revenue neutrality.
 - While it is impossible to predict provider coding behavior, upper and lower bounds can be applied when assessing the impact of a translation.
- NOTES:
 - It is NOT recommended that all ICD-9 to ICD-10 maps be reviewed; rather only the ones that apply in the plan's business.
 - When assessing medical policies and guidelines, it is important to assess the intent of the policy as many do not contain codes.
 - Due to the external facing nature provider contracting remediation is likely to be the most difficult business function to be remediated. The impacts of ICD codes, DRGs and other pay for performance (P4P) measurements should be evaluated early on to allow time to develop appropriate remediation strategies.

6.2.3. Develop a Book of Record of Translation

Functional areas may need to apply the codes differently. Forward mappings and any conditions should be housed in the single source of truth to ensure consistency of adoption across the enterprise.

6.2.4. Business Remediation and Timeline

The actual remediation efforts of the business processes can be estimated based on the analysis of the artifacts described above. The business process owner should perform the actual remediation and therefore:

1. Schedule the remediation of the artifacts – note any application dependencies. (e.g., planned system code remediation)
2. Schedule the appropriate review cycles.
3. Test behavior of mappings as applied to the process particularly case where there are significant downstream impacts. (e.g., medical policy impact on benefits determination, new provisions for a P4P contract, etc.)

The actual effort to remediate the business is significant, and should not be underestimated or delayed. These efforts should be completed in as early as possible in FY12 as most system code needs to be stable and locked down for testing by FY13. Therefore, significant business changes need to be accounted already (e.g., selection of a new DRG).

6.3. Integrate Vendor Code Solutions

Timing vendor dependencies for this project could be a significant endeavor. Be sure to plan sufficiently for this task. Vendor dependency will heavily influence organizations ability to transition to ICD-10 and for this reason work with vendors must occur early in the process allowing the business ample timeframes for testing and integrating.

6.4. ICD-10 Testing

Introduction

As for almost everything related to the implementation of ICD-10, the testing process will be significantly different than it has been for previous HIPAA transitions. In earlier transitions most of the changes and testing have been at the EDI level. The testing focused on whether a transaction could be created, transmitted, received, understood, and taken into the processing system. Most of the internal processing remained unchanged. For ICD-10, we know that the majority of changes associated with the transition will be changes in the business rules associated with processing the codes. Thus, the testing must ascertain that all diagnosis and inpatient hospital codes are handled correctly at each step of the processing cycle. The concern is not only the creation and receipt of a transaction, but also with the storage, transmission, use, and interpretation of the code throughout the organization's business processes. Both automated and manual processes will need to be thoroughly tested to ensure that they work correctly using ICD-10 codes.

It will be important to use consistent test data and scenarios throughout the testing process to ensure that systems are working together correctly. Once that is assured, the same test scenarios should be used in the external testing process.

End to end testing for ICD-10 must also be performed in the external process. It will not be enough to ascertain that systems can transmit and receive ICD-10 codes with trading partners. Organizations must be able to verify that their trading partner is producing the correct ICD-10 code for their purposes and that systems are processing the code and producing the expected result according to the requirements for both the organization and their trading partners.

High level topics and concerns related to internal and external ICD-10 testing are presented below. For more detailed information and guidance on ICD-10 testing, consult the products of the ICD-10 Testing Sub Workgroup, which is responsible for guidance from WEDI in this area.

6.4.1. Internal testing

Unlike the implementation and revision of the HIPAA transactions where the primary impact was felt in the IT department and on EDI processing, the transition to ICD-10 is expected to have a greater impact on business processes than it will have on the IT department. Changes to business processes for the implementation of ICD-10 will be seen in almost every department, and will be far ranging and significant. These business process changes must be accommodated when planning for IT remediation and testing. The business process decisions may impact decisions about system remediation or replacement and determine the scope and nature of the testing required.

