

The Hilltop Institute



analysis to advance the health of vulnerable populations

Health Home Program Quarterly Report

September 11, 2015

Health Home Program Quarterly Report

Table of Contents

| | |
|---|----|
| Introduction | 1 |
| Purpose..... | 1 |
| Data and Methodology..... | 1 |
| eMedicaid Measures..... | 2 |
| MMIS2 Measures | 2 |
| Enrollment..... | 3 |
| Intervention-Quarter Enrollment..... | 3 |
| Quarterly Enrollment | 3 |
| Participant Characteristics..... | 4 |
| New Enrollment | 4 |
| Enrollees by Program..... | 4 |
| Enrollees with a Counselor | 5 |
| Enrollees with a Primary Care Provider | 5 |
| Enrollees by Age Group | 5 |
| Enrollees by Race | 5 |
| Enrollees by Gender | 6 |
| Enrollees by Ethnicity | 6 |
| Enrollees by Primary Mental Health Condition (PRP and MTS Participants Only) | 6 |
| Body Mass Index (BMI) | 6 |
| Chronic Conditions at Intake into the Health Home Program | 7 |
| Health Home Services..... | 7 |
| Health Home Participants by the Number of Services Received per Month by Provider | 7 |
| Health Care Utilization and Quality..... | 8 |
| Inpatient Hospital Admissions | 8 |
| ED Utilization..... | 8 |
| Ambulatory Care Utilization..... | 9 |
| Potentially Avoidable Hospitalizations..... | 9 |
| Appropriateness of ED Care | 10 |



30-Day All-Cause Readmissions11
Continuously Enrolled Cohort12
Conclusion and Next Steps.....13



Introduction

Maryland's Health Home program builds on statewide efforts to integrate somatic and behavioral health services, with the aim of improving health outcomes and reducing avoidable hospital utilization. The Office of Health Services at the Department of Health and Mental Hygiene (DHMH) submitted a Medicaid state plan amendment (SPA) that was approved by the Centers for Medicare & Medicaid Services (CMS) effective October 1, 2013. Health homes target populations with behavioral health needs who are at high risk for additional chronic conditions, offering them enhanced care coordination and support services from providers from whom they regularly receive care. The program is intended to provide an integrated model of care that coordinates primary, acute, behavioral health, and long-term services and supports for Medicaid enrollees with either a serious and persistent mental illness (SPMI) or an opioid substance use disorder (SUD) and risk of additional chronic conditions due to tobacco, alcohol, or other non-opioid substance use.¹

Purpose

The purpose of this report is to provide a description of Medicaid enrollees' current participation in Maryland's Health Home program and their interactions with the health care system during the first six quarters of program implementation. The measures presented here were selected based on the original Maryland SPA application and quality measure recommendations published by CMS.² The measures were calculated using information Health Home providers entered into the eMedicaid care management data system, as well as data from the Maryland Medicaid Information System (MMIS2).

Data and Methodology

This report presents the following measures to describe Maryland's Health Home program from October 2013 through March 2015. The first set of tables are for all participants, and a supplemental set of tables has been added to this quarterly report that presents information for people enrolled continuously from October 2013 through March 31, 2015. The tables are categorized as follows:

- Participant characteristics

¹ The Centers for Medicare & Medicaid Services. (2013, September). *Maryland Health Home state plan amendment*. Retrieved from <http://www.medicaid.gov/state-resource-center/medicaid-state-technical-assistance/health-homes-technical-assistance/downloads/maryland-spa-13-15.pdf>

² The Centers for Medicare & Medicaid Services. (2014, March). *Core set of health care quality measures for Medicaid Health Home programs*. <http://www.medicaid.gov/State-Resource-Center/Medicaid-State-Technical-Assistance/Health-Homes-Technical-Assistance/Downloads/Health-home-core-set-manual.pdf>



- Health home services
- Health care utilization and quality

eMedicaid Measures

eMedicaid is a secure web-based portal that allows healthcare practitioners to enroll as a Medicaid provider, verify recipient eligibility, obtain payment information, and serve as a care management tracking tool for providers participating in Maryland's Health Home program. Within eMedicaid, providers enroll participants and report participant diagnoses, outcomes, and services received. The measures of participant characteristics and services provided in the tables below are calculated from data reported by Health Home providers into the eMedicaid care management system.

