State Fiscal Year 2013

ANNUAL REPORT

SoonerCare Health Management Program Evaluation

Prepared for:

State of Oklahoma
Oklahoma Health Care Authority

February 2014

PHPG

oklahoma health care authority

READER NOTES

The Pacific Health Policy Group (PHPG) is conducting the independent evaluation of the SoonerCare Health Management Program (HMP). PHPG wishes to acknowledge the cooperation of the Oklahoma Health Care Authority (OHCA) and Telligen in providing the information necessary for the evaluation.

Paid Claims File Update

Prior to conducting the utilization and expenditure component of the SFY 2013 evaluation, PHPG received a claims data set from the OHCA with paid claims for SFY 2009 through SFY 2013. The SFY 2009 – SFY 2012 claims data replaced single-year data files that had been generated several months after the closure of each fiscal year. Unlike the earlier data sets, the updated file did not require application of claims completion factors and therefore yielded a more precise profile of service utilization and expenditure trends. Some longitudinal data presented in earlier reports has been revised in this report using the updated file. None of these revisions were material.

SoonerCare HMP "Second Generation" Model

In July 2013, the SoonerCare HMP transitioned to a "second generation" model that embeds health coaches in the offices of participating practices. The health coaches collaborate with practices in managing the care of patients enrolled in the SoonerCare HMP.

The health coaching model replaces field and telephonic-based nurse care management for SoonerCare HMP participants. SoonerCare HMP members who require care management (based on diagnosis, risk score and care management needs) who will not be in a practice with an HMP health coach will be contacted by the OHCA's Chronic Care Unit and offered telephonic care management outside of the SoonerCare HMP.

This report covers the final year of SoonerCare HMP activities under the original model. References to the second generation program are for the most part limited to instances where the impending transition to the health coaching model affected operations in SFY 2013.

Questions or Comments

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EXECUTIVE SUMMARY

Introduction

Chronic diseases are among the most costly of all health problems. According to the Centers for Disease Control, the treatment of chronic diseases accounts for more than 75 percent of total U.S. health care spending. Providing care to individuals with chronic diseases, many of whom meet the federal disability standard, has placed a significant burden on state Medicaid budgets.

Under the Oklahoma Medicaid Reform Act of 2006 (HB2842), the Legislature directed the Oklahoma Health Care Authority (OHCA) to develop and implement a management program for chronic diseases, including, but not limited to, asthma, chronic obstructive pulmonary disease (COPD), congestive heart failure, diabetes and renal disease. The SoonerCare Health Management Program (HMP) would address the health needs of chronically ill SoonerCare members while reducing unnecessary medical expenditures at a time of significant fiscal constraints.

The OHCA contracted with a vendor through a competitive bid process, to implement and operate the SoonerCare HMP. Telligen[1] was selected to administer the SoonerCare HMP in accordance with the OHCA's specifications. Telligen is a national quality improvement and medical management firm specializing in care, quality and information management services. Telligen staff members provide nurse care management to SoonerCare HMP participants and practice facilitation to OHCA-designated primary care providers.

Medical Artificial Intelligence (MEDai), was already serving as a subcontractor to Hewlett Packard (HP), the OHCA's Medicaid fiscal agent. The HMP capitalized on this existing relationship by utilizing MEDai to assist in identifying candidates for enrollment in the SoonerCare HMP based on historical and predicted service utilization.

Prior to the program's implementation, the OHCA committed to measuring its effectiveness and making adjustments, as appropriate, to enhance its efficacy. The OHCA contracted with the Pacific Health Policy Group (PHPG) to assess the program and its performance against stated objectives.

PHPG is conducting a multi-year evaluation of the SoonerCare HMP's impact on beneficiaries, providers and the health care system as a whole with respect to:

1. Utilization of preventive and chronic care management services and adherence to national, evidence-based disease management practice guidelines;

[1] Prior to August 2011, Telligen was known as the Iowa Foundation for Medical Care.

2. Level of care management and coordination between providers, care managers, the member and others involved in the member's care;

3. Increased member self-management of chronic conditions;

4. Member satisfaction and perceived quality of life;

5. Provider participation rates and satisfaction; and

6. Avoidance of unnecessary service utilization (e.g., inpatient days and emergency department visits) and associated expenditures.

Evaluation Scope and Methodology

The fifth Annual Evaluation report addresses the performance of the SoonerCare HMP in State Fiscal Year 2013 (July 2012 – June 2013). The report examines the SoonerCare HMP across a series of measures tied to the broad evaluation criteria presented above.

The measures fall into four categories:

- *Structure Measures* that evaluate whether the SoonerCare HMP vendor (Telligen) is meeting contractual requirements with respect to key program staff

- *Process Measures* that evaluate whether the SoonerCare HMP vendor is meeting contractual requirements with respect to member engagement, assessment and care management contacts and provider practice facilitation, education and incentive payments

- *Performance Measures* that evaluate the program's impact on quality of care for members falling into one or more selected chronic disease groups, as determined through clinical reviews of administrative claims data and medical records

- *Outcome Measures* that evaluate the program's ultimate impact with respect to reducing unnecessary service utilization and expenditures and achieving high levels of member and provider participation and satisfaction

PHPG collected data for the evaluation through a variety of methods. These included an audit of Telligen, analysis of paid claims data and surveys/in-depth interviews of nurse care management and practice facilitation participants.

The evaluation separately examined the two major components of the SoonerCare HMP, nurse care management and practice facilitation. Evaluation findings are presented beginning on the following page.

Nurse Care Management Evaluation

Overview

The SoonerCare HMP targets members with chronic conditions who have been identified as being at high risk for both adverse outcomes and increased health care expenditures, and whose future costs could potentially be reduced, or "impacted" through care management. The high risk population contains a disproportionate number of persons with co-morbidities, including combinations of such diseases as congestive heart failure, chronic obstructive pulmonary disease (COPD), coronary artery disease, diabetes and hypertension.

The OHCA uses MEDai predictive modeling software to identify SoonerCare members with chronic conditions who would be eligible for the SoonerCare HMP. Once identified, the OHCA stratifies these members into tiers based on forecasted risk and service expenditures. Members predicted to be at highest risk for adverse outcomes and increased service expenditures are placed into Tier 1. Members predicted to be at high risk for adverse outcomes and next highest service expenditures are placed into Tier 2.

Nurse care managers conduct an assessment and develop a plan-of-care for their assigned members. The assessment and care planning process is face-to-face for Tier 1 participants and telephonic for Tier 2.

Nurse care managers use assessment results to develop individualized care plans that establish goals and objectives to address the participant's current health needs. The care plan seeks to help participants better manage their health, understand the appropriate use of health care resources and identify changes in their health.

Nurse care managers attempt to provide at least monthly face-to-face visits to Tier 1 participants while Tier 2 participants receive telephonic services from registered nurses and licensed practical nurses. Tier 2 nurse care managers are centrally located at the SoonerCare HMP Call Center, which is in West Des Moines, Iowa.

In June 2013, the program included 623 Tier 1 and 771 Tier 2 participants. Full enrollment is defined as 1,000 for Tier 1 and 4,000 for Tier 2. However in February 2013, the OHCA and Telligen began making changes to decrease the enrollment of new members and transition of current members in preparation for transitioning to a "second generation" care management model in July 2013. (See Reader Note.)

The nurse care managed population is significantly older than the general SoonerCare population and includes persons with a wide variety of chronic and acute medical conditions, such as diabetes and heart disease. The population also includes a significant number of persons with co-morbidities, including physical and behavioral health co-morbidities. In fact,

psychosis has been the most common diagnosis for Tier 1 participants, and second most common for Tier 2, since the beginning of the program.[2]

Evaluation Findings

The nurse care management evaluation included five components:

- Audit of Telligen operations;
- Participant self-management and satisfaction survey and focus groups;
- Quality of care evaluation;
- Utilization and expenditure trend analysis; and
- Cost effectiveness analysis.

PHPG conducted an audit of Telligen in December 2013. The audit was conducted to verify Telligen's compliance with contractual standards during SFY 2013. The standards examined included: nurse care manager staffing; timely completion of assessments and care plans; monthly participant contact attempts; quarterly primary care provider (PCP)[3] contacts; behavioral health referral follow-up; and the graduation process.

Overall, Telligen was found to be in compliance with nearly all assessment and care planning standards. Relatively minor deviations from contract standards were identified, but none was observed to be having a negative impact on the quality of care management. The deviations are discussed in detail in chapter two of the report.

Participant Self-Management and Satisfaction Survey and Focus Groups

PHPG is required to assess the efficacy of the program in part through standardized surveys and in-depth interviews of program participants. The satisfaction survey component of the evaluation assesses the SoonerCare HMP's impact on quality of life and development of chronic disease self-management skills.

The SoonerCare HMP is viewed very favorably by both Tier 1 and Tier 2 participants. Most survey respondents are in regular contact with their nurse care manager and report receiving a range of services intended to improve their health and self-management skills.

Eighty-eight percent of survey participants report being "very satisfied" with their nurse care manager and nearly as many with the program as a whole. Program graduates also remain enthusiastic about their experience; 90 percent are very satisfied.

[2] "Most common diagnosis" is defined as the diagnosis code that appears most frequently in a beneficiary's claims history, based on a count of individual claims. PHPG calculated the three most common diagnoses for each beneficiary.
[3] Also known in the SoonerCare program as Patient Centered Medical Home (PCMH) providers.

Since the initiation of the surveys, approximately 25 percent of survey respondents have reported an improvement in health. Within this group, nearly all (92 percent) attribute the improvement to the program's services.

Member interview findings were consistent with survey results. Interview participants were particularly appreciative of the work performed by their nurse care managers:

> *"She keeps my health and my mind together. Exercising and eating right and taking my medication, my blood sugar and my blood pressure."*
>
> *"She kind of keeps me on my toes...like, weigh yourself every day and make sure, you know, because there's not a lot of exercises I can do because I have congestive heart failure, but she's sent me pamphlets on different things I can do like sitting on the chair and, you know, exercises I can do, and it's been great. I have my big blue envelope of all the stuff my nurse has sent me. As soon as information comes, it goes into my blue envelope."*
>
> *"I love it that someone's checking up on me and making sure that I'm OK every month. I can't say that anybody I've given birth to would do that!"*

Quality of Care Evaluation

The SoonerCare HMP is not a traditional disease management program. Participants do not qualify solely by having a particular chronic illness. However, the program does target members with chronic diseases, including asthma, COPD, congestive heart failure, coronary artery disease, diabetes and hypertension. Participants also must be at risk of incurring significant medical costs based on their past utilization and overall health status.

To measure the program's impact on quality of care, PHPG evaluated the preventive and diagnostic services provided to SoonerCare HMP participants in each of the above diagnostic categories. PHPG also evaluated preventive services, in terms of influenza vaccinations, and the population's MEDai "risk" and "gap" scores prior to and after engagement.

PHPG examined 24 measures using administrative (paid claims) data. PHPG determined the total number of participants with a primary diagnosis in each measurement category, the number meeting the clinical standard and the resultant "percent compliant". PHPG also calculated the SFY 2013 compliance rates for a "comparison group" consisting of SoonerCare members found eligible for, but not enrolled in the SoonerCare HMP.

As in previous years, findings from the analysis were promising. The participant compliance rate exceeded the comparison group rate on 16 of the 21 diagnosis-specific measures. The difference was statistically significant for 11 of the 16, suggesting that the program is continuing to have a positive effect on quality of care. The most impressive results, relative to

the comparison group, were observed for participants with chronic obstructive pulmonary disease, congestive heart failure, diabetes and hypertension.

The participant compliance rate also improved on 12 of the 21 diagnosis-specific measures when compared to SFY 2012. The most impressive results, relative to SFY 2012, were observed for participants with chronic obstructive pulmonary disease, diabetes and hypertension. The program also appears to be having a positive impact on lowering care gap scores.

The compliance rate for the influenza vaccine rose 3.5 percentage points from SFY 2012, but remained low at just under 25 percent. Many SoonerCare HMP participants fall into high risk groups (e.g., persons with compromised immune systems) and continued efforts should be made to educate both providers and participants about the importance of the vaccine.

Utilization and Expenditure Analysis

Nurse care management, if effective, should have an observable impact on participant service utilization and expenditures. Improvement in the quality of care should yield better outcomes in the form of lower hospitalization rates and acute care costs.

PHPG analyzed rates of hospitalization and emergency department visits for both tier groups for the first 12 months after engagement, as compared to MEDai forecasts. Total service expenditures also were analyzed for a 48 month period after engagement, as compared to MEDai and PHPG forecasts.[4] The analysis was performed for individual diagnostic categories (e.g., persons with asthma), as well as for total unduplicated participants within each tier group.

Tier 1 participants (across all diagnostic categories) were forecasted to spend an average of approximately 11 days in the hospital in the 12 months after engagement; the actual rate was approximately four days. Tier 2 participants were forecasted to spend an average of just under three days in the hospital; the actual rate was slightly over one day.

The emergency department visit results were less dramatic, but still positive. Tier 1 participants were forecasted to visit the emergency department an average of four times in the 12 months after engagement; the actual visit rate was 3.7. Tier 2 participants were forecasted to visit the emergency department an average of 2.2 times; the actual visit rate was 1.8.

The improvement in inpatient hospital and emergency department utilization was part of a larger trend. Utilization and expenditures in both tier groups also declined for outpatient hospital, physician and behavioral health services.[5]

[4] MEDai forecasts are for a twelve-month period. PHPG extended the forecasted values another 12 months through application of a trend rate. The methodology is described in detail in chapter two of the report.
[5] Inpatient expenditures for admissions with a behavioral health diagnosis declined, while expenditures for outpatient services with a behavioral health diagnosis increased. Net behavioral health expenditures declined.

Total per member per month (PMPM) medical expenditures for all Tier 1 participants were approximately 11 percent below forecast for the first 24 months following engagement before dropping to 21 percent below forecast in months 25 through 48. Total PMPM medical expenditures for Tier 2 participants dropped steadily in the first 36 months following engagement before leveling out at approximately 23 percent below forecast for months 37 to 48.

Overall, medical expenditure savings attributable to nurse care management across both tier groups totaled $142 PMPM during the first 12 months following engagement, $254 PMPM for months 13 to 24, $344 for months 25 to 36 and $321 for months 37 to 48.

Cost Effectiveness Analysis

PHPG expanded the expenditure forecast analysis by performing cost effectiveness tests for both tier groups. To evaluate cost effectiveness, PHPG calculated program administrative expenses and added them to the participant medical expenditures through SFY 2013. Total engaged member (participant) costs then were compared to MEDai and PHPG forecasted expenditures, both during and after engagement.

In SFY 2010, the program was found to be running a small deficit during the first 12 months of participant engagement, when front-end costs associated with providing preventive services and addressing deferred health needs were incurred, and administrative expenses were highest. However, the deficit converted to savings after month 12, when the impact of improved chronic care self management began to be felt. PHPG hypothesized at the time that, "These savings can be expected to outweigh front-end costs and begin producing aggregate program savings as the program continues to operate and mature."

In SFY 2011, the addition of another year of experience did in fact result in significant program aggregate savings, a trend that continued in SFY 2012 and again in SFY 2013. ***Overall, the nurse care management portion of the SoonerCare HMP through SFY 2013 achieved aggregate savings in excess of $124 million, or approximately 15 percent of total forecasted medical claims costs.***

Practice Facilitation and Provider Education Evaluation

Overview

Telligen has a team of practice facilitators in Oklahoma providing in-office assistance to OHCA-designated primary care providers. The program is voluntary and offered at no charge to the provider. Practice facilitators assist primary care providers and their office staff to improve their efficiency and quality of care through a combination of onsite and follow-up activities.

After a practice is selected for facilitation services, the practice facilitator works with the practice team, and consults with the OHCA as necessary, to outline the most appropriate implementation schedule of core components. Core practice facilitation components include:

- Foundational/infrastructural development;
- Full practice assessment/evaluation;
- Process improvement interventions; and
- Registry implementation.

The practice facilitator also audits charts of chronic disease patients to look for gaps in care. Based on findings of the assessments and audit, the practice facilitator works with the provider and staff to improve practice efficiency and effectiveness.

Providers engaged in practice facilitation also receive training in the CareMeasures™ Data Registry. CareMeasures™ is an electronic patient registry used by office personnel to securely collect clinical data on patients with chronic conditions selected by the practice facilitator for quality measurement purposes.

With the aid of the OHCA, practice facilitators organize, plan and administer collaborative sessions to which all practice facilitation providers are invited. Reward incentives also are available to providers who participate in practice facilitation and meet reporting and quality improvement targets.

Telligen also is responsible for undertaking broad-based education through quarterly mailings to primary care providers throughout the state. The education addresses both treatment of chronic illnesses and delivery of preventive care.

Evaluation Findings

The practice facilitation and provider education evaluation included four components:

- Audit of Telligen operations;
- Practice facilitation site satisfaction survey;
- Expenditure trend analysis; and
- Cost effectiveness analysis.

Telligen Audit

PHPG's audit examined Telligen's compliance with practice facilitation and provider education contractual standards. The standards examined included: practice facilitator staffing; timely completion of assessments and other onsite activities; completion of quarterly mailings and monthly collaboratives; and management of incentive payments. Telligen was found to be in compliance with contract standards.

Practice Facilitation Site Satisfaction Survey

PHPG conducts a survey of practice facilitation sites that inquires about awareness of SoonerCare HMP objectives and components; interactions with Telligen nurse care managers and practice facilitators; and the program's impact with respect to patient management and outcomes.

Providers who have completed the onsite portion of practice facilitation view the SoonerCare HMP favorably. The most common reason cited for participating was to improve care management of patients with chronic conditions. Eighty-seven percent of the surveyed practices reported making changes in the management of their patients with chronic conditions as a result of participating in practice facilitation. Similarly, 86 percent of the practices credited the program with improving their management of patients with chronic conditions.

Overall, 68 percent of the providers described themselves as "very satisfied" with the experience and another 27 percent as "somewhat satisfied". Nearly all (91 percent) would recommend the program to a colleague.

Providers also were asked if any of their patients were enrolled in nurse care management. Most answered yes and a strong majority (77 percent) credited nurse care managers with having a positive impact on their patients.

Practice Facilitation Quality of Care Analysis

Telligen generates monthly reports on the number of patients entered into the registry, by practice site and diagnostic category, and the portion in compliance with CareMeasures™ clinical measures. The reports include 15 diagnosis-specific clinical measures, six population-wide prevention measures and eight tobacco-cessation measures.

PHPG compared the final Telligen SFY 2013 report, containing data for June 2013, to the same reports for June 2012 (12-month longitudinal analysis) and June 2009 (48-month longitudinal analysis). The comparison to June 2009 was intended to identify quality of care trends going back to the start of the program.

PHPG also calculated compliance percentages for the entire SoonerCare Choice population to serve as a HEDIS®-like comparison, where applicable, to CareMeasures™ for the SFY 2013

period. To match the selected portion of the HMP population, PHPG selected SoonerCare members who had at least six months of enrollment in SFY 2013.

In addition, PHPG performed a separate analysis of 19 practices identified by the OHCA as "high buy-in" participants, meaning they had demonstrated a higher than average level of interest and commitment to the program. PHPG compared compliance percentages for these practices to other sites to document any differences in performance during SFY 2013.

Twenty-four out of 29 CareMeasures™ findings improved from SFY 2012 to SFY 2013 while two declined. The remaining three measures did not change or could not be tracked longitudinally because there were fewer than five patients in the denominator in SFY 2013.

Twenty-four out of 29 CareMeasures™ findings also improved from SFY 2009 to SFY 2013 while four declined. (One measure could not be tracked longitudinally because there were fewer than five patients in the denominator in SFY 2013.)

During the period SFY 2012 to SFY 2013, the majority of measures within the select clinical conditions demonstrated significant improvement. The same was true over the longer span of SFY 2009 to SFY 2013.

PHPG's comparison of practice facilitation patients to the general Medicaid population identified significant differences between the two groups. Patients of practice facilitation providers showed higher compliance rates than the general Medicaid population on all six measures for which data was available to make a comparison.

The comparison of "high buy in" practices to other practice facilitation sites was similarly instructive. The high buy-in practices demonstrated better performance on five out of 17 measures for which a comparison could be made.

Expenditure Analysis

Practice facilitation, if effective, should have an observable impact on per member per month (PMPM) expenditures for patients with targeted chronic conditions. Improvement in the quality of care should yield better outcomes in the form of lower hospitalization rates and acute care costs.

Similar to the method used for the nurse care management evaluation, PHPG analyzed PMPM medical expenditures for patients treated during the evaluation period compared to MEDai forecasts. In the Annual Report for SFY 2011, PHPG calculated PMPM cost effectiveness by comparing actual and forecasted costs for the first 24 months following provider initiation. For

the SFY 2012 report, due to the relatively static number of providers, PHPG elected to build on the SFY 2011 analysis by evaluating expenditures in months 25 and beyond.[6]

For this report, PHPG again elected to build on the previous year's analysis by evaluating expenditures separately for four 12-month periods (i.e., months 1 to 12, 13 to 24, 25 to 36 and 37 to 48). Also for this report, PHPG analyzed patient expenditures as measured against forecasted amounts based on the date when the member first encountered a provider after his/her practice facilitation initiation date. This was done to better isolate the impact of practice facilitation on patient utilization and expenditures.

The PMPM medical expenditures for all patients, regardless of condition, either were even with or below forecast across the entire analysis time period. Through SFY 2013, average savings equaled $49 PMPM, or nearly eight percent.

Cost Effectiveness Analysis

PHPG expanded the expenditure trend analysis by performing cost effectiveness tests for practice facilitation, similar to the ones performed for nurse care management. PMPM expenditures for practice facilitation patients (post-provider initiation) averaged $634 through SFY 2013, after factoring-in program administrative expenses. This compared favorably to a $678 PMPM expenditure forecast for the same patients absent practice facilitation.

The net difference in PMPM expenditures (forecast minus actual) through SFY 2013 was $43.70. This figure, when multiplied by practice facilitation site member months yields ***aggregate savings of $58 million (state and federal dollars), or 6.4 percent as measured against total forecasted medical claims costs.***

The PMPM differential through SFY 2013 was somewhat lower than the differential of $74.91 documented in the SFY 2012 annual report, even as aggregate savings rose by approximately $12 million. (The greater aggregate savings result from the additional member months associated with another year of activity.)

As noted, the universe of providers participating in practice facilitation has been relatively static for the past several years. The decline in PMPM savings may reflect a diminishing impact from practice facilitation as providers move several years beyond their initiation into the program. If so, this would support the OHCA's decision to bring health coaches into the offices of providers who have undergone practice facilitation, as a means of better supporting the care management activities of these providers over the long term.

[6] The analysis encompassed all practice facilitation sites, including the small number who began facilitation in SFY 2011 and SFY 2012. Most sites, however, had 25 or more months of experience in the program.

Conclusions

The SoonerCare HMP completed its fifth full year of operations with well-defined structures and processes for conducting nurse care management, practice facilitation and provider education. These program components must be in place for performance- and outcome-related objectives to be met.

Program participants, both members and providers, reported high levels of satisfaction with their experience and decision to enroll. A large percentage of participating members with improved health status attributed the change to nurse care management, while providers generally credited the program with raising their quality of care for patients with chronic illnesses.

Quality of care data also continued to show promise, with participant compliance rates in most categories improving over time and typically exceeding comparison group rates.

The program's impact on service utilization and expenditures continued to increase year over year. Aggregate savings across the two program components stood at nearly $182 million, even after factoring in administrative costs. ***From a return on investment perspective, the SoonerCare HMP has generated over six dollars in medical savings for every dollar in administrative expenditures.***

The challenges faced and successes achieved during the program's five years will be documented in a comprehensive evaluation final report to be issued in 2014. The program today is well-positioned to build on its achievements through implementation of its second generation model of practice based health coaches working in close partnership with participating providers.

CHAPTER 1 – INTRODUCTION

Chronic Disease Management

Chronic diseases – such as cardiovascular disease and diabetes – are the leading causes of death and disability in the United States, accounting for nearly 70 percent of all deaths each year.[7] Almost half of all American adults struggle with a chronic health condition that affects performance of their daily activities.[8]

Chronic diseases are also among the most costly of all health problems, accounting for more than 75 percent of total U.S. health care spending. Providing care to individuals with chronic diseases, many of whom meet the federal disability standard, has placed a significant burden on state Medicaid budgets.

Traditional case and disease management programs target single episodes of care or disease systems, but do not take into account the entire social, educational, behavioral and physical health needs of persons with chronic conditions. Research into holistic models has shown that sustained improvement requires the engagement of the member, provider, the member's support system and community resources to address total needs.

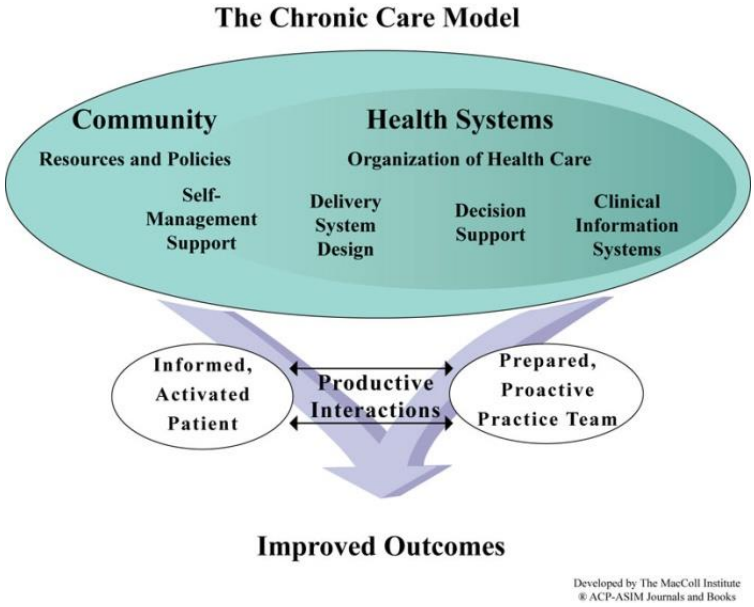
Holistic programs seek to address proactively the individual needs of patients through planned, ongoing follow-up, assessment and education.[9] Under the Chronic Care Model, as first developed by Dr. Edward H. Wagner, community providers collaborate to effect positive changes for health care recipients with chronic diseases.

These interactions include systematic assessments, attention to treatment guidelines and support to empower patients to become self-managers of their own care. Continuous follow-up care and the establishment of clinical information systems to track patient care are also components vital to improving chronic illness management.

[7] Chronic Disease Control and Health Promotion Statistics from the U.S. Department of Health and Human Services, Centers for Disease Control and Prevention.
[8] Chronic Disease Overview from the U.S. Department of Health and Human Services, Centers for Disease Control and Prevention.
[9] Wagner, E.H., "Chronic Disease Management: What Will It Take to Improve Care for Chronic Illness?," *Effective Clinical Practice*, 1:2-4 (1998).

Exhibit 1-1 illustrates the basic components and interrelationships of the Chronic Care Model.

Exhibit 1-1 **– The Chronic Care Model**



Creation of the SoonerCare Health Management Program

Under the Oklahoma Medicaid Reform Act of 2006 (HB2842), the Oklahoma Legislature directed the Oklahoma Health Care Authority (OHCA) to develop and implement a management program for persons with chronic diseases, including, but not limited to, asthma, chronic obstructive pulmonary disease, congestive heart failure, diabetes and renal disease. The program would address the health needs of chronically ill SoonerCare members while reducing unnecessary medical expenditures at a time of significant fiscal constraints.

More specifically and as envisioned by the OHCA, the SoonerCare Health Management Program would:

- Evaluate and manage participants with chronic conditions;
- Improve participants' health status and medical adherence;
- Increase participant disease literacy and self-management skills;
- Coordinate and reduce unnecessary or inappropriate medication usage by participants;
- Reduce hospital admissions and emergency department use by participants;
- Improve primary care provider adherence to evidence-based guidelines and best practices measures;
- Coordinate participant care, including the establishment of coordination between providers, participants and community resources;
- Regularly report clinical performance and outcome measures;

- Regularly report SoonerCare health care expenditures of participants; and
- Measure provider and participant satisfaction with the program.

The OHCA moved from concept to reality by creating a program with two major components. The first component, nurse care management, is directed at members with one or more chronic conditions. The second component, practice facilitation and provider education, is directed at primary care providers treating the chronically ill.

Nurse Care Management

Nurse care management targets SoonerCare members with chronic conditions identified as being at high risk for both adverse outcomes and significant future medical costs. The members are stratified into two levels of care, with the highest-risk segment placed in "Tier 1" and the remainder in "Tier 2."

Prospective participants are contacted and "enrolled" in their appropriate tier. After enrollment, participants are "engaged" through initiation of care management activities.

Tier 1 participants receive face-to-face nurse care management while Tier 2 participants receive telephonic nurse care management. The OHCA's objective is to provide services at any given time to about 1,000 members in Tier 1 and about 4,000 members in Tier 2.

Chapter two includes detailed information on nurse care management staffing, enrollment and services.

Practice Facilitation and Provider Education

Selected participating providers receive practice facilitation through the SoonerCare HMP. Practice facilitators collaborate with providers and office staff to improve the quality of care through implementation of enhanced disease management and improved patient tracking and reporting systems.

The provider education component targets primary care providers throughout the state who treat patients with chronic illnesses. The program incorporates elements of the Chronic Care Model by inviting primary care practices to engage in collaboratives focused on health management and evidence-based guidelines.

Chapter three includes detailed information on practice facilitation staffing, enrollment and services.

SoonerCare HMP Operations

The OHCA contracted with a vendor, Telligen, to administer the SoonerCare HMP in accordance with agency specifications. Telligen (previously known as the Iowa Foundation for Medical Care) is a national quality improvement and medical management firm specializing in care, quality and information management services. Telligen staff members provide nurse care management to SoonerCare HMP participants and practice facilitation to OHCA-designated primary care providers.

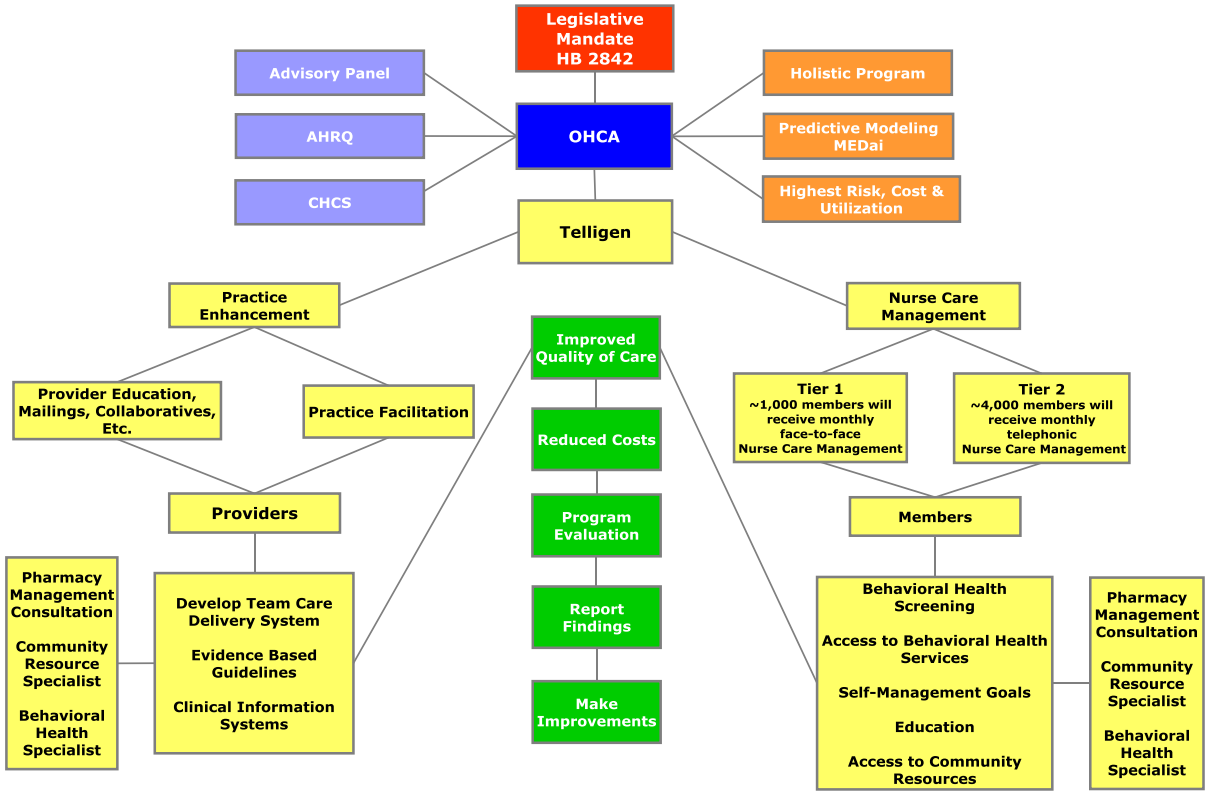
Telligen receives monthly per member payments for each participant engaged in nurse care management; the SFY 2013 payment was $195 per month for each Tier 1 participant (up to 1,000 participants) and $49 per month for each Tier 2 participant (up to 4,000 participants). Telligen also receives a monthly payment for each practice facilitator, set at $20,414 in SFY 2013.

A second firm, MEDai, already was serving as a subcontractor to Hewlett Packard (HP), the OHCA's Medicaid fiscal intermediary, at the time the SoonerCare HMP was developed. The OHCA capitalized on this existing relationship by utilizing MEDai to assist in identifying candidates for enrollment in the HMP based on historical and predicted service utilization.

The OHCA oversees SoonerCare HMP activities through a dedicated unit whose director is an Oklahoma-licensed physician. The unit facilitates the identification and recruitment of eligible beneficiaries and providers and conducts monitoring activities on an ongoing basis.

Exhibit 1-2 summarizes the major components of the SoonerCare Health Management Program.

Exhibit 1-2 – SoonerCare HMP Overview



Source: Oklahoma Health Care Authority

SoonerCare HMP Independent Evaluation

The OHCA has retained the Pacific Health Policy Group (PHPG) to conduct an independent evaluation of the SoonerCare HMP.[10] PHPG is evaluating the program's impact on beneficiaries, providers and the health care system as a whole with respect to:

1. Utilization of preventive and chronic care management services and adherence to national, evidence-based disease management practice guidelines;

2. Level of care management and coordination between providers, care managers, the member and others involved in his/her care;

[10] PHPG subcontracted with APS Healthcare from 2009 to 2012 to perform a portion of the evaluation. In 2013, PHPG assumed responsibility for all evaluation activities.

3. Increased member self-management of chronic conditions;

4. Member satisfaction and perceived quality of life;

5. Provider participation rates and satisfaction; and

6. Avoidance of unnecessary service utilization (e.g., inpatient days; emergency department visits) and associated expenditures.

