Non-Emergency Transportation Services for IHAWP Members:

The early experiences of Iowa Health and Wellness Plan members

A Policy Brief

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Non-emergency Transportation Services for Iowa Health and Wellness Plan members: Early Experiences

Research findings

The primary research question in this study was to determine if there were differences in the access to care for members of the Iowa Health and Wellness Plan (IHAWP-Iowa’s Medicaid expansion program) for whom non-emergent transportation services were waived and the traditional Iowa Medicaid State Plan, whose members receive non-emergent transportation services. The study consisted of responses to member surveys and a network analysis to assess travel distance to available providers.

These analyses indicated that there was little, if any, difference in the barriers to care for IHAWP vs Medicaid members as a result of transportation-related issues as assessed in our surveys. Overall, around 20% of Medicaid and IHAWP members reported usually or always needing help from others to get to a health care visit and around 13% reported an unmet need for transportation to or from a health care visit in the six months prior to the survey.

Geocoding and network analysis indicated that IHAWP members live as close, or closer, to a primary care provider than Medicaid State Plan members. In addition, previous IowaCare members who have enrolled in IHAWP reside closer to a PCP than they did to their assigned provider in IowaCare.

Introduction

The Iowa Health and Wellness Plan (IHAWP) is Iowa’s version of the Medicaid expansion, allowed as part of the Affordable Care Act (ACA). The IHAWP includes two separate programs: 1) the Wellness Plan (WP), which is a more traditional Medicaid-like program, for individuals from 0-100% of the federal poverty level (FPL), operated by the Iowa Medicaid Enterprise, and 2) the Marketplace Choice (MPC) Program, where individuals select a Qualified Health Plan (QHP), from eligible private plans in the Health Insurance Marketplace. The IHAWP began on January 1, 2014.

This policy brief focuses on the issues related to non-emergency medical transportation (NEMT). NEMT is a service that is covered for Medicaid members but is not covered for members in either of the IHAWP programs. To evaluate the impact of Iowa’s waiver from providing NEMT services on access to care, we conducted a multi-factorial approach including:

I. A comparison of the perceptions of people who do and do not receive NEMT services from questions in consumer surveys conducted in the Fall of 2014 with members of IHAWP and Medicaid State Plan and

II. A geographical assessment of distance to primary care providers based on a geocoding/mapping technique.

I. Consumer survey of NEMT-related issues

Surveys were conducted with both IHAWP and Medicaid members in the fall of 2014 to compare these populations on a series of transportation-related questions to explore the impact of not covering NEMT services in the IHAWP program.

Methods for the IHAWP and Medicaid surveys

The 2014 Survey of IHAWP members was conducted during the fall and winter of 2014/2015 using a mixed-mode methodology. Surveys were mailed to a stratified random sample of 6,750 IHAWP members who had been in their current plan for at least the previous six months. We selected a sample of
1,350 from each of five groups (according to the members’ initial IHAWP assignment): WP Fee-for-Service (FFS), WP Health Maintenance Organization (HMO), WP Managed Care, MPC—CoOportunity Health, and MPC—Coventry Health. We also conducted a survey of 4,050 Medicaid members during this same period of time, using the same methodology. We selected a sample of 1,350 from each of three member groups: HMO, MediPASS, and FFS.

Both mail and web-based surveys were used for these assessments. The initial mailings were sent to the sample of IHAWP and Medicaid members in October, 2014. The first mailing included a $2 bill as an incentive, regardless of survey completion. A reminder postcard was sent fourteen days after the initial mailing. About fourteen days after the postcard reminder, a second mailing was sent to those who had not responded to the initial mailing. In the mailed cover letter and on the reminder postcard, enrollees were also given the option of completing the survey online and were provided the website address for that purpose.