Important steps in internal test planning are:

- **Identification of the applications, departments, reports and databases** in the current process that are touched by ICD-9
- **Building the business scenarios and situations to be tested**
- **Creating Test cases and Testing Regions**

- **Testing Regions** – Testing requirements for ICD-10 should be determined far in advance of the start of internal testing. Due to the scope of changes anticipated, test regions which closely resemble production environments will probably be required.
- **Unit Testing Preparation**
- **Determining Impact of testing on daily operations and personnel**
- **Prioritization of testing situations** – identifying the most critical areas for testing
- **Building an end to end testing environment**
- **Testing individual cases/situation and large volumes of data** – There are several stages of testing that must be performed. Initially, systems and processes must be tested for individual situations to ensure that the logic is correct. In addition, “stress testing”; the running of large volumes of data through processes and systems, must be performed to determine performance measures, productivity, and also to look for outliers in the processes which might not have been initially considered in the individual unit testing.
- **Determining timing of internal testing versus external testing**

6.4.2. External testing

External testing may involve coordinating with a large number of entities. Careful planning is needed to ensure that there will be adequate time for testing, remediation, and re-testing with trading partners.

Areas of concern to address related to external testing include, but are not limited to:

- **Identification of Testing Partners**
- **Creation of test data and test scripts**
- **Prioritization** – The most critical testing partners and areas must be identified in planning external testing.
- **Testing Partner Communication**
- **Scheduling External Testing**
- **Testing Resources** – Based on the testing schedule, determine if additional testing regions, space, personnel, or processing power will be required to complete the testing with partners, and plan appropriately.
- **Parallel testing**
- **Retesting as necessary**

6.5. Implement Solution(s)

Due to the highly complex nature of ICD-10, healthcare organizations will need to engage in careful planning, execution and control of activities to meet their desired strategic and compliant operating levels for people, processes and technology. Section 5.3 of this document describes the initial scope, schedule and budget for this initiative based on the Impact Assessment. Sections 5.4-5.7 build upon these activities to test and confirm that transition and implementation plans are up to date and reflect the latest understanding of resources, risks and issues. In addition, any alternative delivery mechanisms needed should have been identified and the required resources can be readied for mobilization.

During the Implement Solutions phase, the different parts of the ICD-10 implementation are brought together and assembled in its entirety. While there may have been points during the testing phase when internal and external systems and processes have been cross-checked, this is the first time that all of the work deliverables are combined and tested as a whole. The following sections highlight the key implementation tasks as well as the planning methodologies and control activities that can be used during project execution to assist organizations in staying on track, maintaining momentum, and achieving their ICD-10 goals.

6.5.1. High Level Implementation Activities

The following section describes the high-level activities required to implement the ICD-10 remediation activities identified during the assessment and testing phases, and provide the required level of staff and stakeholder training to support these initiatives. Risk assessments, contingency plans, reporting mechanisms and other iterative tools can be used concurrently to manage developing issues and support effective outcomes. Activities can include, but are not limited to, the following:

- Confirm Transition Plans
- Transition Business and Technology Operations
- Validate Vendor Compliance
- Execute Change and Communication Strategy
- Conduct Readiness Assessments

6.5.1.1 Confirm Transition Plans

As a first step in transitioning the organization from its current state to the future ICD-10 compliant state, any implementation plans, contingency plans, or transition plans previously developed should be reviewed for completeness and applicability. Plans should be adjusted based on testing results or new data developments, as needed. In addition, any parameters or assumptions used during initial project planning should also be re-evaluated for accuracy and strategic alignment.

6.5.1.2 Transition Business and Technology Operations

Once ICD-10 transition plans have been confirmed, the next step is to execute the identified tasks in the timeframes established. In implementing new or revised business and technology processes, consider establishing a standard framework to describe and document the methodology by which processes will be managed, measured, and improved on an ongoing basis. Framework components could include:

- Description of the organization's key ICD-10 priorities for people, process and technology by functional area, including next step remediation projects and the key performance indicators to be used to measure progress
- Process ownership and accountability
- Established implementation teams and cross-functional workgroups by business or technology functional area
- Regular process reviews to measure current performance levels, determine next steps and identify any gaps
- Training in ICD-10 related processes and systems
- Governance structure to ensure ongoing alignment with organization's overall ICD-10 compliance objectives

6.5.1.3 Validate Vendor Compliance

As part of transitioning business and technology operations, organizations should consider establishing a vendor management plan to manage and validate that all vendors are in compliance with ICD-10 guidelines. Vendors perform essential everyday activities and are therefore instrumental to the success of any organization. Starting remediation conversations earlier rather than later and ensuring that key vendors with ICD impacts are in compliance with ICD-10 regulations will be a critical step during implementation.

