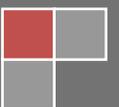


2013

DM 3700 Clients Enrolled in CMHC Healthcare Homes Progress Report

2/21/14



Prior to the development of the Community Mental Health Center (CMHC) Healthcare Home initiative, the Department of Mental Health collaborated with MO HealthNet to reach out and engage individuals in service who had a psychiatric diagnosis but who had not previously been connected with a CMHC. On average, these individuals cost Medicaid more than \$38,000 in the previous year. In addition to their psychiatric diagnosis, about one-third also had a diagnosis of diabetes, one-third had a diagnosis of asthma, one-third had a diagnosis of COPD, and more than ten percent (10%) were suffering from congestive heart failure. This initiative has been called the “DM 3700” project, with “DM” standing for ‘disease management’ and “3700” representing the initial cohort of individuals that were thought to qualify for outreach and engagement.

Each quarter, beginning in November 2010, each CMHC was given a list of individuals who met the criteria and who had addresses in their service area. CMHCs then made an effort to locate and engage these individuals in service. Some individuals could not actually be located, and some refused to engage in care. But each quarter, new individuals were enrolled in service.

The DM 3700 project showed immediate and significant improvements in the health status of the individuals who were engaged in services and significant reductions in the cost to Medicaid for their care. In fact, the early success of the DM 3700 was one of the factors contributing to Missouri’s enthusiasm for establishing CMHC Healthcare Homes, and much of the work being done with DM 3700 enrollees drove the design of the CMHC Healthcare Homes.

DM 3700 enrollees were among the cohort of individuals auto-enrolled in CMHC Healthcare Homes. CMHCs continue to receive lists of individuals to locate and engage in service on a quarterly basis, and individuals who are engaged are expected to be enrolled in the CMHC Healthcare Home program. In effect, DM 3700 has become the outreach arm of the CMHC Healthcare Home program.

This report summarizes the clinical and financial outcomes associated with the DM 3700 clients who have been enrolled in a CMHC Healthcare Home.

CLINICAL OUTCOMES

There were 1,438 DM 3700 clients enrolled in CMHC Healthcare Homes as of February 2012. In order to assess progress in achieving the benchmark and gap closing goals of the CMHC Healthcare Home initiative, reports were created for DM 3700 clients who had been continuously enrolled in a CMHC Healthcare Home for one year as of the end of January 2013, and DM 3700 clients who had been enrolled in a CMHC Healthcare Home for eighteen months

as of the end of June 2013, comparing the values for each of these measures at baseline (February 2012) with the values for these measures as of January 2013 and June 2013.¹

More than three-quarters (77% or 1,101 out of 1,438 individuals) of the DM 3700 clients who had been enrolled in a CMHC Healthcare Home in February 2012 were still enrolled in a CMHC Healthcare Home as of January 2013, one year later.

About two-thirds (65% or 941 out of 1,438 individuals) of the DM 3700 clients who had been enrolled in a CMHC Healthcare Home in February 2012 were still enrolled in a CMHC Healthcare Home as of June 2013, eighteen months later.

Each of the following sections discuss the progress in meeting the CMHC Healthcare Home benchmark and gap closing goals for this cohort of DM 3700 enrollees.