There were 670 Medicaid members and 1792 IHAWP members (1101 WP and 691 MPC members) who responded to the survey for an overall adjusted response rates of 30% for the IHAWP sample and 19% for the Medicaid sample. Response rates were adjusted by removing from the denominator those ineligible to complete a survey because of incorrect or out-of-state addresses.

Transportation-related questions in surveys covered the following topics:

- The enrollees’ mode for traveling for health care
- How frequently they needed assistance traveling for health care in the last 6 months
- Unmet need for NEMT in the last 6 months
- Any past use of NEMT paid for by Medicaid
- Concern about costs associated with NEMT in the last 6 months
- Transportation as a barrier to using the emergency department instead of going to a doctor’s office or clinic for care (only asked of IHAWP members)
- Transportation as a barrier to obtaining a physical exam (only asked of IHAWP members)

Data were tabulated and bivariate analyses (i.e., chi-square and t-tests for group differences) were conducted using SAS. NEMT is a service that is covered for Medicaid members but is not a covered service in the IHAWP. Thus, the primary analyses were comparisons between members of IHAWP (WP and MPC combined) and members of Medicaid. A secondary analysis was conducted looking at potential differences between WP and MPC members within the IHAWP.

The data was post-stratified to control for potential systematic biases created from collecting data from a stratified sample. We used a simple weighting factor to make the data representative of all IHAWP and Medicaid members statewide and to account for that fact that there were not equal numbers of enrolled members in each sampled group. Thus, the percentages reported were weighted to reflect the statewide membership in each group.

**Limitations**

There are some limitations with survey research that can affect the interpretation of the results. First, those who choose to respond to the survey may be different from those who choose not to respond and this can create biased results. In this evaluation, respondents (both to the Medicaid and the IHAWP surveys) were more likely to be female, white, and older than those who did not respond to the surveys. Second, respondents may have difficulty accurately remembering events which may introduce recall bias. This risk may not be high because of the relatively short time period for recalling events (6 months). Third, there may be variables that confound the interpretation of these results. One such example is the
fact that one of the MPC plans (CoOportunity) pulled out of the MPC around the time of the administration of this survey which may affect the experiences of those members differently than the members of the other MPC plan, Coventry Health.

Results

Mode of Transportation to Health Care Visits

In the surveys, members were asked: “When you need to get health care, what is the type of transportation you use most often to get to your visit? (Please choose only one answer.)” Figure 1 provides a summary of the responses from both Medicaid and IHAWP members.

The majority of respondents of both groups drive themselves (77% Medicaid, 68% IHAWP) or are driven by family or friends (17% Medicaid, 22% IHAWP) to their health care appointments. There was no difference between Medicaid and IHAWP in the reporting of not having a reliable method to get to health care visits with around 2% reporting no reliable transportation. Within the IHAWP, 3% of WP and 1% of MPC members reported no reliable way to get to visits and this difference was statistically significant (p=.02).
Need for Assistance to Get to Health Care Visits

Members were asked: “In the last 6 months, how often did you need assistance from other sources (such as friends, family, public transportation, etc.) to get to your health care visit?” Figure 2 summarizes the percentage of those who ‘usually’ or ‘always’ needed assistance from others.

![Figure 2. Usually or Always Needed Assistance](image)

Around 20% of Medicaid and 22% of IHAWP members reported usually or always needing help from other sources to get to health care visits and this was not a statistically significant difference. Within IHAWP, a higher percentage of WP members reported this need (25%) compared to MPC members (11%) and this difference was statistically significant (p<.001).
Unmet Need for Transportation to or from Health Care Visits

Members were asked: “In the last 6 months, was there any time when you needed transportation to or from a health care visit but could not get it for any reason?” Figure 3 provides a summary of the unmet need for transportation to health care visits by plan.