PHPG is presenting evaluation findings in a series of reports issued over a five-year period. The first two reports, Baseline Analysis and Implementation Evaluation, were issued in the fall of 2009 to provide a framework for ongoing evaluation activities.

Member and provider Satisfaction and Self-Management reports containing survey, focus group and interview findings were issued in the fall of 2009 and spring of 2010, 2011, 2012 and 2013. A sixth Satisfaction and Self-Management evaluation report will be issued in the spring of 2014.

This is the fifth Annual Evaluation report addressing progress toward achievement of program objectives. The first Annual Evaluation report was issued in mid-2010, the second in mid-2011, third in mid-2012 and the fourth in mid-2013.

Findings from the Satisfaction and Self-Management and Annual Reports will be consolidated in a Comprehensive Program Evaluation and Cost Savings report to be released in the summer of 2014. The report will examine the impact of the SoonerCare HMP from implementation through conclusion of the program's first generation model in June 2013.

Exhibit 1-3 lists the reports and their approximate issuance dates.

Exhibit 1-3 - SoonerCare HMP Evaluation Reports

Evaluation Report	Description	Issue Date
Baseline Analysis Report	Demographic, utilization and expenditure data prior to HMP implementation, for use in measuring program impact over time. Also, delineation of evaluation measures to be used in tracking program progress	Fall 2009
Implementation Evaluation Report	Review of HMP start-up activities and initial cost impact for period February – June 2008	Fall 2009
Initial Satisfaction and Self-Management Report	Member and provider satisfaction survey results	Fall 2009
First Annual Report	Program progress against evaluation measures, including cost impact	Winter 2010
Second Satisfaction and Self-Management Report	Member and provider satisfaction survey results	Spring 2010
Second Annual Report	Program progress against evaluation measures, including cost impact	Winter 2011
Third Satisfaction and Self-Management Report	Member and provider satisfaction survey results	Summer 2011
Third Annual Report	Program progress against evaluation measures, including cost impact	Spring 2012
Fourth Satisfaction and Self-Management Report	Member and provider satisfaction survey results	Spring 2012
Fourth Annual Report	Program progress against evaluation measures, including cost impact	Winter 2013
Fifth Satisfaction and Self-Management Report	Member and provider satisfaction survey results	Spring 2013
Fifth Annual Report	Program progress against evaluation measures, including cost impact	Winter 2014
Sixth Satisfaction and Self-Management Report	Member and provider satisfaction survey results	Spring 2014
Comprehensive Program Evaluation and Cost Savings Report	Final evaluation results	Summer 2014

Annual Evaluation Report Scope and Methodology

The fifth Annual Evaluation report addresses the performance of the SoonerCare HMP in State Fiscal Year 2013 (July 2012 – June 2013). The report examines the SoonerCare HMP across a series of measures tied to the broad evaluation criteria presented below.[11]

The measures fall into four categories:

- *Structure Measures* that evaluate whether the SoonerCare HMP vendor (Telligen) is meeting contractual requirements with respect to key program staff;
- *Process Measures* that evaluate whether the SoonerCare HMP vendor is meeting contractual requirements with respect to member engagement, assessment and care management contacts and provider practice facilitation, education and incentive payments;
- *Performance Measures* that evaluate the program's impact on quality of care for members falling into one or more selected chronic disease groups, as determined through clinical reviews of administrative claims data and medical records; and
- *Outcome Measures* that evaluate the program's ultimate impact with respect to reducing unnecessary service utilization and expenditures and achieving high levels of member and provider participation and satisfaction.

PHPG collected data for the fifth annual evaluation through a variety of methods. These included an audit of Telligen, claims and medical record reviews and standardized surveys/in-depth interviews of nurse care management and practice facilitation participants.

***Telligen Audit**:* PHPG conducted an audit of Telligen in December 2013. The purpose of the audit was to validate staffing and operational information submitted to the OHCA by Telligen through standardized reports over the course of the year. PHPG interviewed Telligen staff and examined primary source materials to confirm the accuracy of the Telligen reports and determine Telligen's compliance with contractual requirements.

Participant Self-Management and Satisfaction: PHPG conducted structured telephone surveys and in-depth interviews of SoonerCare HMP participants, to inquire about their reasons for enrolling, acquired self-management skills and satisfaction with the program. In addition, PHPG conducted follow-up surveys with members six months after their initial surveys and members who graduated to obtain updated information. PHPG also surveyed individuals who elected not to enroll when offered the opportunity and former participants who dropped out of the program, to explore the basis for their decisions.

[11] The measures are identified throughout the body of this report. A consolidated list is included in the Baseline Report.

***Provider Satisfaction**:* PHPG conducted telephone surveys and follow-up interviews of practice facilitation sites, to inquire about their reasons for participation, the impact on their practices and satisfaction with the program.

***Quality of Care Analysis**:* PHPG used administrative (paid claims) data to evaluate the SoonerCare HMP's impact on participant care and health status. PHPG used CareMeasures™ Data Registry reports produced by Telligen to conduct a similar evaluation of the quality of care at practice facilitation sites.

***Utilization, Expenditure and Cost Effectiveness Analysis**:* PHPG also used paid claims data to profile members participating in the SoonerCare HMP and members eligible for, but not enrolled in the program. PHPG analyzed the data to document the demographic characteristics of both groups and to estimate the impact of nurse care management on service utilization and expenditures. PHPG obtained MEDai member forecast data to estimate the impact of the program by measuring actual expenditures against forecasted expenditures. PHPG similarly analyzed paid claims for SoonerCare members with targeted chronic conditions treated at practice facilitation provider sites to estimate the impact of practice facilitation on service utilization and expenditures.

The evaluation methodology is described in more detail in the body of the report.

Report Chapters

Chapter two presents the results of the nurse care management evaluation. This includes Telligen audit findings, member (participant) survey and in-depth interview data, quality of care study findings, utilization/expenditure data and results of the nurse care management cost-effectiveness analysis. The chapter concludes with a summary of key findings.

Chapter three presents the results of the practice facilitation and provider education evaluation. This includes the provider portion of the Telligen audit, practice facilitation site survey data, quality of care study findings and results of the practice facilitation expenditure and cost-effectiveness analysis. The chapter concludes with a summary of key findings.

Chapter four presents an analysis of the program's return on investment through the end of SFY 2013.

The report also contains a series of appendices with supporting documentation. The appendices are identified in the body of the report.

CHAPTER 2 – NURSE CARE MANAGEMENT EVALUATION

This chapter presents evaluation findings for the nurse care management component of the SoonerCare HMP. The chapter begins with an overview of the nurse care management model and participants, followed by evaluation results in five areas:

- Audit of Telligen
- Member self-management and satisfaction survey and focus groups
- Quality of care study
- Utilization and expenditure analysis
- Cost effectiveness analysis

Overview of the Nurse Care Management Model

The SoonerCare HMP targets members with chronic conditions who have been identified as being at high risk for both adverse outcomes and increased health care expenditures, and whose future costs could potentially be reduced, or "impacted" through care management. The "high risk" population contains a disproportionate number of persons with co-morbidities, including combinations of such diseases as congestive heart failure, chronic obstructive pulmonary disease (COPD), coronary artery disease, hypertension and diabetes.

A core objective of the program is to better coordinate, or integrate, services for beneficiaries whose care has previously been unmanaged. Accordingly, the SoonerCare HMP excludes members in nursing homes, institutional settings or other "waiver" eligibility categories – settings in which integrated care should already be provided.

For the same reason, the SoonerCare HMP also excludes members who are enrolled in other disease management programs or have third party comprehensive medical insurance. In addition, the program excludes members with End Stage Renal Disease (ESRD), who are undergoing dialysis, have had a transplant or are pregnant.[12]

The OHCA uses MEDai predictive modeling software to identify SoonerCare members with chronic conditions who would be eligible for the SoonerCare HMP. Once identified, the OHCA stratifies these members into tiers based on forecasted risk and service expenditures. Members predicted to be at highest risk for adverse outcomes and increased service expenditures are placed into Tier 1. Members predicted to be at high risk for adverse outcomes and next highest service expenditures are placed into Tier 2.

Telligen is required to make up to five attempts by telephone and mail (using personalized letters) to contact eligible members. Once contact is made, and the member agrees to participate, he or she is considered "enrolled" and is assigned to a nurse care manager. The

[12] SoonerCare HMP members who become pregnant after enrolling are not automatically excluded or terminated from the program but are given the opportunity to continue receiving nurse care management.

nurse care manager is required to conduct an assessment and develop a plan-of-care for the member, who then is considered "engaged." The assessment and care planning process is face-to-face for Tier 1 participants and telephonic for Tier 2.

The initial assessment is required to be holistic in scope and includes health literacy, self-management skills and baseline function (clinical, psychosocial and medical history). The health care literacy portion enables the nurse care manager to determine the participant's capacity to process and understand basic health information and care needs in order to make appropriate health care decisions.

Nurse care managers also perform an eighteen-item behavioral health assessment during the initial encounter that includes the Patient Health Questionnaire (PHQ-9) depression-screening tool. Individuals who score in the moderate or higher range are offered referrals and contacts for behavioral health services.

Nurse care managers use assessment results to develop individualized care plans that establish goals and objectives to address the participant's current health needs. The care plan seeks to help participants better manage their health, understand the appropriate use of health care resources and identify changes in their health.

Registered nurse care managers must attempt to provide at least monthly face-to-face visits to Tier 1 participants. These nurses are required to have at least three years of clinical experience and are strategically located around the state to facilitate assessments and subsequent follow-up visits.

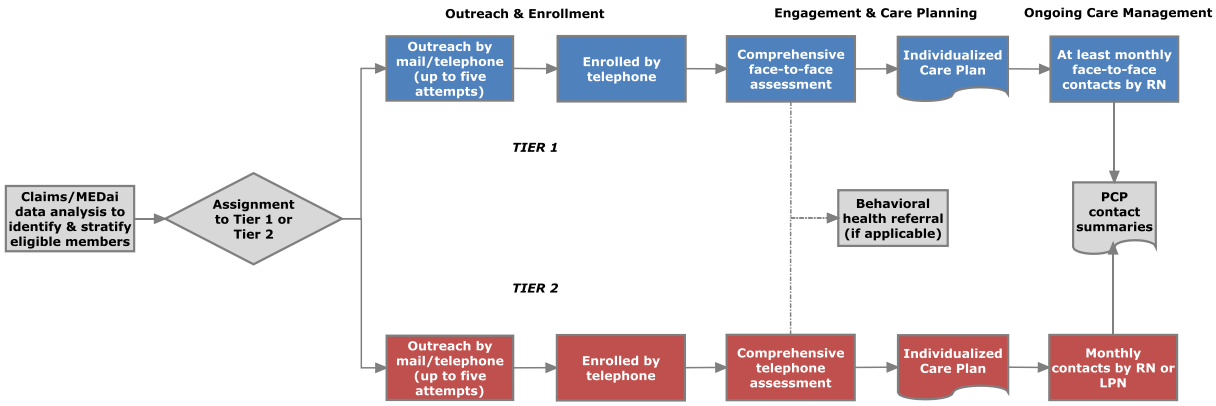
Tier 2 participants receive telephonic services from registered nurses and licensed practical nurses. Tier 2 nurse care managers are centrally located at the SoonerCare HMP Call Center, which is in West Des Moines, Iowa.

Nurse care managers serve as a link between the member, primary care providers and other resources such as behavioral health services, pharmacotherapy management and community services. Providers receive contact summaries from nurse care managers that include information on the participant's health status, health literacy, medical adherence assessment data, depression screen results and any social service or other referrals.

Participants graduate from the program upon meeting criteria established by the OHCA and Telligen. The graduation process is described in detail later in the chapter.

Exhibit 2-1 below summarizes the SoonerCare HMP stratification, enrollment and engagement steps.

Exhibit 2-1 – Nurse Care Management Process



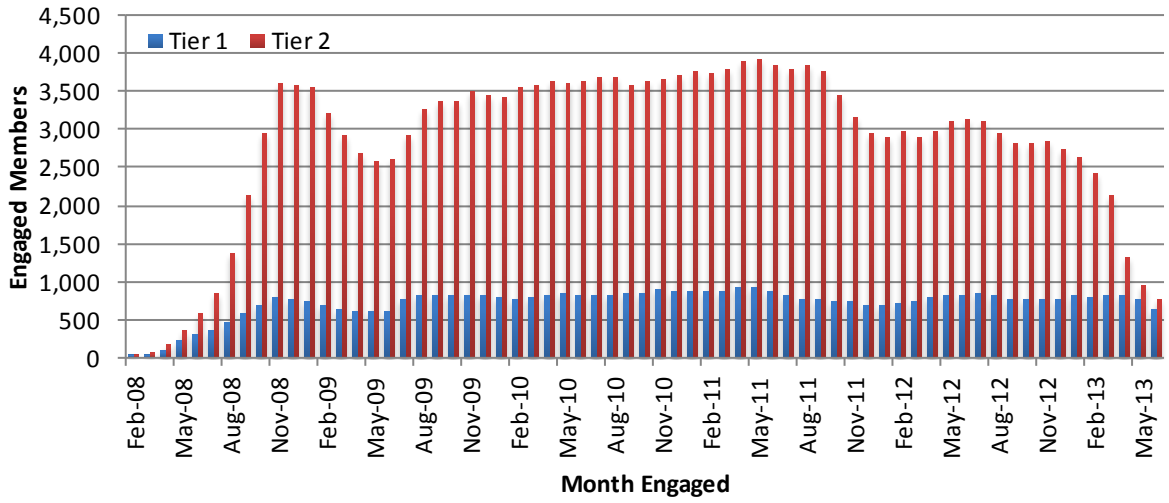
Nurse Care Management Participants

The OHCA's goal at the outset of the SoonerCare HMP was to provide nurse care management at any one time to 1,000 Tier 1 participants and 4,000 Tier 2 participants. However, the final numbers were to be contingent on available funding and identification of a sufficient number of SoonerCare members who met enrollment criteria.

The program enjoyed steady enrollment growth in SFY 2008 and the first half of SFY 2009 (July to December 2008), before leveling off in January 2009 (see exhibit 2-2). Enrollment in both tiers approached full capacity during SFY 2010 and remained at capacity in SFY 2011.

In SFY 2012, a concerted effort was made to graduate participants with extended periods of engagement, resulting in a decrease in enrollment during the first half of the fiscal year (July to December 2011). In February 2013, the OHCA and Telligen began making changes to decrease the enrollment of new members and transition current members in preparation for the "second generation" SoonerCare HMP practice-based health coaching model, which would begin July 2013. (See Reader Note for more detail.)

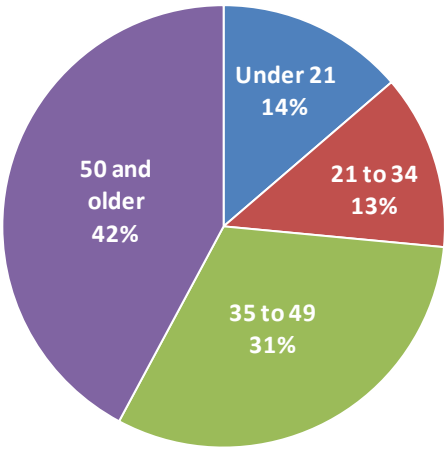
Exhibit 2-2 – Cumulative Engagement Totals per Month, February 2008 - June 2013



Participants by Age

Not surprisingly, SoonerCare HMP participants are older than the general Medicaid population. Only 14 percent of SoonerCare HMP participants are under the age of 21, compared to approximately 65 percent of the overall SoonerCare population (see exhibit 2-3).[13]

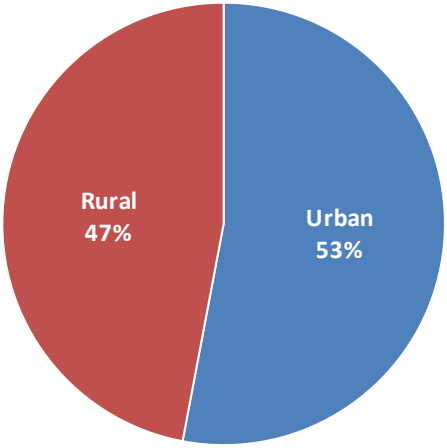
Exhibit 2-3 – Age Distribution for Participants



Participants by Place of Residence

Slightly more nurse care management participants live in urban (53 percent) than rural areas (47 percent) (see exhibit 2-4). The urban portions of the state include the greater Oklahoma City, Tulsa and Lawton metropolitan areas.

Exhibit 2-4 – Participants by Location: Urban/Rural Mix

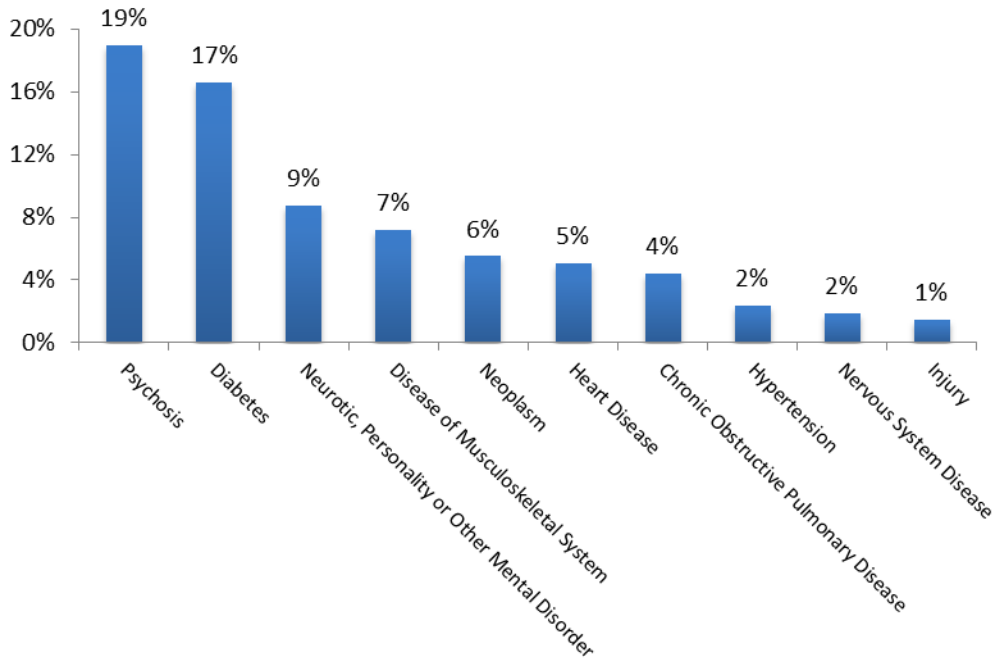


[13] Source: OHCA Sooner Care Fast Facts, June 2013.

Participants by Most Common Diagnoses

Program participants have been treated for numerous chronic and acute physical conditions. The most common diagnostic category within Tier 1 is psychosis,[14] which accounted for 19 percent of participants, followed by diabetes at 17 percent (see exhibit 2-5). The top ten conditions together accounted for 72 percent of the Tier 1 population.

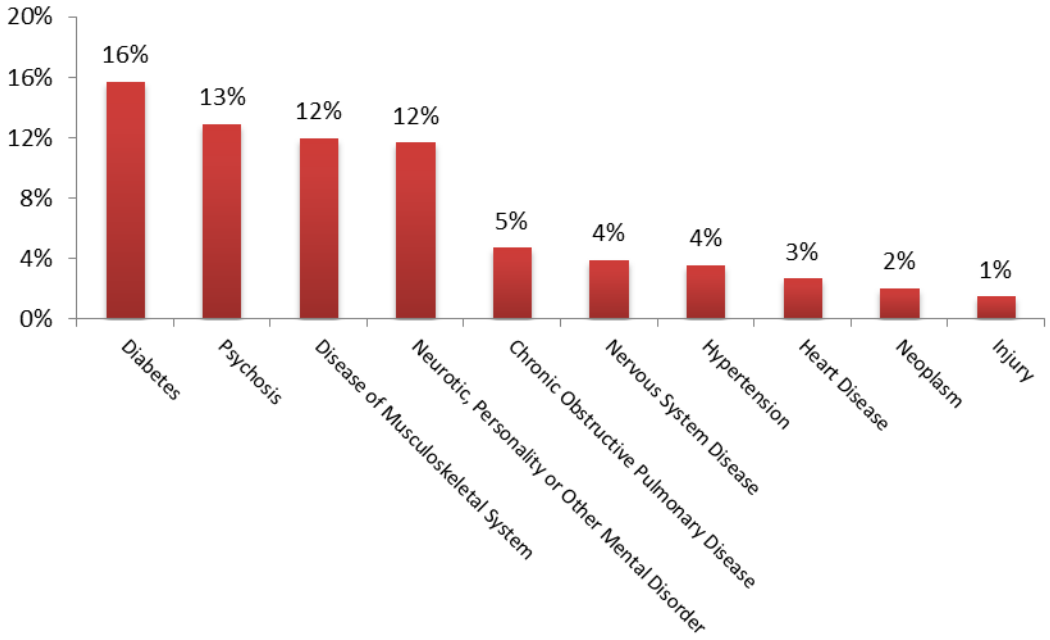
Exhibit 2-5 – Most Common Diagnoses for Tier 1 Participants



[14] Based on primary diagnosis total paid claim counts.

Tier 2 participants resembled, but were not identical to, their Tier 1 counterparts. Diabetes was the most common diagnosis for Tier 2 participants, accounting for 16 percent of participants; psychosis was the second most common at 13 percent (see exhibit 2-6). The top ten conditions in total also accounted for 72 percent of the Tier 2 population.

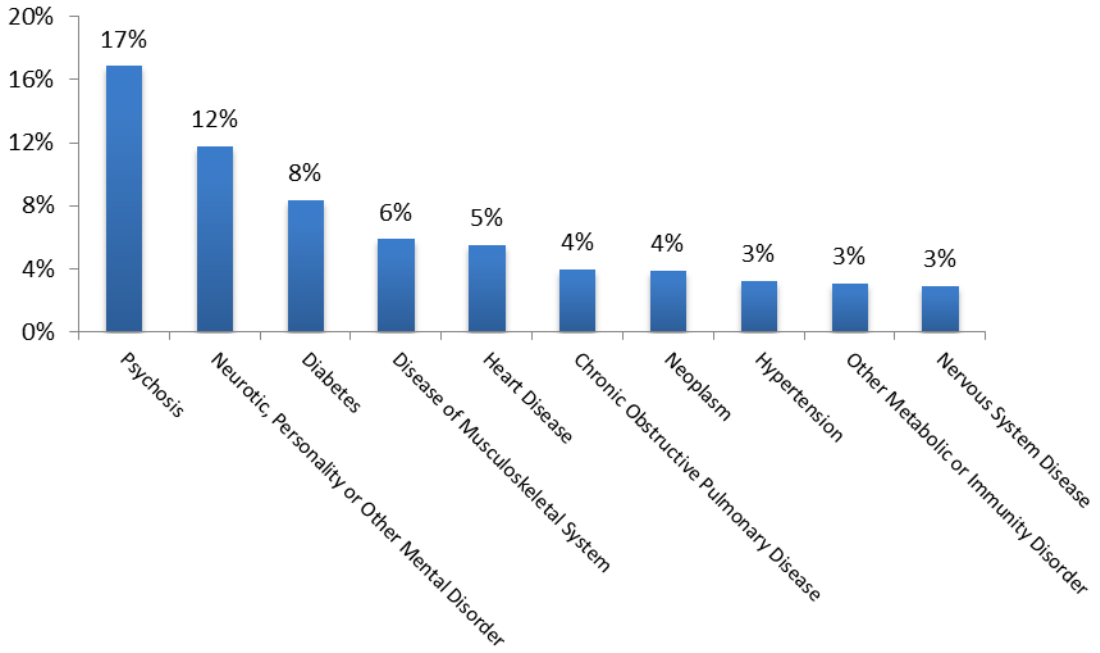
Exhibit 2-6 – Most Common Diagnoses for Tier 2 Participants



Participants by Most Expensive Diagnoses

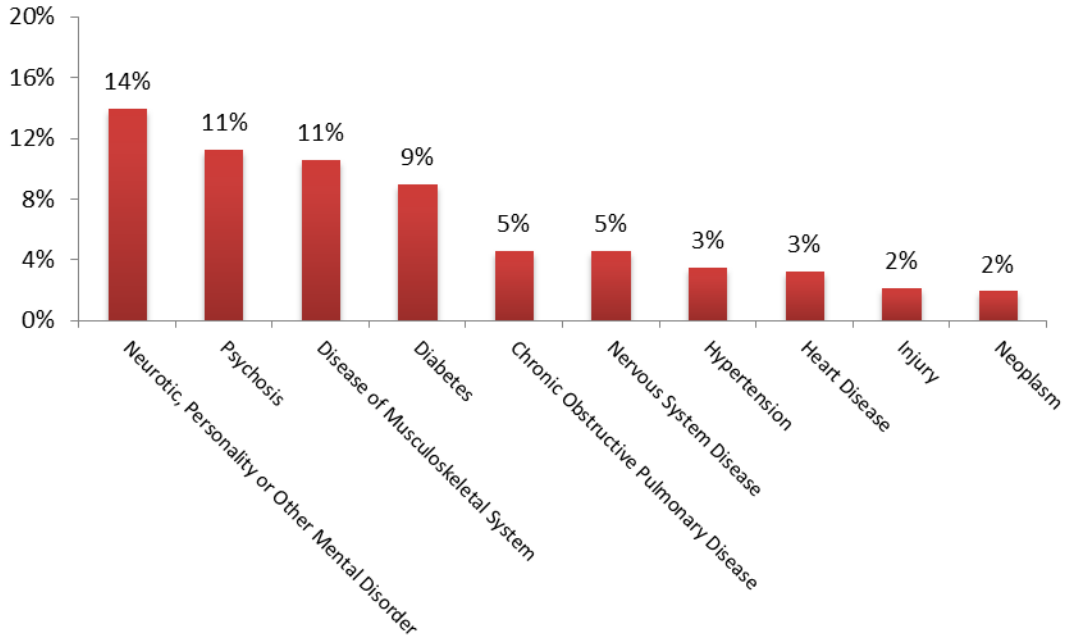
Psychosis was the most expensive diagnostic category within Tier 1 based on paid claim amounts. "Neurotic, personality or other mental disorder" was second, followed by a mixture of chronic and acute conditions (see exhibit 2-7). The top ten conditions together accounted for 65 percent of the Tier 1 population.

Exhibit 2-7 – Most Expensive Diagnoses for Tier 1 Participants



"Neurotic, personality or other mental disorder" was the most costly diagnosis among Tier 2 participants, followed closely by psychosis, musculoskeletal disease and diabetes (see exhibit 2-8). The top ten conditions in total also accounted for 65 percent of the Tier 2 population.

Exhibit 2-8 – Most Expensive Diagnoses for Tier 2 Participants

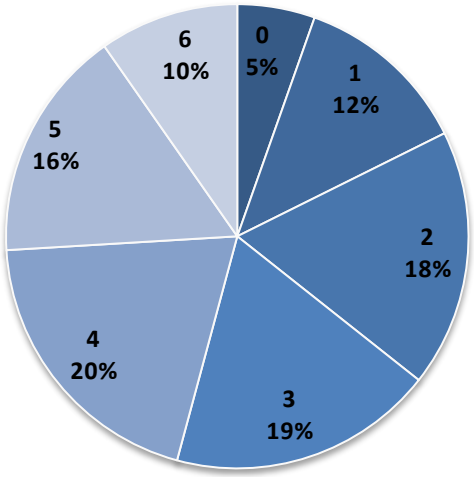


Co-morbidities among Participants

The SoonerCare HMP's focus on holistic care rather than management of a single disease is appropriate given the prevalence of co-morbidities in the nurse care managed population.

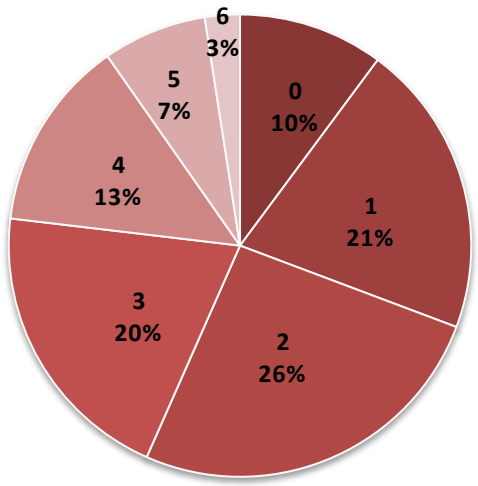
PHPG examined the number of physical chronic conditions per participant and found that 83 percent of Tier 1 participants through SFY 2013 had at least two of the six most frequently observed chronic physical conditions (asthma, COPD, coronary artery disease, diabetes, heart failure and hypertension) (see exhibit 2-9).

Exhibit 2-9 – Number of Physical Health Chronic Conditions – Tier 1



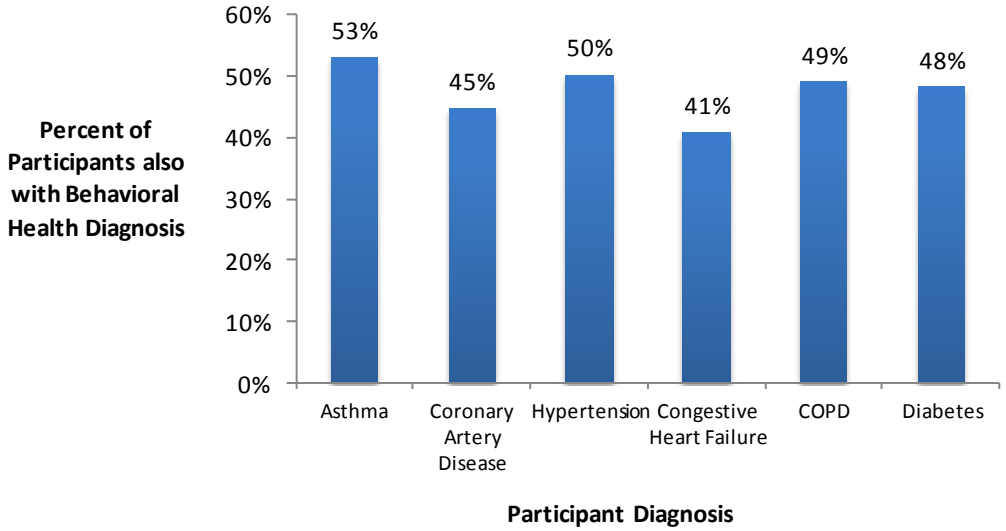
The co-morbidity rate was lower among Tier 2 than Tier 1 participants but still stood at 69 percent (see exhibit 2-10).

Exhibit 2-10 – Number of Physical Health Chronic Conditions – Tier 2



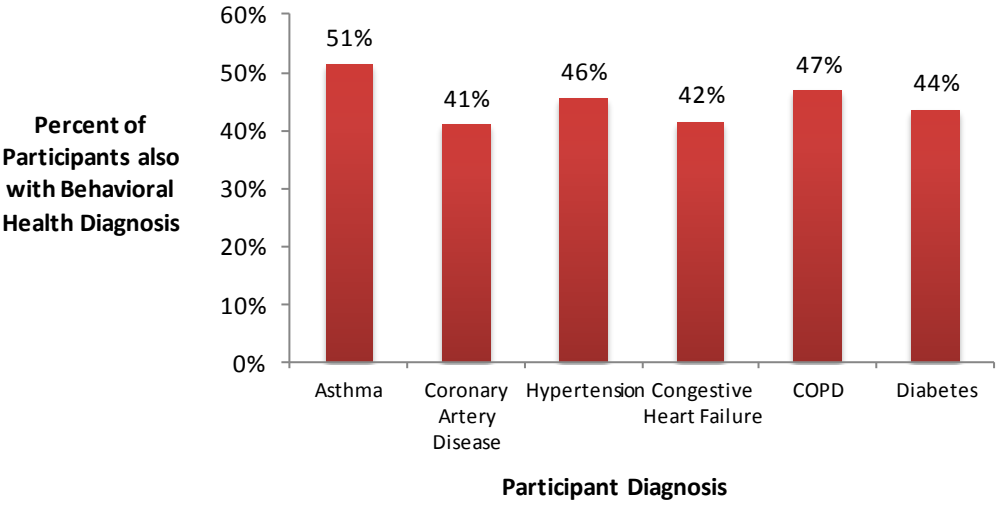
Nearly 50 percent of the Tier 1 population had physical/behavioral health co-morbidities, although the rate varied depending on the physical condition. The prevalence ranged from 41 percent in the case of persons with heart failure up to 53 percent among persons with asthma (see exhibit 2-11).[15]

Exhibit 2-11 – Behavioral Health Co-morbidity Rate – Tier 1



Tier 2 participants were somewhat less likely to have physical/behavioral health co-morbidities, although the rate was still significant (see exhibit 2-12).

Exhibit 2-12 – Behavioral Health Co-morbidity Rate – Tier 2



[15] Behavioral health comorbidity defined as diagnosis codes 290-319 being one of the participant's top three most common or most expensive diagnosis, by claim count and paid amount, respectively.

Conclusion

Overall, Tier 1 and Tier 2 participants demonstrate the characteristics expected of a population that potentially could benefit from care management. The greater number of co-morbidities found among Tier 1 participants also suggests that the enrollment process is distinguishing appropriately based on complexity of need when making tier assignments.

The population's characteristics have remained relatively stable since the program's inception. Early adjustments made to the program, such as placing a greater emphasis on behavioral expertise within the nurse care management structure, have contributed to its efficacy, as documented in the remainder of the chapter.

Telligen Audit – Nurse Care Management

In December 2013, PHPG performed an audit to verify Telligen's compliance with contractual standards related to staffing, member (participant) enrollment, engagement and ongoing contacts. (In some cases, Telligen was evaluated against program objectives, where formal standards did not apply.) PHPG also compared audit findings to reports previously submitted by Telligen to the OHCA, to validate the accuracy of the Telligen data.

The specific evaluation measures addressed through the audit included both "structure" and "process" items, as summarized in exhibit 2-13 below.

Exhibit 2-13 – Audit Evaluation Measures – Nurse Care Management

Measure Type	Measure	Applies to
Structure	Nurse care manager Tier 1 staffing	Tier 1 participants
	Nurse care manager Tier 2 staffing	Tier 2 participants
Process	Percent of available slots filled	All participants
	Timely completion of assessment, care plan and education	All participants
	Monthly contact with participant	All participants
	Quarterly contact with PCP	All participants
	Behavioral health referral follow-up	All participants
	Graduation rate from Tier 1 to Tier 2	Tier 1 participants
	Graduation rate from HMP	All participants

In contrast to previous evaluations which looked at the last quarter of the fiscal year, the SFY 2013 audit presents findings from July 2012 through January 2013. In February 2013, the OHCA and Telligen began making changes to decrease the enrollment of new members and transition current members in preparation for the "second generation" SoonerCare HMP, which would begin July 2013.