a) Diabetes Mellitus

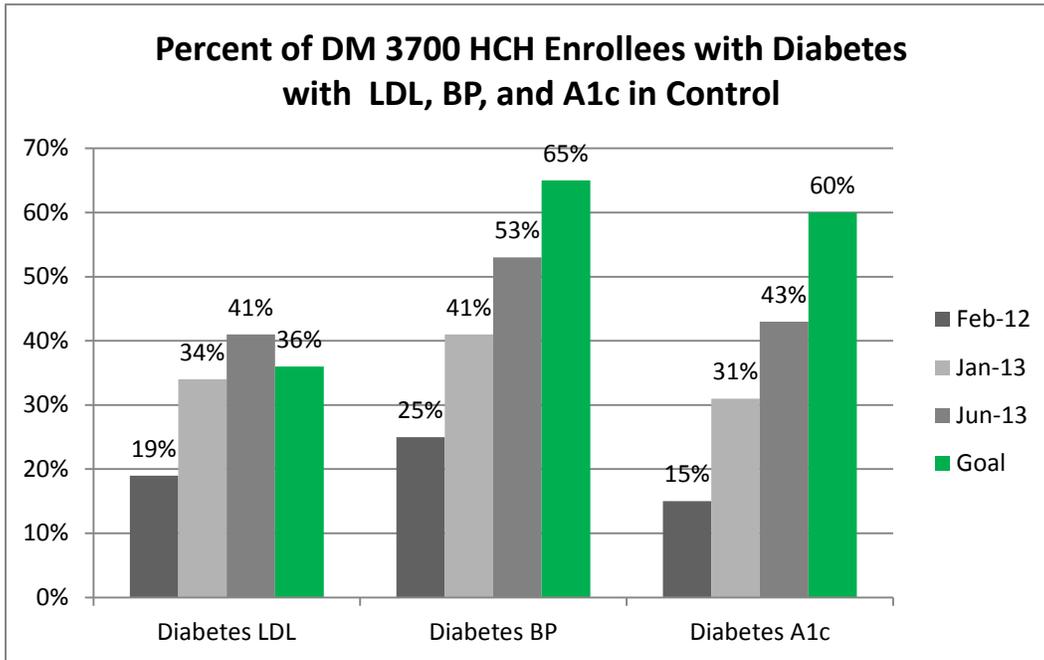
Thirty-five percent (35% or 330 out of 941 individuals) of the DM 3700 clients who were continuously enrolled in CMHC Healthcare Homes for eighteen months had been diagnosed with diabetes mellitus, about three-and-a-half times the prevalence of diabetes in the general adult population (10%).

CMHC Healthcare Homes track and report blood pressure, LDL, and A1c levels for all HCH enrollees with diabetes as part of the required Metabolic Syndrome Screening. The following table defines the population that is “in control” with regard to each measure for adults.

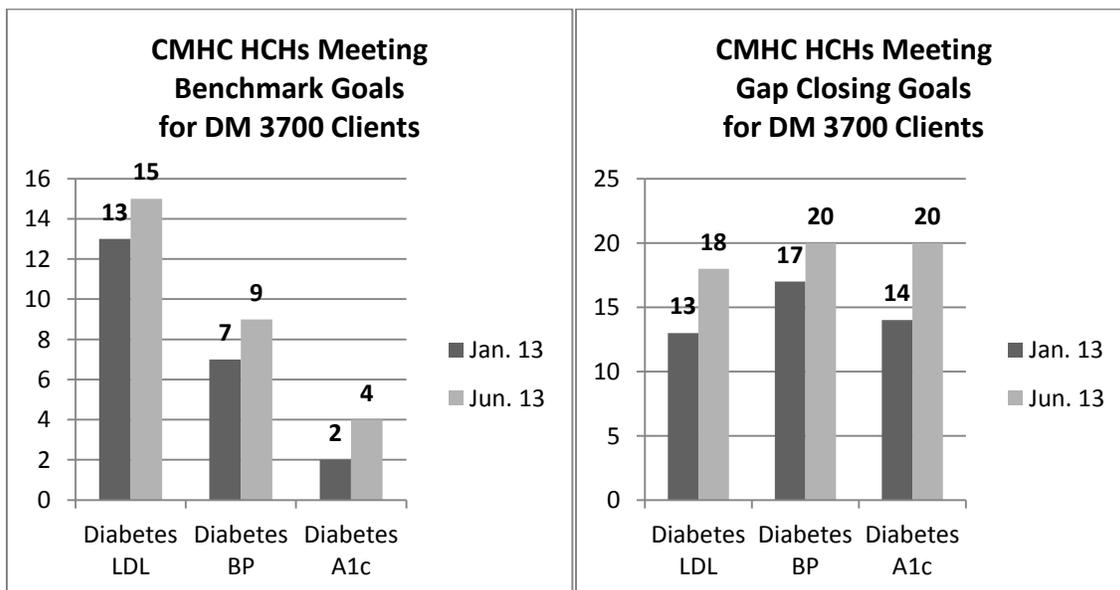
Diabetes Blood Pressure Control (Adult)	% of patients 18-75 years of age with a diagnosis of diabetes (type 1 or type 2) who had a blood pressure <140/90 mmHg.	Benchmark Goal: 65% Gap Closing Goal: increase by 10 percentage points
Diabetes A1c Control (Adult)	% of patients 18-75 years of age with a diagnosis of diabetes (type 1 or type 2) who had an HbA1c <8.0%.	Benchmark Goal: 60% Gap Closing Goal: increase by 10 percentage points
Diabetes LDL Control (Adult)	% of patients 18-75 years of age with a diagnosis of diabetes (type 1 or type 2) who had LDL <100 mg/dL.	Benchmark Goal: 36% Gap Closing Goal: increase by 10 percentage points