Figure 3. Unmet Need for Transportation To or From a Health Care Visit

Overall, less than 15% reported an unmet need for transportation to medical appointments. The reported unmet need for transportation was not statistically different for Medicaid members (12%) and IHAWP members (13%). However, within IHAWP, a higher percentage of WP members (15%) than MPC members (5%) reported an unmet need for transportation and this difference was statistically significant (p<.001).
Past Use of the Medicaid Transportation Benefit

Members were asked: “Have you ever used transportation paid for by Medicaid to get to or from a health care visit?” Figure 4 provides a summary of the use of the Medicaid NEMT benefit by these members.

Figure 4. Percentage Reporting Any Past Use of Medicaid Transportation Benefit

Overall, less than 10% of members of these plans reported ever having used the Medicaid transportation benefit. Not unexpectedly, there was a significant difference between Medicaid (8%) and IHAWP (4%) members in ever having used the benefit (p<.001). Among IHAWP members, there was no difference between WP and MPC members in the use of the NEMT benefit.
**Worry about the Cost of Transportation to Health Care Visits**

Members were asked: “In the last 6 months, how much, if at all, have you worried about your ability to pay for the cost of transportation to or from a health care visit?” Figure 5 provides a summary of the members’ perceptions of the burden of transportation costs.

![Figure 5. Worry about Ability to Pay for NEMT](image)

There was no difference between Medicaid and IHAWP in reported worry about the cost of transportation with 13% of each reporting that they worried “a lot” about their ability to pay for the cost of transportation to or from a health care visit. Within IHAWP, a higher percentage of WP members (14%) than MPC members (6%) worried “a lot” about transportation costs (p<.001).
Transportation Problems as a Barrier to Health Care

Two transportation-related questions were asked on the IHAWP survey but not on the Medicaid survey. Both questions asked respondents to give reasons why they were not able to obtain particular health care services:

1) Do you think the care you received at your most recent visit to the ER could have been provided in a doctor’s office if one was available at the time? If so,
   o What was the main reason you did not go to a doctor’s office or clinic for this care [care received at the emergency room (ER) that could have been provided at a doctor’s office or clinic]?

Around half of the IHAWP members reported that the care they received at their most recent visit to an ER could have been provided in a doctor’s office instead (51% WP, 50% MPC; n=250 total). The majority of IHAWP members (around 64%) reported using the ER instead of the doctor’s office or clinic because the doctor’s office or clinic was not open when they needed care. Five percent of WP members and 2% of MPC members who used the ER when they might have gone to a doctor’s office reported that it was because of transportation problems. Statistical comparisons between these two groups with regard to transportation as a barrier were not done due to low sample sizes (Table 1).

2) Do you think any of the following reasons would keep you from getting a physical exam this year? (Choose all that apply).

Transportation difficulties were the sixth most reported barrier to obtaining a physical exam for WP members (6%) and the eighth most reported for MPC members (2%). The difference between WP and MPC with regard to transportation as a barrier to obtaining a physical exam was statistically significant at p=.02 (Table 2).

<table>
<thead>
<tr>
<th>WP (n=164)</th>
<th>MPC (n=83)</th>
<th>Response Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>63%</td>
<td>64%</td>
<td>A doctor’s office or clinic was not open when I needed care</td>
</tr>
<tr>
<td>15%</td>
<td>20%</td>
<td>I had to wait too long for an appointment with the doctor’s office or clinic</td>
</tr>
<tr>
<td>12%</td>
<td>12%</td>
<td>Other</td>
</tr>
<tr>
<td>5%</td>
<td>2%</td>
<td>I had transportation problems getting to a doctor’s office or clinic</td>
</tr>
<tr>
<td>4%</td>
<td>1%</td>
<td>My insurance plan would not cover the care I needed if I went to a doctor’s office or clinic</td>
</tr>
</tbody>
</table>
Table 2. Barriers to Obtaining a Physical Exam