Telligen Nurse Care Manager Staffing (Tier 1 and 2)

Overview: Telligen is required to assign Tier 1 participants to registered nurse care managers with at least three years of clinical experience. The average caseload for Tier 1 nurse care managers may not exceed 75-to-1, although individual care managers may have larger caseloads so long as they are able to fulfill their face-to-face care management duties.

Telligen is required to assign Tier 2 participants to registered nurse or licensed practical nurse care managers located at the SoonerCare HMP Call Center in West Des Moines, Iowa. Tier 2 nurse care manager caseloads may not exceed 150-to-1.

Evaluation Findings: PHPG examined nurse care manager staffing records, by tier, for July 2012 through January 2013 (see exhibit 2-14). During the evaluation period, Telligen maintained an average Tier 1 caseload of 66.

Exhibit 2-14 – Tier 1 Nurse Care Manager Average Caseloads for July 2012 through January 2013[16]

Month	Number of Staff	Caseload Range	Average
July 2012	12	62-82	70
August 2012	12	55-81	67
September 2012	12	52-85	64
October 2012	12	50-75	62
November 2012	12	48-70	64
December 2012	12	49-82	64
January 2013	12	47-80	69
Average			**66**

During the evaluation period, Telligen maintained an average Tier 2 caseload of 158 and was in excess of the 150-to-1 standard in all months except November and December (see exhibit 2-15).

Exhibit 2-15 – Tier 2 Nurse Care Manager Average Caseloads for July 2012 through January 2013[17]

Month	Number of Staff	Caseload Range	Average
July 2012	17	162-202	183
August 2012	19	151-199	155

[16] Exhibit 2-14 includes nurse care managers who began work and had an active caseload (as indicated in the Telligen Visit Outcomes Report) or were terminated within the month. The measurement period also at times included the Tier 1 Lead having an active caseload.

[17] Exhibit 2-15 includes nurse care managers who began work and had an active caseload (as indicated in the Telligen Visit Outcomes Report) or were terminated within the month. The measurement period also at times included the Tier 2 Supervisors having an active caseload.

Month	Number of Staff	Caseload Range	Average
September 2012	18	42-213	157
October 2012	18	31-203	157
November 2012	19	52-183	150
December 2012	19	28-175	144
January 2013	17	32-186	155
Average			**158**

The number of cases a nurse care manager may have in a particular month can fluctuate. Nurse care managers often experience an increase in their caseload when a member of the team leaves or takes a leave of absence.

When this occurs, the departing nurse care manager's caseload is divided among more experienced members of the care team and/or management until the position is filled or the individual returns. New nurse care managers gradually are brought up to a full caseload. Some nurses also may temporarily carry a larger caseload if some of their cases are due to be closed at month's end, for example due to loss of SoonerCare eligibility or graduation from the program.

Conclusion: Telligen met the standard for Tier 1 staffing (see exhibit 2-14 on the previous page). Telligen was slightly above the standard for Tier 2 staffing in most of the months audited (see exhibit 2-15 above).

Tier 1 caseloads have consistently been within contract standards over the life of the program (see exhibit 2-16 below). Tier 2 caseloads have consistently been higher over the course of the program, although this does not necessarily mean that staffing levels are insufficient to provide effective care management (see exhibit 2-17 on the following page).

Exhibit 2-16 – Comparison of Tier 1 Nurse Care Manager Average Caseloads for SFYs 2009 through 2013

Summary of Findings for SFY 2009-2013					
	SFY 2009 Findings (April – June 2009)	SFY 2010 Findings (April – June 2010)	SFY 2011 Findings (April – June 2011)	SFY 2012 Findings (April – June 2012)	SFY 2013 Findings (July 2012 – January 2013)
Average Number of Staff	14	13	14	12	**12**
Average Caseload	54	73	71	74	**66**

Exhibit 2-17 – Comparison of Tier 2 Nurse Care Manager Average Caseloads for SFYs 2009 through 2013

Summary of Findings for SFY 2009-2013					
	SFY 2009 Findings (April – June 2009)	SFY 2010 Findings (April – June 2010)	SFY 2011 Findings (April – June 2011)	SFY 2012 Findings (April – June 2012)	SFY 2013 Findings (July 2012 – January 2013)
Average Number of Staff	22	21	24	19	**18**
Average Caseload	138	183	169	174	**158**

Percentage of Available Slots Filled, by Tier

Overview: The OHCA's goal at the outset of the SoonerCare HMP was for nurse care management services to be provided at any one time to 1,000 Tier 1 participants and 4,000 Tier 2 participants. However, the final numbers would be contingent on available funding and identification of a sufficient number of SoonerCare members who met enrollment criteria.

Evaluation Findings: Participation growth was hampered in SFY 2009 by disenrollments from the program. Telligen disenrolled any participant who could not be contacted by his or her nurse care manager during the month. The OHCA responded to the participation drop by enforcing contract standards requiring Telligen to make at least five contact attempts before disenrolling a participant. The total number of participants began to climb again in the spring of 2009 following the OHCA's actions.

Enrollment continued to grow in SFY 2010 and SFY 2011, with Tier 1 membership exceeding capacity in April 2011 and remaining near capacity in May and June 2011. Tier 2 membership exceeded capacity during April through June 2011. Tier 1 and Tier 2 engagement dropped slightly during the SFY 2012 evaluation period. As reported by Telligen, approximately 35 percent of individuals have participated in the program for over 12 months.

In April 2011, the OHCA assigned a nurse from its staff to assist in the evaluation of the appropriateness of continued engagement among longer term participants. Between July and September 2011, the OHCA determined that many of the members enrolled in the SoonerCare HMP were not engaged actively enough to benefit from the services being offered.

This included participants who were not fully engaged in behavior change and action planning, and in some cases, participants with needs that did not fit the intent of the program. Further, in cases where multiple contacts were made before a participant could be reached, the OHCA evaluated whether services would still be required by the time the individual was actually contacted.

During fall and winter 2011, the OHCA and Telligen re-evaluated the goals of the program and determined the appropriate types of cases to engage and when to continue providing services. The OHCA applied predictive modeling and case-by-case review to identify members who would benefit from the services being provided.

These joint efforts contributed to a decrease in engagement totals during SFY 2012. The OHCA suspended the disenrollment process in January 2012 and requested that Telligen focus on maintaining engagement and increase enrollment with members meeting programmatic requirements.

In anticipation of programmatic changes for SFY 2014, the OHCA and Telligen began winding down the program under current operations during SFY 2013. Telligen started to decrease the enrollment of new members and transition current members.

The number of individuals engaged in Tier 1 fluctuated during the first half of SFY 2013 (exhibit 2-18). Tier 2 membership gradually decreased during this period. Telligen stopped new enrollment for both tiers during the last quarter of SFY 2013.

Exhibit 2-18 – Engagement Totals from July 2012 through January 2013 as Reported by Telligen

Month	Tier	Cumulative Total Engagement	Percent of Available Slots Filled by Tier
July 2012	1	848	84.8%
	2	3112	77.8%
August 2012	1	811	81.1%
	2	2949	73.7%
September 2012	1	776	77.6%
	2	2817	70.4%
October 2012	1	755	75.5%
	2	2819	70.5%
November 2012	1	768	76.8%
	2	2845	71.1%
December 2012	1	769	76.9%
	2	2742	68.6%
January 2013	1	822	82.2%
	2	2628	65.7%

Conclusion: Over the course of the program's evolution, the OHCA and Telligen have made changes to program eligibility to better serve participants engaged in the program and to facilitate enrollment of individuals who may benefit from the services being provided through the SoonerCare HMP. As documented in prior reports, these changes appeared to have a positive impact on participant satisfaction and quality-of-care. The lower enrollment observed in SFY 2013 was the result of planning for the transition to the "second generation" SoonerCare HMP and did not reflect any underlying issues within the existing model.

Assessment of Newly Enrolled SoonerCare HMP Members

Overview: Once Telligen contacts an eligible member, and the member agrees to participate, he or she is considered "enrolled" and is assigned to a nurse care manager. The nurse care manager is required to conduct a series of assessments and develop an individualized plan-of-care for the member. Members are then considered "engaged."

The assessments must be conducted and care plan developed within ten business days of consent to participate in the program. The assessment and care planning process is face-to-face for Tier 1 participants and telephonic for Tier 2.

Evaluation Findings: PHPG selected 75 Tier 1 and 75 Tier 2 care management records from QualiTrac™, Telligen's web-based health management information system. PHPG reviewed completion dates for the following:

- Initial health questionnaire;
- Baseline health assessment;
- Initial care plan development; and
- Education on identified health needs and self-management activities.

Telligen completed assessment and care planning activities for all 75 Tier 1 and 75 Tier 2 participants in accordance with contract standards (see exhibit 2-19).

Exhibit 2-19 – Initial Assessment and Care Planning Timeliness for July 2012 – January 2013

Measure	Standard	Tier 1 Results	Tier 2 Results
1. Completion of initial health questionnaire	100% of engaged	100% (75 out of 75)	100% (75 out of 75)
2. Timely completion of baseline health assessment	95% within 10 business days of first contact	100% (75 out of 75)	100% (75 out of 75)
3. Development of individualized care plan	95% within 10 business days of first contact	100% (75 out of 75)	100% (75 out of 75)

Measure	Standard	Tier 1 Results	Tier 2 Results
4. Education on health needs and self-management activities	95% within 10 business days of first contact	98.7% (75 out of 75)	100% (75 out of 75)

Telligen's compliance in SFY 2013 was consistent with its performance in previous evaluation periods (see exhibit 2-20).

Exhibit 2-20 – Initial Assessment and Care Planning Timeliness for SFYs 2009 through 2013

	Summary of Findings for SFYs 2009-2013									
	SFY 2009 Findings (April – June '09)		SFY 2010 Findings (April – June '10)		SFY 2011 Findings (April – June '11)		SFY 2012 Findings (April – June '12)		SFY 2013 Findings (July '12– Jan. '13)	
Measure	Tier 1	Tier 2	Tier 1	Tier 2	Tier 1	Tier 2	Tier 1	Tier 2	Tier 1	Tier 2
1. Completion of initial health questionnaire	100%	100%	100%	100%	100%	100%	100%	100%	**100%**	**100%**
2. Timely completion of baseline health assessment	98.7%	100%	98.7%	100%	100%	100%	100%	100%	**100%**	**100%**
3. Development of individualized care plan	98.7%	100%	100%	100%	100%	100%	100%	100%	**100%**	**100%**
4. Education on health needs and self-management activities	98.7%	100%	96.0%	100%	100%	100%	98.7%	100%	**98.7%**	**100%**

Conclusion: Telligen has consistently met the contractual standards for assessment and care plan development for both tier groups.

Ongoing Monthly Contact (Intervention)

Overview: Nurse care managers must attempt at least monthly face-to-face visits, or interventions, with all Tier 1 participants. However, a Tier 1 participant may receive a telephone contact if his/her schedule, mobility and/or geographic location make a face-to-face visit difficult. Successful interventions include new engagement assessment, monthly follow up and quarterly re-assessment.

Nurse care managers must attempt to make at least monthly telephone contact with all Tier 2 participants. As with Tier 1, successful interventions include new engagement assessment, monthly follow up and quarterly re-assessment.

Telligen's contract was clarified in SFY 2009 to allow for "intervention equivalents" in lieu of successful telephone or face-to-face interventions. The "intervention equivalent" consists of three attempts (telephone or missed appointments) occurring on three different dates, spanning at least seven calendar days in that month, with one attempt occurring in the evening.

Telligen also may provide a "partial intervention equivalent" in circumstances where timing of the engagement or previous contact makes it such that a full intervention equivalent cannot be accomplished within the calendar month. The partial intervention equivalent consists of at least two attempts to contact the participant.

The OHCA requires Telligen to have an intervention, intervention equivalent or partial intervention equivalent with 100 percent of engaged Tier 1 and Tier 2 participants each month. The OHCA further requires that at least 70 percent of the total be comprised of successful interventions.

Evaluation Findings: Telligen submits monthly reports to the OHCA documenting its visit outcomes by tier. Exhibits 2-21 and 2-22 below display the percentage of successful interventions and intervention equivalents reported by Telligen for July 2012 through January 2013 by tier. Although the successful intervention rate has declined slightly from previous evaluation periods, the percentage of individuals who were not contacted at all continues to remain very low.

Exhibit 2-21 – Telligen-Reported Visit Outcomes for Tier 1 Participants

Month	Percent Successful Intervention	Percent Intervention Equivalent	Percent No Contact	Other Contacts (non-billable, one contact, pending closure)
July 2012	66.98%	21.81%	0.12%	11.08%
August 2012	64.24%	21.83%	3.70%	10.23%
September 2012	66.62%	23.84%	0.77%	8.76%
October 2012	68.74%	22.25%	0.13%	8.88%
November 2012	66.54%	24.74%	0.39%	8.33%
December 2012	65.28%	25.36%	0.78%	8.58%
January 2013	72.26%	17.04%	0.00%	10.7%

Exhibit 2-22 – Telligen-Reported Visit Outcomes for Tier 2 Participants

Month	Percent Successful Intervention	Percent Intervention Equivalent	Percent No Contact	Other Contacts (non-billable, one contact, pending closure)
July 2012	66.07%	31.72%	0.03%	2.18%
August 2012	69.01%	29.17%	0.07%	1.76%
September 2012	67.91%	29.11%	0.07%	2.91%
October 2012	73.64%	24.19%	0.00%	2.16%
November 2012	72.06%	26.22%	0.04%	1.69%
December 2012	68.02%	29.25%	0.07%	2.66%
January 2013	69.44%	27.89%	0.00%	2.67%

PHPG selected a sample of care management records for participants during July 2012 through January 2013 and reviewed the records to document the intervention attempts and outcomes. Telligen achieved an average successful intervention rate of 78 percent among Tier 1 participants during the audit period, although the rate declined somewhat during the period reviewed (see exhibit 2-23). Phone interventions were conducted whenever a participant was unavailable for a face-to-face visit.

Exhibit 2-23 – Tier 1 Monthly Intervention Audit Findings

Month	Cases in Audit Sample	Percent Face-to-face Interventions	Percent Phone Interventions	Percent Intervention Equivalents	Percent No Contact Attempts	Percent Successful Interventions
July 2012	12	33.3%	66.7%	0.0%	0.0%	100.0%
August 2012	22	63.6%	22.7%	9.1%	0.0%	86.4%
September 2012	35	57.1%	17.1%	22.9%	0.0%	74.3%
October 2012	45	53.3%	33.3%	13.3%	0.0%	86.7%
November 2012	55	41.8%	23.6%	32.7%	0.0%	65.5%
December 2012	65	50.8%	18.5%	26.1%	0.0%	69.2%
January 2013	75	52.0%	10.7%	24.0%	0.0%	64.0%
Average of Audit Period		***50.3%***	***27.5%***	***18.3%***	***0.0%***	***78.0%***

Telligen achieved an average successful intervention rate of 83 percent among Tier 2 participants during the audit period (see exhibit 2-24).

Exhibit 2-24 – Tier 2 Monthly Intervention Audit Findings

Month	Cases in Audit Sample	Percent Phone Interventions	Percent Intervention Equivalents	Percent No Contact Attempts	Percent Successful Interventions
July 2012	12	100.0%	0.0%	0.0%	100.0%
August 2012	22	77.3%	22.7%	0.0%	77.3%
September 2012	35	85.7%	14.3%	0.0%	85.7%
October 2012	45	84.4%	15.6%	0.0%	84.4%
November 2012	55	81.8%	18.2%	0.0%	81.8%
December 2012	65	76.9%	23.1%	0.0%	76.9%
January 2013	75	74.7%	25.3%	0.0%	74.7%
Average of Audit Period		***83.0%***	***17.0%***	***0.0%***	***83.0%***

Telligen's successful intervention rate increased from the previous year's evaluation (see exhibit 2-25).

Exhibit 2-25 – Average Percent of Successful Monthly Interventions for SFYs 2009 through 2013

	Summary of Findings for SFYs 2009-2013									
	SFY 2009 Findings		SFY 2010 Findings		SFY 2011 Findings		SFY 2012 Findings		SFY 2013 Findings	
Month	**Tier 1**	**Tier 2**	**Tier 1**	**Tier 2**	**Tier 1**	**Tier 2**	**Tier 1**	**Tier 2**	**Tier 1**	**Tier 2**
Average of Audit Period	95.8%	83.8%	79.8%	81.5%	78.5%	86.2%	74.87%	75.67%	***78.0%***	***83.0%***

Conclusion: During the SFY 2013 evaluation period, Telligen met the 70 percent successful intervention standard for both Tier 1 and Tier 2 participants.

Quarterly Contact with Primary Care Provider

Overview: Nurse care managers must provide written reports to each participant's primary care provider, updating them on care plans and progress toward meeting care plan goals.

Evaluation Findings: Telligen automatically generates and mails letters to providers containing information on the participants' current care plans. Nurse care managers also call primary care providers with updates as necessary.

For the SFY 2013 audit, PHPG reviewed the case records of 75 Tier 1 and 75 Tier 2 participants to verify a letter had been sent. As with the SFY 2010, 2011 and 2012 audits, all the records included documentation of quarterly primary care provider contacts in the form of a letter. Some records also included documentation of phone follow-ups with providers by Tier 1 and Tier 2 nurse care managers.

In addition, case records and reports from members indicate that individual nurse care managers are meeting with providers in person and scheduling monthly visits to coincide with participants' provider appointments. This allows participants, nurse care managers and providers to more effectively communicate the care and health needs of the individual participant.

Conclusion: Telligen met the standard for quarterly primary care provider contacts.

Follow-up on Behavioral Health Referrals

Overview: Nurse care managers perform ongoing assessments that include a screening for depression using the Patient Health Questionnaire (PHQ-9). Telligen must offer referrals to individuals who score in the moderate to higher range and must provide follow-up during subsequent care management contacts.

Telligen forwards the referral to the OHCA Behavioral Health Specialist, who contacts the participant directly and provides information on behavioral health resources. The large percentage of participants with physical and behavioral health co-morbidities underscores the importance of these referrals.

Evaluation Findings: PHPG obtained from the OHCA a list of participants who were referred by their nurse care managers for behavioral health resources. From this list, PHPG selected a sample of Tier 1 and Tier 2 participants who were referred during July 2012 through January 2013.

PHPG reviewed the participants' records for documentation of behavioral health follow-up activities by nurse care managers. Follow-up activities were defined to include provision of

additional resources, education activities and documentation of the participant's decision to obtain behavioral health services.

The sample included 28 randomly selected Tier 1 and 28 Tier 2 participants, for a total of 56 (eight referrals per month). Of the participants who remained eligible in the program following referral, all of the reviewed cases contained documentation of follow-up by nurse care managers.

In addition, PHPG looked at the claims of all members who received a behavioral health referral over a period of one, two or three months after the referral month. Fifty-three percent of the members received services from a behavioral health provider within 3 months of a referral being made. Sixty-seven percent of the members received services related to a behavioral or mental health diagnosis from a behavioral health or other provider.[18]

Exhibit 2-26 – Rates of Follow-up after Behavioral Health Referrals

Rates of Follow Up After BH Referrals					
Months After Referral Month	Denominator (Members with Eligibility in Month)	BH Providers Only		BH Providers + Other Providers with BH/MH Diagnosis Codes (290-319)	
		N	%	N	%
Same	756	177	23%	235	31%
1	756	263	35%	346	46%
2	757	309	41%	387	51%
3	638	337	53%	428	67%

Conclusion: Telligen met the contractual standard for behavioral health follow-up activities during the SFY 2013 evaluation period. With the exception of one case record during the SFY 2011 audit period, Telligen has met this standard for all other evaluation years.

Graduation from Nurse Care Management

Overview: Under the program's original design, the period of face-to-face care management was to last an average of six months, after which the participant would be transitioned to Tier 2 or graduated from the program. The OHCA elected not to begin the formal graduation process during the program's first year, to allow time for refinement of the nurse care management

[18] "Other Providers" includes primary care providers, non-behavioral health specialists, Federally Qualified Health Centers (FQHCs), Rural Health Clinics (RHCs) and tribal clinics.

process. The OHCA did approve a small number of persons for graduation in SFY 2009, acting on a case-by-case basis.

In October 2009, the OHCA and Telligen completed development of a formal graduation process. Under the graduation process guidelines, an OHCA Senior Research Analyst compiles a "potential discharge list" on a quarterly basis. This list includes Tier 1 participants who have achieved a MEDai Acute Risk Score of 80 or lower and a Chronic Risk Score of less than 90, and Tier 2 participants who achieved a MEDai Acute Risk Score of 60 or lower and a Chronic Risk Score of less than 90.

Nurse care managers also review these cases with consideration of the following:

- Whether the participant met (or is very near to meeting) care plan goals;
- Whether a specialist who is involved should be contacted to verify the participant's readiness for discharge from the program, and if so, whether the specialist has been contacted and is in agreement; and
- Whether the participant exhibits the ability to manage his or her care independently.

The participant's primary care provider also may be contacted to contribute to the discharge decision.

Taking all these factors into consideration, the nurse care manager determines whether the participant should graduate from the program due to having met his or her care plan goals; discharged from the program due to non-compliance or lack of progression/effort towards goals; graduated to another tier; or remain in the program with no change in status.

As discussed earlier in this evaluation, joint efforts by the OHCA and Telligen management staff, including implementation of the graduation process, review of participant MEDai files and identification of participants with access to behavioral health services, contributed to an increase in the number of individuals graduating from the program in SFY 2012.

In February 2013, Telligen began informing members of the upcoming changes to the program. Depending on the member's health needs, the member would be placed into one of three categories as of July 2013:

- Case management services;
- Health coaching (if enrolled with a participating primary care provider); or
- Graduation upon successful completion of the program.

Evaluation Findings: By the end of June 2013, 2,009 SoonerCare HMP participants (438 Tier 1 and 1,571 Tier 2) had graduated from the program. During SFY 2013, 156 Tier 1 and 728 Tier 2 members graduated.

A total of 17 Tier 1 participants graduated during the July 2012 through January 2013 evaluation period. PHPG reviewed all of these case records. In addition, PHPG reviewed 30 records of Tier 2 participants out of the 80 total who graduated during the evaluation period.

Nurse care managers generally notify participants of their upcoming graduation from, or completion of, the SoonerCare HMP. All sampled Tier 1 case records included documentation of discussions of upcoming graduation. Thirty-five percent of the records contained a completion letter sent to the participant. Telligen reported that nurse care managers often hand participants a completion certificate at the last meeting rather than mailing out a letter. Of the sampled case records, 29 percent contained the completion letter sent to the participant's primary care provider.

All sampled Tier 2 case records contained documentation of discussions of upcoming graduation and documentation that a completion letter was sent to the participant. In addition, all sampled records contained documentation that a completion letter was sent to the participant and provider. Forty percent of the sampled cases contained documentation that the nurse care manager called the provider to inform them of the participant's graduation from the program.

Conclusion: The number of SoonerCare HMP graduates increased significantly in SFY 2013. All participants were notified of their upcoming graduation – an improvement from prior evaluations. This also is reflected in PHPG's survey of graduated members; over 87 percent reported graduating from the program as the reason for no longer participating.

Participant Self-Management and Satisfaction Survey and Member Interviews

Introduction

The SoonerCare HMP evaluation contractor is required to assess the efficacy of the program in part through surveys of program participants, both members and practice facilitation providers. Specifically, the evaluation for Request for Proposals states:

> *The (evaluation contractor) shall design surveys to measure the perceived quality of the HMP process, its impact on participants' health, self-management and the satisfaction of both participants and providers.*[19]

PHPG began surveying newly-engaged participants in April 2009 and initiated six-month follow-up surveys of active participants in October 2009. Surveys of former participants and individuals who chose not to enroll ("opt outs") were started in August 2009. Surveys of formal nurse care management graduates began in December 2011.

Each spring PHPG issues a stand-alone survey report that includes updated findings for the various surveyed populations. Highlights of key findings from survey and member interview activities also are included in the annual report.

This section of the annual report builds upon previous reports by documenting member perceptions of the SoonerCare HMP through summer 2013. Trends and disparities between earlier and more recent respondent groups are noted where applicable.

Member (Participant) Survey

The member (or participant) perceptions and satisfaction survey component of the evaluation assesses the SoonerCare HMP's impact on quality of life and development of chronic disease self-management skills. Although these objectives are not as "quantifiable" as claims cost effectiveness tests, they are critically important when judging the program's impact and overall performance.

This report includes findings for all five groups. Specifically:

- Initial survey results for 3,924 active SoonerCare HMP participants (1,258 Tier 1 and 2,666 Tier 2)
- Follow-up survey results for 1,368 participants
- Survey results for 564 former participants
- Opt out survey results for 548 individuals
- Survey results for 547 graduates[20]

[19] HMP Evaluation RFP, Section C.2.3.
[20] Prior to December 2011, survey results for graduates were captured using the former participant survey.

Data for the five populations is cross-tabulated by tier group, age, gender and geography (urban/rural), with results presented in detailed tables in Appendix B.[21]

Survey Methodology and Structure

The OHCA provides to PHPG on a monthly basis the names and available contact information for active participants in the SoonerCare HMP, as well as former participants and opt outs, as reported to the OHCA by Telligen. PHPG sends introductory letters informing active participants that they have been selected to participate in an evaluation of the SoonerCare HMP and will be contacted by telephone to complete a survey asking their opinions of the SoonerCare HMP. (Former participants and opt outs are not sent an advance letter.)

PHPG waits a minimum of four business days for the letters to arrive before initiating telephone outreach calls. Surveyors make three telephone call attempts per member at different times of the day and different days of the week before closing a case.

Members who participate in the survey are re-contacted six months later for a follow up survey inquiring as to whether they are still participating in the program, their current health care access and their perceptions and satisfaction of the program. Survey participants include members still engaged in the SoonerCare HMP, as well as former participants who elected to disenroll from the program.

All surveys were written at a sixth-grade reading level. The survey instrument for active participants consists of questions designed to garner meaningful information on member perceptions and satisfaction. The areas explored include:

- Program awareness and enrollment status
- Usual source of care
- Decision to enroll in the SoonerCare HMP
- Experience with and satisfaction of nurse care manager
- Experience with and satisfaction of the SoonerCare HMP website
- Overall satisfaction with the SoonerCare HMP
- Health status and demographics

The follow-up survey covers the same areas as the initial survey. The follow-up survey also captures information on changes in the member's health status; the number of nurse care managers to whom the member has been assigned; changes made in self-management of care; and whether the member believes he or she still requires the services of a nurse care manager.

[21] The only significant differences observed within the initial participant survey cross-tabulations was between Tier 1 and Tier 2 participants, as discussed in Chapter Two. Cross-tabulations for the other four surveys are presented for informational purposes only and should be interpreted with caution, given their smaller sample sizes.

The former participant and opt out surveys each have 21 questions, focusing on program awareness, patterns of care and reasons for disenrolling or choosing not to enroll in the SoonerCare HMP.

The graduate survey asks about overall satisfaction with the program; suggestions for improvement; current health care resources; and changes in health and care self-management.

Survey Margin of Error and Confidence Levels

The member survey results are based on a sample of the total SoonerCare HMP population and therefore contain a margin of error. The margin of error (or confidence interval), is usually expressed as a "plus or minus" percentage range (e.g., "+/- 5 percent"). The margin of error for any survey is a factor of the absolute sample size, its relationship to the total population and the desired confidence level for survey results.

The confidence level for each of the surveys was set at 95 percent, the most commonly used standard. The confidence level represents the degree of certainty that a statistical prediction (i.e., survey result) is accurate. That is, it quantifies the probability that a confidence interval (margin of error) will include the true population value. The 95 percent confidence level means that, if repeated 100 times, the survey results will fall within the margin of error 95 out of 100 times. The other five times the results will be outside of the range.

Exhibit 2-27 presents the sample size and margin of error for each of the surveys. The margin of error is for the total survey population, based on the average distribution of responses to individual questions. The margin can vary by question to some degree, upward or downward, depending on the number of respondents and distribution of responses.

Exhibit 2-27 – Survey Sample Size and Margin of Error

Survey	Sample Size	Confidence Level	Margin of Error
Active Participants	3,924	95%	+/- 1.50%
Follow-up Participants	1,368	95%	+/- 2.06%
Former Participants	564	95%	+/- 4.05%
Opt Outs	548	95%	+/- 4.06%
Graduates[22]	547	95%	+/- 3.58%

The margin of error for former participants, opt out and graduate groups is relatively larger, reflecting the moderate sample sizes for these populations. However, the results for most questions were sufficiently lopsided to demonstrate statistical significance despite the margin of error.

[22] Margin of error is smaller for graduates than for former participants and opt outs because the surveyed population represents a higher percentage of the total universe of potential respondents.

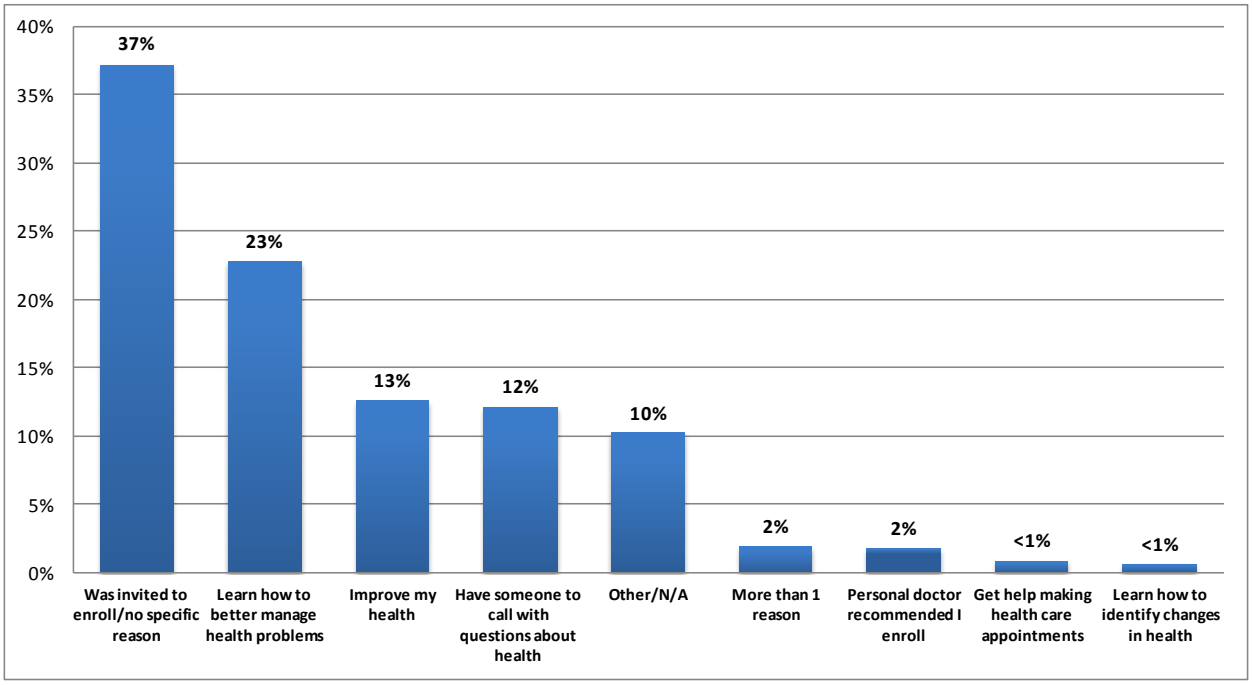
Active Participant Initial Survey Findings

Key findings for the initial participant survey are discussed below. The full set of responses is presented in Appendix B. The same format is followed for the other four surveys.

Reason for Enrolling

The SoonerCare HMP seeks to teach participants how to better manage their chronic conditions. This was the primary reason cited by participants across both tiers who had a goal in mind when enrolling. However, the largest segment, at 37 percent, enrolled simply because they were asked (see exhibit 2-28).

Exhibit 2-28 – Primary Reason for Enrolling in SoonerCare HMP



Nurse Care Manager Activities

Nurse care managers are expected to help participants build their self-management skills. Over the entire course of the evaluation, nearly all of the respondents indicated that their nurse care manager asked questions about and provided answers and instructions for taking care of their health problems or concerns (see exhibit 2-29). Fifty-two percent said their nurse care manager helped them to identify changes in their health that might be an early sign of a problem.

Exhibit 2-29 – Nurse Care Manager Activity Ratings

Activity		Respondents answering "yes" to activity				
	Yes	Very Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Very Dissatisfied	Unsure/ N/A
1. Asked questions about your health problems or concerns	***98.4%***	89.4%	9.0%	0.9%	0.6%	0.1%
2. Provided instructions about taking care of your health problems or concerns	***94.9%***	90.4%	8.5%	0.6%	0.4%	0.1%
3. Helped you to identify changes in your health that might be an early sign of a problem	***52.4%***	93.0%	6.5%	0.3%	0.1%	0.1%
4. Answered questions about your health	***93.3%***	91.0%	8.2%	0.4%	0.3%	0.1%
5. Helped you to make and keep health care appointments for medical problems	***44.9%***	94.9%	4.7%	0.1%	0.1%	0.2%
6. Helped you to make and keep health care appointments for mental health or substance abuse problems	***20.8%***	94.8%	4.8%	0.1%	0.0%	0.2%

Note: Percentages may not total to 100 percent due to rounding.

Nearly 45 percent reported that their nurse care manager helped them make and keep health care appointments for medical problems. Over 20 percent reported that the nurse care manager helped them make and keep health care appointments for mental health or substance abuse problems.

Respondents were asked to rate their satisfaction with each "yes" activity. The overwhelming majority reported being very satisfied with the help they received, with the portion ranging from 89 to 95 percent, depending on the item.

The percentage of individuals who reported being very satisfied with the services they received from their nurse care managers has remained consistently high over the duration of the program (see exhibit 2-30).[23]

Exhibit 2-30 – Nurse Care Manager Activity Ratings (Very Satisfied)
Comparison of SFYs 2009 through 2013

Activity	Percentage of Individuals Reporting "Very Satisfied" April 2009-June 2013					
	SFY 2009*	SFY 2010	SFY 2011	SFY 2012	SFY 2013	Overall
1. Asked questions about your health problems or concerns	81.4%	89.2%	89.1%	91.6%	89.4%	***89.4%***
2. Provided instructions about taking care of your health problems or concerns	79.0%	89.4%	90.4%	93.0%	90.9%	***90.4%***
3. Helped you to identify changes in your health that might be an early sign of a problem	81.4%	92.4%	91.7%	95.6%	96.5%	***93.0%***
4. Answered questions about your health	82.6%	89.4%	89.9%	94.1%	92.4%	***91.0%***
5. Helped you to make and keep health care appointments for medical problems	89.9%	93.9%	92.9%	98.1%	96.1%	***94.9%***
6. Help you to make and keep health care appointments for mental health or substance abuse problems	87.2%	95.2%	93.3%	96.6%	97.0%	***94.8%***

*Note: Member surveys for SFY 2009 only include surveys conducted April 2009 through June 2009.