¹ February 2012 was selected to establish baseline data, rather than January 2012, because CMHCs were still engaged in contacting auto-enrollees to confirm their enrollment in the Healthcare Home initiative during January 2012. Some auto-enrolled individuals could not be located or declined enrollment, so that CMHC Healthcare Home enrollment actually stabilized in February 2012. However, because CMHCs did not immediately add new enrollees beyond those who had been auto-enrolled, it is fair to assume that individuals enrolled in February 2012 were also enrolled in January 2012, so that individuals continuously enrolled in a Healthcare Home as of June 2013 can fairly be considered to have been enrolled for 18 months.

As the following chart illustrates, the percentage of adult DM 3700 HCH enrollees with diabetes with LDL, blood pressure, and A1c levels that are in control has steadily improved from February 2012 through June 2013; so that at eighteen months, the percentage of individuals whose diabetes was in control exceeded or was approaching the benchmark goal for each measure.



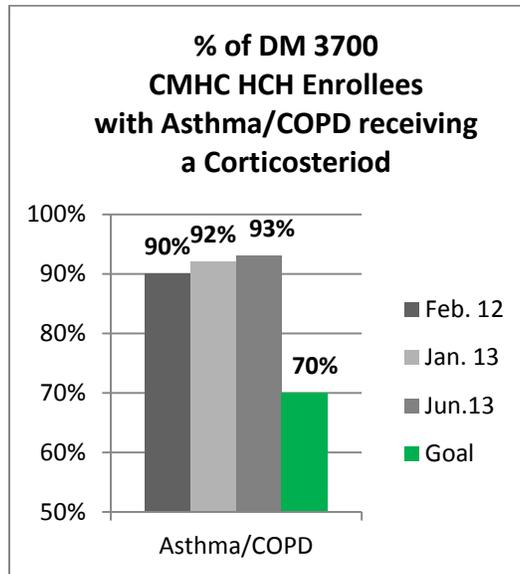
As illustrated by the following charts, for each measure, several CMHC Healthcare Homes met the benchmark goal, and most of the CMHC Healthcare Homes were meeting the gap closing goals for each measure as of June 2013.



b) Asthma

More than one-quarter (27% or 255 out of 941 individuals) of the DM 3700 clients who were continuously enrolled in CMHC Healthcare Homes for eighteen months were diagnosed with Chronic Obstructive Pulmonary Disease (COPD) or Asthma compared to fifteen percent (15%) of adults in the general population.

CMHC Healthcare Homes are responsible for assuring that individuals with persistent Asthma have been appropriately prescribed a corticosteroid. Initially, it was thought that the benchmark goal for this measure should be established at a relatively low level, since only individuals with persistent asthma require a corticosteroid, and it is not possible to determine from diagnostic data which individuals have “persistent” asthma. But as illustrated from the following charts, ninety percent (90%) of the DM 3700 clients who have been continuously enrolled in a CMHC Healthcare Home have been receiving a corticosteroid since the beginning of the HCH initiative. Consequently, every CMHC Healthcare Home was already meeting the benchmark goal for this measure when the initiative began.