The measures reported from eMedicaid are based on Health Home provider's self-reported entries into the database.³ Providers are only required to report those data (i.e., height, weight, and blood pressure) for which the original evaluation design relies on eMedicaid. Any data fields besides those were intended for the providers' tracking and care management purposes and are only reported at the provider's discretion. In addition, providers can revise the data they report for a period of time after an initial entry is entered, as well as make new reports for any period of time. This means that the estimates of the same measure in the same period will change slightly across quarterly report deliverables as some providers enter information on discharges, enrollment, services delivered, or other participant characteristics from earlier quarters. The limited reporting obligation and data verification may be influencing the consistency and quality of data being entered in eMedicaid, which may affect any conclusions that can be drawn.

MMIS2 Measures

The health care utilization measures were calculated using MMIS2 claims and encounter data. MMIS2 data are updated monthly and routinely used for evaluating the performance of Medicaid programs. All of the data presented in this report reflect MMIS2 as of May 31, 2015. Typically, MMIS2 data are not considered complete until twelve months have passed for adjudication of FFS claims and six months for submission of managed care encounters. Therefore, *all utilization measures based on MMIS2 data should be considered preliminary* and will be revised and updated in future reports. This will most significantly affect measures of health care utilization for the most recently occurring period of enrollees' participation in a Health Home. Because additional claims and encounters will be received in later updates to the MMIS2, the majority of

³ The eMedicaid data are reported as entered by Health Home providers. Hilltop has only made changes to these data to account for the termination of a Health Home, at request of DHMH.



these recent measures will increase during subsequent revisions. The data presented in the tables⁴ may appear to suggest that health care utilization rates decrease the longer participants are enrolled. However, conclusions about trends cannot be drawn from these interim data. The effectiveness of the program will be analyzed in the final evaluation.

Enrollment

Intervention-Quarter Enrollment

Table 1 presents enrollment across the first six quarters of the program. The measures are calculated from data reported by Health Home providers into the eMedicaid care management system.⁵ Table 1 shows the number of participants by quarter during the first 18 months of the program. Quarterly enrollment almost doubled during the program’s first six quarters—from 2,156 participants in Quarter 1 to 4,210 participants in Quarter 6.

Table 1. Enrollment in Health Homes by Intervention Quarter

| Quarter | Dates | Enrolled at Any Point in the Quarter |
|----------------------------|--------------------|--------------------------------------|
| Quarter 1 | 10/1/13 – 12/31/13 | 2,156 |
| Quarter 2 | 1/1/14 – 3/31/14 | 3,018 |
| Quarter 3 | 4/1/14 – 6/30/14 | 3,598 |
| Quarter 4 | 7/1/14 – 9/30/14 | 3,884 |
| Quarter 5 | 10/1/14 – 12/31/14 | 4,035 |
| Quarter 6 | 1/1/15 – 3/31/15 | 4,210 |
| Total Ever Enrolled | | 5,131 |

Quarterly Enrollment

Table 2 presents Health Home participants by length of enrollment during the first 18 months of the program. The intervention-quarter categories described in the previous section are based on calendar months. The enrollment-quarter categories below are based on participants’ unique date of enrollment into a Health Home. Instead of having a fixed period for all participants, the health care measures are calculated using each participant’s enrollment date as a point of reference. This means that the quarters are not aligned with the calendar across participants. For example, if a participant enrolled in a Health Home on October 17, 2013, his or her first quarter measure

⁴ Tables 1, 2, 20, and 22 are provided in this report. Because of their large size, Tables 3 through 19, as well as Table 21, are provided in the accompanying Excel file.

⁵ If a participant was discharged and later re-enrolled, that person has multiple records in the database to account for each enrollment span.



would be for health care services received between October 17, 2013, and January 16, 2014; if another participant joined a Health Home on March 1, 2014, his or her first quarter would be March 1, 2014, through May 31, 2014. The visits within each category are those at a similar length of time from their respective participant’s enrollment date, not those at the same point in time.

Table 2 shows quarterly enrollment during the first 18 months of the Health Home program. As of March 31, 2015, 4,636 people were enrolled in a Health Home for at least one quarter. There were 125 participants who enrolled during the first month of program implementation and remained in the program for all six quarters.