[23] In the SFY 2012 HMP Annual Evaluation Report, survey data shown was cumulative, except where otherwise indicated. That is, each year included results collected during that year and all prior years. Beginning with the Spring 2013 standalone Satisfaction and Self-Management Impact Report, PHPG presented longitudinal data with survey results isolated by year. Longitudinal results presented in this report are shown isolated by year.

Satisfaction with Nurse Care Manager and SoonerCare HMP

Overall, 88 percent of participants were very satisfied with the help they received from their nurse care manager (see exhibits 2-31 and 2-32).

Exhibit 2-31 – Overall Satisfaction with Nurse Care Manager

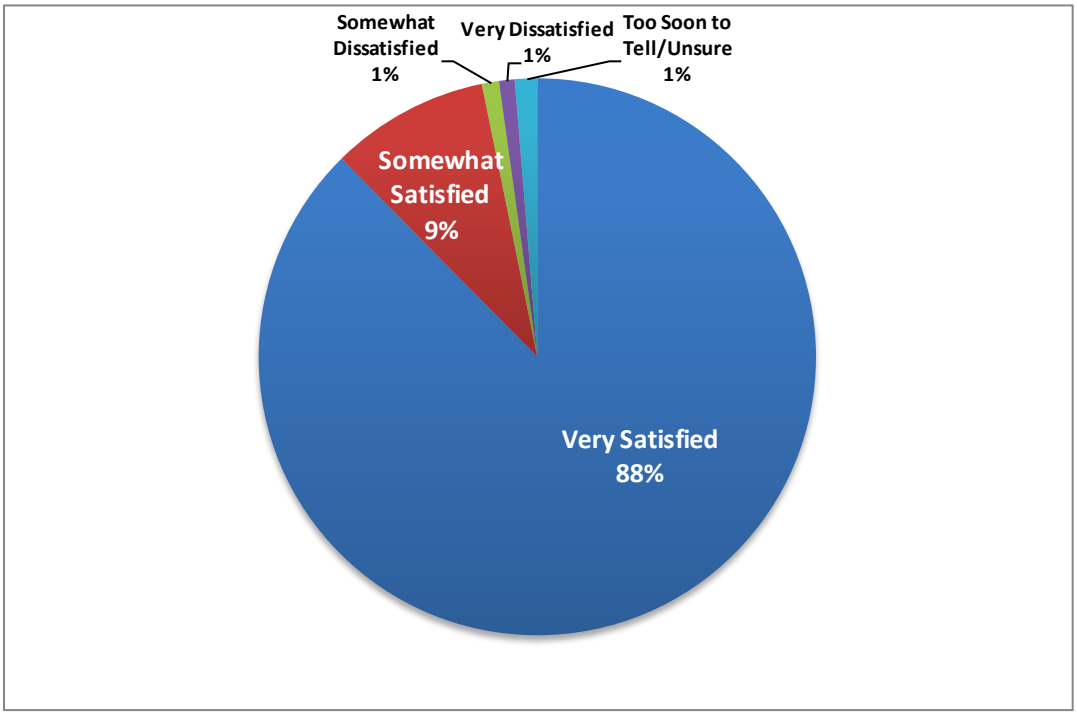


Exhibit 2-32 – Overall Satisfaction with Nurse Care Manager
Comparison of SFYs 2009 through 2013

	Overall Findings by Tier		Overall Satisfaction with Nurse Care Manager April 2009-June 2013					
Level of Satisfaction	**Tier 1**	**Tier 2**	**SFY 2009***	**SFY 2010**	**SFY 2011**	**SFY 2012**	**SFY 2013**	**Overall**
Very Satisfied	85.9%	88.5%	78.9%	87.9%	87.2%	90.1%	87.1%	***87.6%***
Somewhat Satisfied	9.2%	9.3%	17.1%	10.6%	9.6%	6.5%	8.8%	***9.2%***
Somewhat Dissatisfied	1.6%	0.7%	2.3%	0.7%	0.7%	1.0%	1.2%	***1.0%***
Very Dissatisfied	1.5%	0.6%	1.7%	0.7%	0.8%	0.5%	1.2%	***0.9%***
Too Soon to Tell/Unsure	1.9%	1.0%	0.0%	0.1%	1.7%	1.9%	1.7%	***1.3%***

*Note: Member surveys for SFY 2009 only include surveys conducted April 2009 through June 2009.

For most participants, the nurse care manager *is* the SoonerCare HMP. Overall satisfaction with the program closely tracked to the nurse care manager ratings (see exhibits 2-33 and 2-34).

Exhibit 2-33 – Overall Satisfaction with SoonerCare HMP

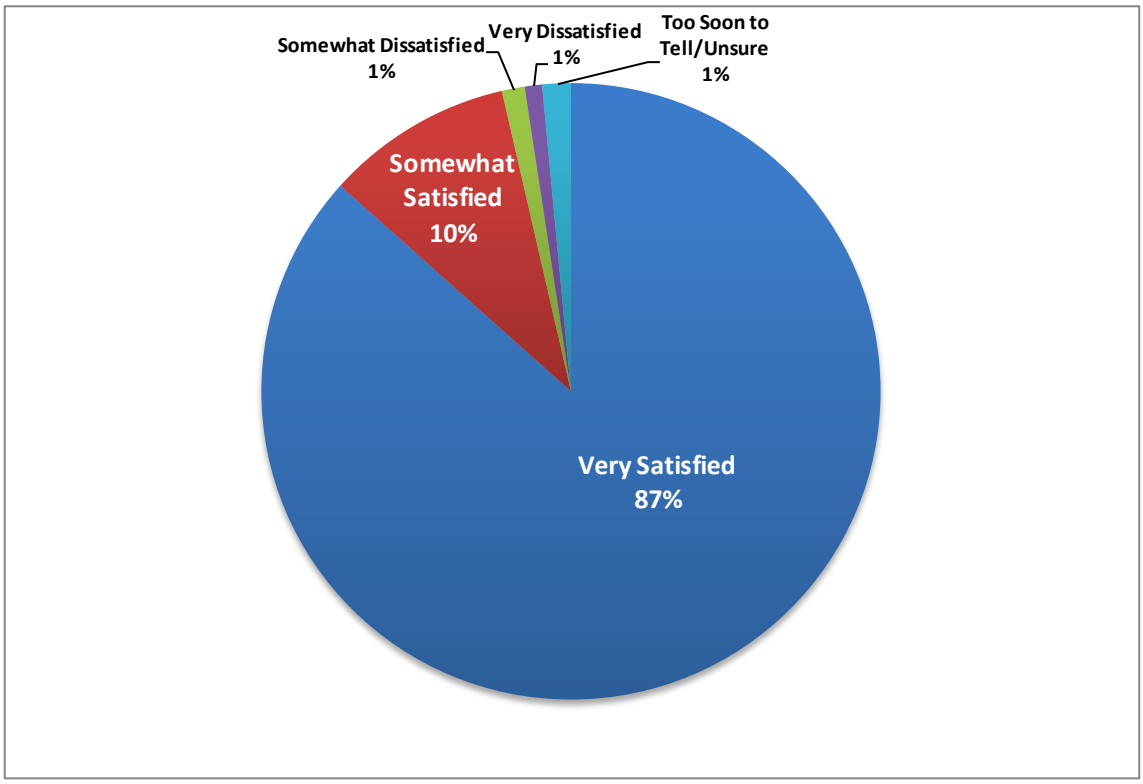


Exhibit 2-34 – Overall Satisfaction with SoonerCare HMP
Comparison of SFYs 2009 through 2013

	Overall Findings by Tier		Overall Satisfaction with SoonerCare HMP April 2009-June 2013					
Level of Satisfaction	**Tier 1**	**Tier 2**	**SFY 2009***	**SFY 2010**	**SFY 2011**	**SFY 2012**	**SFY 2013**	**Overall**
Very Satisfied	85.2%	87.3%	77.1%	84.8%	86.6%	90.7%	86.5%	***86.6%***
Somewhat Satisfied	9.7%	9.8%	17.7%	12.7%	10.0%	6.0%	8.8%	***9.8%***
Somewhat Dissatisfied	1.6%	0.9%	3.4%	1.3%	0.7%	0.9%	1.3%	***1.2%***
Very Dissatisfied	1.5%	0.6%	1.7%	0.7%	0.9%	0.5%	1.2%	***0.9%***
Too Soon to Tell/Unsure	2.0%	1.3%	0.0%	0.5%	1.8%	1.9%	2.2%	***1.5%***

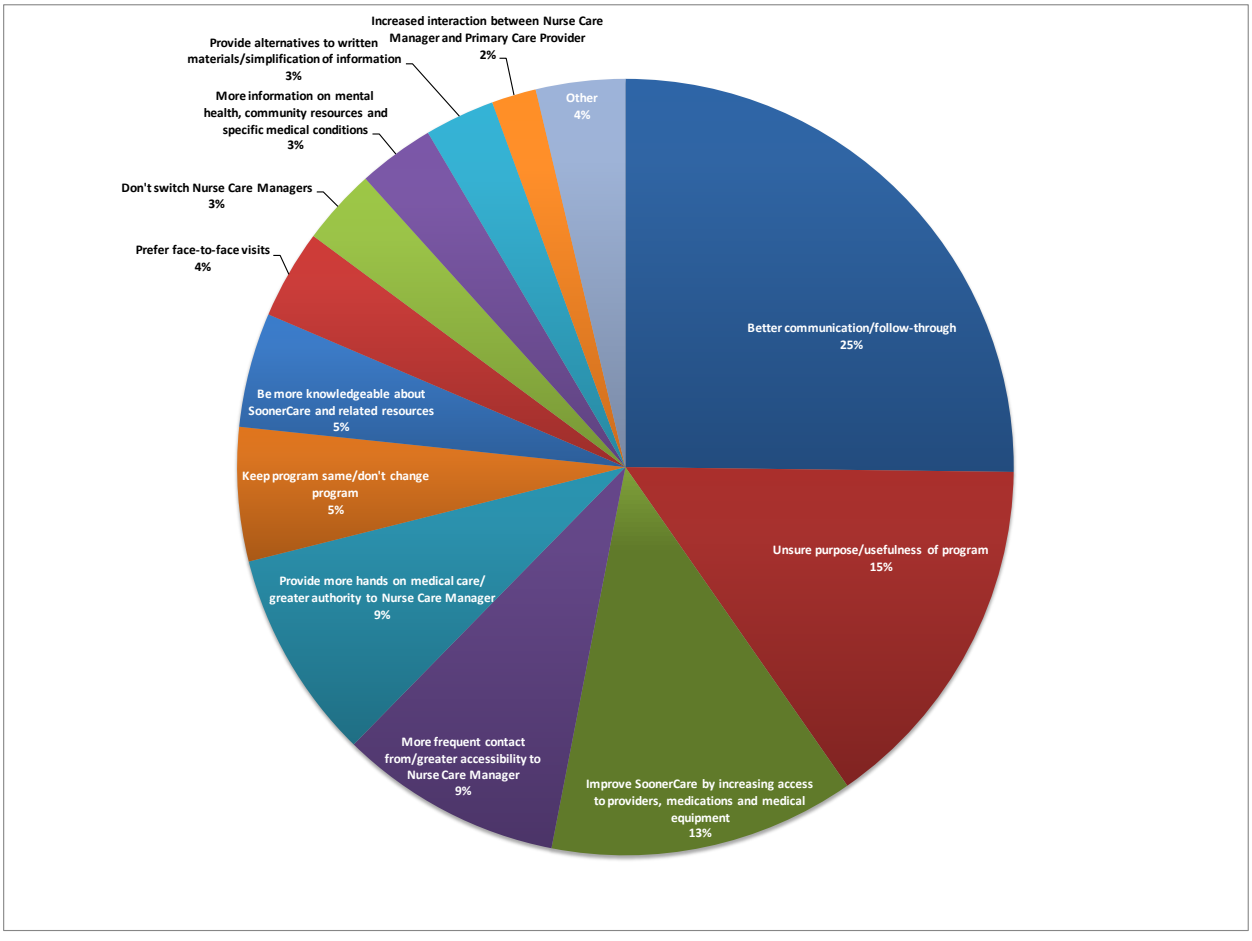
*Note: Member surveys for SFY 2009 only include surveys conducted April 2009 through June 2009.

Recommendations for Improvement

The overwhelming majority of surveyed participants (90 percent) was entirely satisfied and had no suggestions for how the SoonerCare HMP could be improved. Among those who did have suggestions, the largest portion (25 percent) requested better communication and contact (e.g., punctuality and contact at scheduled time) with their nurse care manager. The second largest segment (15 percent) was unsure about the purpose or usefulness of the program. Thirteen-percent of respondents requested improved access to providers, medications and medical equipment, which applies to the Medicaid program in general.

Other recommendations included more frequent contact from nurse care managers; providing more hands-on medical care (not permitted under SoonerCare HMP rules); being more knowledgeable about SoonerCare and related resources; providing more information on mental health and other resources; and offering face-to-face visits instead of telephone contacts (as reported by Tier 2 members) (see exhibit 2-35).

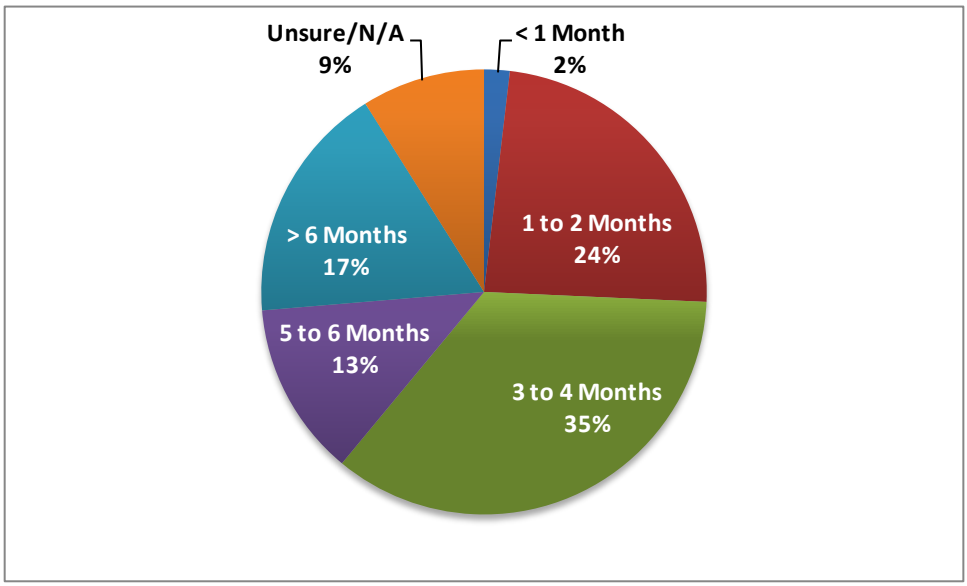
Exhibit 2-35 – Participant Recommendations



Change in Health Status

Improved self-management skills should translate over time into improved health status. The results to date, from a participant perspective, are not decisive. Among all respondents, approximately 65 percent had been enrolled in the SoonerCare HMP for at least three months (see exhibit 2-36).

Exhibit 2-36 – Length of Enrollment



Within this segment, most (67 percent) reported their health to be about the same as before they enrolled in the SoonerCare HMP (see exhibit 2-37).

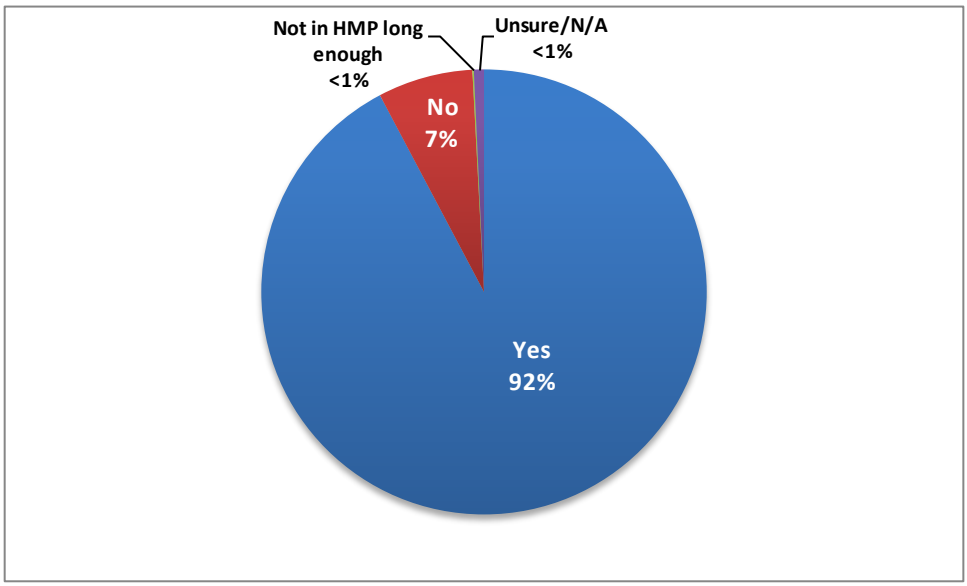
Exhibit 2-37 – Perceived Changes in Health Status
Comparison of SFYs 2009 through 2013

	Overall Findings by Tier		Overall Perceived Changes in Health Status April 2009-June 2013					
Change in Health Status	**Tier 1**	**Tier 2**	**SFY 2009***	**SFY 2010**	**SFY 2011**	**SFY 2012**	**SFY 2013**	**Overall**
Better	24.5%	24.4%	35.4%	34.9%	21.2%	21.6%	17.9%	***24.5%***
Worse	8.2%	7.4%	12.6%	9.9%	6.2%	5.6%	7.8%	***7.6%***
About the Same	66.6%	67.7%	52.0%	54.8%	71.8%	72.5%	73.5%	***67.4%***
Too Soon to Tell/ Unsure /N/A	0.7%	0.4%	0.0%	0.4%	0.8%	0.3%	0.7%	***0.5%***

*Note: Member surveys for SFY 2009 only include surveys conducted April 2009 through June 2009.

Through June 2013, nearly 25 percent of all initial survey respondents reported improved health. Nearly all of the respondents (91 percent for Tier 1 and 93 percent for Tier 2) who reported an improvement said that the SoonerCare HMP contributed to their change in status (see exhibit 2-38). The reasons given included following diet and exercise recommendations suggested by the nurse care manager and making and keeping more appointments with health care providers.

Exhibit 2-38 – Improvement Attributed to SoonerCare HMP



It should be noted that PHPG's analysis of quality care measures and participant utilization and expenditure trends has found evidence that the SoonerCare HMP is having a positive impact on participant health.[24] Most of the improvement occurs after the first year of enrollment, making it less likely that participants in the initial or six-month follow-up surveys would be reporting a change in status. As discussed later in this evaluation, a higher prevalence of individuals reported an improvement in health during the follow-up survey.[25]

[24] See Quality of Care and Utilization/Expenditure Analysis sections of report.

[25] Anecdotally, some respondents have confided to interviewers that they are reluctant to report improved health status or ability to self-manage their disease out of fear that they will be disenrolled from nurse care management. These disclosures are not tracked and cannot be quantified but likely account for some of the discrepancy between survey responses and other data points.

Six-month Follow-up Survey Findings

Between October 2009 and August 2013, PHPG attempted to re-contact all participants initially surveyed between April 2009 and January 2013 to conduct a six-month follow up survey. Among the 3,471 members who were surveyed initially during this period, 1,368 (approximately 39 percent) agreed to participate in the follow up survey (413 Tier 1 and 955 Tier 2). Nearly all of the surveyed individuals (1,345 out of 1,368) reported still being enrolled in the SoonerCare HMP. Results are presented separately for Tier 1 and Tier 2 respondents.

Nurse Care Manager Changes

Among all respondents, 74 percent reported having the same nurse care manager since enrolling in the program (see exhibits 2-39 and 2-40).

Exhibit 2-39 – Follow-up Survey: Number of Nurse Care Managers

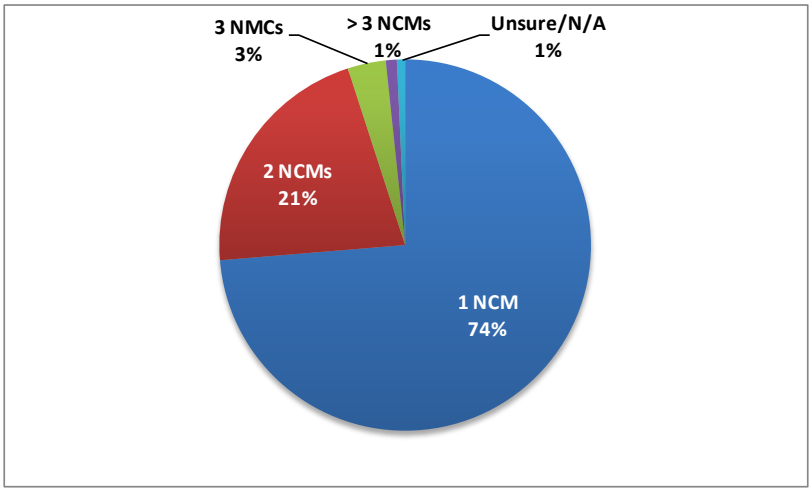


Exhibit 2-40 – Follow-up Survey: Number of Nurse Care Managers
Comparison of SFYs 2010 through 2013

	Overall Findings by Tier		Number of Nurse Care Managers While in HMP October 2009-August 2013				
# of Nurse Care Managers	Tier 1	Tier 2	SFY 2010*	SFY 2011	SFY 2012	SFY 2013	Overall
1	70.7%	75.0%	57.3%	81.0%	87.1%	71.2%	***73.7%***
2	22.9%	20.6%	34.3%	17.0%	11.8%	21.2%	***21.3%***
3	4.0%	3.0%	4.5%	1.5%	0.8%	5.9%	***3.3%***
More than 3	1.9%	0.6%	1.6%	0.6%	0.4%	1.1%	***1.0%***
Unsure/N/A	0.5%	0.8%	2.3%	0.0%	0.0%	0.6%	***0.7%***

*Note: Member surveys for SFY 2010 only include surveys conducted October 2009 through June 2010.

Among those who had at least two nurse care managers, only four individuals reported that the most recent change was made at their request. Among the rest, approximately 33 percent of participants were told that their nurse care manager had either relocated or resigned. Forty percent of Tier 1 participants and 49 percent of Tier 2 participants reported they were not given a reason.

Despite the lack of a formal transition in most cases, 96 percent of Tier 1 participants and 91 percent of Tier 2 participants reported being very satisfied or somewhat satisfied with the way the change in nurse care managers was handled (see exhibits 2-41 and 2-42). Those dissatisfied with the change said that they preferred their previous nurse care manager and/or were never notified of the change.

Exhibit 2-41 – Follow-up Survey: Satisfaction with Way Change Handled

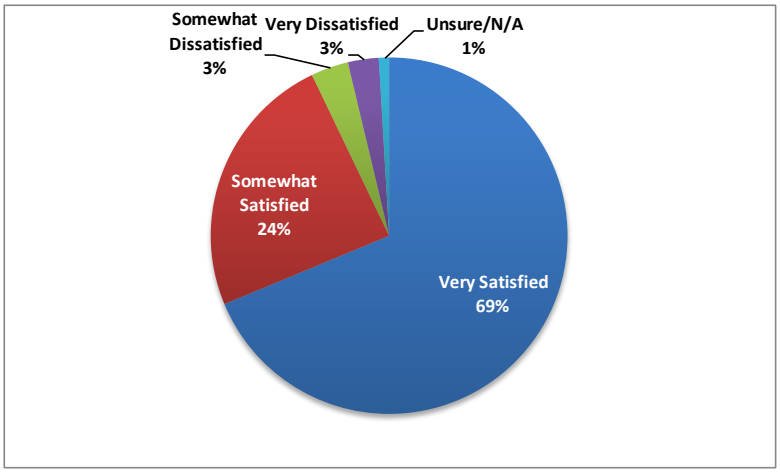


Exhibit 2-42 – Follow-up Survey: Satisfaction with Way Change Handled by Tier Comparison of SFYs 2010 through 2013

Tier 1

	Overall Findings	Tier 1 Satisfaction with Way Change Handled October 2009-August 2013			
Level of Satisfaction	Tier 1	SFY 2010*	SFY 2011	SFY 2012	SFY 2013
Very Satisfied	***73.1%***	78.0%	55.6%	70.0%	70.0%
Somewhat Satisfied	***23.1%***	20.3%	44.4%	20.0%	23.3%
Somewhat Dissatisfied	***2.8%***	1.7%	0.0%	0.0%	6.7%
Very Dissatisfied	***0.9%***	0.0%	0.0%	10.0%	0.0%
Unsure/N/A	***0.0%***	0.0%	0.0%	0.0%	0.0%

Tier 2

	Overall Findings	Tier 2 Satisfaction with Way Change Handled October 2009-August 2013			
Level of Satisfaction	Tier 2	SFY 2010*	SFY 2011	SFY 2012	SFY 2013
Very Satisfied	***66.5%***	65.2%	61.8%	83.3%	65.7%
Somewhat Satisfied	***24.7%***	25.8%	29.1%	12.5%	24.3%
Somewhat Dissatisfied	***3.7%***	3.0%	3.6%	0.0%	5.7%
Very Dissatisfied	***3.7%***	6.1%	5.5%	0.0%	1.4%
N/A	***1.4%***	0.0%	0.0%	4.2%	2.9%

*Note: Member surveys for SFY 2010 only include surveys conducted October 2009 through June 2010.

Nurse Care Manager Activities

Nurse care managers are expected to help participants develop their self-management skills and take a more proactive role in maintaining or improving their health. Consistent with their responses in the initial survey, nearly all follow-up survey respondents reported that their nurse care manager asked questions about their health problems or concerns (99 percent) and provided instructions about taking care of their health problems or concerns (97 percent) (see exhibit 2-43).

Nearly 96 percent of respondents said their nurse care manager also answered questions about their health. Over 60 percent of respondents reported that their nurse care manager helped them to identify changes in their health that might be an early sign of a problem, as compared to 52 percent in the initial survey.

Exhibit 2-43 – Follow-up Survey: Nurse Care Manager Activity Ratings

Activity		Respondents answering "yes" to activity				
	Yes	Very Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Very Dissatisfied	Unsure/ N/A
1. Asked questions about your health problems or concerns	***98.6%***	91.5%	7.4%	0.6%	0.5%	0.1%
2. Provided instructions about taking care of your health problems or concerns	***96.8%***	92.3%	6.9%	0.3%	0.4%	0.1%
3. Helped you to identify changes in your health that might be an early sign of a problem	***60.6%***	95.6%	4.2%	0.1%	0.1%	0.0%
4. Answered questions about your health	***95.5%***	92.9%	6.7%	0.2%	0.2%	0.0%

Activity		Respondents answering "yes" to activity				
	Yes	Very Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Very Dissatisfied	Unsure/ N/A
5. Helped you to make and keep health care appointments for medical problems	***51.0%***	96.3%	3.4%	0.2%	0.2%	0.0%
6. Helped you to make and keep health care appointments for mental health or substance abuse problems	***23.1%***	95.2%	4.1%	0.0%	0.3%	0.3%

Fifty-one percent of the follow-up respondents reported that their nurse care manager helped them make and keep health care appointments for medical problems, up from approximately 45 percent in the initial survey. Slightly over 23 percent reported that their nurse care manager helped them make and keep health care appointments for mental health or substance abuse.

Respondents also were asked to rate their satisfaction with each "yes" activity. The overwhelming majority again reported being very satisfied with the help they received. The percentage of very satisfied respondents has remained consistently high over the evaluation period (see exhibit 2-44). Satisfaction among follow up respondents is slightly higher, on average, than in the initial survey.

Exhibit 2-44 – Follow-up Survey: Nurse Care Manager Activity Ratings (Very Satisfied) Comparison of SFYs 2010 through 2013

Activity	Percentage of Individuals Reporting "Very Satisfied" October 2009-August 2013					Initial Survey Overall
	SFY 2010*	SFY 2011	SFY 2012	SFY 2013	Overall	
1. Asked questions about your health problems or concerns	92.2%	92.4%	91.9%	89.6%	***91.5%***	*89.4%*
2. Provided instructions about taking care of your health problems or concerns	93.3%	92.4%	91.9%	91.6%	***92.3%***	*90.4%*
3. Helped you to identify changes in your health that might be an early sign of a problem	95.8%	95.5%	94.4%	96.3%	***95.6%***	*93.0%*
4. Answered questions about your health	93.6%	92.6%	93.3%	92.1%	***92.9%***	*91.0%*
5. Helped you to make and keep health care appointments for medical problems	95.6%	95.2%	96.0%	98.6%	***96.3%***	*94.9%*
6. Helped you to make and keep health care appointments for mental health or substance abuse problems	94.9%	91.5%	98.0%	98.4%	***95.2%***	*94.8%*

*Note: Member surveys for SFY 2010 only include surveys conducted October 2009 through June 2010.

Satisfaction with Nurse Care Manager and SoonerCare HMP

Overall, 89 percent of Tier 1 and Tier 2 participants reported being very satisfied with the help they received from their nurse care manager (see exhibits 2-45 and 2-46). Participant satisfaction has remained relatively consistent during the course of the evaluation.

Exhibit 2-45 – Follow-up Survey: Overall Satisfaction with Nurse Care Manager

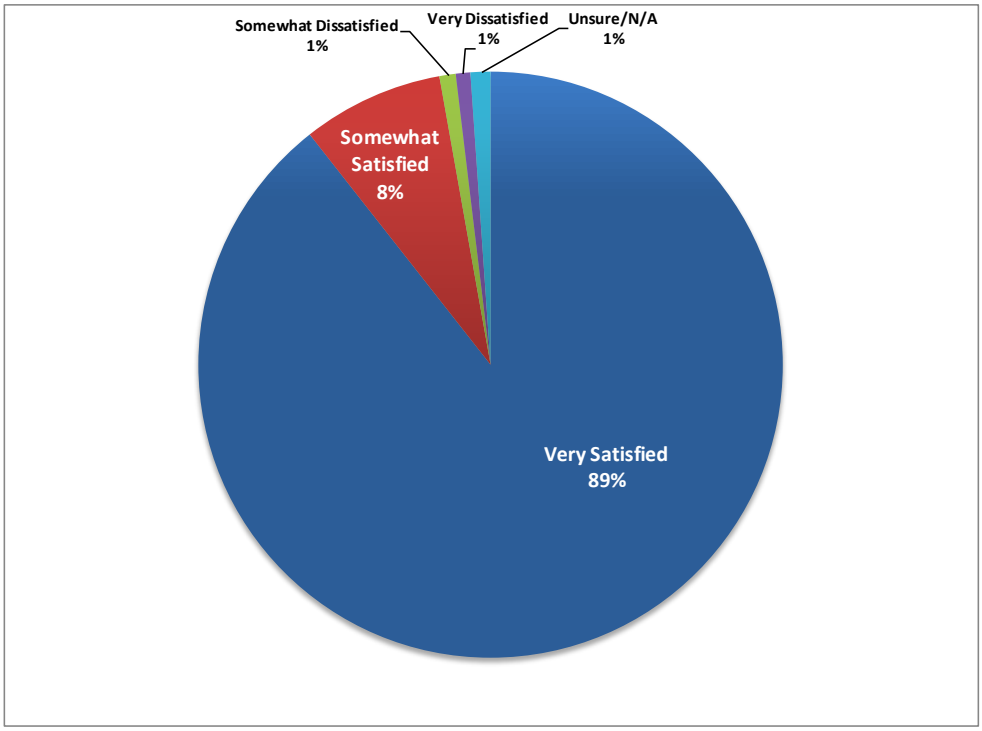


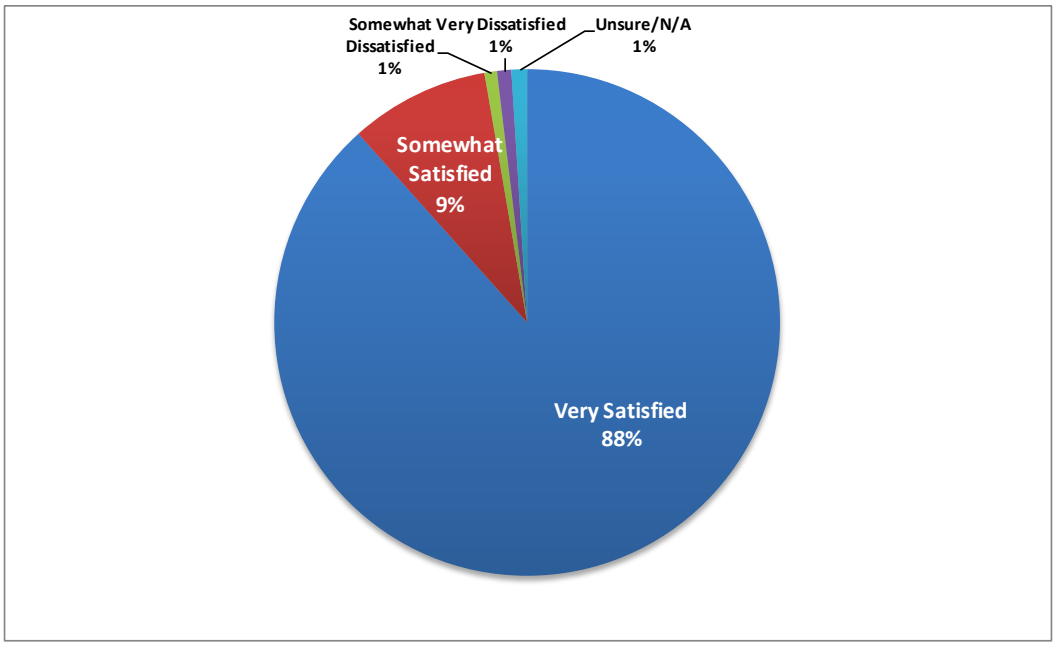
Exhibit 2-46 – Follow-up Survey: Overall Satisfaction with Nurse Care Manager Comparison of SFYs 2010 through 2013

	Overall Findings by Tier		Overall Satisfaction with Nurse Care Manager October 2009-August 2013					Initial Survey Overall
Level of Satisfaction	**Tier 1**	**Tier 2**	**SFY 2010***	**SFY 2011**	**SFY 2012**	**SFY 2013**	**Overall**	
Very Satisfied	88.3%	89.9%	91.6%	90.4%	87.1%	88.4%	***89.4%***	*87.6%*
Somewhat Satisfied	8.3%	7.6%	5.5%	8.7%	9.5%	7.6%	***7.8%***	*9.2%*
Somewhat Dissatisfied	1.3%	0.7%	0.6%	0.0%	1.5%	1.4%	***0.9%***	*1.0%*
Very Dissatisfied	1.3%	0.6%	1.6%	0.6%	0.4%	0.6%	***0.8%***	*0.9%*
Unsure/N/A	0.8%	1.2%	0.6%	0.3%	1.5%	2.0%	***1.1%***	*1.3%*

*Note: Member surveys for SFY 2010 only include surveys conducted October 2009 through June 2010.