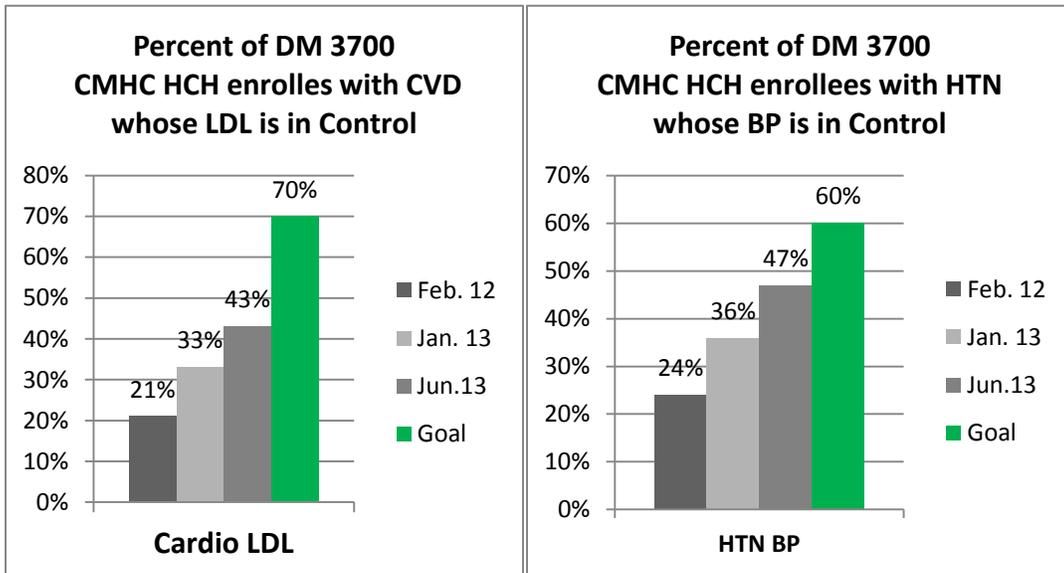
c) Hypertension and Cardiovascular Disease

Although only about eight percent (8%) of the DM 3700 clients who have been continuously enrolled in a CMHC Healthcare Home for eighteen months have been diagnosed with cardiovascular disease (CVD), almost forty-seven percent (47% or 441 out of 941 individuals) have been diagnosed with hypertension.

CMHC Healthcare Homes are responsible for tracking, reporting, and improving the percentage of adults with cardiovascular disease whose LDL is in control and the percentage of adults with hypertension whose blood pressure is in control.

BP Control HTN	% of patients 18 years and older with a diagnosis of hypertension with a blood pressure <140/90 mmHg, during the most recent office visit within a 12 month period.	Benchmark Goal: 60% Gap Closing Goal: 10% (1yr) 15% (18 mo)
LDL Control Cardio	% of patients 18-75 years of age with a diagnosis of CAD with lipid level adequately controlled (LDL <100 mg/dL).	Benchmark Goal: 70% Gap Closing Goal: 10% (1yr) 15% (18 mo)

As illustrated by the following charts, both the percentage of DM 3700 clients enrolled in CMHC Healthcare Homes who have been diagnosed with cardiovascular disease and whose LDL levels are in control, and the percentage of DM 3700 clients enrolled in CMHC Healthcare Homes who have been diagnosed with hypertension and whose blood pressure levels are in control have steadily improved from February 2012 through June 2013.



The number of continuously enrolled DM 3700 clients with cardiovascular disease is low, but the prevalence of cardiovascular disease for this cohort is about that of the general adult population. By contrast, the percentage of continuously enrolled DM 3700 clients with hypertension is almost five times the prevalence of hypertension in the general adult population (57% compared to 10%).