6.5.1.4 Execute Change and Communication Strategy

Organizations need to consider approaches for leading and sustaining change before, during and after the transition. ICD-10 requires changing business rules and processes in current operations and will likely create some change resistance and confusion. Regular communication to all stakeholders during implementation can help manage expectations and reduce the likelihood of opposition. Coupling stakeholder communication with an effective training program will help mitigate additional risk.

Components of an effective Stakeholder Change and Communication Plan include:

- List of stakeholders and project participants
- Roles and responsibilities
- Project reporting frequency – identifies when, how and what information is communicated to each stakeholder by listed role
- Project contact list – identifies roles and contact information for key individuals responsible for transition-related activities

6.5.1.5 Conduct Readiness Assessment

Conducting a readiness assessment allows an organization to baseline and to gauge its preparedness for ICD-10 compliance. It also highlights areas and activities that may need adjustment in order to fulfill compliance objectives. In determining which functional areas and related components to evaluate, organizations should look to its overall ICD-10 objectives and critical success factors. The readiness assessment should analyze the areas that most impact the organization's defined strategic and compliant operating levels for people, processes and technology.

6.5.1.5.1. Establish Readiness Criteria and Develop Assessment Tool

Functional areas to consider for the assessment include:

- Engagement and Planning Readiness (e.g., organizational buy-in and support of senior leadership, etc.)
- Workplace Readiness (e.g., training effectiveness, addressed ICD-10 compliance requirements, etc.)
- Technical Readiness (e.g., updated business rules engine, addressed technical feasibility, validated technology functionality and sustainability, established interoperability of equipment and technology, etc.)
- Business Operational Readiness (e.g., addressed business requirements issues, evaluated external stakeholder impacts, updated medical policies and related documentation, etc.)

Readiness criteria and a defined scoring system should be established and validated by key stakeholders beforehand to ensure useful and objective results. Also, consider a delivery mechanism that is familiar or compatible with the organization (i.e., interactive, web-based, or paper format). An effective readiness assessment tool should consider the following objectives:

- Understandable and easy to use (i.e., clear directions, use of examples, etc.)
- Be practical and knowledge-driven
- Educate the organization about critical needs for planned changes
- Serve as a benchmark to measure transition progress

6.5.1.5.2. Plan Ahead

- Perform a detailed transition risk analysis to identify those risks both before and after the effective date
- Determine number of monitoring activities – consider 2-3 tests to document issues and timing
- Notify stakeholders – establish communication strategy to organization, members, providers, vendors, payers, affiliates, etc.
- Establish key decision points made by stakeholders (e.g., determine when to move forward, roll back)
- Determine timing of checkpoints
- Make sure the timing for readiness assessments/testing aligns with the organization's overall ICD-10 plan
- Prepare business operations for readiness assessment
- Understand how to get organization back to pre-assessment operations (roll back)

6.5.1.5.3. Other Considerations

- Establish escalation plan – (e.g., Do issues identified during the readiness assessment get escalated upward faster or is the regular project risk/issue escalation process sufficient?)
- Understand the variance from cutover to future state
- Document any lessons learned along the way
- Establish stakeholder roles and responsibilities
- Begin identification of a post-implementation support plan

6.5.2. Implementation Control Activities

Regular performance reporting serves as a mechanism to measure the progress of implementation activities and helps identify project issues that may require resolution. The following are some examples of key reports that can be used during implementation. These tools may already be created and managed as part of the overall ICD-10 project management program.

6.5.2.1 Reporting

- Status Report
 - Status report template that includes milestones and key transition and implementation activities
 - Status report process
 - Reporting frequency/schedule
 - Distribution list
 - Pre-determined status definitions (e.g., red, green, yellow)
 - Roles and responsibilities
- Key Performance Indicators, including Benefits Realization Process
 - Reporting process
 - Key transition performance metrics
 - People
 - Process
 - Technology

6.5.2.2 Risk/Issue Management

In addition to status and performance reporting, healthcare organizations should protect their critical assets by developing risk management, mitigation and related contingency plans. Organizations need to understand its risks of transition and regularly monitor the status of implementation activities to ensure that project tasks are achieved according to schedule.