As with initial survey results, overall satisfaction with the program closely tracked to the nurse care manager ratings (see exhibit 2-47 and 2-48).

Exhibit 2-47 – Follow-up Survey: Overall Satisfaction with SoonerCare HMP



Nearly 88 percent of Tier 1 follow-up respondents and 89 percent of Tier 2 follow-up respondents described themselves as very satisfied (see exhibit 2-48).

Exhibit 2-48 – Follow-up Survey: Overall Satisfaction with SoonerCare HMP Comparison of SFYs 2010 through 2013

	Overall Findings by Tier		Overall Satisfaction with SoonerCare HMP October 2009-August 2013					Initial Survey Overall
Level of Satisfaction	**Tier 1**	**Tier 2**	**SFY 2010***	**SFY 2011**	**SFY 2012**	**SFY 2013**	**Overall**	
Very Satisfied	87.5%	88.8%	88.6%	90.1%	85.9%	88.4%	***88.4%***	*86.6%*
Somewhat Satisfied	9.1%	8.8%	7.8%	9.0%	11.0%	8.2%	***8.9%***	*9.8%*
Somewhat Dissatisfied	1.3%	0.6%	1.0%	0.0%	0.8%	1.4%	***0.8%***	*1.2%*
Very Dissatisfied	1.6%	0.6%	1.9%	0.6%	0.4%	0.6%	***0.9%***	*0.9%*
Unsure/N/A	0.5%	1.2%	0.6%	0.3%	1.9%	1.4%	***1.0%***	*1.5%*

*Note: Member surveys for SFY 2010 only include surveys conducted October 2009 through June 2010.

The small minority who reported being dissatisfied with the SoonerCare HMP found the nurse pleasant to talk to, but questioned the usefulness of the program. Participants also attributed their dissatisfaction to issues with provider and medication access, which applies to the Medicaid program in general.

Eighty-eight percent of follow-up respondents had no suggestions for how the SoonerCare HMP could be improved. Among those who did, their suggestions mirrored the ones provided during the initial survey.

Health Status

Approximately 27 percent of Tier 1 follow-up respondents and 30 percent of Tier 2 respondents described their health as "excellent" or "good" (see exhibit 2-49). This was comparable to the results as reported by Tier 1 and Tier 2 participants in the initial survey (25 percent and 29 percent, respectively).

Exhibit 2-49 – Follow-up Survey: Current Health Status (Self-Reported)
Comparison of SFYs 2010 through 2013

	Overall Findings by Tier		Self-Reported Current Health Status October 2009-August 2013					Initial Survey Overall
Current Health Status	Tier 1	Tier 2	SFY 2010*	SFY 2011	SFY 2012	SFY 2013	Overall	
Excellent	1.7%	2.6%	3.9%	2.5%	2.5%	0.6%	***2.3%***	*3.8%*
Good	25.1%	26.9%	28.1%	30.0%	24.3%	22.6%	***26.4%***	*24.0%*
Fair	42.0%	49.0%	44.1%	43.3%	51.4%	49.7%	***46.9%***	*47.2%*
Poor	30.8%	21.2%	23.9%	24.0%	21.8%	26.3%	***24.1%***	*24.8%*
Other/N/A	0.2%	0.3%	0.0%	0.3%	0.0%	0.9%	***0.3%***	*0.2%*

*Note: Member surveys for SFY 2010 only include surveys conducted October 2009 through June 2010.

Follow-up survey respondents had been in the program for at least six-months,[26] with the majority of those surveyed having been in the program for over nine months. Improved self-management skills should translate over time to improved health status.

[26] Thirteen members reported being in the program for less than 6 months; however, review of Telligen records indicated that the members had been in the program for more than 6 months.

The results at the time of the follow-up survey were similar to the initial survey, with the largest segment (56 percent of Tier 1 and 58 percent of Tier 2) reporting their health to be about the same as before they enrolled in the SoonerCare HMP (see exhibit 2-50).

The percentage of Tier 1 participants reporting their health to be better increased from 25 percent in the initial survey for Tier 1 and Tier 2 participants to 31 percent for both tiers. Nearly all (93 percent) of the respondents reporting an improvement said that the SoonerCare HMP contributed to their change in status.

Exhibit 2-50 – Follow-up Survey: Perceived Changes in Health
Comparison of SFYs 2010 through 2013

	Overall Findings by Tier		Overall Perceived Changes in Health Status October 2009-August 2013					Initial Survey Overall
Change in Health Status	Tier 1	Tier 2	SFY 2010*	SFY 2011	SFY 2012	SFY 2013	Overall	
Better	31.0%	30.7%	35.8%	27.0%	30.0%	30.8%	***30.8%***	*24.5%*
Worse	12.7%	11.2%	15.0%	10.6%	6.4%	13.8%	***11.6%***	*7.6%*
About the Same	56.1%	57.8%	48.6%	62.1%	63.2%	55.4%	***57.3%***	*67.4%*
Unsure /N/A	0.3%	0.3%	0.6%	0.3%	0.4%	0.0%	***0.3%***	*0.5%*

*Note: Member surveys for SFY 2010 only include surveys conducted October 2009 through June 2010.

As noted earlier, PHPG's analysis of quality of care measures and participant utilization and expenditure trends has found evidence that the SoonerCare HMP is having a positive effect on participant health, with most of the improvement occurring after the first year of enrollment. The health status information reported through the graduate survey also provides more insight into the program's impact on perceived health status (results are discussed later in this section).

Self-Management Skills

Beginning in the fall of 2011, survey respondents who attributed improvement in health to the SoonerCare HMP were asked to provide examples of how their nurse care managers helped them to make lifestyle changes. Respondents were asked whether their nurse care managers discussed behavior changes with respect to smoking, exercise, diet, medication management, water intake and alcohol/substance consumption. If so, respondents were asked about the impact of the nurse care manager's intervention on their behavior (no change, temporary change or continuing change). Survey data was collected from 138 respondents (see exhibit 2-51).

Exhibit 2-51 – Follow-up Survey: Changes in Behavior

Activity	Discussion and Change in Behavior					
	N/A – Not Discussed*	Discussed – No Change	Discussed – Temporary Change	Discussed – Continuing Change	Discussed – But Not Applicable	Unsure/ No Response
1. Smoking less or using other tobacco products less	23.2%	14.5%	4.3%	34.8%	21.7%	1.4%
2. Moving around more or getting more exercise	4.3%	13.0%	3.6%	76.1%	1.4%	1.4%
3. Changing your diet	2.9%	6.5%	2.2%	85.5%	1.4%	1.4%
4. Managing and taking your medications better	8.0%	15.2%	24.6%	41.3%	9.4%	1.4%
5. Making sure to drink enough water throughout the day	22.5%	12.3%	3.6%	57.2%	1.4%	2.9%
6. Drinking or using other substances less	31.2%	21.7%	0.0%	10.9%	34.8%	1.4%

*Note: The "Discussed – No Change" group includes persons for whom no behavior change was needed (e.g., non-smokers). The original survey question was revised to capture this distinction through inclusion of a new response option: "Discussed – But Not Applicable".

A majority of respondents reported discussing each of the activities with their nurse care manager, and a majority reported that they are continuing to work on making recommended lifestyle changes. However, the results should be interpreted with caution, given the small sample size.

Thirty-seven percent of Tier 1 follow-up respondents and 45 percent of Tier 2 follow-up respondents reported that they have learned how to manage their own care and could continue without their nurse care manager (see exhibits 2-52 and 2-53). However, 62 percent of Tier 1 and 54 percent of Tier 2 participants stated that they still need their nurse care manager to help manage their care. Tier 1 participants generally have greater health care needs and may need more time to develop effective self-management skills.

Exhibit 2-52 – Follow-up Survey: Perceived Ability to Self-Manage

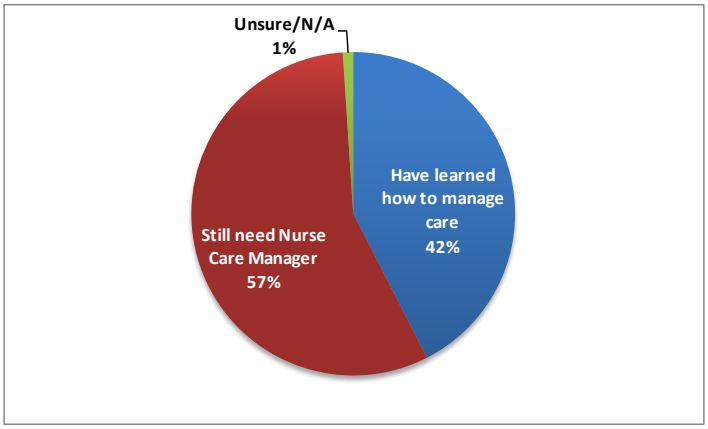


Exhibit 2-53 – Follow-up Survey: Perceived Ability to Self-Manage
Comparison of SFYs 2010 through 2013

Tier 1

	Overall Findings	Tier 1 Perceived Ability to Self-Manage October 2009-August 2013			
Perceived Ability to Self-Manage	**Tier 1**	**SFY 2010***	**SFY 2011**	**SFY 2012**	**SFY 2013**
I have learned how to manage my care and could do so without my Nurse Care Manager	***37.1%***	31.9%	32.6%	43.6%	45.2%
I still need my Nurse Care Manager to help me	***61.6%***	67.4%	66.3%	54.5%	52.7%
Unsure/N/A	***1.3%***	0.7%	1.1%	1.8%	2.2%

Tier 2

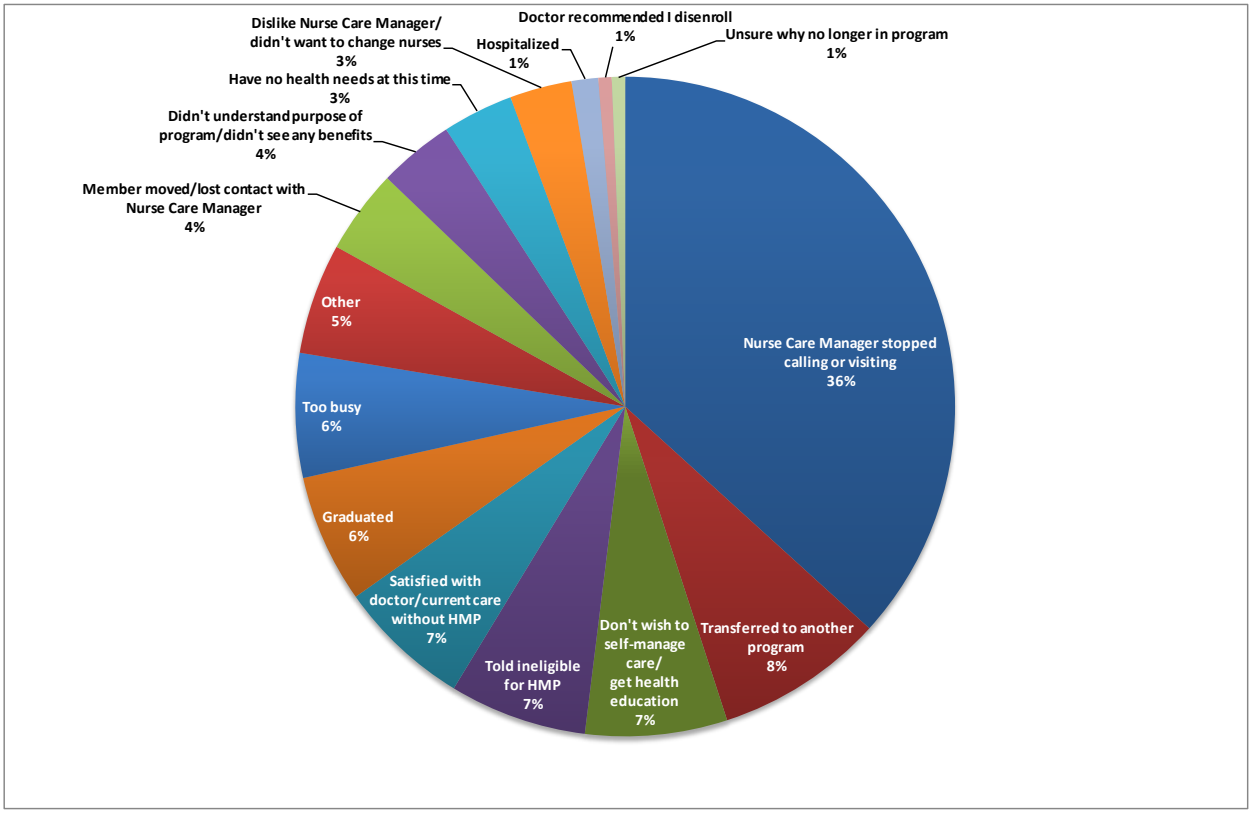
	Overall Findings	Tier 2 Perceived Ability to Self-Manage October 2009-August 2013			
Perceived Ability to Self-Manage	**Tier 2**	**SFY 2010***	**SFY 2011**	**SFY 2012**	**SFY 2013**
I have learned how to manage my care and could do so without my Nurse Care Manager	***44.7%***	39.3%	37.4%	47.6%	52.9%
I still need my Nurse Care Manager to help me	***54.4%***	60.1%	62.6%	51.9%	44.8%
Unsure/N/A	***0.9%***	0.6%	0.0%	0.5%	2.3%

*Note: Member surveys for SFY 2010 only include surveys conducted October 2009 through June 2010.

SoonerCare HMP Former Participants

PHPG surveyed a sample of former SoonerCare participants who were reported by Telligen to have dropped out of the program. When asked why they disenrolled, 36 percent said it was not their decision. Instead, they reported that their nurse care manager had stopped calling or visiting (see exhibit 2-54). Respondents also reported being told they were ineligible for HMP either due to loss of SoonerCare eligibility, transfer to another program (e.g., Medicare or SoonerCare *AD*vantage) or hospitalization. Six percent reported graduating from the program.[27]

Exhibit 2-54 – Reason for Decision to Disenroll[28]



Among the remaining respondents, few gave a reason that clearly suggested a true intent to disenroll. Seven percent did not wish to self-manage their care or receive health education, and another seven percent were satisfied with their current doctor and access to health care. Three percent reported disliking the switch to another nurse care manager and preferred to have their former nurse care manager instead.

[27] In December 2011, PHPG began separately surveying members documented by Telligen as having graduated from the SoonerCare HMP.
[28] Respondents permitted to give multiple reasons.

The remainder of respondents reported other reasons for disenrolling from the SoonerCare HMP. These included:

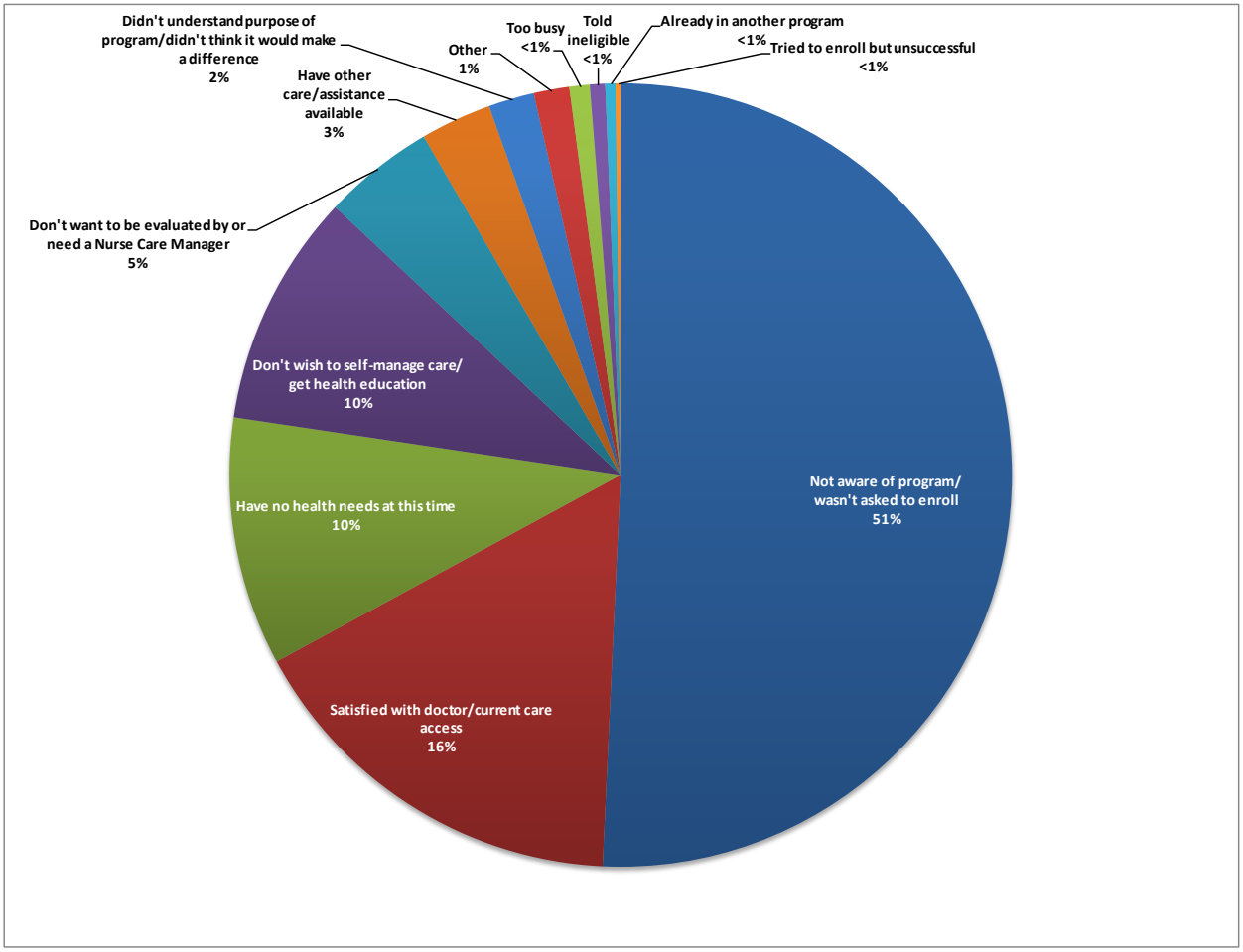
- Too busy to meet with or accept calls from a nurse care manager
- Did not find the program helpful enough to meet member needs (e.g., preference for more hands-on care)
- Having no health needs at this time
- Losing contact with their nurse care managers (e.g., participant moved)

When asked if they would like to be contacted about re-enrolling, 39 percent of the respondents said yes. Telligen reports that it has made periodic re-contact attempts with former participants to inquire about their interest in re-engaging and that members have contacted Telligen to re-enroll in the program.

SoonerCare HMP Opt Outs

PHPG also surveyed a sample of SoonerCare members who had been contacted by Telligen but declined to enroll in the SoonerCare HMP. When asked about their decision, the largest segment (51 percent) was unaware of the program and/or did not recall being asked to enroll. Sixteen percent said they were satisfied with their current health care, and ten percent had no health needs that required assistance from a nurse care manager. Others stated they did not have any health needs at this time, did not wish to self-manage their care or receive health education or did not want to be evaluated by a nurse care manager (see exhibit 2-55).

Exhibit 2-55 – Reason for Decision not to Enroll[29]



In contrast to the former participant group, 72 percent of respondents indicated that they did not want someone to contact them about enrolling in the SoonerCare HMP. However, 23 percent were willing to speak to someone and one percent was unsure.

[29] Respondents permitted to give multiple reasons.

SoonerCare HMP Graduate Survey Findings

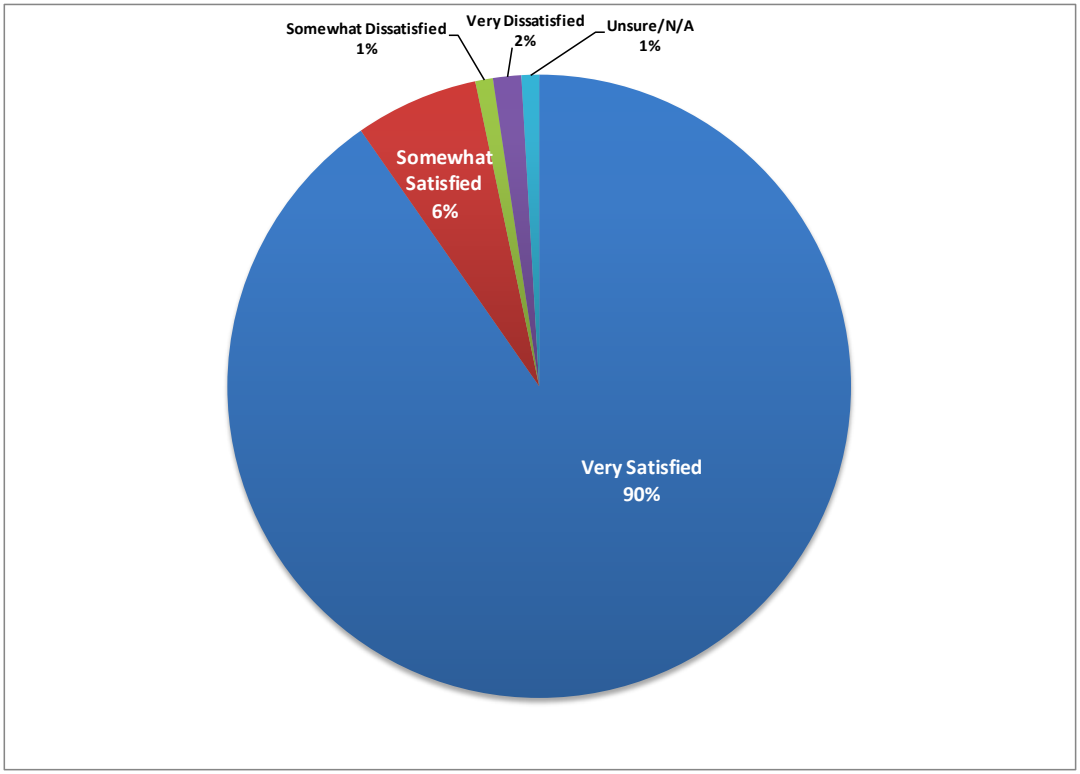
In December 2011, PHPG began to conduct targeted surveys of individuals whom Telligen identified as having graduated or otherwise successfully completed the program. The survey explores overall satisfaction with experience in the program and changes to health status. Survey data was collected from 547 respondents through October 2013.

Satisfaction with Experience in the SoonerCare HMP

Ninety percent of the graduates reported being very satisfied with their overall experience with the program; most of the remainder (six percent) reported being somewhat satisfied (see exhibit 2-56). Only three percent were somewhat or very dissatisfied.

Among all respondents, 96 percent would recommend the program to a friend with similar health care needs.

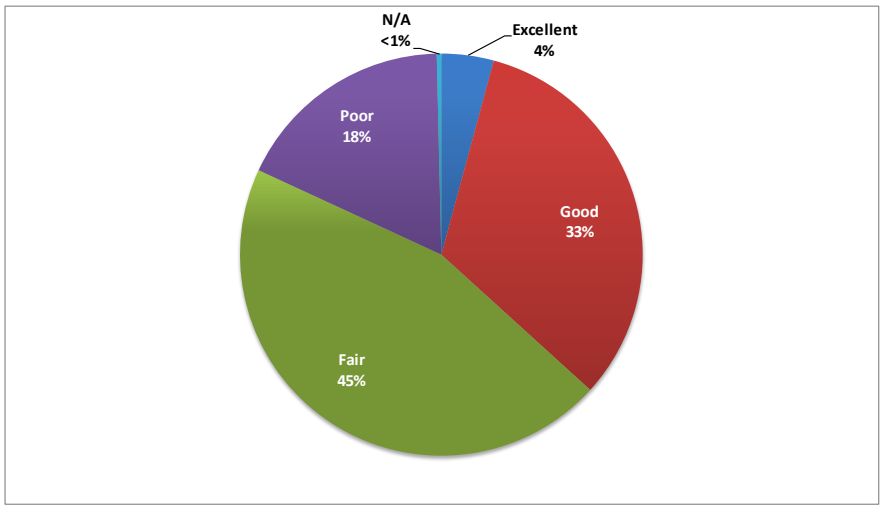
Exhibit 2-56 – Graduate Survey: Overall Satisfaction with the SoonerCare HMP



Current Health Status

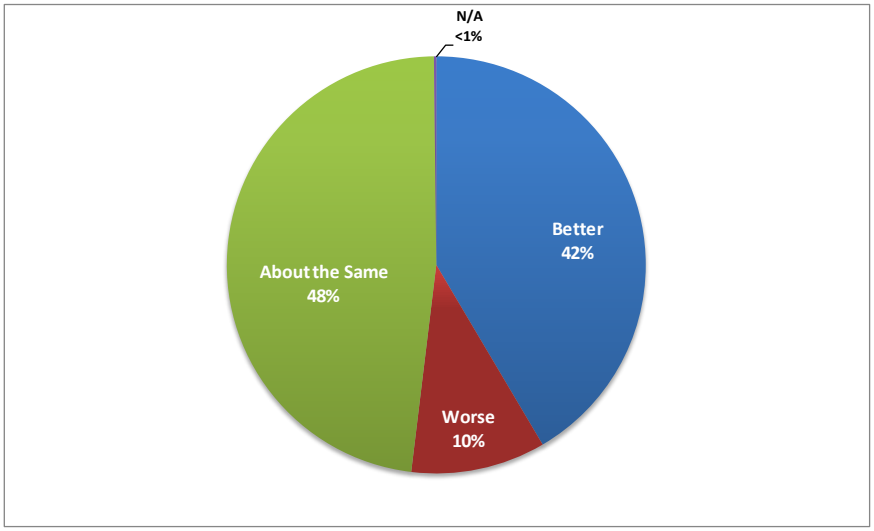
Thirty-seven percent of graduates reported their health status as "excellent" or "good" (see exhibit 2-57). This was an improvement from the active participant initial survey group, in which 28 percent of respondents reported "excellent" or "good" health.

Exhibit 2-57 – Graduate Survey: Current Health Status (Self-Reported)



As in the active participant initial survey, the largest segment (48 percent) considered their health to be about the same as before they enrolled in the SoonerCare HMP (see exhibit 2-58). However, the percentage of graduates reporting their health to be better increased from 25 percent in the active participant initial survey to 42 percent in the graduate group. Nearly all participants reporting an improvement attribute the change to their participation in nurse care management (91 percent).

Exhibit 2-58 – Graduate Survey: Perceived Changes in Health Status



Self-Management Skills

As with the six-month follow-up group, graduates were asked to provide examples of how their nurse care managers helped them to make lifestyle changes. Respondents were asked whether their nurse care managers discussed behavior changes with respect to smoking, exercise, diet, medication management, water intake and alcohol/substance consumption. If so, respondents were asked about the impact of the nurse care manager's intervention on their behavior (no change, temporary change or continuing change).

The results were similar to those for the six-month follow-up group, with respondents reporting that most items were discussed. The most significant behavior changes reported for exercise, diet, medication management and water intake (see exhibit 2-59).

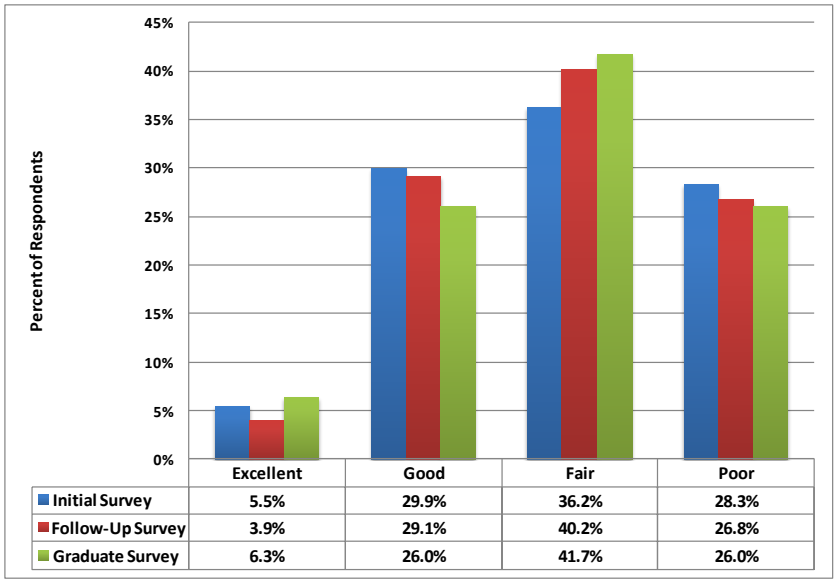
Exhibit 2-59 – Graduate Survey: Changes in Behavior

Activity	Discussion and Change in Behavior					
	N/A – Not Discussed*	Discussed – No Change	Discussed – Temporary Change	Discussed – Continuing Change	Discussed – But Not Applicable	Unsure/ No Response
1. Smoking less or using other tobacco products less	16.5%	16.8%	7.5%	19.7%	38.8%	0.7%
2. Moving around more or getting more exercise	14.3%	19.7%	9.5%	45.5%	10.2%	0.7%
3. Changing your diet	11.9%	16.3%	7.9%	53.9%	9.0%	1.1%
4. Managing and taking your medications better	11.0%	21.9%	1.1%	49.2%	15.7%	1.1%
5. Making sure to drink enough water throughout the day	26.1%	13.9%	2.4%	45.7%	10.8%	1.1%
6. Drinking or using other substances less	22.5%	13.3%	0.5%	7.9%	0.7%	55.0%

*Note: The "Discussed – No Change" group includes persons for whom no behavior change was needed (e.g., non-smokers). Surveys were later revised provide for further distinction ("Discussed – But Not Applicable").

Among the 547 graduate survey respondents, 127 (41 Tier 1 and 86 Tier 2) also had completed an initial survey and six-month follow-up survey. Fifty-four percent of the surveyed individuals (69 out of 127) reported the same health status during the graduate survey as when initially surveyed (see exhibit 2-60). Thirty individuals reported a more positive current health status during the graduate survey (e.g., from "good" to "excellent" or "fair" to "good").

Exhibit 2-60 – Graduate Survey: Comparison of Current Health Status (Self-Reported)



	Excellent	Good	Fair	Poor
Initial Survey	5.5%	29.9%	36.2%	28.3%
Follow-Up Survey	3.9%	29.1%	40.2%	26.8%
Graduate Survey	6.3%	26.0%	41.7%	26.0%

During the initial and graduate surveys, the largest segment reported their health to be about the same as before enrolling in the SoonerCare HMP (see exhibit 2-61). However, among those who indicated an improvement in status, nearly all of the follow-up and graduate respondents attributed this to the SoonerCare HMP.

Exhibit 2-61 – Graduate Survey: Comparison of Perceived Changes in Health Status

Change in Health Status	Perceived Changes in Health Status					
	Initial Survey		Follow-up Survey		Graduate Survey	
	Tier 1	Tier 2	Tier 1	Tier 2	Tier 1	Tier 2
Better	26.8%	19.8%	25.0%	36.0%	24.4%	38.4%
Worse	4.9%	4.7%	5.0%	10.5%	19.5%	12.8%
About the Same	68.3%	74.4%	67.5%	53.5%	56.1%	48.8%
Unsure/N/A	0.0%	1.2%	2.5%	0.0%	0.0%	0.0%
Improvement Due to HMP	63.6%	88.2%	100.0%	93.5%	100.0%	97.0%

Summary of Key Findings

Responses from the most recent year of respondents remained relatively consistent with the findings presented in prior evaluations. Current participants generally are very satisfied with the nurse care management program and the SoonerCare HMP overall. Graduates are similarly satisfied with their experience.

Most participants have a positive relationship with their nurse care manager and report receiving assistance with developing their self-management skills and arranging medical and (when applicable) behavioral health appointments.

The majority of survey respondents did not report a positive change in their health status, either at the time of the initial survey, at the six-month follow-up or after graduation. However, nearly all of those who did see an improvement credit their change at least in part to the program's services.

Many of the former participants said they valued the program and would like to re-enroll. A significant minority of the population that initially "opted out" when contacted also would like another chance to enroll.

Member Interviews

Interviews provide an opportunity to explore participant attitudes in greater depth than is possible during a standardized survey.

PHPG used the participant interviews to gain additional insights in three areas:

1. *Nurse Care Management Services* – capture what the nurse care manager has done for the participant or participant's family member, the typical monthly interaction between the participant and his or her nurse care manager and the participant's progress toward self-management of his or her condition(s);

2. *Current Health Care Status and Utilization* – understand where participants typically get their health care and whether utilization has changed since enrolling in the SoonerCare HMP, as well as explore changes in participant health status attributable to the program; and

3. *Suggestions for Program Improvement* – obtain suggestions from participants about changes to the SoonerCare HMP they would like to see.

Individual Interview Methodology

PHPG conducted focus groups in 2010, 2011 and 2012 with participants recruited from the pool of standardized survey respondents. In 2013, PHPG replaced the focus group sessions with one-on-one interviews conducted with former focus group participants; members who had completed an initial, follow-up and graduate survey; and members who had been in the program for over three years. PHPG elected to conduct interviews to increase participation and better track members' progress over the course of their enrollment in the program.

In February 2013, PHPG notified eligible Tier 1 and Tier 2 participants by mail and phone of the opportunity to participate in a one-on-one interview. PHPG completed 50 phone interviews:

- ***Former Focus Group Participants*** – Twenty-one members attended PHPG's 2012 focus groups in Oklahoma City and Tulsa. PHPG contacted 20 of the 21 individuals for a follow-up interview.[30] Eleven individuals elected to participate. Among the 11, seven were still in the program, one had graduated, one had transitioned to another SoonerCare program (*AD*vantage waiver) and two were no longer enrolled in the SoonerCare HMP.

- ***Members Who Completed All Three Surveys*** – At the time of the interviews, 259 individuals had completed a graduate survey. Among this group of survey participants, 51 (11 Tier 1 and 40 Tier 2) also completed an initial survey and six-month follow-up

[30] One participant passed away in December 2012.

survey. Eleven individuals from this group agreed to provide feedback about their self-management progress since graduating from the SoonerCare HMP.

- ***Members Enrolled in the SoonerCare HMP for More than Three Years*** – Fourteen Tier 1 members and 14 Tier 2 members from this group offered insight into the impact the SoonerCare HMP has made on their health and ability to learn how to self-manage their own care. Participants also included individuals who attended the 2010 and/or the 2011 focus group sessions.

Summary of Key Findings

Nurse Care Management Activities and Impact

Interview participants described their monthly interactions with the nurse care manager. Nurse care managers typically ask members about their health status and encourage healthy behaviors:

"Well, I feel, I report to her what's going on with me and she offers support...and suggestions...and my...probably my biggest issue is not eating right...she's offered to help with some of that and sent me nutritional information and she's sent information to me..."