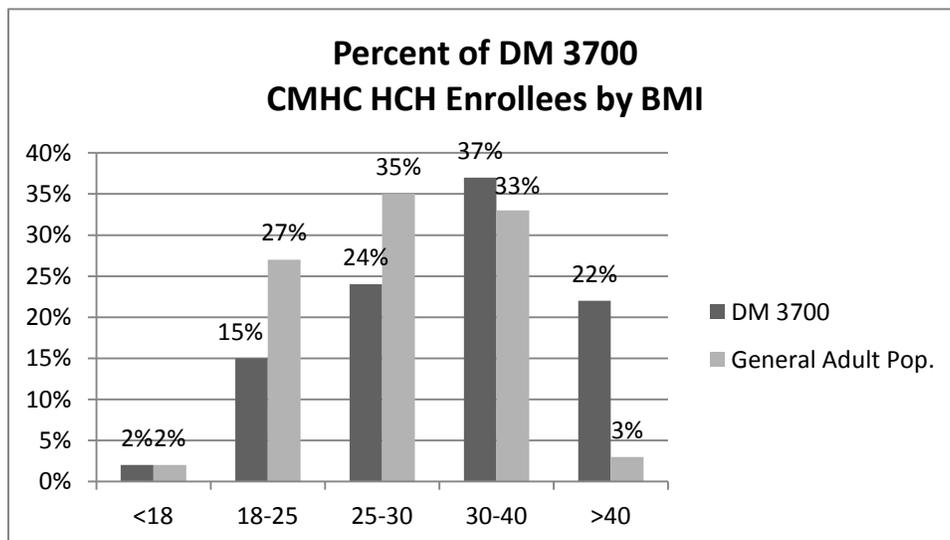
d) Body Mass Index

Excessive body fat and being severely underweight are both associated with increased risk for a variety of chronic health conditions. Because it is based on an individual's height and weight, calculating a Body Mass Index (BMI) is one of the easiest ways to assess the extent to which an individual is severely under- or overweight and, therefore, at greater risk for chronic health conditions.

A BMI between 18.5 and 24.9 is considered **normal**. An individual with a BMI under 18.5 is considered **underweight**. An individual with a BMI between 25 and 29.9 is considered to be **overweight**. An individual with a BMI between 30 and 39.9 is considered to be **obese**. And an individual with a BMI of 40 or greater is considered to be **extremely obese**.

The Affordable Care Act provided that individuals with a BMI greater than 25 were eligible for enrollment in a health home if they also had another chronic disease or were at risk for a chronic disease.

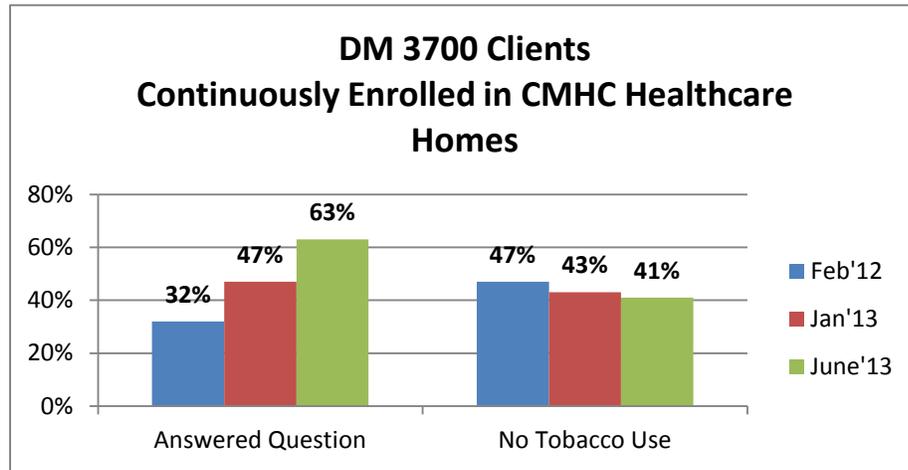
Although less than thirty percent (30%) of the general adult population has a BMI of 25 or less, DMH initially established what we now recognize as an unrealistic benchmark goal of thirty-seven percent (37%) of HCH enrollees having a BMI of 25 or less. In fact, more than eighty percent (80%) of the DM 3700 clients who have been continuously enrolled for eighteen months have a BMI greater than 25, and as the following chart illustrates, a much greater percentage of these individuals are obese or extremely obese than the general population.