Table 2. Enrollment in Health Homes by Intervention Quarter

| Enrollment Length | Health Home Participants |
|--------------------|--------------------------|
| At Least 3 Months | 4,636 |
| At Least 6 Months | 4,249 |
| At Least 9 Months | 3,756 |
| At Least 12 Months | 3,096 |
| At Least 15 Months | 2,184 |
| At Least 18 Months | 125 |

Participant Characteristics

The measures reported in this “Participant Characteristics” section are based on data reported in the eMedicaid database by Health Home providers. The corresponding data described below can be found in the Excel file titled “HH Quarterly Report Q1_Q6 Chartbook_Printable_Randomized_CellSuppressed.” The data are based on participant enrollment at any point in the quarter.

New Enrollment

Table 3 displays the percentage of Health Home participants who were newly enrolled during the quarter. As expected, the largest proportions of new enrollees per provider were during the initial quarters, and they decreased over time. However, providers were still enrolling new participants into the Health Homes program more than a year after they initially began registering participants.

Enrollees by Program

Table 4 presents the percentage of Health Home participants by program of enrollment: Psychiatric Rehabilitation Program (PRP), Mobile Treatment Service (MTS), or an Opioid Treatment Program (OTP). A consistent majority (79.5 to 82.9 percent) of enrollees were enrolled in a PRP. There were 5.2 to 6.6 percent of enrollees in an MTS program, and 10.5 to



14.4 percent of enrollees in an OTP across all intervention quarters. Only 2 of the 33 providers offer care to enrollees across more than one program. Of the remaining providers, all of the Health Home participants are within the same program.

Enrollees with a Counselor

Table 5 presents the percentage of Health Home participants who have a counselor, by provider and quarter. The percentage of participants per counselor differs across providers and varies from 0 to 100 percent. A majority of participants are reported to have a counselor, increasing from 49.5 percent in Quarter 1 to 61.2 percent in Quarter 6, across all providers.

Enrollees with a Primary Care Provider

Table 6 presents the percentage of Health Home participants who have a primary care provider (PCP), by provider and quarter. A majority of participants are reported as having a PCP, increasing from 62.9 percent in Quarter 1 to 69.2 percent in Quarter 6 across all providers. Three providers report that 100 percent of their participants have a PCP during all quarters in which the provider participated in the program. The majority of providers report that most of their participants have a PCP, with more than half of providers in Quarter 6 reporting that 85 percent or more of their participants have a PCP. However, a few providers show only a small percentage of their enrollees with a PCP.

Enrollees by Age Group

Table 7 presents the percentage of Health Home participants by age group, provider, and quarter. Across all quarters, approximately 61 percent of the participants were aged 40 to 64 years, slightly more than a quarter were between the ages of 21 and 39 years, and nearly 9 percent of participants were children up to age 20 years. Only a few of the participating providers serve children under the age of 15 years. Enrollment drops off steeply among those aged 65 years and over; this is likely because this population's medical service use is mainly covered by Medicare.⁶

Enrollees by Race

Table 8 presents the percentage of Health Home participants by race. The majority of the participants were Black (43.5 to 47.4 percent) or White (46.7 to 50.9 percent) across all intervention quarters. Those who identified themselves as Asian, Native Hawaiian/Other Pacific Islander, or American Indian/Alaskan Native combined were a smaller proportion of the population than those who identified themselves as either "Other" or failed to note their race.

⁶ For those individuals older than 65 years enrolled in both Health Homes and Medicare, we will report on their medical services that are billed to Medicaid.



Enrollees by Gender

Table 9 shows that, across all six intervention quarters, more than half (54.6 to 55.5 percent) of Health Home participants were male. The proportion of female participants decreased slightly over time. Although a very small minority, the program does serve participants who identify as transgender.

Enrollees by Ethnicity

Table 10 shows that, across all six intervention quarters, less than 2 percent of Health Home participants identified as Hispanic. Providers with the largest proportion of Hispanics had 6 to 7 percent of their participants identify as Hispanic. Depending on the quarter, between 35 and 50 percent of providers had no Hispanic participants during the quarter.