"She keeps my health and my mind together. Exercising and eating right and taking my medication, my blood sugar and my blood pressure."

"With the understanding that she comes out to see me once a month, is that what you're talking about? Well, she does a great job. She's familiar with...I'm computer illiterate and cell phone illiterate and I will ask her for how to cope and deal with anger and she'll get three or four pages copied out of a computer and bring it to me and we'll discuss it…I also go to anger management…I go once a week...and I've been doing real well. She also gave me readouts from the computer about exercise. She's given me one about diet and exercise and one on anger management and no matter what the issue is she's bringing me the information I need."

"She kind of keeps me on my toes...like, weigh yourself every day and make sure, you know, because there's not a lot of exercises I can do because I have congestive heart failure, but she's sent me pamphlets on different things I can do like sitting on the chair and, you know, exercises I can do, and it's been great. I have my big blue envelope of all the stuff my nurse has sent me. As soon as information comes, it goes into my blue envelope."

Participants reported making lifestyle and self-management changes since enrolling in the SoonerCare HMP. Participants described engaging in healthier behaviors and taking steps to self-manage their care:

"I've learned a lot more about my Coumadin than I learned from my doctor. About how the dark green vegetables and cranberry juice and stuff like that affects the Coumadin level. And, you know, just the interaction between drugs, how I probably shouldn't take Bactrim. Bactrim can affect my INR, which is the blood test they take every so often to make sure you're within therapeutic range. She's just had a lot of good little hints to help me understand what's going on because a lot of times the doctors don't take the time or assume that...in life people assume you know what they know and sometimes that's not always true. So, my nurse has been helpful with kind of those things."

"...Except that my food it comes from a food bank and you can't be picky about it. There's no leafy vegetables and fruit from food banks. It's always cans. But I've learned to, if I use a can of green beans, I dump the water out and wash the fruit...get the salt out of it. I've become a label reader. So, I've lost almost 100 pounds."

"I quit smoking and I quit drinking."

"Well, I mean, health-wise, I feel like I'm better. I lost, like, 92 pounds. I started that prior to my hip surgery because I'd recover faster. But after my hip surgery, I had to go on the ADvantage program. I'm exercising three times a week...and when it's warm I try to walk as much as I can outside. When it's cold I walk inside my apartment building in the hall. There's other things going on too, but my nurse also helped me to come up with a plan to lose weight."

Many participants reported that they have worked with more than one nurse and received notice of the transition prior to its occurrence:

"The first nurse told me that she would be leaving. Well, yes I didn't want her to go, but that's OK. We all have to move on in life and do other things sometimes. At least I didn't just get a surprise call from somebody!"

"1, 2 and this might be the 3rd or 4th one...they called and let me know..."

"My SoonerCare lady, she joined a hospice and let me know, I was scheduled to see her Friday, the eighth day of February, and she called and told me that she joined hospice and that I would be getting a different lady."

Two participants from the 2012 focus group sessions reported they were no longer enrolled in the program, potentially for loss of contact. Of these two participants, one felt that the additional help was no longer needed, while the other would like to have remained in the program:

"She doesn't call any more...I talked to somebody the other day at SoonerCare and she was telling me that the lady that was calling, [Nurse Care Manager], was no longer there and that did I need someone calling me again...But I need nobody to call me...She just quit calling, but I didn't know that she didn't work there anymore."

"No he's [participant's child] not. I was wondering how to go about that because they kept on calling me and then stopped. My mom passed away and I guess I just lost contact. It's been a long time. I also changed my number and then I went ahead and switched back so she probably couldn't get a hold of me...I totally forgot about the nurses and stuff...I'm still interested in getting back in the program because we've had a lot of stuff going on with him so he's been getting sick back to back and going to the emergency room a lot. You know, just having a lot of problems. So I need to get him back into the program."

Of the seven former 2012 focus group participants still receiving nurse care management services, three stated that they could self-manage their own care and did not need additional support from a nurse care manager. The other four participants stated they needed the continued help of their nurse care managers. The graduated participant noted improvement in his health and no longer needed a nurse care manager. The participant currently enrolled in *AD*vantage reported not needing the assistance of the SoonerCare HMP nurse care manager because of the services received through *AD*vantage.

Seven of 11 graduated Tier 1 members interviewed by PHPG also stated that they could self-manage their own care and did not need additional support from a nurse care manager.

Among the individuals enrolled in the program for longer than three years, 13 of the 14 Tier 1 participants and nine of the 14 Tier 2 participants stated that they still needed assistance.

As expressed by participants no longer requiring the monthly contact:

"No, I don't need [Nurse Care Manager]. I think there are other patients who are not as interactive with their own. People who have a hard time understanding different things medically, you know. I think there are some other people who could use her services better than me."

"Well, I mean, we've pretty much covered all the bases as far as I know. But it's nice to have someone call and check on me."

"Well, I'm going to be honest with you...I'm involved with programs to take care of myself, and I'm not one to get disappointed or thinking that I need more assistance."

"I like her a lot, but I can manage without her."

Many members who believed that they still required care primarily cited enjoying having someone to talk to who kept them on track with their health:

"I love it that someone's checking up on me and making sure that I'm OK every month. I can't say that anybody I've given birth to would do that!"

"I need all the extra help that I can get."

"[Child's] asthma has gotten much worse. He had a really bad time the last part of the year since the nurse stopped calling."

Participant Recommendations for Improvement

Although all participants reported that their nurse care managers were very knowledgeable about health and wellness matters, some were unhappy that their nurses could not assist them with SoonerCare-related matters such as finding a new provider or accessing prescriptions. (This finding has been documented in previous reports.)

The most frequent recommendation was that the nurse care managers receive more training on the SoonerCare program's benefits and resources to assist members in navigating the program. As described by one participant:

"One of the things that…would help is being a patient advocate to SoonerCare, and one of the things that I suggested in the focus group last year was having your personal nurse care manager – your people – help people understand the SoonerCare system better. Because, for instance, you have to go to the hamster wheel to get to the pharmacy desk. That's one of the biggest. And, then knowing what requires a prior authorization would help, you know. Knowing this or that requires prior authorization. Like, I have an issue with the disc...I have a ruptured disc in my neck so you know asking that question and what's the procedure with SoonerCare to get that neck treatment – what requires prior authorization? Little questions like that. Having and looking at the clerk's help desk and what requires prior authorization…"

Another suggestion was for greater accessibility to nurses after hours:

"Have an after-hours phone call center. I can't reach the nurse at night or on weekends. There are some things that can't wait."

The vast majority of participants found the once a month contact to be adequate. However, a handful of individuals requested increased contact by their nurse care managers:

"Have the nurse call me twice a month instead of once."

"Sometimes I have more needs so it would be better if she called more often."

"More!"

Summary of Key Findings

All participants had positive experiences with their nurse care managers and credited the program with having a positive impact on their lifestyle and health care utilization. As documented in prior focus groups and surveys, participants referred to their nurse care managers as caring and appreciated the help they received.

Quality of Care Analysis

The quality of care analysis targeted SoonerCare HMP participants continuously engaged during SFY 2013 having no more than 45 days without coverage. SoonerCare HMP participants had to have a minimum of six months of enrollment in the program. The enrollment was not strictly limited to the measurement period of July 1, 2012 to June 30, 2013; rather, it included members who may have begun their enrollment before the measurement period and whose enrollment continued into all or part of the measurement period.

The evaluation included 21 diagnosis-specific clinical measures (identified later in the chapter) and three population-wide measures:

- Percent of participants receiving influenza vaccination in the previous twelve months
- Percent of participants reducing their acuity scores as identified through MEDai profiles
- Percent of participants reducing their measure gaps as identified through MEDai profiles

After confirming enrollment requirements, the second criterion was to select a timeframe reference for which a medical procedure could be attributed to an engaged HMP member. Any procedure done during the measurement year of July 1, 2012 to June 30, 2013 was attributed to compliance for the measure.

Participants were included in each diagnostic category for which they had a primary diagnosis listed on one or more paid claims in SFY 2013. PHPG used administrative (paid claims) data to develop findings for the 21 diagnosis-specific clinical measures.

PHPG determined the total number of participants with a primary diagnosis in each measurement category, the number meeting the clinical standard and the resultant “percent compliant”. PHPG also calculated the SFY 2013 compliance rates for a “comparison group” consisting of SoonerCare Choice members found eligible for, but not enrolled in the SoonerCare HMP. The comparison group was continuously enrolled from July 1, 2012 through June 30, 2013.

The diagnosis-specific findings begin on the next page, followed by the three population-wide measures. For each measure, the first exhibit displayed is the comparison between the SoonerCare HMP (engaged group) and the SoonerCare Choice members (comparison group). This is followed by the year-over-year compliance percentage comparison for engaged SoonerCare HMP participants. Statistically significant differences between the engaged and comparison group populations, at a 99 percent confidence level, are highlighted in bold face.

Asthma

The quality of care for participants with asthma was evaluated through one clinical measure:

- Percent with persistent asthma who had at least one dispensed prescription for inhaled corticosteroids, nedocromil, cromolun sodium, leukotriene modifiers or methylaxanthines.

Over 65 percent of participants with a primary diagnosis of asthma were found to have at least one dispensed prescription (see exhibit 2-62). The rate for the comparison group[31] was higher than for the engaged population (statistically significant difference).

Exhibit 2-62 – Asthma Clinical Measures Engaged vs. Comparison Group

Measure	Analysis Method	Engaged Population			Engaged versus Comparison Group	
		Total Members	Members Compliant	Percent Compliant	Comparison Group Compliance Rate	Engaged - Comparison: % Point Difference
1. Percent with persistent asthma who had at least one dispensed prescription for inhaled corticosteroids, nedocromil, cromolun sodium, leukotriene modifiers or methylaxanthines	Administrative data	196	128	65.3%	75.6%	**(10.3%)**

[31] In the interest of space, the population size for the comparison group is not presented in the tables. However, in most instances, it was three to five times the size of the engaged population.

The 65 percent compliance rate in SFY 2013 for SoonerCare HMP participants with a primary diagnosis of asthma was down slightly from 70 percent in SFY 2012 (see exhibit 2-63).

Exhibit 2-63 – Asthma Clinical Measures 2012 - 2013

Measure	Analysis Method	June 2012 Findings	June 2013 Findings	2012-2013 Comparison
		Percent Compliant	Percent Compliant	% Point Change
1. Percent with persistent asthma who had at least one dispensed prescription for inhaled corticosteroids, nedocromil, cromolun sodium, leukotriene modifiers or methylaxanthines	Administrative data	70.0%	65.3%	(4.7%)

COPD

The quality of care for participants with COPD was evaluated through three clinical measures:

- Percent over age 40 who received spirometry screening
- Percent prescribed steroid inhaler
- Percent who received chest x-ray in previous twelve months

The strongest results were found for the chest x-ray measure; 70.2 percent of participants with COPD received a chest x-ray in the previous twelve months versus 61.6 percent of the comparison group (statistically significant difference).

Nearly 83 percent of participants had a steroid prescribed, which was slightly higher than for the comparison group.

Only 24.1 percent of participants over age 40 received a spirometry screening but this was in line with the comparison group (see exhibit 2-64).

Exhibit 2-64 – COPD Clinical Measures Engaged vs. Comparison Group

Measure	Analysis Method	Engaged Population			Engaged versus Comparison Group	
		Total Members	Members Compliant	Percent Compliant	Comparison Group Compliance Rate	Engaged - Comparison: % Point Difference
1. Percent over age 40 who received spirometry screening	Administrative data	547	132	24.1%	22.1%	2.0%
2. Percent prescribed steroid inhaler	Administrative data	563	466	82.8%	78.9%	3.9%
3. Percent who received chest x-ray in previous twelve months	Administrative data	563	395	70.2%	61.6%	**8.6%**

The 82 percent compliance rate for steroid prescribing in SFY 2013 represented a 30.3 percentage point increase from SFY 2012.

The 70.2 percent chest x-ray compliance rate in SFY 2013 was up from 63.8 percent in SFY 2012.

While only 24.1 percent of participants over age 40 received a spirometry screening in SFY 2013, this still represented modest improvement over the 20.8 percent rate observed in SFY 2012 (see exhibit 2-65).

Exhibit 2-65 – COPD Clinical Measures 2012 - 2013

Measure	Analysis Method	June 2012 Findings	June 2013 Findings	2012-2013 Comparison
		Percent Compliant	Percent Compliant	% Point Change
1. Percent over age 40 who received spirometry screening	Administrative data	20.8%	24.1%	3.3%
2. Percent prescribed steroid inhaler	Administrative data	52.5%	82.8%	30.3%
3. Percent who received chest x-ray in previous twelve months	Administrative data	63.8%	70.2%	6.4%

Heart Failure

The quality of care for participants with heart failure was evaluated through two clinical measures:

- Percent prescribed a beta blocker
- Percent who received chest x-ray in previous twelve months

Over 46 percent of participants were prescribed a beta blocker, which was well-above the rate for the comparison group (statistically significant difference).

Over 57 percent received a chest x-ray in the previous twelve months compared to nearly 32 percent for the comparison group (statistically significant difference). (See exhibit 2-66.)

Exhibit 2-66 – Heart Failure Clinical Measures Engaged vs. Comparison Group

Measure	Analysis Method	Engaged Population			Engaged versus Comparison Group	
		Total Members	Members Compliant	Percent Compliant	Comparison Group Compliance Rate	Engaged - Comparison: % Point Difference
1. Percent prescribed a beta blocker	Administrative data	828	383	46.3%	20.0%	**26.3%**
2. Percent who received chest x-ray in previous twelve months	Administrative data	828	476	57.5%	31.9%	**25.6%**

The 46.3 percent beta blocker compliance rate in SFY 2013 represented a very slight decline from 48.1 percent in SFY 2012. The 57.5 chest x-ray compliance rate in SFY 2013 also was down modestly from 62.4 percent in SFY 2012 (see exhibit 2-67).

Exhibit 2-67 – Heart Failure Clinical Measures 2012 - 2013

Measure	Analysis Method	June 2012 Findings	June 2013 Findings	2012-2013 Comparison
		Percent Compliant	Percent Compliant	% Point Change
1. Percent prescribed a beta blocker	Administrative data	48.1%	46.3%	(1.8%)
2. Percent who received chest x-ray in previous twelve months	Administrative data	62.4%	57.5%	(4.9%)

Coronary Artery Disease

The quality of care for participants with Coronary Artery Disease was evaluated through five clinical measures:

- Percent with prior myocardial infarction (MI) prescribed beta-blocker therapy
- Percent with prior MI prescribed ACE inhibitor/ARB therapy
- Percent who received at least one LDL cholesterol screen
- Percent prescribed lipid-lowering therapy
- Percent who received left ventricular (LV) function test after acute myocardial infarction

The compliance rate among participants was over 50 percent for four of the five measures. The one lagging measure continues to be LV function test, performed on only 3.5 percent of the participants.

Two measures, the percent of participants who received at least one LDL-C screen and the percent prescribed lipid-lowering therapy, exceeded the comparison group rates by a statistically significant amount. One measure, the percent of participants with prior MI prescribed beta-blocker therapy, was lower than the comparison group by a statistically significant amount (see exhibit 2-68).

Exhibit 2-68 – Coronary Artery Disease Clinical Measures Engaged vs. Comparison Group

Measure	Analysis Method	Engaged Population			Engaged versus Comparison Group	
		Total Members	Members Compliant	Percent Compliant	Comparison Group Compliance Rate	Engaged - Comparison: % Point Difference
1. Percent with prior MI prescribed beta-blocker therapy	Administrative data	227	149	65.6%	75.6%	**(10.0%)**
2. Percent with prior MI prescribed ACE/ARB therapy	Administrative data	227	150	66.1%	70.3%	(4.2%)
3. Percent who received at least one LDL-C screen	Administrative data	863	571	66.2%	36.6%	**29.6%**
4. Percent prescribed lipid-lowering therapy	Administrative data	863	485	56.2%	23.4%	**32.8%**
5. Percent who received LV function test after AMI	Administrative data	227	8	3.5%	6.2%	(2.7%)

Compliance for the five measures decreased slightly in SFY 2013 when compared to SFY 2012 but remained above 50 percent in all but one instance (see exhibit 2-69).

Exhibit 2-69 – Coronary Artery Disease Clinical Measures 2012 - 2013

Measure	Analysis Method	June 2012 Findings	June 2013 Findings	2012-2013 Comparison
		Percent Compliant	Percent Compliant	% Point Change
1. Percent with prior MI prescribed beta-blocker therapy	Administrative data	72.0%	65.6%	(6.4%)
2. Percent with prior MI prescribed ACE/ARB therapy	Administrative data	68.0%	66.1%	(1.9%)
3. Percent who received at least one LDL-C screen	Administrative data	67.8%	66.2%	(1.6%)
4. Percent prescribed lipid-lowering therapy	Administrative data	59.5%	56.2%	(3.3%)
5. Percent who received LV function test after AMI	Administrative data	6.0%	3.5%	(2.5%)

Diabetes

Diabetes is one of the most prevalent of the chronic conditions targeted through the SoonerCare HMP. The quality of care for participants with diabetes was evaluated through five clinical measures:

- Percent prescribed ACE/ARB therapy
- Percent who received LDL-C in previous twelve months
- Percent who received at least one dilated retinal eye exam in previous twelve months
- Percent who received urine micro albumin screen in previous twelve months
- Percent who received at least one HbA1c test in previous twelve months

Results for this group showed strong performance on three measures: 76 percent received at least one HbA1c test; nearly 69 percent received an LDL-C; and 66.1 percent were prescribed ACE/ARB therapy (see exhibit 2-70).

The HMP compliance rate exceeded the comparison group compliance rate for four of five measures. Two measures, the percent who were prescribed ACE/ARB therapy and the percent who received at least one dilated retinal eye exam, exceeded the rate for the comparison group by a statistically significant amount.

The percent who received at least one HbA1c test where in line with the comparison group.

Exhibit 2-70 – Diabetes Mellitus Clinical Measures Engaged vs. Comparison Group

Measure	Analysis Method	Engaged Population			Engaged versus Comparison Group	
		Total Members	Members Compliant	Percent Compliant	Comparison Group Compliance Rate	Engaged - Comparison: % Point Difference
1. Percent prescribed ACE/ARB therapy	Administrative data	1,348	891	66.1%	59.5%	**6.6%**
2. Percent who received LDL-C in previous twelve months	Administrative data	1,348	927	68.8%	65.3%	3.5%
3. Percent who received at least one dilated retinal eye exam in previous twelve months	Administrative data	1,348	541	40.1%	30.5%	**9.6%**
4. Percent who received urine micro albumin screen in previous twelve months	Administrative data	1,348	404	30.0%	29.7%	0.3%
5. Percent who received at least one HbA1C test in previous twelve months	Administrative data	1,348	1,025	76.0%	76.1%	(0.1%)

The results for diabetes measures all increased from 2012 to 2013, with the greatest increase observed for dilated retinal eye exam measure (see exhibit 2-71).

Exhibit 2-71 – Diabetes Mellitus Clinical Measures 2012 - 2013

Measure	Analysis Method	June 2012 Findings	June 2013 Findings	2012-2013 Comparison
		Percent Compliant	Percent Compliant	% Point Change
1. Percent prescribed ACE/ARB therapy	Administrative data	64.5%	66.1%	1.6%
2. Percent who received LDL-C in previous twelve months	Administrative data	65.7%	68.8%	3.1%
3. Percent who received at least one dilated retinal eye exam in previous twelve months	Administrative data	33.7%	40.1%	6.4%
4. Percent who received urine micro albumin screen in previous twelve months	Administrative data	27.9%	30.0%	2.1%
5. Percent who received at least one HbA1C test in previous twelve months	Administrative data	73.2%	76.0%	2.8%

Hypertension

Hypertension is another prevalent condition in the SoonerCare HMP population. The quality of care for participants with hypertension was evaluated through five clinical measures:

- Percent who received LDL-C in previous twelve months
- Percent prescribed calcium channel blocker or thiazide diuretic
- Percent over age 55 prescribed ACE/ARB therapy
- Percent who received urine micro albumin screen in previous twelve months
- Percent who received serum creatinine BUN lab test

Results for this group (see exhibit 2-72) showed strong performance on four measures: 88.1 percent received a serum creatinine BUN lab test; over 74 percent were prescribed a calcium channel blocker and nearly the same percentage of members over age 55 received ACE/ARB therapy; and 69.6 percent received an LDL-C. Results for the participant population were higher than the comparison group by a statistically significant amount on three of the four measures, the exception being ACE/ARB therapy.

The lowest compliance rate was the percent of members who received a urine micro albumin screen. Only 16.2 percent of the participant population was compliant on this measure, although this still exceeded the comparison group rate by a statistically significant amount.

Exhibit 2-72 – Hypertension Clinical Measures Engaged vs. Comparison Group

Measure	Analysis Method	Engaged Population			Engaged versus Comparison Group	
		Total Members	Members Compliant	Percent Compliant	Comparison Group Compliance Rate	Engaged - Comparison: % Point Difference
1. Percent who received LDL-C in previous twelve months	Administrative data	1,070	745	69.6%	61.2%	**8.4%**
2. Percent prescribed calcium channel blocker or thiazide diuretic	Administrative data	1,070	800	74.8%	54.7%	**20.1%**
3. Percent over age 55 prescribed ACE/ARB therapy	Administrative data	576	430	74.7%	71.4%	3.3%
4. Percent who received urine micro albumin screen in previous twelve months	Administrative data	1,070	173	16.2%	11.7%	**4.5%**
5. Percent who received serum creatinine BUN lab test	Administrative data	1,070	943	88.1%	82.5%	**5.6%**

Compliance for four of the five measures increased in SFY 2013 when compared to SFY 2012 (see exhibit 2-73). The greatest increase was observed for the percent prescribed a calcium channel blocker or thiazide diuretic. The percent of participants who received a serum creatinine BUN lab test declined slightly.

Exhibit 2-73 – Hypertension Clinical Measures 2012 - 2013

Measure	Analysis Method	June 2012 Findings	June 2013 Findings	2012-2013 Comparison
		Percent Compliant	Percent Compliant	% Point Change
1. Percent who received LDL-C in previous twelve months	Administrative data	68.6%	69.6%	1.0%
2. Percent prescribed calcium channel blocker or thiazide diuretic	Administrative data	53.9%	74.8%	20.9%
3. Percent over age 55 prescribed ACE/ARB therapy	Administrative data	71.7%	74.7%	3.0%
4. Percent who received urine micro albumin screen in previous twelve months	Administrative data	15.9%	16.2%	0.3%
5. Percent who received serum creatinine BUN lab test	Administrative data	89.8%	88.1%	(1.7%)

Prevention Measure

The SoonerCare HMP emphasizes prevention as part of a holistic care model. The quality of preventive care for participants was evaluated through one clinical measure:

- Percent receiving influenza vaccination in the previous twelve months

The influenza measure is important, given the compromised immune systems of many persons with chronic illnesses. Over 24 percent of participants received the vaccination in SFY 2013 (see exhibit 2-74). The participant compliance rate was higher than the rate for the comparison group by a statistically significant amount, although the relatively low rate for both populations suggests that ongoing provider and participant education is necessary to address the importance of getting the vaccine.

Exhibit 2-74 – Prevention Measure (Influenza Vaccination) Engaged vs. Comparison Group

Measure	Analysis Method	Engaged Population			Engaged versus Comparison Group	
		Total Members	Members Compliant	Percent Compliant	Comparison Group Compliance Rate	Engaged - Comparison: % Point Difference
1. Percent receiving influenza vaccination in the previous twelve months	Administrative data	3,542	866	24.4%	13.9%	**10.5%**

The participant compliance rate of 24.4 percent was an improvement over the SFY 2012 rate of 20.9 percent (see exhibit 2-75).

Exhibit 2-75 – Prevention Measure (Influenza Vaccination) 2012 - 2013

Measure	Analysis Method	June 2012 Findings	June 2013 Findings	2012-2013 Comparison
		Percent Compliant	Percent Compliant	% Point Change
1. Percent receiving influenza vaccination in the previous twelve months	Administrative data	20.9%	24.4%	3.5%

MEDai Profiles

Potential SoonerCare HMP participants are identified partly through a MEDai analysis of paid claims data. MEDai generates individual profiles that include an acuity score based on the predicted risk of future acute care expenditures and a gap score based on variance from impactable care guidelines.

PHPG obtained the pre-enrollment scores for SoonerCare HMP participants, by tier, and compared them to updated scores generated after at least six months of continuous participation in the program. Over 51 percent of participants in Tier 1 had lower acuity scores after six months, and 45 percent of participants in Tier 2 had lower acuity scores after six months. Over 40 percent of participants in both tiers had lower gap scores (see exhibit 2-76).

Exhibit 2-76 – MEDai Profiles Engaged vs. Comparison Group

Measure	Analysis Method	Engaged Period		
		Total Members	Members w/ Lower Scores	Percent w/ Lower Scores
1a. TIER 1: Percent reducing their acuity scores as identified through MEDai profiles	Administrative data	760	388	51.1%
1b. TIER 2: Percent reducing their acuity scores as identified through MEDai profiles	Administrative data	2,782	1,256	45.1%
2a. TIER 1: Percent reducing their measure gaps as identified through MEDai scores	Administrative data	760	309	40.7%
2b. TIER 2: Percent reducing their measure gaps as identified through MEDai scores	Administrative data	2,782	1,117	40.2%

The percentage of participants in Tier 1 and Tier 2 with lower acuity scores declined slightly from SFY 2012 to SFY 2013 while the percentage of Tier 1 participants with lower gap scores increased. There was a considerable increase in the percentage of Tier 2 participants with lower gap scores (see exhibit 2-77).

Exhibit 2-77 – MEDai Profiles 2012 - 2013

Measure	Analysis Method	June 2012 Findings	June 2013 Findings	2012-2013 Comparison
		Percent Compliant	Percent Compliant	% Point Change
1a. TIER 1: Percent reducing their acuity scores as identified through MEDai profiles	Administrative data	54.3%	51.1%	(3.2%)
1b. TIER 2: Percent reducing their acuity scores as identified through MEDai profiles	Administrative data	47.0%	45.1%	(1.9%)
2a. TIER 1: Percent reducing their measure gaps as identified through MEDai scores	Administrative data	35.0%	40.7%	5.7%
2b. TIER 2: Percent reducing their measure gaps as identified through MEDai scores	Administrative data	29.3%	40.2%	10.9%

Summary of Key Findings

The results of the quality of care analysis were derived from a full year of participant data for SFY 2013. The results were evaluated against SFY 2013 compliance rates for a comparison group consisting of persons eligible for, but not enrolled in the SoonerCare HMP. SFY 2013 participant results also were evaluated against the same data for SFY 2012.

Engaged vs. Comparison Group

The participant compliance rate exceeded the comparison group rate on 16 of the 21 diagnosis-specific measures (76 percent). The difference was statistically significant for 11 of the 16, suggesting that the program is continuing to have a positive effect on quality of care. The most impressive results, relative to the comparison group, were observed for participants with chronic obstructive pulmonary disease, congestive heart failure, diabetes and hypertension.

The program also appears to be having a positive impact on participant acuity and care gap scores. The participant compliance rate for the influenza vaccine was significantly higher than the rate for the comparison group.

SFY 2012 – SFY 2013 Comparison

The participant compliance rate improved on 12 of the 21 diagnosis-specific measures (57 percent). The most impressive results, relative to SFY 2012, were observed for participants with chronic obstructive pulmonary disease, diabetes and hypertension. The program also appears to be having a positive impact on lowering gap scores.

Utilization and Expenditure Trend Analysis

Overview

Nurse care management, if effective, should have an observable impact on patient service utilization and expenditures. Improvement in the quality of care performance measures presented in the previous section should yield better outcomes in the form of lower hospitalization rates and acute care costs.

The utilization and expenditure analysis was conducted separately for Tier 1 and Tier 2 participants. Participant data was stratified by claim cost, age, location (urban/rural), primary diagnosis and comorbidities (both physical and behavioral). Utilization and expenditure data for the "eligible but not engaged" population, while not presented here, also was evaluated for the purpose of validating MEDai forecast data, as well as developing trend factors for growth in forecasted costs absent nurse care management.

Results are presented for participants' actual claims experience compared to MEDai forecasts for the 48-month period following the start date of engagement. Data includes both active participants and persons who have graduated or otherwise disenrolled from the program. (Months 13 to 24, 25 to 36 and 37 to 48 in particular include a significant amount of post-engagement data.)

MEDai's advanced predictive modeling, as opposed to extrapolating historical trends, accounts for participants' risk factors and recent clinical experience. The resulting forecasts serve as an accurate depiction of what participant utilization would have been like in the absence of nurse care management.

Participants in each diagnostic category were included in the analysis only if it was their most expensive at the time of engagement. A member's most expensive diagnostic category at the time of engagement was defined as the diagnostic category associated with the greatest medical expenditures during the pre-engaged (1-12 months) and engaged periods. As participants in nurse care management have significant rates of physical co-morbidities, categorizing participants in this manner allows for a targeted analysis of both the absolute and relative impact of nurse care management on the various Chronic Impact conditions driving participant utilization.

Information is presented for the 16 diagnostic categories used by MEDai in calculation of the Chronic Impact score for potential nurse care management participants: asthma, coronary artery disease, cerebrovascular accident/stroke, chronic obstructive pulmonary disease (COPD), congestive heart failure, depression, diabetes mellitus, HIV, hyperlipidemia/high cholesterol, hypertension, lower back pain, migraine headaches, multiple sclerosis, renal failure/ESRD, rheumatoid arthritis and schizophrenia.

The following data is provided for each diagnostic category:

1. Inpatient admissions
2. Emergency department visits
3. PMPM medical expenditures (total and by category of service; expenditures by category of service are presented comparing expenditures prior to and during engagement, as MEDai does not forecast expenditures by individual categories of service)
4. Total medical expenditure impact of nurse care management (forecast versus actual PMPM expenditures)

Utilization and expenditures by category of service only are presented for the first 12 months of engagement. The six most frequently observed chronic conditions are presented first (asthma, coronary artery disease, congestive heart failure, COPD, diabetes and hypertension) followed by the additional Chronic Impact conditions.

Methodology for Creation of Utilization/Expenditure Dataset

PHPG developed utilization/expenditure rates using claims with dates of service from SFY 2006 through SFY 2013. The OHCA and HP (the state's Medicaid fiscal agent) prepared a claims file employing the same extraction methodology used by the OHCA on a monthly basis to provide updated claims files to MEDai.

The initial file contained individual eligibility records and complete claims for Medicaid eligibles. PHPG created a dataset that identified each individual's eligibility and claims experience during the evaluation period. The dataset is an updated version of the one created for the Fourth Annual Report issued in mid-2013.

The claims extract for the dataset was created in September and October 2013. PHPG employed completion factors for claims with dates of service during SFY 2009, SFY 2010, SFY 2011, SFY 2012 and SFY 2013. Completion factors were applied to account for claims that have been incurred by the OHCA but were unpaid at the time the dataset was created.

Participants were included in the analysis only if they had two months or more of engagement experience as of June 30, 2013, and had MEDai forecast data available at the time of engagement.[32]

Appendix C contains a full set of utilization and expenditure exhibits, including cross-tabulated results by tier group. Key findings are presented by major disease category and tier group starting on the following page. Utilization and expenditure findings for diagnoses with small numbers of participants should be interpreted with caution.

[32] Of members engaged at least two months as of June 30, 2013 (18,797 members), 99.3 percent (18,673 members) had MEDai forecast data available at the time of engagement.

Asthma Population Utilization and Expenditures Trends

The SoonerCare HMP through SFY 2013 engaged 1,547 Tier 1 and 5,324 Tier 2 participants with an asthma diagnosis. Asthma was the most expensive diagnosis at the time of engagement for 14 percent of Tier 1 and 28 percent of Tier 2 participants with this diagnosis (see exhibit 2-78).

Exhibit 2-78 – Participants with Asthma as Most Expensive Diagnosis

Enrollment Group	Participants with Diagnosis	Most Expensive Diagnosis	Percent Most Expensive
Tier 1	1,547	222	14%
Tier 2	5,324	1,479	28%
Tiers 1 & 2	**6,871**	**1,701**	**25%**

Ninety-eight percent of participants with asthma also were diagnosed with another Chronic Impact condition, the most common being hypertension and depression (see exhibit 2-79). More detailed co-morbidity data is provided in Appendix C.

Exhibit 2-79 – Participants with Asthma
Co-morbidity with Chronic Impact Conditions

Comorbidity	Participants	%
Asthma	**6,871**	**100.0%**
	139	**2.0%**
+ Hypertension	4,974	72.4%
	68	1.0%
+ Depression	4,701	68.4%
	147	2.1%
+ Lower Back Pain	3,869	56.3%
	39	0.6%
+ COPD	3,755	54.6%
	44	0.6%
+ Diabetes	3,604	52.5%
	40	0.6%

Participants with asthma, the specified comorbidity, and additional comorbidities

Participants ONLY with asthma and the specified comorbidity (no other comorbidities)

Utilization

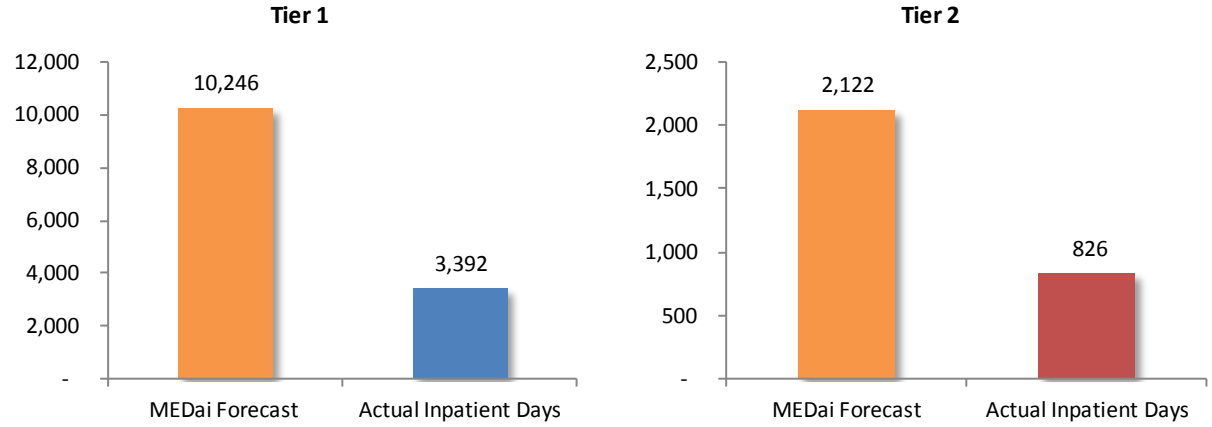
PHPG analyzed inpatient hospital and emergency department utilization rates. Hospital utilization was measured by number of inpatient days (both for admissions and readmissions) and emergency department utilization by number of visits per 1,000 participants with asthma as their most expensive diagnosis at the time of engagement.