Because a relatively modest reduction in BMI for individuals who are obese or extremely obese can result in general health benefits, we will be establishing more realistic benchmark and gap closing goals related to percentage reductions in BMI score, targeting individuals with a BMI greater than 30.

e) Tobacco Use

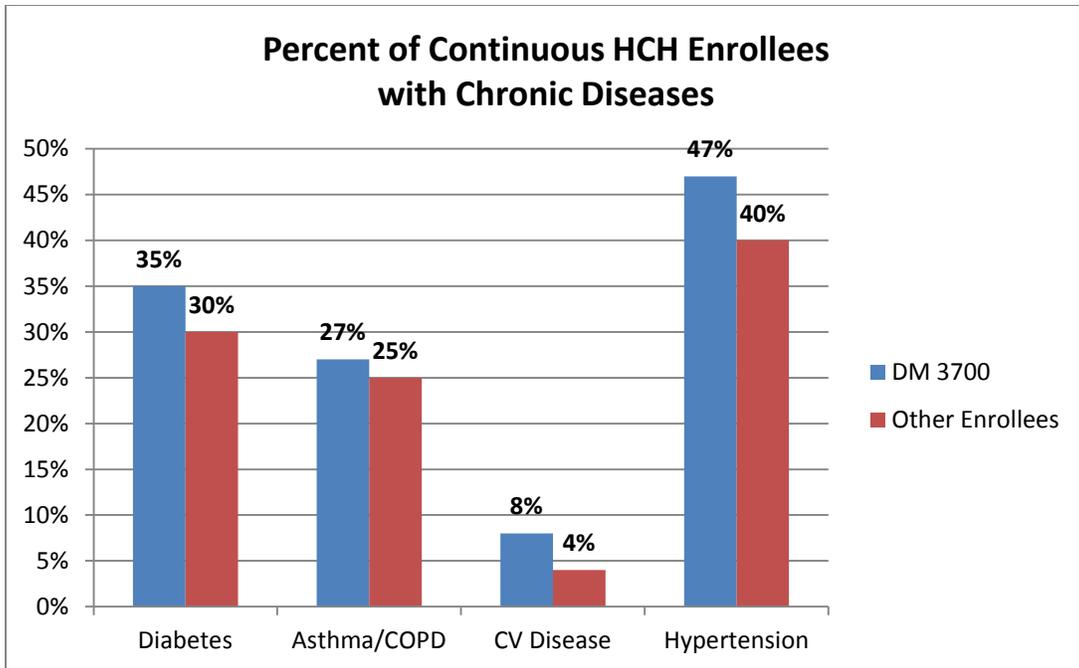
DMH established a benchmark goal of fifty-six percent (56%) of HCH enrollees being free of tobacco use. Tobacco use is determined simply by asking enrollees about their use of tobacco. The following graph illustrates the percentage of DM 3700 clients who had been continuously enrolled in a CMHC Healthcare Home for eighteen months in June 2013 and who were asked and answered the question concerning their tobacco use at baselines, at one year and at eighteen months, as well as the percentage of these adults who reported no tobacco use at each point in time.