Enrollees by Primary Mental Health Condition (PRP and MTS Participants Only)

Table 11 presents Health Home participant selections for “Primary Mental Health Condition” upon intake⁷ into the Health Home program. The table demonstrates that several providers entered more than one diagnosis as a participant’s “primary” condition. As a result, complete and reconcilable proportions of conditions across providers cannot be calculated. The table shows that, across all six intervention quarters, approximately 30 percent of Health Home participants identified as having schizophrenia. The next two conditions with the largest proportions are Major Depressive Disorder (14.8 to 16.0 percent) and Bipolar I or Bipolar II Disorder (14.7 to 15.4 percent) across all intervention quarters.

Body Mass Index (BMI)

Table 12 shows that, across all six intervention quarters, the average BMI was 31. The participants’ median BMIs differ across providers – varying from 17.4 to 44.3⁸ in Quarter 6. These measures of BMI were calculated at intake and do not represent participant-level trends over time. Instead, these tables present the BMI estimates at intake of people who were enrolled during the quarter.

⁷ Primary mental health conditions include: Attachment Disorder, Attention Deficit Disorder, Bipolar Disorder I and II, Borderline Personality Disorder, Conduct Disorder, Delusional Disorder, Communication Disorder, Major Depressive Disorder, Oppositional Defiance Disorder, Psychotic Disorder, Schizophrenia, Schizotypal Disorder, and Post Traumatic Stress Disorder.

⁸ The BMI data are reported as entered by Health Home providers.



Blood Pressure at Intake

Table 13 presents the average and median blood pressure across all six intervention quarters. The total average diastolic blood pressure reported ranged from 76.5 to 77.2 mmHg and the average systolic blood pressure reported was 121.9 to 123.1 mmHg across all intervention quarters. As mentioned earlier, these data have not been modified to exclude possible outliers. Therefore, data entry errors may potentially skew the estimated averages.

Chronic Conditions at Intake into the Health Home Program

Table 14 displays the percentage of Health Home participants by chronic condition reported at baseline. The leading diagnosis reported was mental health disorder, ranging between 92.0 to 93.6 percent of participants across all intervention quarters. The percentage of Health Home participants who indicated an opioid SUD was 31.3 percent in Quarter 1 and rose to 41.9 percent by Quarter 6 across all intervention quarters. Of the other chronic conditions, the most common diagnosis was obesity, at 73.8 to 76.7 percent across all intervention quarters.

Health Home Services

Health Home providers deliver a variety of services to participants in the program. The range of services include comprehensive care management, care coordination, health promotion, comprehensive transitional care, individual and family support services, and referral to community and social support services.

Table 15 shows the percentage of Health Home participants receiving the services described above and the average number of services by provider and quarter. A consistent majority (61.8 to 90.4 percent) of enrollees received at least one service per quarter. During Quarter 1 through Quarter 6, the percent of participants receiving services ranged from 0 to 100 percent per provider. The occurrence of providers with 0 percent of their participants receiving services is more likely during the earlier quarters. The average number of services received across all providers ranged from 4.8 in Quarter 1 to 6.8 in Quarter 5.

Health Home Participants by the Number of Services Received per Month by Provider

Table 16 shows the percentage of Health Home participants by the number of services received during each month. This table only counts participants that were enrolled for the entirety of that particular month, instead of any point during the quarter as is the criteria for the previous tables.⁹

⁹ Since there were no enrollees on October 1, 2013, anyone enrolled during the first week of that month are counted as enrolled for the full first month.



This is a change from last quarter's report, in order to ensure that everyone counted had the opportunity to be served during that entire month. The number of enrollees that receive two or more services during the month ranged from 12.6 to 81.6 percent across all months. After the first month of the intervention, 63 percent or more of enrollees received two or more services. The occurrence of providers with none of their participants receiving services is more likely during the earliest months of the Health Home program.

