Summary Report of the Iowa Medicaid Medical Health Home: Evaluation of a health home program for those with chronic illnesses

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**DOI:** [https://doi.org/10.17077/fs1d-lwe2](https://doi.org/10.17077/fs1d-lwe2)
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March 2015

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The Iowa Medicaid Health Home Program

Background

In the Affordable Care Act of 2010 (Section 2703), there is an optional Medicaid State Plan benefit that allows states to establish Health Homes for Medicaid enrollees who have multiple chronic health conditions. Medicaid beneficiaries with multiple chronic conditions are high users of health care services tending to use a wider variety of services than other health care consumers. Providing good care coordination and self-management support to those with chronic illness improves health reducing the costs of care. The Iowa Medicaid Health Home (MHH) program is designed to provide a comprehensive, person-centered system of care coordination, similar to a patient-centered medical home (PCMH), for these high-need, high-cost Medicaid members. The overarching goals are to simultaneously improve member care experiences, population health, and decrease health care costs without harming individuals, families, or communities.

In the Iowa Medicaid Health Home program (MHH), Medicaid provider organizations capable of offering enhanced personal, coordinated care for Medicaid members meeting program eligibility criteria are enrolled. In return for the enhanced care, the Iowa Medicaid Enterprise (IME) offers monthly care coordination payments and the potential for annual performance-based incentives. For Medicaid enrollees to be eligible for the MHH program, they must have at least two chronic conditions or one chronic condition and be at risk for developing a second. Eligible chronic conditions include: hypertension, being overweight (a body mass index of 25 or higher), heart disease, diabetes, asthma, substance abuse, or mental health problems.

For members, enrollment into the MHH begins with a request to participate from their Health Home provider to IME. The provider presents the member with the health home benefits and the member agrees to opt-in. Members are classified into one of four tiers based on the provider’s report of their number and severity of chronic conditions as defined by a tier assignment tool developed and provided by IME. The provider receives a per-member-per-month (PMPM) payment for their care based on the tier (Table 1). Additional information about the Iowa MHH can be found at http://www.ime.state.ia.us/Providers/healthhome.html.

Table 1. Tier definitions and payment levels

<table>
<thead>
<tr>
<th>Tier</th>
<th>Sum of chronic conditions</th>
<th>Monthly payment to provider</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1-3</td>
<td>$12.80</td>
</tr>
<tr>
<td>2</td>
<td>4-6</td>
<td>$25.60</td>
</tr>
<tr>
<td>3</td>
<td>7-9</td>
<td>$51.21</td>
</tr>
<tr>
<td>4</td>
<td>10 or more</td>
<td>$76.81</td>
</tr>
</tbody>
</table>

Research Findings

This report provides a synopsis of the major findings from a series of 4 reports documenting the evaluation results for the first 18 month of the Iowa Medicaid Health Home program. For information on the study methods and additional findings and recommendations please refer to the individual reports which can be found at http://ppc.uiowa.edu/health/study/evaluation-iowa-medicaid-health-home-program.
Program implementation

Member and provider enrollment success

One measure of success for a targeted program is the enrollment of individuals who will benefit from the new constellation of services and providers who are able to provide these services. The MHH is designed to enroll and serve Medicaid members with chronic conditions utilizing providers that understand and incorporate Patient Centered Medical Home concepts. MHH enrollment began on July, 2012. Enrollment of providers and thereby members was slow with 29 providers and 5,869 members enrolled within the first 18 months.

Figure 1. MHH enrollment by month and tier.

Providers were able to give us some clues as to why program enrollment was slow. The key findings from the interviews with MHH providers across the state resulted in the following observations.

- The transition to becoming an MHH was most challenging for those clinics working to achieve PCMH recognition and this may have hindered their attempts to enroll patients.
- Address and other patient contact data sent to providers from Medicaid are not always “clean” so it was sometimes difficult for providers to reach potential MHH patients.
- Providers noted issues with having all of their staff on board with identifying potential MHH candidates and then adequately documenting their issues in the chart so that the patient could be categorized as eligible for the MHH.
- Many patients do not understand the concept of health home, and the provider/clinical staff understanding of the health home model—and therefore their capacity to explain the new system to patients—varies by degree of knowledge.