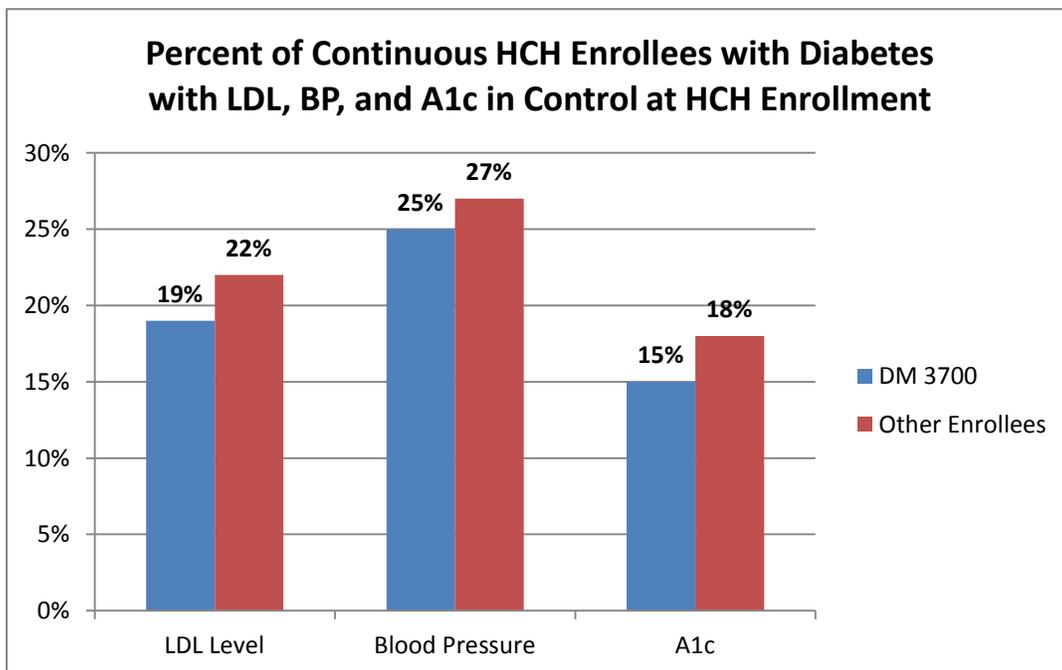
f) Comparison with Other Healthcare Home Enrollees

About three-quarters of both DM 3700 clients and other CMHC Healthcare Home enrollees continued to be enrolled in a CMHC Healthcare Home after one year, and about two-thirds of both DM 3700 clients and other CMHC Healthcare Home enrollees continued to be enrolled in a CMHC Healthcare Home after eighteen months.

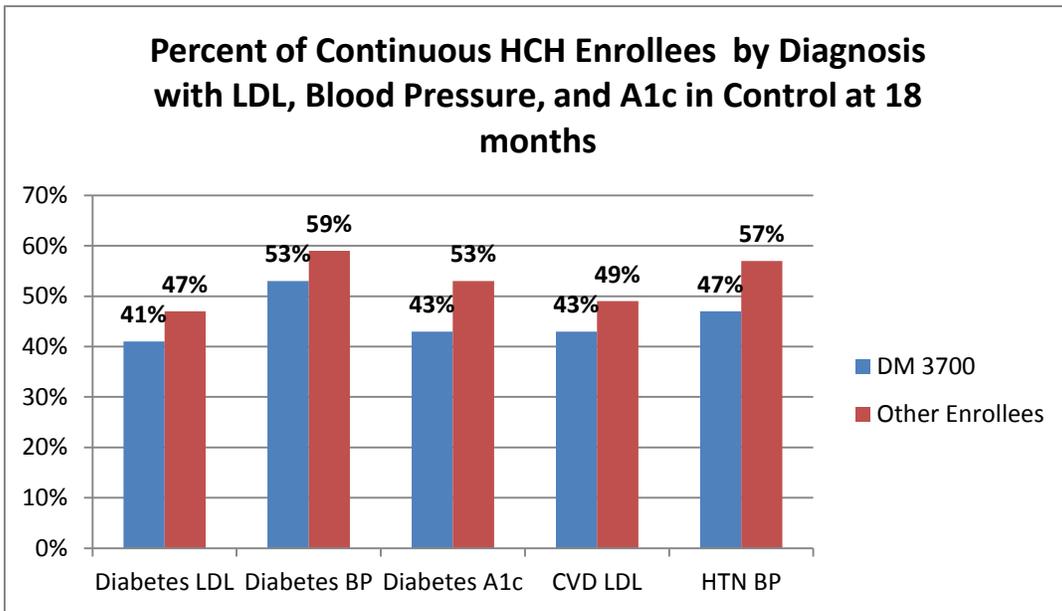
Compared to other CMHC HCH enrollees, **a higher percentage of the DM 3700 clients who were continuously enrolled in a CMHC Healthcare Home had co-occurring chronic diseases.**