Health Care Utilization and Quality

The health care utilization measures presented in this section were calculated using MMIS2 fee-for-service (FFS) claims and managed care encounter data. All of the data presented in this section reflect data submitted to MMIS2 as of May 31, 2015. Typically, MMIS2 data are not considered complete until twelve months have passed for adjudication of FFS claims and six months for submission of managed care encounters. Therefore, *all utilization measures based on MMIS2 data should be considered preliminary* and will be revised and updated in future reports. This will most significantly affect measures of health care utilization for the most recently occurring period of enrollees' participation in Health Homes. Because additional FFS claims and MCO encounters will be received in later updates to the MMIS2, the majority of these recent measures will increase during subsequent revisions. The data presented in the tables may appear to suggest that health care utilization rates decrease the longer participants are enrolled. However, conclusions about trends cannot be drawn from these interim data. The effectiveness of the program will be analyzed in the final evaluation.

Inpatient Hospital Admissions

Table 17 presents data on Health Home participants' inpatient hospital admission rates across their length of enrollment. For participants who were enrolled for at least one quarter, 5.5 percent experienced at least one inpatient admission during their first quarter of enrollment. For participants who were enrolled for at least six quarters, only 2.4 percent had an inpatient admission during their sixth enrollment quarter. The inpatient admissions rate across providers ranged from 0 to 13.0 percent during a participant's first quarter of enrollment. The inpatient admission rates vary widely over time due to the small number of participants with inpatient stays.

ED Utilization

Table 18 presents data on Health Home participants' ED visits. For participants who were enrolled for at least one quarter, 27.1 percent had at least one ED visit during their first quarter of enrollment, with an average of 1.9 visits during the quarter. Of participants who were enrolled for at least six quarters, only 20 percent had an ED visit during their sixth quarter in the Health Homes program, with an average of 1.8 visits per quarter. During the first quarter of a participant's enrollment, the rate of ED visits across providers ranged from 0 to 41.2 percent.



Ambulatory Care Utilization

Table 19 presents data on Health Home participants' ambulatory care visits. An ambulatory care visit¹⁰ is defined as contact with a doctor or nurse practitioner in a clinic, physician's office, or hospital outpatient department. For participants who were enrolled at least one quarter, 62.9 percent had at least one ambulatory care visit during their first quarter of enrollment, with an average of 2.9 visits per quarter. For participants who were enrolled for at least six quarters, 64.0 percent had an ambulatory care visit during their sixth quarter in the Health Home program, with an average of 3.0 visits per quarter. During a participant's first quarter of enrollment, rates of ambulatory care visits across providers ranged from 23.3 to 100.0 percent.

Potentially Avoidable Hospitalizations

The Agency for Healthcare Research and Quality's (AHRQ's) Prevention Quality Indicators (PQIs) include measures of preventable or avoidable hospitalizations. These measures are intended to indicate hospitalizations that could have been prevented if effective ambulatory care had been completed in a timely manner. As part of this analysis, the participants' inpatient hospital admissions were reviewed using AHRQ's PQI criteria to determine which events may have been potentially avoidable. As specified by the AHRQ criteria, only a subset of hospital admissions experienced by Health Home participants aged 18 through 64 years within specified diagnosis related groups (DRGs) were taken into consideration for this portion of the analysis.

Table 20 presents the number and percentage of Health Home participants with a PQI admission across the six quarters of participants' enrollment. During the first six quarters, the number of participants with at least one potentially avoidable hospital admission ranged from 0 to 32 per quarter. The maximum number of visits per quarter ranged from 2 to 5. The table shows that these potentially avoidable hospital admission events are extremely rare, with rates of less than 1 percent of participants per quarter. The report does not include the data separated by provider, because the likelihood of events is so rare, analysis of these data using percentages of Health Home participants by provider is subject to misinterpretation due to varying sizes of the different Health Homes.

¹⁰ This definition excludes ED visits, hospital inpatient services, substance abuse treatment, mental health, home health, x-ray, and laboratory services.



Table 20. Number and Percentage of Health Home Participants with at Least One Avoidable Inpatient Hospital Admission, and Maximum, Minimum, and Average Number of Visits, by Quarter

| Quarter | # of Participants | # with a Potentially Avoidable Hospitalization | % with a Potentially Avoidable Hospitalization | Summary Statistics for Those with at Least One Potentially Avoidable Hospitalization | | |
|-----------|-------------------|--|--|--|---------------------------|---------------------------|
| | | | | Average Visits per Person | Minimum Visits per Person | Maximum Visits per Person |
| Quarter 1 | 4,636 | 26 | 0.6% | 1.2 | 1 | 2 |
| Quarter 2 | 4,249 | 28 | 0.7% | 1.3 | 1 | 3 |
| Quarter 3 | 3,756 | 32 | 0.9% | 1.3 | 1 | 5 |
| Quarter 4 | 3,096 | 21 | 0.7% | 1.6 | 1 | 5 |
| Quarter 5 | 2,184 | 14 | 0.6% | 1.3 | 1 | 3 |
| Quarter 6 | 125 | 0 | 0.0% | - | - | - |