- Escalation process
- Risk/Issue log
 - ID #
 - Risk/Issue Name
 - Description
 - Responsible party
 - Open Date
 - Status Date
 - Status (i.e., New, In Process, Pending, Closed)
 - Mitigation Approach
 - Progress Notes

Without careful planning, management, and reporting, the effort required for organizations to achieve the desired level of ICD-10 compliance and their ability to measure project success will increase. Organizations will only focus on completing the implementation without taking advantage of available opportunities to improve processes and reduce costs.

6.6. Post Implementation

ICD-10 brings a significant change to the organization. Implementation Plans should consider the impact to IT support teams and business operations (call response times, etc.) in addition to ensuring any benefit realization tied to the program. An effective Transition to Sustainment plan should incorporate the following considerations for ICD-10:

6.6.1. Contingency Planning

Have all trading partners transitioned to the new code set? A business response strategy should be in place to address this risk. The Final Rule stipulates that HIPAA Transactions referencing a Date of Service on or after 10/1/2013 must utilize the ICD-10 coding system. Claims for dates of service on or after 10/1/2013 that contain ICD-9 codes are not compliant with HIPAA requirements. If your organization chooses to accept non-compliant transactions and process them, it could have other residual impacts for the industry. (Consider COB scenarios as an example.)

6.6.2. Implementation Performance Monitoring & Response

The implementation of ICD-10 carries with it significant risk to business operations. There is a potential for increased call volumes, fluctuations in auto adjudication, additional legwork in fraud and abuse, confusion around appeals and a high likelihood the frequency of incorrectly coded claims will skyrocket. An implementation like this also carries the risk of being a default assumed cause for unrelated business issues and, as such, can cloud critical root cause analysis activities that are necessary for the resolution and prevention of those issues. In order to ensure the organization is able to respond appropriately, it may be necessary to build some additional functionality into the business support processes for ICD-10. Consider the following:

- Implement a trackable ICD-10 attribute into the organization's incident tracking system(s) so that incoming calls can be appropriately tagged and fluctuations can be monitored and managed.
- Implement the ability to track ICD-10 incidents as they flow through the business process workflow to identify backlogs and shuffle resources appropriately.
- Establish an ICD-10 cross-functional review board that can triage nebulous issues such as incorrect coding, disputes or appeals related to code mapping or definitions, contract anomalies or questions around updated medical policies.
- Establish a baseline of performance measures for impacted business areas (such as target auto adjudication rates) and monitor against the increased volume of ICD-10 coded transactions. This should span across a minimum of 6 months and may run as long as 3 years depending on the organization.
- Establish a method for measuring and trending the volume of incoming ICD-10 coded transactions as a percentage of total transactions. This data could be used to predict downstream fluctuations in business support operations.

6.6.3. Measurement of Revenue Impacts

ICD-10 is expected to be the most costly government mandated change to ever hit the healthcare industry. The cost to healthcare organizations will place a significant burden even for the most minimalist compliance strategies. Organizations should take an aggressive approach to identifying, implementing and managing benefit realization opportunities as a strategy for mitigating the total cost of ownership for the remediation effort. The benefit realization opportunities identified should have measurable criteria to ensure they are implemented correctly. Where the implementation does not meet the expected measures, the organization should be prepared to take corrective action. Even where an organization has not identified benefit realization opportunities, it will still be critical to track revenue flows to ensure fluctuations are understood and not inappropriately impacted by the ICD-10 implementation. Some areas to watch closely might include:

- Claim Payments in proportion to claim volume
- Claim Payments measured against common scenarios (highest frequency codes as selected prior to implementation)
- Medicare Reimbursement
- Fraud and Abuse
- Claim Denials in proportion to claim volume
- Claim Denials measures against common scenarios (highest frequency codes as selected prior to implementation)

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