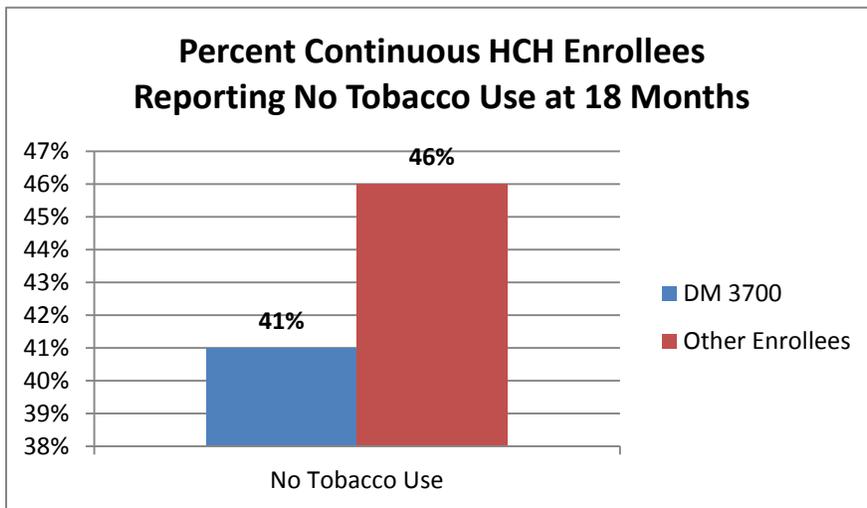
A lower percentage of the LDL, blood pressure, and A1c levels of DM 3700 clients with diabetes were in control at the time of enrollment compared to other CMHC Healthcare Home enrollees.



Progress in achieving benchmark goals was somewhat more difficult for DM 3700 clients continuously enrolled in CMHC Healthcare Homes than for other HCH enrollees.



A lower percentage of DM 3700 clients continuously enrolled in CMHC Healthcare Homes reported no tobacco use than did other CMHC Healthcare Home enrollees.



In short, compared to other CMHC Healthcare Home enrollees, DM 3700 clients had more chronic diseases, a lower percentage of their diseases were in control at enrollment, and improving their health status was more challenging.

FINANCIAL OUTCOMES

MO HealthNet and DMH analyzed total Medicaid costs for 2,237 DM 3700 enrollees who were enrolled in a CMHC Healthcare Home for at least nine months during 2012.

One-quarter (552 individuals) of these were dually eligible for Medicare and Medicaid. These dually eligible enrollees showed a substantial cost savings to Medicaid (\$10.1 million), but we are unable to determine the overall cost of care for these individuals, since we do not have access to Medicare cost data.

Medicaid was the sole payer for the remaining 1,685 DM 3700 enrollees. These individuals accounted for a net savings of \$168.42 per-member-per-month (PMPM), over and above the \$78.74 PMPM cost of the CMHC Healthcare Home; or a total savings to Medicaid of \$4.9 million.

By comparison, the 6,156 other adults, excluding dual eligibles, who were enrolled in a CMHC Healthcare Home for at least nine months accounted for a net savings of \$32.98 PMPM, over and above the \$78.74 PMPM cost of the CMHC Healthcare Home, or a total savings of \$2.4 million.

Together, the 1,685 DM 3700 clients and the 6,156 other adults enrolled in a CMHC Healthcare Home for at least nine months accounted for a total net savings to Medicaid in the amount of \$7.3 million during their first year of enrollment.

CONCLUSIONS

DM 3700 clients are individuals who previously were not connected to a behavioral health provider that could help them learn how to self-manage their chronic diseases and more appropriately utilize services and supports. Because their chronic diseases were not being well managed, they used excessive amounts of health care services, resulting in very high Medicaid costs.

Not surprisingly, although they typically have more chronic diseases than other CMHC Healthcare Home enrollees, and are more challenging in terms of improving their health status, enrolling DM 3700 clients in CMHC Healthcare Homes have been effective in improving health status. It has also resulted in even greater cost savings to Medicaid than other adult CMHC Healthcare Home enrollees who have also benefited from improvements in health status.