Appropriateness of ED Care

One widely used methodology to evaluate the appropriateness of care in the ED setting is based on classifications developed by the New York University (NYU) Center for Health and Public Service Research. The algorithm assigns probabilities of likelihoods that the ED visit falls into one of the following categories:

1. *Non-emergent*: Immediate care was not required within 12 hours based on patient’s presenting symptoms, medical history, and vital signs
2. *Emergent but primary care treatable*: Treatment was required within 12 hours, but it could have been provided effectively in a primary care setting (e.g., CAT scan or certain lab tests)
3. *Emergent but preventable/avoidable*: Emergency care was required, but the condition was potentially preventable/avoidable if timely and effective ambulatory care had been received during the episode of illness (e.g., asthma flare-up)
4. *Emergent, ED care needed, not preventable/avoidable*: Ambulatory care could not have prevented the condition (e.g., trauma or appendicitis)
5. *Injury*: Injury was the principal diagnosis
6. *Alcohol-related*: The principal diagnosis was related to alcohol
7. *Drug-related*: The principal diagnosis was related to drugs
8. *Mental-health related*: The principal diagnosis was related to mental health
9. *Unclassified*: The condition was not classified in one of the above categories

Table 21 presents the distribution of “Non-Emergent” ED visits for Health Home participants according to the NYU classification. If a visit is classified as more than 50 percent likely to fall into Categories 1 or 2 described above, then it is considered “Non-Emergent.” The estimates



presented in the table therefore show the number and percentage of participants who went to the ED when either immediate care was not required within 12 hours or it could have been provided in a primary care setting. During the first six quarters of enrollment, the aggregate rates of Health Home participants with non-emergent ED visits ranged from 8.8 to 13.8 percent. Of those with a non-emergent ED visit, the average number of ED visits was 1.5 to 1.6 visits per quarter. During Health Home participants' first enrollment quarter, rates of non-emergent ED visits across providers ranged from 0 to 22.5 percent.

30-Day All-Cause Readmissions

The 30-day all-cause readmission rate, based on National Committee for Quality Assurance (NCQA) definitions, was calculated as the percentage of acute inpatient stays during the measurement year that were followed by an acute inpatient readmission for any diagnosis within 30 days. The Healthcare Effectiveness Data and Information Set (HEDIS) 2013 specifications identify inclusion criteria for types of stays and hospitals. The HEDIS specifications also limit the population to people continuously enrolled in Medicaid with respect to the date of discharge.

Table 22 presents Health Home participants' 30-day all-cause readmissions across their first six quarters of enrollment. The number of Health Home Participants who experienced at least one 30-day readmission per quarter ranged from 1 to 56. Of those with at least one 30-day readmission, the average number of readmissions ranged from 1.0 to 2.0 per participant. The table shows that these 30-day readmission events are extremely rare, with rates of 1.1 percent of participants across all quarters. The report does not include the data on 30-day all-cause readmissions by provider, because the likelihood of these events is so rare, analysis of these data using percentages of Health Home participants by provider is subject to misinterpretation due to varying sizes of the health homes.

Table 22. Number and Percentage of Health Home Participants with at Least One 30-Day All-Cause-Hospital Readmission and Maximum, Minimum, and Average Number of Visits, by Quarter

| Quarter | # of Participants | # with a 30 day Readmission | % with a 30-day Readmission | Summary Statistics for Those with at Least One 30-Day Readmission | | |
|-----------|-------------------|-----------------------------|-----------------------------|---|---------------------------|---------------------------|
| | | | | Average Visits per Person | Minimum Visits per Person | Maximum Visits per Person |
| Quarter 1 | 4,636 | 43 | 0.9% | 1.3 | 1 | 4 |
| Quarter 2 | 4,249 | 56 | 1.3% | 1.5 | 1 | 5 |
| Quarter 3 | 3,756 | 46 | 1.2% | 1.8 | 1 | 11 |
| Quarter 4 | 3,096 | 36 | 1.2% | 2.0 | 1 | 7 |
| Quarter 5 | 2,184 | 12 | 0.5% | 1.8 | 1 | 5 |
| Quarter 6 | 125 | 1 | 0.8% | 1.0 | 1 | 1 |