Member health

MHH providers did enroll members with chronic conditions. A majority (60%) of MHH enrollees reported their physical health as fair or poor which is much higher than adults in the Iowa SSI program (46%) and the traditional Medicaid state plan (22%)\(^1\). Although intended primarily for those with physical health conditions, more MHH enrollees reported fair or poor mental health (41%) as compared to SSI adults (32%) and Medicaid state plan adults (24%). Almost 80% of enrollees reported 3 or more chronic physical health conditions and 71%
reported at least 1 chronic mental health condition. Based on the 2014 survey, the most commonly reported chronic physical health conditions were arthritis (56%), hypertension (54%), and back/neck problems (51%) with the most commonly reported chronic mental health conditions being depression (49%) and anxiety (43%).

MHH enrollees reported fairly high levels of functional limitations due to their chronic health problems. Yet, those with experience in the program reported significantly less functional limitation due to their health problems than prior to the program in three areas: 1) interference with ability to work, attend school, or manage day-to-day activities, 2) interference with their independence, participation in the community, or quality of life and 3) need for help with activities of daily living (ADLs) such as eating, dressing, or getting around the house (Figure 2).

**Figure 2. Self-Reported Functional Limitations of 2014 Adult MHH Enrollees as compared to 2013 Adult MHH Enrollees**

![Figure 2](image)

* Significant difference at p<.05; IADLs are Instrumental Activities of Daily Living such as everyday household chores, shopping, or getting around for other purposes.

**Program outcomes**

**Providers as Patient-centered medical homes**

We asked MHH members to tell us whether their providers reflected the domains of the PCMH model of health care delivery: 1) identification of a personal doctor; 2) enhanced communication with a personal doctor; 3) coordination of care and information about care; 4) timely access to care; 5) comprehensiveness of care; 6) self-management support; and, 7) shared decision-making. The vast majority (around 90%) of MHH enrollees identified a personal doctor and expressed satisfaction with their office-visit communication with their doctor. And, while there was significant improvement from before MHH enrollment to after enrollment with regard to timely access to care (64% to 70%), there were areas for improvement in the care experience with regard to all of the other aspects of PCMH quality care provision (Figure 3).
Providers indicated that there were many difficulties providing “medical home” type of care including: 1) increased costs (financial and other) of providing this type of care: hiring additional staff to coordinate care, technology upgrades/cost, staff frustration, and staff education, 2) lack of access to data outside of their provider network and/or electronic database, 3) not enough time at patient visits, and 4) the presence of significant socioeconomic barriers to health and wellness faced by this patient population combined with a lack of community services to address them.

At the same time, providers told us that for the most part, clinic staff are excited about the health home concept and remain optimistic that the changes made to how they provide care will benefit their patient populations.

**Unmet Need for Care**

A key component of this type of program is the enhanced ability to provide needed care.

Less than 20% of MHH enrollees reported unmet needs for routine or preventive care. But overall, MHH enrollees had relatively high rates of unmet need for most other health care services particularly for specialist care (58%), dental care (31%), prescription medications (27%), and mental health care (25%). However, for most health service areas, MHH enrollees reported a decline in unmet need for care in the follow-up period compared to baseline. In particular, significant declines in unmet need were seen with regard to after-hours help, urgent care, specialist care, and prescription medications (Figure 4).
**ED visits**

Receiving needed care, particularly at the primary and preventive level, is expected to reduce ED visits, hospital readmissions, and admissions to SNFs. Both hospital readmissions and SNF admissions were difficult to analyze due to the small numbers of admissions/readmissions. However, from the limited information available, we could potentially see that the rates for each are not increasing. Evaluation of the claims experience of MHH enrollees indicated that ED rates remained steady or decreased in the MHH group while either remaining steady or increasing in the non-MHH group (Figure 5 and 6). In addition, costs analyses indicate that there is a $12.30 reduction in expenditures for ED visits per member per month in the program.

**Figure 4. Unmet Need for Health Care Services Reported by MHH Enrollees**

*Significant difference at p<.05*

**Figure 5. ED visits/1000 eligible months by MHH enrollment (18-44 year olds)**

**Figure 6. ED visits/1000 eligible months by MHH enrollment (45-64 year olds)**
MHH enrollees tell a similar story in that 41% of enrollees in the follow-up period reported going to the ED at least once in the previous six months which was significantly less than the 48% of enrollees who reported the same at baseline.