The purpose of this analysis was to determine if enrollment in nurse care management had an impact on avoidable and expensive acute care episodes. All hospitalizations and emergency department visits for a participant were included in the calculations, regardless of the primary admitting/presenting diagnosis. Nurse care management is intended to be holistic and not limited in its impact to the member's particular chronic condition.

MEDai forecasted that Tier 1 participants with asthma would accrue 10,246 inpatient days per 1,000 participants in the first 12 months of engagement, as compared to 597 per 1,000 for all Oklahomans.[33] Claims data showed the actual rate was 3,392, or 33 percent of forecast.

MEDai forecasted that Tier 2 participants with asthma would accrue 2,122 inpatient days per 1,000 participants; the actual rate was 826 days, or 39 percent of forecast (see exhibit 2-80).

Exhibit 2-80 – Participants with Asthma as Most Expensive Diagnosis
Inpatient Utilization - First 12 Months Following Engagement, per 1,000 Participants

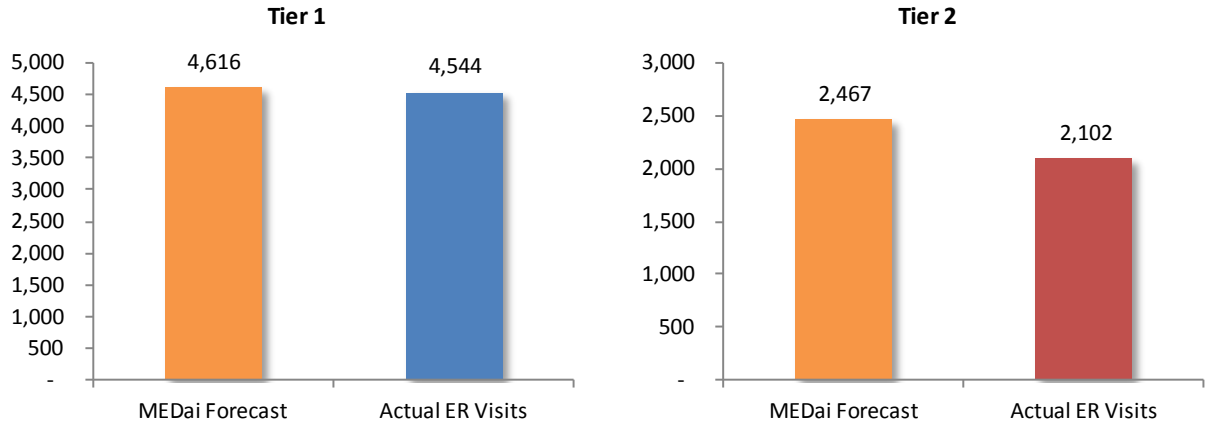


[33] Source: Statehealthfacts.org. "All Oklahomans" rate is across all payer types. Data from 2011 (most recent available).

For Tier 1 participants, MEDai forecasted an emergency department visit rate of 4,616 per 1,000 participants with asthma, as compared to 488 per 1,000 for all Oklahomans.[34] The actual rate was 4,544, or two percent below forecast.

Tier 2 participants with asthma were forecasted to visit the emergency department 2,467 times per 1,000 participants, while the actual rate was 2,102, or 85 percent of forecast (see exhibit 2-81).

Exhibit 2-81 – Participants with Asthma as Most Expensive Diagnosis
Emergency Department Utilization - First 12 Months Following Engagement, per 1,000 Participants



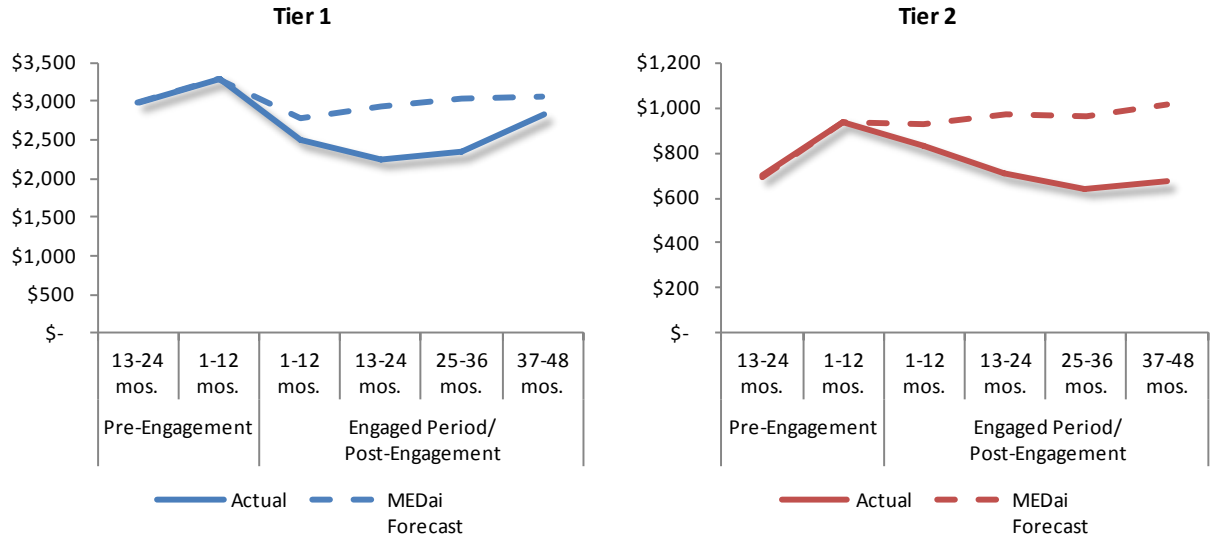
[34] Source: Statehealthfacts.org. "All Oklahomans" rate is across all payer types. Data from 2011 (most recent available).

Medical Expenditures – Total and by Category of Service

Total PMPM medical expenditures for Tier 1 participants with asthma were below forecast for the 48 months following engagement, although the gap narrowed considerably in months 37 to 48 (see exhibit 2-82).

Total PMPM medical expenditures for Tier 2 participants were below forecast for the 48 months following engagement, with the gap widening over time before leveling out in months 37 to 48. More detail is provided in exhibit 2-84 on page 106.

Exhibit 2-82 – Participants with Asthma as Most Expensive Diagnosis
Total PMPM Expenditures



For both Tier 1 and Tier 2 participants, decreased hospital, physician and behavioral health costs appear to be the drivers of cost savings, based on a comparison of pre-engaged to engaged evaluation periods (see exhibit 2-83).

Exhibit 2-83 – Participants with Asthma as Most Expensive Diagnosis
PMPM Expenditures by Category of Service

Category of Service	Tier 1			Tier 2		
	Pre-Engagement: 1-12 months	First 12 months of Engagement	Percent Change	Pre-Engagement: 1-12 months	First 12 months of Engagement	Percent Change
Inpatient Hospital	$1,177	$623	-47.1%	$233	$167	-28.4%
Outpatient Hospital	$278	$236	-15.2%	$121	$97	-19.7%
Physician	$577	$435	-24.6%	$209	$171	-18.3%
Behavioral Health (Psych.)	$119	$82	-31.3%	$51	$48	-5.5%
Pharmacy	$433	$399	-7.8%	$208	$223	7.0%
All Other	$714	$733	2.7%	$115	$120	4.3%
Total	**$3,298**	**$2,507**	**-24.0%**	**$938**	**$827**	**-11.9%**

Total Medical Expenditure Impact of Nurse Care Management

PHPG evaluated the impact of Nurse Care Management on medical expenditures by comparing MEDai forecasted expenditures to actual paid claims data for the 48 months following engagement.

PHPG calculated average PMPM expenditures for the first 12 months following engagement and the 12 months prior to engagement. PHPG then calculated the PMPM percent change forecasted in the MEDai extracts and applied that percentage to the actual paid claims data to arrive at a final forecast for PMPM expenditures that was consistent with PHPG's dataset.[35]

To calculate forecasted expenditures for months 13 and beyond following engagement, PHPG analyzed paid claims data for SoonerCare members that were selected but not engaged in nurse care management ("selected" population). PHPG calculated the trends in actual expenditures by tier across the life of the program (February 2008 to June 2013), and applied the trend factors to participants' forecasted expenditures for months 1 to 12 following engagement.[36]

Overall, medical expenditure savings attributable to nurse care management for persons with asthma across both tiers were $256 PMPM. Average PMPM expenditures for the 48 months following engagement were 79 percent of forecast (see exhibit 2-84).

Exhibit 2-84 – Participants with Asthma as Most Expensive Diagnosis
Forecast versus Actual PMPM Medical Expenditures

Engaged/Post-Engagement Period (months)	Tier1			Tier2			Tiers 1 & 2		
	MEDai Forecast	Actual (Dollars)	Actual (% of Forecast)	MEDai Forecast	Actual (Dollars)	Actual (% of Forecast)	MEDai Forecast	Actual (Dollars)	Actual (% of Forecast)
1 to 12	$2,788	$2,507	90%	$926	$827	89%	$1,159	$1,036	89%
13 to 24	$2,944	$2,258	77%	$970	$706	73%	$1,201	$887	74%
25 to 36	$3,038	$2,353	77%	$963	$642	67%	$1,204	$841	70%
37 to 48	$3,060	$2,824	92%	$1,016	$668	66%	$1,253	$918	73%
Overall: 1 to 48	**$2,917**	**$2,445**	**84%**	**$958**	**$732**	**76%**	**$1,193**	**$937**	**79%**

[35] For participants with forecasted costs greater than $144,000 (the maximum amount forecasted by MEDai), PHPG set forecasted costs equal to prior year costs, assuming no increase or decrease in costs.
[36] This analysis was limited to SoonerCare members selected as of June 30, 2012 and never engaged to ensure a full 12 months of trend data.

COPD Population Utilization and Expenditures Trends

The SoonerCare HMP through SFY 2013 engaged 2,033 Tier 1 and 5,972 Tier 2 participants with a COPD diagnosis. COPD was the most expensive diagnosis at the time of engagement for approximately 18 percent of Tier 1 and 21 percent of Tier 2 participants with this diagnosis (see exhibit 2-85).

Exhibit 2-85 – Participants with COPD as Most Expensive Diagnosis

Enrollment Group	Participants with Diagnosis	Most Expensive Diagnosis	Percent Most Expensive
Tier 1	2,033	366	18%
Tier 2	5,972	1,243	21%
Tiers 1 & 2	**8,005**	**1,609**	**20%**

Nearly all participants with COPD also were diagnosed with another Chronic Impact condition, the most common being hypertension and depression (see exhibit 2-86).

Exhibit 2-86 – Participants with COPD
Co-morbidity with Chronic Impact Conditions

Comorbidity	Participants	%
COPD	**8,005**	**100.0%**
	63	**0.8%**
+ Hypertension	6,640	82.9%
	63	0.8%
+ Depression	5,217	65.2%
	45	0.6%
+ Lower Back Pain	4,821	60.2%
	44	0.5%
+ Hyperlipidemia (High Cholesterol)	4,504	56.3%
	13	0.2%
+ Diabetes	4,395	54.9%
	21	0.3%

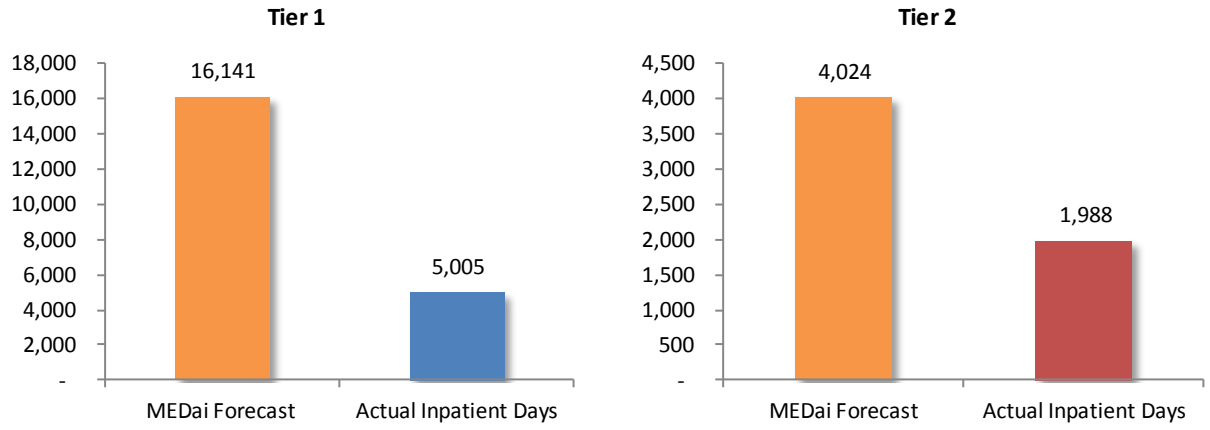
Participants with COPD, the specified comorbidity, and additional comorbidities

Participants ONLY with COPD and the specified comorbidity (no other comorbidities)

Utilization

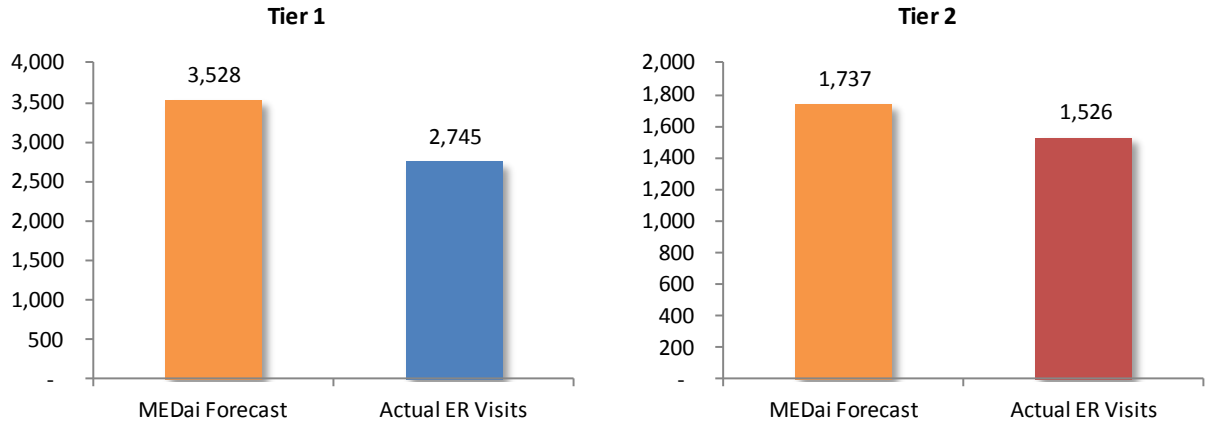
MEDai forecasted that Tier 1 participants would accrue 16,141 inpatient days per 1,000 participants in the first 12 months following engagement. The actual rate was 5,005, or 31 percent of forecast. Tier 2 participants accrued 1,988 inpatient days, or 49 percent of forecast (see exhibit 2-87).

Exhibit 2-87 – Participants with COPD as Most Expensive Diagnosis
Inpatient Utilization - First 12 Months Following Engagement, per 1,000 Participants



For Tier 1 participants, MEDai forecasted an emergency department visit rate of 3,528 per 1,000 participants. The actual rate was 2,745, or 78 percent of forecast. Tier 2 participants were forecasted to visit the emergency department 1,737 times per 1,000 participants, while the actual rate was 1,526, or 88 percent of forecast (see exhibit 2-88).

Exhibit 2-88 – Participants with COPD as Most Expensive Diagnosis
Emergency Department Utilization - First 12 Months Following Engagement, per 1,000 Participants

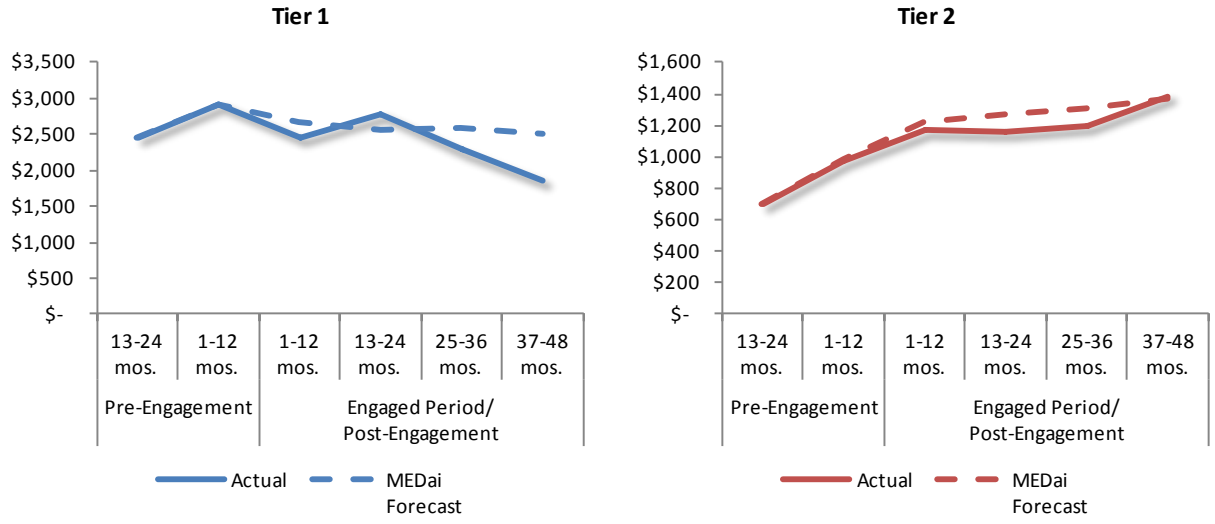


Medical Expenditures – Total and by Category of Service

Total PMPM medical expenditures for months 1 to 24 following engagement for Tier 1 participants were nearly even with the forecasted amount before dropping below forecast for months 25 to 48 (see exhibit 2-89).

Total PMPM medical expenditures for Tier 2 participants were even with, or slightly below forecast over the 48 months following engagement.

Exhibit 2-89 – Participants with COPD as Most Expensive Diagnosis
Total PMPM Expenditures



Tier 1 participants experienced decreased expenditures in all categories except the "all other" line item. Conversely, Tier 2 participants experienced increased expenditures in nearly all categories of service (see exhibit 2-90).

Exhibit 2-90 – Participants with COPD as Most Expensive Diagnosis
PMPM Expenditures by Category of Service

Category of Service	Tier 1			Tier 2		
	Pre-Engagement: 1-12 months	First 12 months of Engagement	Percent Change	Pre-Engagement: 1-12 months	First 12 months of Engagement	Percent Change
Inpatient Hospital	$1,188	$898	-24.4%	$294	$364	24.1%
Outpatient Hospital	$203	$163	-19.9%	$106	$105	-1.1%
Physician	$477	$347	-27.3%	$181	$206	13.6%
Behavioral Health (Psych.)	$45	$42	-5.4%	$15	$20	35.8%
Pharmacy	$605	$548	-9.4%	$254	$294	15.5%
All Other	$407	$460	13.0%	$132	$184	39.1%
Total	**$2,924**	**$2,457**	**-16.0%**	**$982**	**$1,172**	**19.4%**

Total Medical Expenditure Impact of Nurse Care Management

Overall, medical expenditure savings attributable to nurse care management across both tiers were $84 PMPM. Average PMPM expenditures for the 48 months following engagement were 95 percent of forecast (see exhibit 2-91).

Exhibit 2-91 – Participants with COPD as Most Expensive Diagnosis
Forecast versus Actual PMPM Medical Expenditures

Engaged/Post-Engagement Period (months)	Tier1			Tier2			Tiers 1 & 2		
	MEDai Forecast	Actual (Dollars)	Actual (% of Forecast)	MEDai Forecast	Actual (Dollars)	Actual (% of Forecast)	MEDai Forecast	Actual (Dollars)	Actual (% of Forecast)
1 to 12	$2,671	$2,457	92%	$1,217	$1,172	96%	$1,541	$1,458	95%
13 to 24	$2,554	$2,787	109%	$1,266	$1,162	92%	$1,528	$1,492	98%
25 to 36	$2,593	$2,273	88%	$1,305	$1,202	92%	$1,556	$1,411	91%
37 to 48	$2,504	$1,857	74%	$1,367	$1,391	102%	$1,570	$1,475	94%
Overall: 1 to 48	**$2,603**	**$2,448**	**94%**	**$1,270**	**$1,205**	**95%**	**$1,544**	**$1,460**	**95%**

Congestive Heart Failure Population Utilization and Expenditures Trends

The SoonerCare HMP through SFY 2013 engaged 1,348 Tier 1 and 2,890 Tier 2 participants with a congestive heart failure diagnosis. Congestive heart failure was the most expensive diagnosis at the time of engagement for 11 percent of Tier 1 and Tier 2 participants with this diagnosis (see exhibit 2-92).

Exhibit 2-92 – Participants with Congestive Heart Failure as Most Expensive Diagnosis

Enrollment Group	Participants with Diagnosis	Most Expensive Diagnosis	Percent Most Expensive
Tier 1	1,348	151	11%
Tier 2	2,890	312	11%
Tiers 1 & 2	**4,238**	**463**	**11%**

Nearly all participants with congestive heart failure also were diagnosed with another Chronic Impact condition, the most common being hypertension, followed by COPD (see exhibit 2-93).

Exhibit 2-93 – Participants with Congestive Heart Failure Co-morbidity with Chronic Impact Conditions

Comorbidity	Participants	%
Congestive Heart Failure	**4,238**	**100.0%**
	22	**0.5%**
+ Hypertension	3,794	89.5%
	22	0.5%
+ COPD	2,750	64.9%
	6	0.1%
+ Diabetes	2,734	64.5%
	11	0.3%
+ Depression	2,731	64.4%
	19	0.4%
+ Hyperlipidemia (High Cholesterol)	2,711	64.0%
	0	0.0%

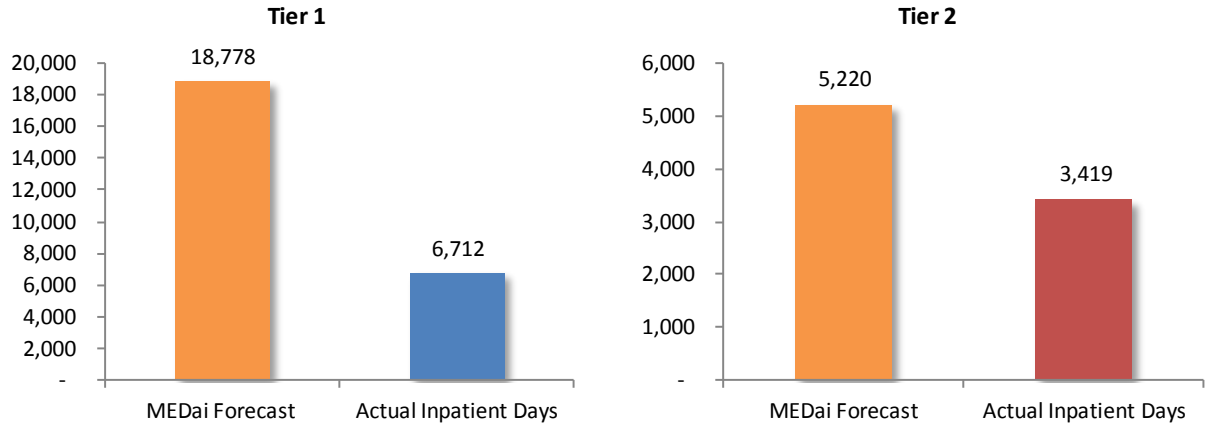
Participants with congestive heart failure, the specified comorbidity, and additional comorbidities

Participants ONLY with congestive heart failure and the specified comorbidity (no other comorbidities)

Utilization

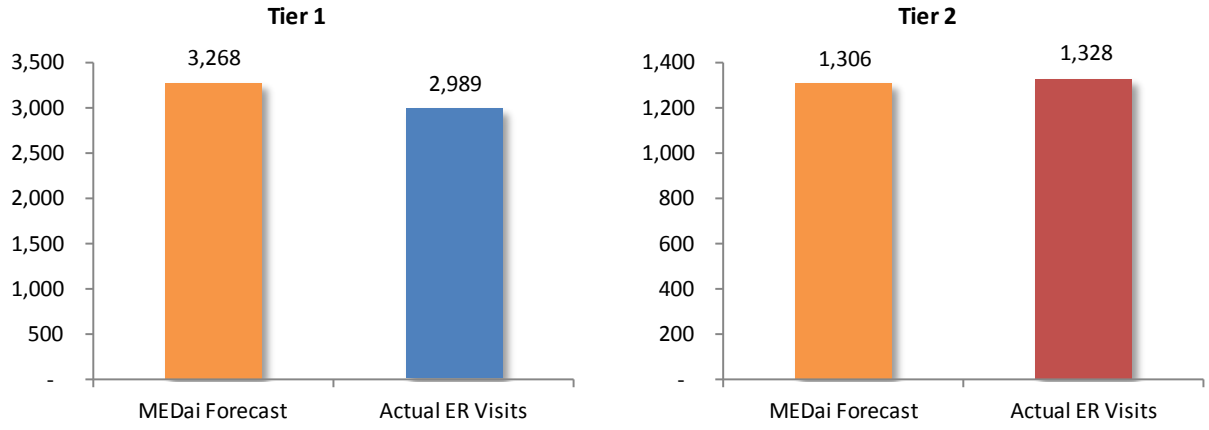
MEDai forecasted that Tier 1 participants would accrue 18,778 inpatient days per 1,000 participants in the first 12 months following engagement. The actual rate was 6,712, or 36 percent of forecast. Tier 2 participants accrued 3,419 inpatient days per 1,000 participants, or 65 percent of forecast (see exhibit 2-94).

Exhibit 2-94 – Participants with Congestive Heart Failure as Most Expensive Diagnosis
Inpatient Utilization - First 12 Months Following Engagement, per 1,000 Participants



For Tier 1 participants, MEDai forecasted an emergency department visit rate of 3,268 per 1,000 participants. The actual rate was 2,989, or 91 percent of forecast. Tier 2 participants were forecasted to visit the emergency department 1,306 times per 1,000 participants, while the actual rate was 1,328, or 102 percent of forecast (see exhibit 2-95).

Exhibit 2-95 – Participants with Congestive Heart Failure as Most Expensive Diagnosis
Emergency Department Utilization - First 12 Months Following Engagement, per 1,000 Participants

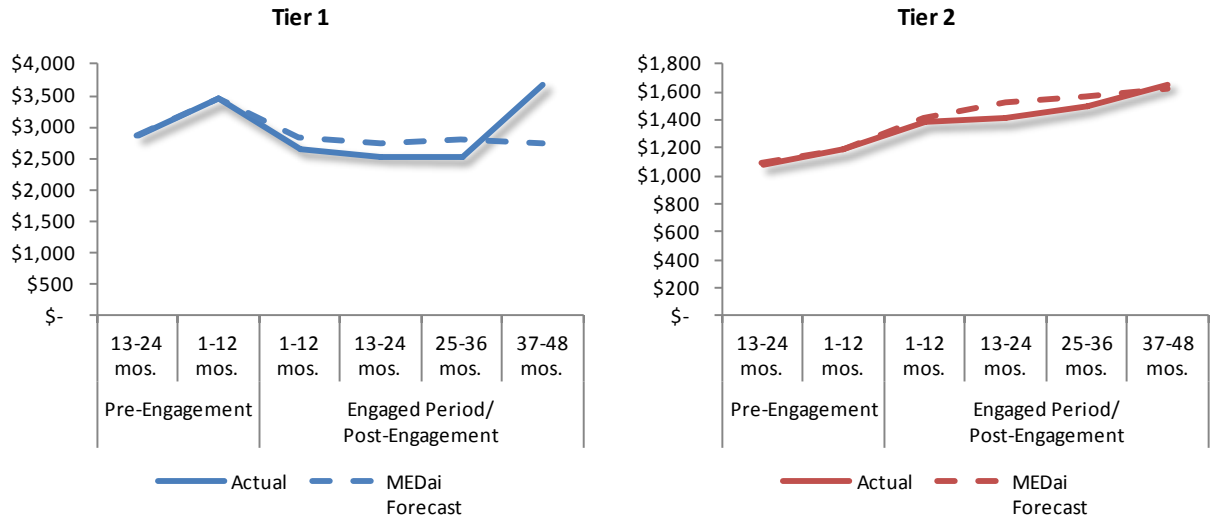


Medical Expenditures – Total and by Category of Service

Total PMPM medical expenditures for Tier 1 participants were nearly even with or below forecast for the first 36 months of member engagement, before increasing to 25 percent above forecast in months 37 to 48.

Total PMPM medical expenditures for Tier 2 participants were nearly even with or below forecast for 48 months following engagement.

Exhibit 2-96 – Participants with Congestive Heart Failure as Most Expensive Diagnosis
Total PMPM Medical Expenditures



Note: The results for months 37 to 48 should be interpreted with caution, given that a relatively small number of participants were engaged for more than 36 months.

Savings for Tier 1 participants were derived primarily from decreases in hospital and physician expenditures. Tier 2 participants experienced a drop in outpatient expenditures, though expenditures increased across all other categories of service (see exhibit 2-97).

Exhibit 2-97 – Participants with Congestive Heart Failure as Most Expensive Diagnosis PMPM Expenditures by Category of Service

Category of Service	Tier 1			Tier 2		
	Pre-Engagement: 1-12 months	First 12 months of Engagement	Percent Change	Pre-Engagement: 1-12 months	First 12 months of Engagement	Percent Change
Inpatient Hospital	$1,875	$1,200	-36.0%	$495	$597	20.7%
Outpatient Hospital	$267	$253	-4.9%	$137	$102	-25.3%
Physician	$515	$397	-22.9%	$205	$215	5.0%
Behavioral Health (Psych.)	$56	$50	-11.4%	$23	$28	19.9%
Pharmacy	$310	$311	0.4%	$203	$241	18.8%
All Other	$423	$446	5.4%	$128	$207	61.2%
Total	**$3,445**	**$2,656**	**-22.9%**	**$1,191**	**$1,391**	**16.7%**

Total Medical Expenditure Impact of Nurse Care Management

Overall, medical expenditure savings attributable to nurse care management across both tiers were $59 PMPM. Average PMPM expenditures for the 48 months following engagement were 97 percent of forecast (see exhibit 2-98).

Exhibit 2-98 – Participants with Congestive Heart Failure as Most Expensive Diagnosis Forecast versus Actual PMPM Medical Expenditures

Engaged/Post-Engagement Period (months)	Tier1			Tier2			Tiers 1 & 2		
	MEDai Forecast	Actual (Dollars)	Actual (% of Forecast)	MEDai Forecast	Actual (Dollars)	Actual (% of Forecast)	MEDai Forecast	Actual (Dollars)	Actual (% of Forecast)
1 to 12	$2,845	$2,656	93%	$1,420	$1,391	98%	$1,879	$1,798	96%
13 to 24	$2,752	$2,555	93%	$1,525	$1,409	92%	$1,895	$1,755	93%
25 to 36	$2,805	$2,528	90%	$1,572	$1,502	96%	$1,931	$1,801	93%
37 to 48	$2,756	$3,688	134%	$1,622	$1,656	102%	$1,935	$2,217	115%
Overall: 1 to 48	**$2,799**	**$2,727**	**97%**	**$1,511**	**$1,457**	**96%**	**$1,902**	**$1,843**	**97%**

Coronary Artery Disease Population Utilization and Expenditures Trends

The SoonerCare HMP through SFY 2013 engaged 1,719 Tier 1 and 4,295 Tier 2 participants with a coronary artery disease diagnosis. Coronary artery disease was the most expensive diagnosis at the time of engagement for approximately 19 percent of Tier 1 and 21 percent of Tier 2 participants with this diagnosis (see exhibit 2-99).

Exhibit 2-99 – Participants with Coronary Artery Disease as Most Expensive Diagnosis

Enrollment Group	Participants with Diagnosis	Most Expensive Diagnosis	Percent Most Expensive
Tier 1	1,719	322	19%
Tier 2	4,295	912	21%
Tiers 1 & 2	**6,014**	**1,234**	**21%**

Nearly all participants with coronary artery disease also were diagnosed with another Chronic Impact condition, the most common being hypertension followed by hyperlipidemia (see exhibit 2-100).

Exhibit 2-100 – Participants with Coronary Artery Disease Co-morbidity with Chronic Impact Conditions

Comorbidity	Participants	%
Coronary Artery Disease	**6,014**	**100.0%**
	18	**0.3%**
+ Hypertension	5,419	90.1%
	27	0.4%
+ Hyperlipidemia (High Cholesterol)	4,064	67.6%
	9	0.1%
+ Depression	3,763	62.6%
	17	0.3%
+ Diabetes	3,696	61.5%
	6	0.1%
+ COPD	3,652	60.7%
	11	0.2%

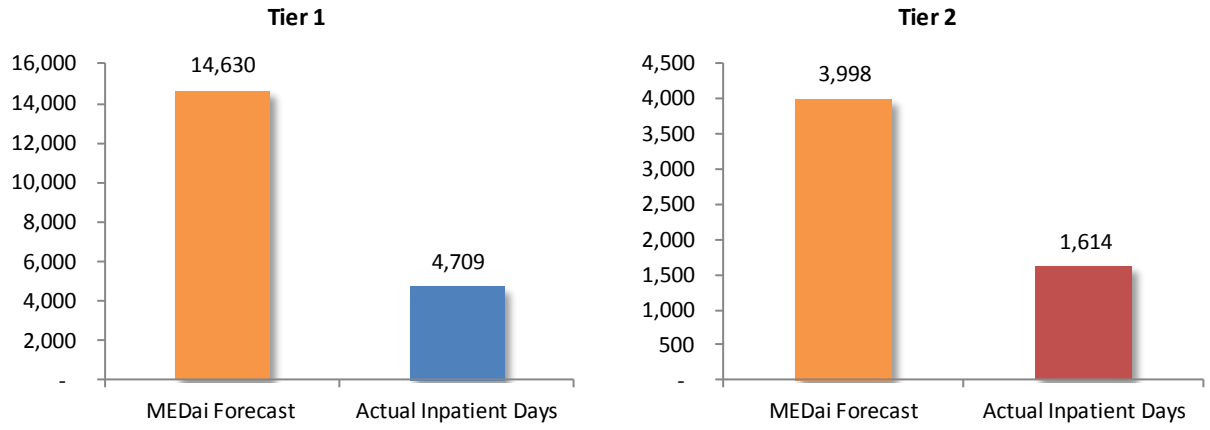
Participants with coronary artery disease, the specified comorbidity, and additional comorbidities

Participants ONLY with coronary artery disease and the specified comorbidity (no other comorbidities)

Utilization

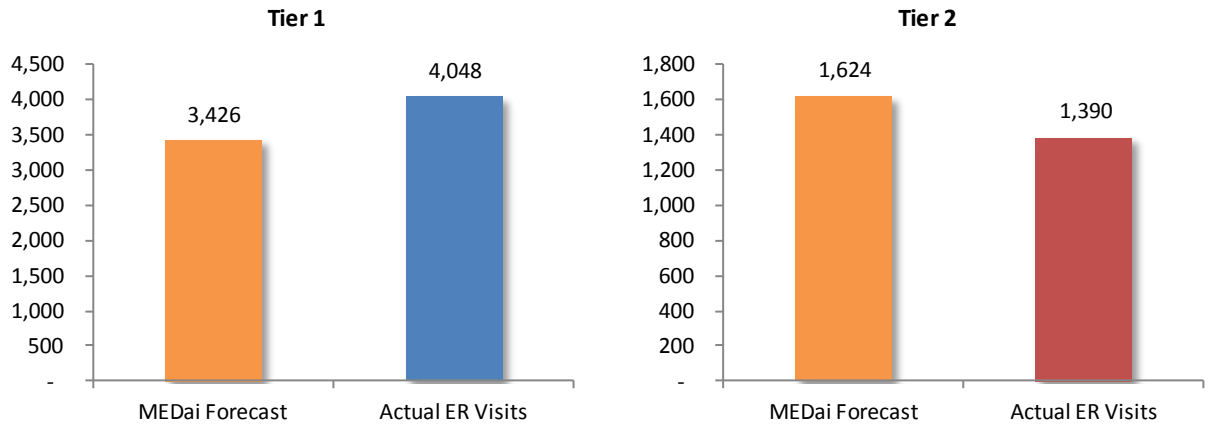
MEDai forecasted that Tier 1 participants would accrue 14,630 inpatient days per 1,000 participants in the first 12 months following engagement. The actual rate was 4,709, or 32 percent of forecast. Tier 2 participants accrued 1,614 inpatient days, or 40 percent of forecast (see exhibit 2-101).