Continuously Enrolled Cohort

At the request of The Maryland Department of Health and Mental Hygiene (DHMH), The Hilltop Institute has added a supplemental analysis to the quarterly report deliverables. This new set of tables examines outcomes for people continuously enrolled across the full intervention period. These tables report on the same measures (as applicable)¹¹ calculated for all participants, but restricts the cohort to include only those enrolled on or before October 31, 2013 and were still enrolled as of March 31, 2015. As of the date the data were downloaded from the eMedicaid database, that cohort includes 512 individuals.¹² The tables describing this cohort of participants are presented in the chartbook titled “HH Quarterly Report_Q1_Q6 Chartbook_Printable_Continuously Enrolled Cohort.”

There were eight providers serving participants who have been continuously enrolled across the full intervention period. Ninety-three percent of these participants are enrolled in the PRP program and the remaining 6.6 percent are in the OTP program, none of these enrollees are in the MTS program. The continuously enrolled participants are less likely to be children, with only 0.2 percent of them under age 21. When compared to the entire cohort enrolled during the first quarter, those continuously enrolled are less likely to be Black, Hispanic, or female. Ninety-seven percent of those continuously enrolled indicate that they have a mental health condition and 22.1 percent indicate that they have a substance use disorder, which is significantly smaller than the 31.3 percent of those enrolled at any point in the first quarter with a substance use disorder. Across all quarters, the continuously enrolled were more likely to receive a service and received a larger number of services than those enrolled at any point during the quarter.

The rates of the continuously enrolled participants who had an inpatient admission during the quarter ranged from 2.1 percent to 5.5 percent. The likelihood of an emergency department visit during the quarter ranged from 18.8 percent to 23.4 percent, with those that had at least one ED visit incurring an average of 1.8 visits to 2.5 visits per quarter. The quarterly rates of ambulatory visits ranged from 55.1 percent to 62.9 percent, with those that had at least one visit having an average of 2.8 visits to 3.2 visits across all quarters. Incidences of avoidable admissions and 30-day readmissions were both very rare, with the largest quarterly rate at 1.6 percent, or 8 participants across all providers, for either of the two measures. The likelihood of a nonemergent emergency department ranged from 7.6 percent to 10.4 percent, with those that had at least one nonemergent emergency department visit incurring an average of 1.3 visits to 2.1 visits per

¹¹ Since this cohort only includes people continuously enrolled across the full intervention period, two tables prepared for the entire cohort are not included. Table 2 “Health Home Enrollment by Intervention Quarter” and Table 3 “Number and Percentage of Health Home Participants Enrolled by Provider and Quarter” present changes in enrollment over time and are therefore excluded from this set of tables.

¹² The number of people continuously enrolled differs from the number in Table 2, as those were counts of people enrolled during the first week of October 2013 instead of at any point during October 2013.



quarter. Hilltop will monitor and report on continuously enrolled participants with a goal of eventually measuring the long-term effectiveness of the Health Home intervention.

Conclusion and Next Steps

Quarterly reports will continue to be developed for the remainder of the program period. Metrics will be updated to include the most recently available eMedicaid and MMIS2 claims data.

Additional evaluations will also be completed to address the requests of state and national stakeholders. The State of Maryland's General Assembly requested a report on patient outcomes for participants in the Health Home program. The report will include a comparison of Health Home participants to Medicaid enrollees with similar chronic conditions who are not in the Health Home program. The report will also provide a comparison of outcomes between different Health Home providers. Lastly, after the conclusion of the program, a final evaluation will be completed for submission to CMS in 2016.





The Hilltop Institute

University of Maryland, Baltimore County
Sondheim Hall, 3rd Floor
1000 Hilltop Circle
Baltimore, MD 21250
410-455-6854
www.hilltopinstitute.org