Some clinics were able to identify the specific changes they made to address these reductions in service use (enacting processes to follow-up with patients after discharge, establishing a better communication network with local hospitals, reminder systems). But, many clinics were not far enough along in implementation to address these issues specifically. In addition, MHHs connected to a larger health care system reported the greatest success in making changes to address these specific issues. Challenges remained for other clinics regarding establishing better communication with hospitals and providing better after-hours contacts for their patients.

**Reductions in Cost**

Table 2 provides the regression results for the analyses of change in total costs (medical, institutional, dental, inpatient, outpatient, pharmaceutical, durable medical equipment, and any additional services provided under special programs or waivers), ED costs not associated with an inpatient stay, and inpatient stay costs. These analyses were adjusted for age, presence of substance abuse, asthma, diabetes, coronary artery disease, hypertension, obesity, or mental health condition, percent poverty, Medicare eligible, Medicaid program type.

A total cost savings of $167.90 PMPM was achieved, on average, during the first month of enrollment in the MHH with a monthly savings trend of $8.96 PMPM after the first month. While the cost saving was significant for ED visits at $12.30 PMPM and for inpatient stays at $147.40 PMPM for the first month of enrollment, these savings did not increase significantly over time for either service use.

Table 2. Change in PMPM Costs

<table>
<thead>
<tr>
<th></th>
<th>Total cost</th>
<th>ED cost</th>
<th>Inpatient cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in PMPM cost</td>
<td>-167.90**</td>
<td>-12.30**</td>
<td>-147.40**</td>
</tr>
<tr>
<td>Monthly trend</td>
<td>-8.96**</td>
<td>-0.42</td>
<td>-2.00</td>
</tr>
</tbody>
</table>

** Statistically significant at the p<.01 level

Overall, the cost analyses indicated that the MHH provided up to $11 million in total cost savings to the Medicaid program during its first 18 months of implementation. Additional analyses regarding PMPM ED visit costs indicate that some of these savings were derived from lower costs for ED visits that did not result in an inpatient stay. The total amount spent on care for the intervention group over the 18 month period was approximately $49 million, marking a nearly 20% reduction in costs.

**Discussion**

After 18 months of MHH implementation, there does appear to be limited evidence pointing to improvements in patient health and satisfaction with care, reductions in emergency department use, and reductions in overall cost to the Medicaid program for these complex patients. These results should be viewed with caution given the limitations inherent in claims data, self-reported survey data, and limited comparison groups. Though we can make general conclusions about the effectiveness of the MHH program after 18 months of implementation based on associating the findings from all of these evaluations, we are not able to absolutely conclude that the MHH program is the only cause of any changes observed.
Perhaps most important, these results derive from a small group of members chosen to benefit from the Health Home model. It is inappropriate to believe that the MHH program would have the same effect on other Medicaid members unless they were chosen according to the same criteria. It is difficult to understand what characteristics of the member, providers or program actually provided the improvements. Until more members are included allowing for more complex analytics, it is difficult to predict who will benefit from this program in the future.

**Conclusions**

Regardless of the limitations, there are some important findings to consider:

1) The MHH program has resulted in cost savings to Medicaid. In the cost analyses, the total amount spent on care for the MHH group over the 18 month period was approximately $49 million, marking a nearly 20% reduction in costs.
2) There is some evidence that MHH members are making fewer trips to the emergency department for care.
3) While MHH enrollees report satisfactory access to routine and preventive care, a significant number (compared to other Medicaid enrollees) report unmet need for other services, particularly for specialist care.
4) There is some limited evidence that MHH members are experiencing fewer functional limitations due to their health.
5) MHH members are connected with a personal physician and report good communication during their visits with their provider.
6) Member surveys indicate room for improvement in some aspects of quality medical home care provision such as care coordination, comprehensive care, shared decision-making, and support for self-management of their health conditions.
7) MHH providers face significant challenges transitioning into a patient-centered medical home including increasing costs, poorly understood staffing requirements, educating staff and patients, communicating with other health providers, and accessing resources from the community to address non-medical needs affecting their patients’ health.

**Endnotes**