<table>
<thead>
<tr>
<th>WP (n=1101)</th>
<th>MPC (n=691)</th>
<th>Response options</th>
</tr>
</thead>
<tbody>
<tr>
<td>52%</td>
<td>40%</td>
<td>I have already had a physical exam this year</td>
</tr>
<tr>
<td>10%</td>
<td>12%</td>
<td>I don’t believe I need a physical exam</td>
</tr>
<tr>
<td>8%</td>
<td>9%</td>
<td>I am not sure where to go to get a physical exam</td>
</tr>
<tr>
<td>7%</td>
<td>13%</td>
<td>I don’t currently have a doctor/don’t like my current doctor</td>
</tr>
<tr>
<td>6%</td>
<td>9%</td>
<td>I don’t like getting a physical exam</td>
</tr>
<tr>
<td>6%</td>
<td>2%</td>
<td>Getting transportation to my doctor’s office is hard</td>
</tr>
<tr>
<td>5%</td>
<td>4%</td>
<td>It is hard to get an appointment for a physical exam from my doctor</td>
</tr>
<tr>
<td>4%</td>
<td>8%</td>
<td>I can’t get the time off of work/can’t get child care</td>
</tr>
</tbody>
</table>

Conclusions

There was little, if any, difference in the barriers to care for IHAWP vs Medicaid members as a result of transportation-related issues assessed in our surveys. Overall, around 20% of Medicaid and IHAWP members reported usually or always needing help from others to get to a health care visit and around 13% reported an unmet need for transportation to or from a health care visit in the six months prior to the survey.

For those who do not have the benefit (IHAWP members), there were significant differences in the need for transportation between those in the WP and those in the MPC. This finding mirrors those found in our previous work when we surveyed IowaCare members who were transitioning into the IHAWP. In that report, we surveyed former IowaCare members about their transition into the IHAWP and included the same transportation-related questions summarized in this report. As in this report, we found that WP members experienced more transportation-related issues than MPC members. However, the unmet need for transportation reported by IHAWP members in the current survey are somewhat lower than those found in the previous study (20% WP unmet need in the IowaCare transition survey, 15% WP in current survey; 10% MPC unmet need in in the IowaCare transition survey, 5% MPC unmet need in current survey) which could be due to the inclusion of all IHAWP members in the sample (which includes other populations in addition to former IowaCare members).

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**II. Distance calculations**

*Methods*

Geocoding combined with network analysis was used to determine the distance and travel time to a primary care provider (PCP) for IHAWP and Medicaid State Plan members. All members were enrolled for at least 1 month during the period January-June 2014 in IHAWP (Wellness Plan or MarketPlace Choice) or Medicaid State Plan (MediPASS or Fee-for-Service).

- **IHAWP**
  - Marketplace Choice-Coventry and CoOpportunity
    This group is only included in the mapping for members without claims as the QHP claims were not ready for analyses.
  - Wellness Plan and Medicaid State Plan
    These two group are included in both types of mapping as Medicaid claims were available.
  - IowaCare
    This group is included in both types of mapping. We did not utilize claims as IowaCare members were assigned a specific PCP. As they were required to utilize care at this location, we did not require claims for assignment purposes.

*Primary care providers* (PCPs) were defined as physicians or nurse practitioners who had a specialty of General Practice, Family Practice, OB/GYN, or Internal Medicine for women, we removed OB/Gyn as a primary care specialty for men. Internal Medicine specialists who listed a secondary specialty such as cardiology or endocrinology and clinics or providers that had no specialty or method of identifying specialty, even if they had provided a primary care visit, were removed.

Members with at least one claim for preventive care were mapped to the provider who provided this care as defined by the V70.X diagnosis codes or 99385 or 99386 CPT codes. If there were no claims for preventive care, the member was mapped to the provider with the most claims. In the case of a tie the member was be mapped to the closest provider. Members with no visits or with visits to providers that we could not match as primary care were mapped to the closest provider (Figure 6). Marketplace Choice members were not matched to PCP through claims as Marketplace Choice claims are not yet ready for analyses.
Location/Address data are cleaned prior to geocoding. Incomplete addresses and Post Office Box address are omitted from the dataset. Geocoding was carried out in multiple steps. Locations were initially geocoded using an address locator created in ESRI ArcMap using the "North American Detailed Streets" dataset maintained by ESRI. Addresses incorrectly located, or unlocated after this process were located using a combination of ESRI geocoding API and Google Maps geocoding API.

To determine the nearest provider for each member, a network dataset was created using the North American Detailed Streets dataset maintained by ESRI. Non road pathways (i.e. bike trails) were omitted and a travel time for each section of roadway was calculated using the posted speed limit and section length. A small subset of roads lacking speed limit data were edited to have a 15 mph speed limit in order to avoid inflated travel times. The ESRI Network Analyst OD Cost Matrix tool was used to determine the closest provider to each enrollee without a provider number, which calculated the travel time and distance for each enrollee to the closest provider along the fastest travel route on the network (Manhattan distance). This may not be the shortest route, but better reflects actual route choice.

For members with a provider number the Straight-line (Euclidean) distance was calculated for each member to the identified provider. Straight-line distance was used for these cases due to time and processing limitations.

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Results

Members without a claim were mapped to the nearest PCP. IowaCare members are included in these analyses as claims were not needed to assign the PCP. Table 3 and Figures 7 and 8 provide information regarding time and distance to the nearest provider for IHAWP, Medicaid State Plan (MediPASS and Fee-for-Service) and IowaCare members. IHAWP members are generally closer to a PCP in both time and distance. As expected due to the nature of the program (8 providers in the state), IowaCare members were much further from a PCP. Practically all IHAWP and Medicaid State Plan members resided within 30 minutes or 30 miles of a PCP.

Table 3. Time and distance to nearest PCP

<table>
<thead>
<tr>
<th>Study group</th>
<th>Time (Minutes)</th>
<th>Distance (Miles)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Maximum</td>
</tr>
<tr>
<td>IHAWP-All</td>
<td>4.02</td>
<td>53.97</td>
</tr>
<tr>
<td>Medicaid</td>
<td>4.65</td>
<td>42.01</td>
</tr>
<tr>
<td>IowaCare</td>
<td>40.50</td>
<td>372.90</td>
</tr>
</tbody>
</table>

Figure 7. Distance in miles to nearest PCP by program
Members with a claim

Medicaid and Wellness Plan members who had a visit(s) with a PCP were mapped to the PCP with whom they had the most visits and in the case of ties were mapped to the nearest provider. Often there were multiple ties resulting in a complex matrix structure (described above). The most efficient data manipulation allowed us to calculate straight line distances only as shown in Table 4 and Figure 9.

Results

Members with a claim were mapped to the PCP identified as providing the majority of preventive care. IowaCare members are included in these analyses as they are assigned a PCP. Table 4 and Figure 9 provide information regarding distance to the nearest provider for Wellness Plan, Medicaid State Plan (MediPASS and Fee-for-Service) and IowaCare members. Both Wellness Plan and Medicaid State Plan members travel nearly equal distances for care, while IowaCare members were much further from a PCP. For both Wellness Plan and Medicaid State plan 10% or less of the members had to travel more than 35 miles.

Table 4. Distance to nearest PCP

<table>
<thead>
<tr>
<th>Study group</th>
<th>Distance (Miles)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
</tr>
<tr>
<td>IHAWP-WP</td>
<td>11.24</td>
</tr>
<tr>
<td>Medicaid</td>
<td>12.85</td>
</tr>
<tr>
<td>IowaCare</td>
<td>40.50</td>
</tr>
</tbody>
</table>
**Figure 9. Distance in miles to nearest PCP by program for members with at least one primary care visit**

**Conclusions**

There appears to be no practical difference in the distance to a PCP in miles or minutes, as measured by network analysis, between IHAWP and Medicaid members. IHAWP members who were previously enrolled in IowaCare are closer to PCPs as part of this new program.