Exhibit 2-101 – Participants with Coronary Artery Disease as Most Expensive Diagnosis
Inpatient Utilization - First 12 Months Following Engagement, per 1,000 Participants



For Tier 1 participants, MEDai forecasted an emergency department visit rate of 3,426 per 1,000 participants. The actual rate was 4,048, or 18 percent above forecast. Tier 2 participants were forecasted to visit the emergency department 1,624 times per 1,000 participants, while the actual rate was 1,390, or 86 percent of forecast (see exhibit 2-102).

Exhibit 2-102 – Participants with Coronary Artery Disease as Most Expensive Diagnosis
Emergency Department Utilization - First 12 Months Following Engagement, per 1,000 Participants

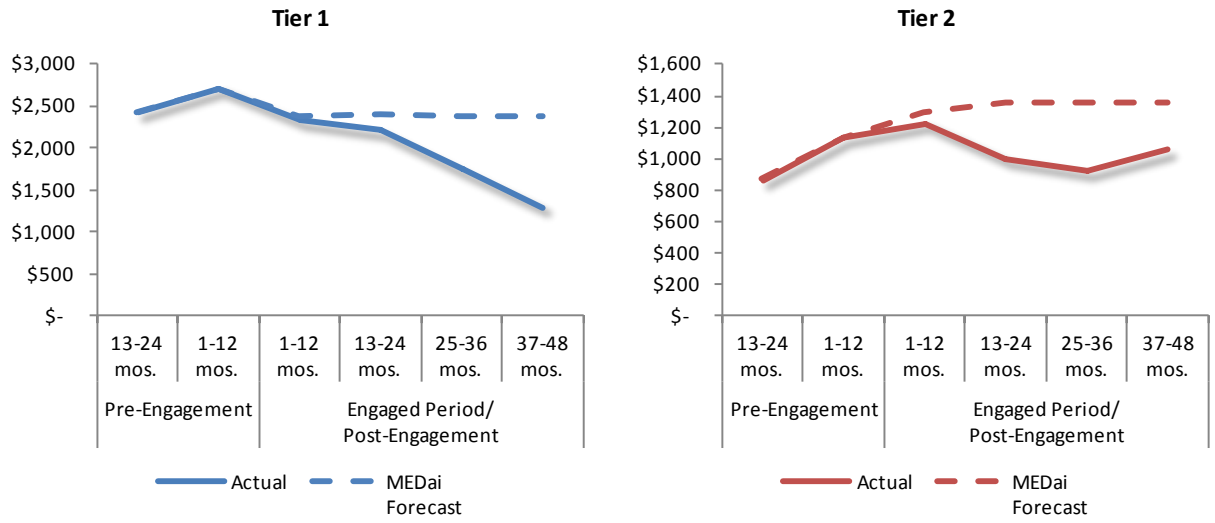


Medical Expenditures – Total and by Category of Service

Total PMPM medical expenditures for Tier 1 participants were below forecast during the 48 months following engagement, with the gap widening over time (see exhibit 2-103).

Total PMPM medical expenditures for Tier 2 participants also were below forecast, although the gap narrowed in months 37 to 48 following engagement.

Exhibit 2-103 – Participants with Coronary Artery Disease as Most Expensive Diagnosis
Total PMPM Medical Expenditures



Savings for Tier 1 participants were driven by decreases in inpatient hospital and physician expenditures, while Tier 2 participants saw modest decreases in physician and outpatient hospital costs that were overset by increased inpatient service costs (see exhibit 2-104).

Exhibit 2-104 – Participants with Coronary Artery Disease as Most Expensive Diagnosis PMPM Expenditures by Category of Service

Category of Service	Tier 1			Tier 2		
	Pre-Engagement: 1-12 months	First 12 months of Engagement	Percent Change	Pre-Engagement: 1-12 months	First 12 months of Engagement	Percent Change
Inpatient Hospital	$1,402	$955	-31.9%	$429	$484	12.7%
Outpatient Hospital	$259	$269	3.7%	$156	$152	-2.9%
Physician	$467	$402	-13.8%	$235	$231	-1.7%
Behavioral Health (Psych.)	$21	$35	64.4%	$15	$17	17.4%
Pharmacy	$302	$366	21.3%	$214	$229	7.1%
All Other	$264	$305	15.5%	$88	$117	33.4%
Total	**$2,715**	**$2,332**	**-14.1%**	**$1,137**	**$1,230**	**8.2%**

Total Medical Expenditure Impact of Nurse Care Management

Overall, medical expenditure savings attributable to nurse care management across both tiers were $284 PMPM. Average PMPM expenditures for the 48 months following engagement were 82 percent of forecast (see exhibit 2-105).

Exhibit 2-105 – Participants with Coronary Artery Disease as Most Expensive Diagnosis Forecast versus Actual PMPM Medical Expenditures

Engaged/Post-Engagement Period (months)	Tier1			Tier2			Tiers 1 & 2		
	MEDai Forecast	Actual (Dollars)	Actual (% of Forecast)	MEDai Forecast	Actual (Dollars)	Actual (% of Forecast)	MEDai Forecast	Actual (Dollars)	Actual (% of Forecast)
1 to 12	$2,392	$2,332	98%	$1,296	$1,230	95%	$1,575	$1,511	96%
13 to 24	$2,411	$2,208	92%	$1,354	$1,006	74%	$1,612	$1,299	81%
25 to 36	$2,388	$1,751	73%	$1,356	$927	68%	$1,613	$1,133	70%
37 to 48	$2,387	$1,312	55%	$1,362	$1,060	78%	$1,616	$1,122	69%
Overall: 1 to 48	**$2,396**	**$2,035**	**85%**	**$1,335**	**$1,077**	**81%**	**$1,600**	**$1,316**	**82%**

Diabetes Mellitus Population Utilization and Expenditures Trends

The SoonerCare HMP through SFY 2013 engaged 2,058 Tier 1 and 6,991 Tier 2 participants with a diabetes mellitus diagnosis. Diabetes mellitus was the most expensive diagnosis at the time of engagement for approximately 32 percent of Tier 1 and 40 percent of Tier 2 participants with this diagnosis (see exhibit 2-106).

Exhibit 2-106 – Participants with Diabetes Mellitus as Most Expensive Diagnosis

Enrollment Group	Participants with Diagnosis	Most Expensive Diagnosis	Percent Most Expensive
Tier 1	2,058	657	32%
Tier 2	6,991	2,824	40%
Tiers 1 & 2	**9,049**	**3,481**	**38%**

Nearly 99 percent of participants with diabetes mellitus also were diagnosed with another Chronic Impact condition, the most common being hypertension and depression (see exhibit 2-107).

Exhibit 2-107 – Participants with Diabetes Mellitus Co-morbidity with Chronic Impact Conditions

Comorbidity	Participants	%
Diabetes	**9,049**	**100.0%**
	99	**1.1%**
+ Hypertension	7,575	83.7%
	125	1.4%
+ Depression	5,717	63.2%
	84	0.9%
+ Hyperlipidemia (High Cholesterol)	5,368	59.3%
	21	0.2%
+ Lower Back Pain	4,915	54.3%
	36	0.4%
+ COPD	4,395	48.6%
	21	0.2%

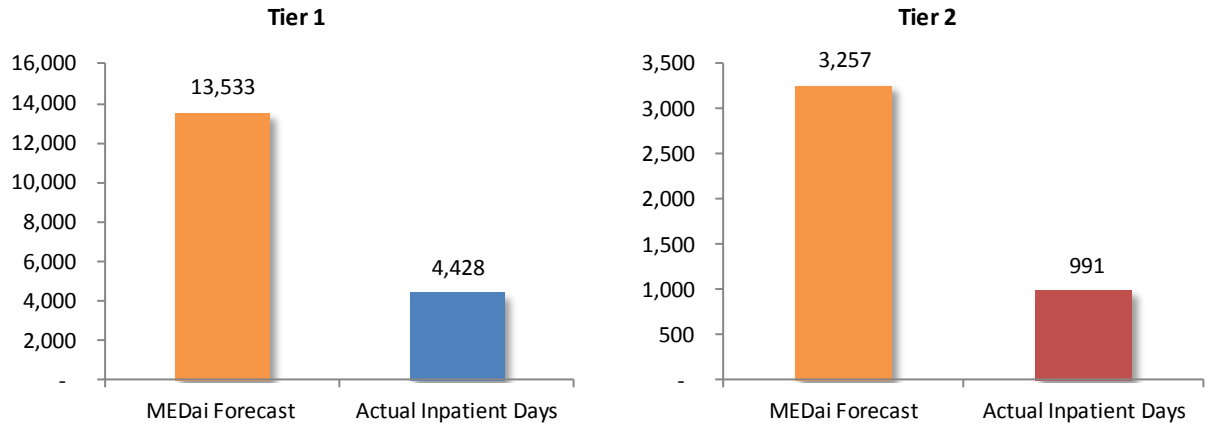
Participants with diabetes, the specified comorbidity, and additional comorbidities

Participants ONLY with diabetes and the specified comorbidity (no other comorbidities)

Utilization

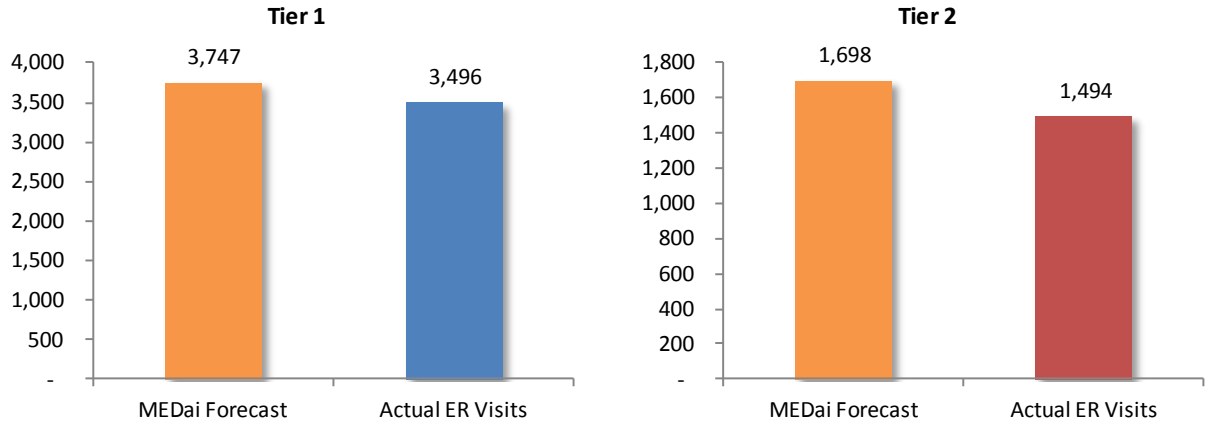
MEDai forecasted that Tier 1 participants would accrue 13,533 inpatient days per 1,000 participants in the first 12 months following engagement. The actual rate was 4,428, or 33 percent of forecast. Tier 2 participants accrued 991 inpatient days per 1,000 participants, or 30 percent of forecast (see exhibit 2-108).

Exhibit 2-108 – Participants with Diabetes Mellitus as Most Expensive Diagnosis
Inpatient Utilization - First 12 Months Following Engagement, per 1,000 Participants



For Tier 1 participants, MEDai forecasted an emergency department visit rate of 3,747 per 1,000 participants. The actual rate was 3,496, or 93 percent of forecast. Tier 2 participants were forecasted to visit the emergency department 1,698 times per 1,000 participants, while the actual rate was 1,494, or 88 percent of forecast (see exhibit 2-109).

Exhibit 2-109 – Participants with Diabetes Mellitus as Most Expensive Diagnosis
Emergency Department Utilization - First 12 Months Following Engagement, per 1,000 Participants

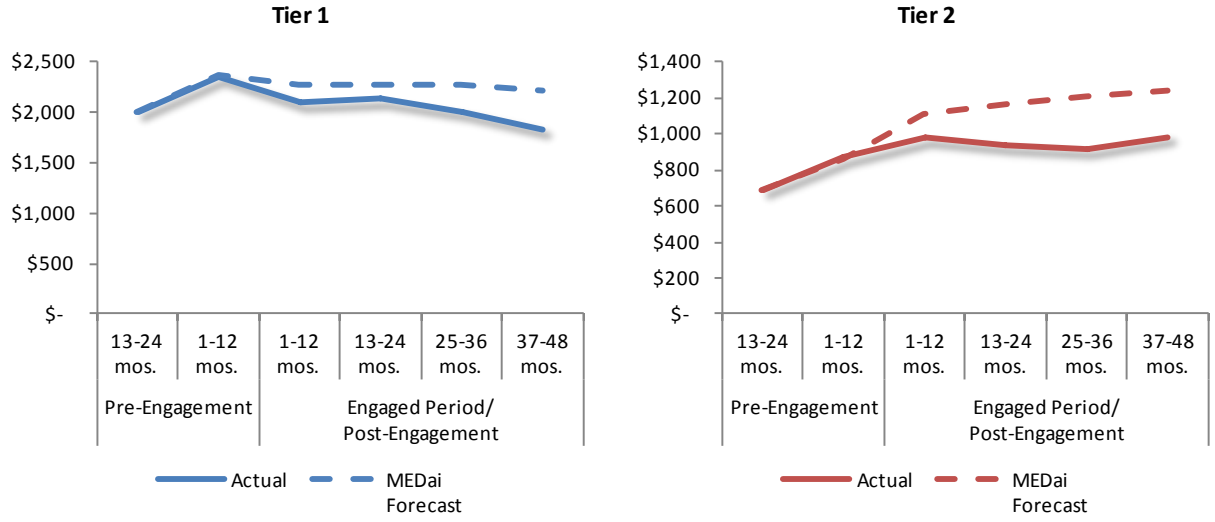


Medical Expenditures – Total and by Category of Service

Total PMPM medical expenditures for Tier 1 participants were nearly even with or below forecast for the 48 months following engagement (see exhibit 2-110).

Total PMPM medical expenditures for Tier 2 participants also were below forecast for the 48 months following engagement, with the gap widening through month 36 before narrowing slightly in months 37 to 48.

Exhibit 2-110 – Participants with Diabetes Mellitus as Most Expensive Diagnosis
Total PMPM Expenditures



Savings for Tier 1 participants were driven by decreases in hospital and physician expenditures, although these reductions were partly offset by increases in other categories of service. Expenditures for Tier 2 participants increased across all categories of service (see exhibit 2-111).

Exhibit 2-111 – Participants with Diabetes Mellitus as Most Expensive Diagnosis
PMPM Expenditures by Category of Service

Category of Service	Tier 1			Tier 2		
	Pre-Engagement: 1-12 months	First 12 months of Engagement	Percent Change	Pre-Engagement: 1-12 months	First 12 months of Engagement	Percent Change
Inpatient Hospital	$1,047	$735	-29.8%	$179	$207	16.1%
Outpatient Hospital	$224	$211	-5.6%	$106	$110	3.9%
Physician	$406	$362	-10.8%	$184	$190	3.7%
Behavioral Health (Psych.)	$41	$44	9.6%	$20	$23	16.4%
Pharmacy	$353	$371	5.0%	$261	$293	12.2%
All Other	$295	$379	28.4%	$118	$152	29.0%
Total	**$2,365**	**$2,103**	**-11.1%**	**$867**	**$976**	**12.6%**

Total Medical Expenditure Impact of Nurse Care Management

Overall, medical expenditure savings attributable to nurse care management across both tiers were $211 PMPM. Average PMPM expenditures for the 48 months following engagement were 84 percent of forecast (see exhibit 2-112).

Exhibit 2-112 – Participants with Diabetes Mellitus as Most Expensive Diagnosis
Forecast versus Actual PMPM Medical Expenditures

Engaged/Post-Engagement Period (months)	Tier1			Tier2			Tiers 1 & 2		
	MEDai Forecast	Actual (Dollars)	Actual (% of Forecast)	MEDai Forecast	Actual (Dollars)	Actual (% of Forecast)	MEDai Forecast	Actual (Dollars)	Actual (% of Forecast)
1 to 12	$2,276	$2,103	92%	$1,110	$976	88%	$1,322	$1,181	89%
13 to 24	$2,270	$2,135	94%	$1,164	$936	80%	$1,355	$1,143	84%
25 to 36	$2,271	$2,015	89%	$1,208	$914	76%	$1,396	$1,108	79%
37 to 48	$2,219	$1,838	83%	$1,239	$986	80%	$1,423	$1,146	81%
Overall: 1 to 48	**$2,265**	**$2,055**	**91%**	**$1,164**	**$953**	**82%**	**$1,361**	**$1,150**	**84%**

Hypertension Population Utilization and Expenditures Trends

The SoonerCare HMP through SFY 2013 engaged 2,937 Tier 1 and 10,446 Tier 2 participants with a hypertension diagnosis. Hypertension was the most expensive diagnosis at the time of engagement for approximately 17 percent of Tier 1 and 23 percent of Tier 2 participants with this diagnosis (see exhibit 2-113).

Exhibit 2-113 – Participants with Hypertension as Most Expensive Diagnosis

Enrollment Group	Participants with Diagnosis	Most Expensive Diagnosis	Percent Most Expensive
Tier 1	2,937	509	17%
Tier 2	10,446	2,408	23%
Tiers 1 & 2	**13,383**	**2,917**	**22%**

Nearly all participants with hypertension also were diagnosed with another Chronic Impact condition, the most common being depression and diabetes (see exhibit 2-114).

Exhibit 2-114 – Participants with Hypertension Co-morbidity with Chronic Impact Conditions

Comorbidity	Participants	%
Hypertension	**13,383**	**100.0%**
	128	**1.0%**
+ Depression	8,340	62.3%
	141	1.1%
+ Diabetes	7,575	56.6%
	125	0.9%
+ Lower Back Pain	7,532	56.3%
	106	0.8%
+ Hyperlipidemia (High Cholesterol)	7,524	56.2%
	49	0.4%
+ COPD	6,640	49.6%
	63	0.5%

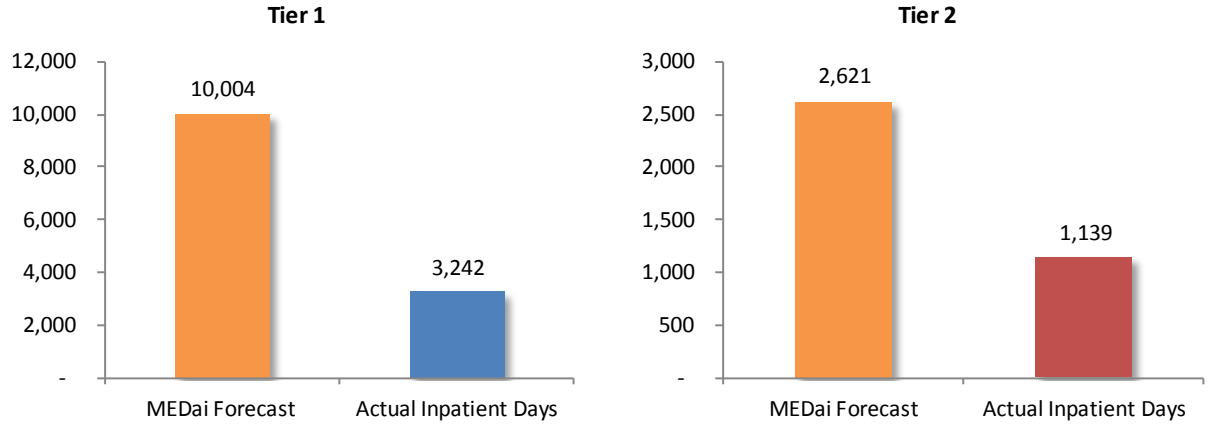
Participants with hypertension, the specified comorbidity, and additional comorbidities

Participants ONLY with hypertension and the specified comorbidity (no other comorbidities)

Utilization

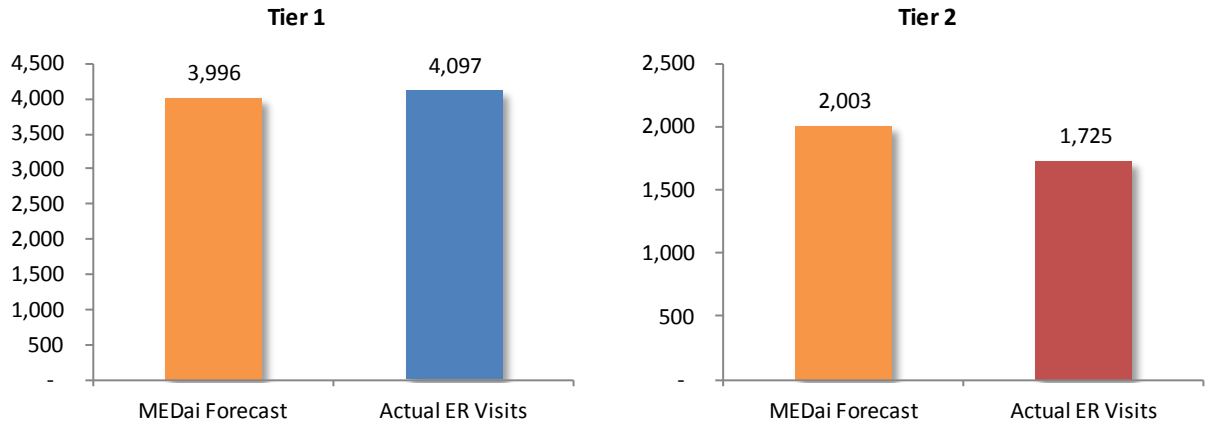
MEDai forecasted that Tier 1 participants would accrue 10,004 inpatient days per 1,000 participants in the first 12 months following engagement. The actual rate was 3,242, or 32 percent of forecast. Tier 2 participants accrued 1,139 inpatient days per 1,000 participants, or 43 percent of forecast (see exhibit 2-115).

Exhibit 2-115 – Participants with Hypertension as Most Expensive Diagnosis
Inpatient Utilization - First 12 Months Following Engagement, per 1,000 Participants



For Tier 1 participants, MEDai forecasted an emergency department visit rate of 3,996 per 1,000 participants. The actual rate was 4,097, two percent above forecast. Tier 2 participants were forecasted to visit the emergency department 2,003 times per 1,000 participants, while the actual rate was 1,725, or 86 percent of forecast (see exhibit 2-116).

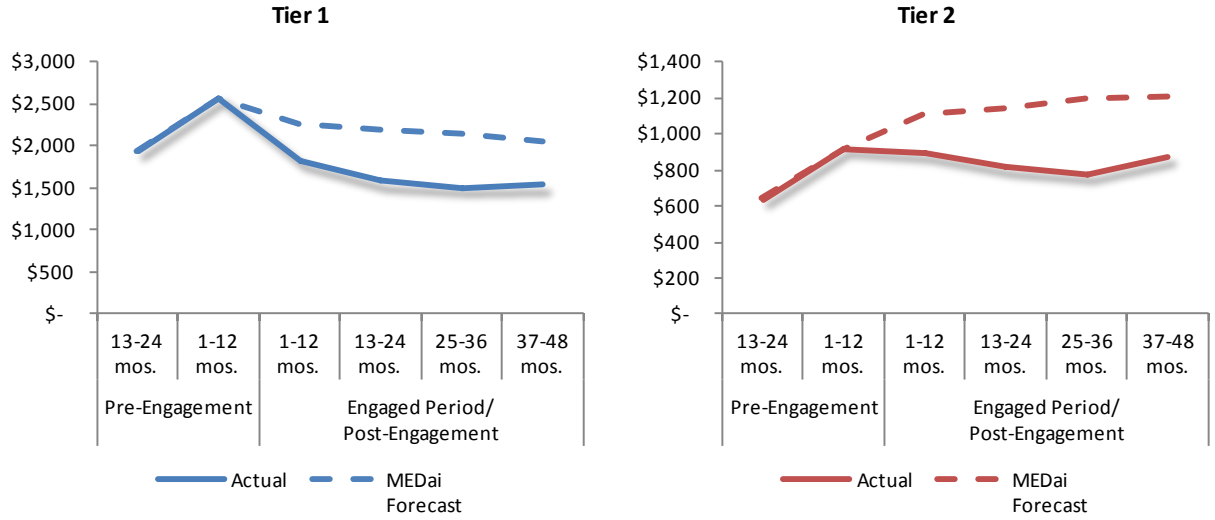
Exhibit 2-116 – Participants with Hypertension as Most Expensive Diagnosis
Emergency Department Utilization - First 12 Months Following Engagement, per 1,000 Participants



Medical Expenditures – Total and by Category of Service

Total PMPM medical expenditures for both Tier 1 and Tier 2 participants were below forecast during the 48 months following engagement, with the gap widening through month 36 before narrowing slightly during months 37 to 48 (see exhibit 2-117).

Exhibit 2-117 – Participants with Hypertension as Most Expensive Diagnosis
Total PMPM Medical Expenditures



Tier 1 participants experienced decreases in expenditures across all major categories of service, excluding behavioral health. Tier 2 participants experienced decreases in hospital and physician services, which offset increases in other categories of service (see exhibit 2-118).

Exhibit 2-118 – Participants with Hypertension as Most Expensive Diagnosis
PMPM Expenditures by Category of Service

Category of Service	Tier 1			Tier 2		
	Pre-Engagement: 1-12 months	First 12 months of Engagement	Percent Change	Pre-Engagement: 1-12 months	First 12 months of Engagement	Percent Change
Inpatient Hospital	$1,139	$640	-43.8%	$277	$235	-15.2%
Outpatient Hospital	$282	$234	-17.1%	$130	$120	-8.3%
Physician	$531	$367	-30.9%	$219	$208	-5.2%
Behavioral Health (Psych.)	$45	$48	7.8%	$21	$26	26.0%
Pharmacy	$315	$281	-10.8%	$174	$191	10.1%
All Other	$261	$254	-2.6%	$96	$108	13.0%
Total	**$2,573**	**$1,823**	**-29.1%**	**$917**	**$888**	**-3.2%**

Total Medical Expenditure Impact of Nurse Care Management

Overall, medical expenditure savings attributable to nurse care management across both tiers were $350 PMPM. Average PMPM expenditures for the 48 months following engagement were 73 percent of forecast (see exhibit 2-119).

Exhibit 2-119 – Participants with Hypertension as Most Expensive Diagnosis
Forecast versus Actual PMPM Medical Expenditures

Engaged/Post-Engagement Period (months)	Tier1			Tier2			Tiers 1 & 2		
	MEDai Forecast	Actual (Dollars)	Actual (% of Forecast)	MEDai Forecast	Actual (Dollars)	Actual (% of Forecast)	MEDai Forecast	Actual (Dollars)	Actual (% of Forecast)
1 to 12	$2,276	$1,823	80%	$1,108	$888	80%	$1,303	$1,045	80%
13 to 24	$2,198	$1,573	72%	$1,149	$809	70%	$1,315	$930	71%
25 to 36	$2,159	$1,522	70%	$1,194	$774	65%	$1,338	$886	66%
37 to 48	$2,065	$1,535	74%	$1,208	$867	72%	$1,338	$969	72%
Overall: 1 to 48	**$2,205**	**$1,657**	**75%**	**$1,151**	**$838**	**73%**	**$1,319**	**$969**	**73%**

Cerebrovascular Accident Population Utilization and Expenditures Trends

The SoonerCare HMP through SFY 2013 engaged 465 Tier 1 and 871 Tier 2 participants with a cerebrovascular accident diagnosis. Cerebrovascular accident was the most expensive diagnosis at the time of engagement for approximately six percent of Tier 1 and nine percent of Tier 2 participants with this diagnosis (see exhibit 2-120).

Exhibit 2-120 – Participants with Cerebrovascular Accident as Most Expensive Diagnosis

Enrollment Group	Participants with Diagnosis	Most Expensive Diagnosis	Percent Most Expensive
Tier 1	465	28	6%
Tier 2	871	79	9%
Tiers 1 & 2	**1,336**	**107**	**8%**

Note: Because of the relatively small number of cases, all findings should be interpreted with caution.

Nearly all participants with a cerebrovascular accident diagnosis also were diagnosed with another Chronic Impact condition, the most common being hypertension and hyperlipidemia (high cholesterol) (see exhibit 2-121).

Exhibit 2-121 – Participants with Cerebrovascular Accident Co-morbidity with Chronic Impact Conditions

Comorbidity	Participants	%
Cerebrovascular Accident (Stroke)	**1,336**	**100.0%**
	6	**0.4%**
+ Hypertension	1,199	89.7%
	10	0.7%
+ Hyperlipidemia (High Cholesterol)	871	65.2%
	2	0.1%
+ Depression	864	64.7%
	5	0.4%
+ Diabetes	776	58.1%
	1	0.1%
+ Coronary Artery Disease	773	57.9%
	0	0.0%

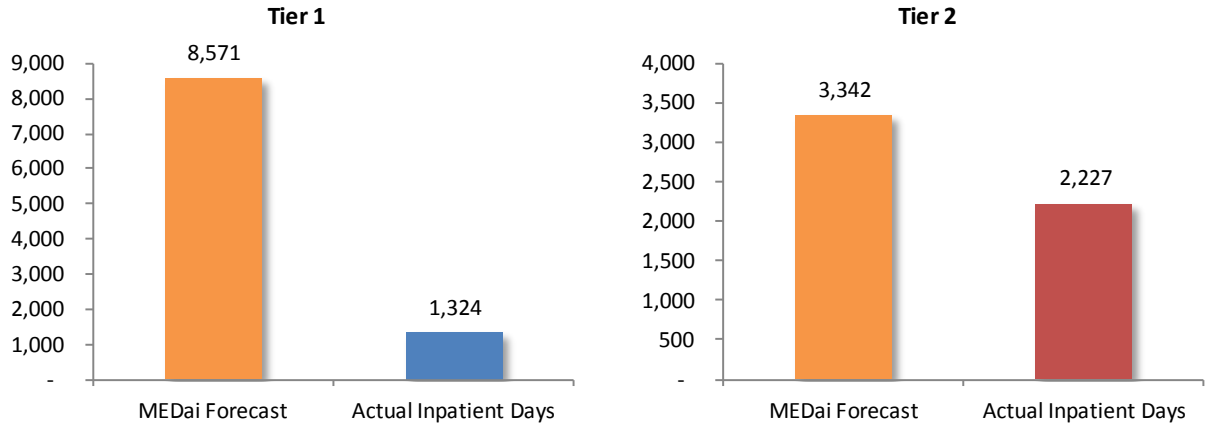
Participants with cerebrovascular accident, the specified comorbidity, and additional comorbidities

Participants ONLY with cerebrovascular accident and the specified comorbidity (no other comorbidities)

Utilization

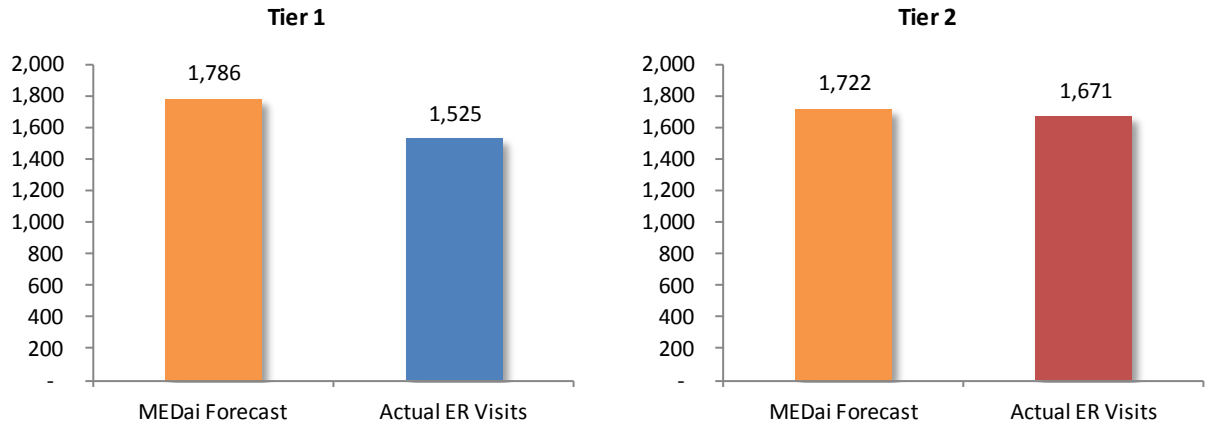
MEDai forecasted that Tier 1 participants would accrue 8,571 inpatient days per 1,000 participants in the first 12 months following engagement. The actual rate was 1,324, or 15 percent of forecast. Tier 2 participants accrued 2,227 inpatient days per 1,000 participants, or 67 percent of forecast (see exhibit 2-122).

Exhibit 2-122 – Participants with Cerebrovascular Accident as Most Expensive Diagnosis
Inpatient Utilization - First 12 Months Following Engagement, per 1,000 Participants



For Tier 1 participants, MEDai forecasted an emergency department visit rate of 1,786 per 1,000 participants. The actual rate was 1,525, or 85 percent of forecast. Tier 2 participants were forecasted to visit the emergency department 1,722 times per 1,000 participants, while the actual rate was 1,671, or 97 percent of forecast (see exhibit 2-123).

Exhibit 2-123 – Participants with Cerebrovascular Accident as Most Expensive Diagnosis
Emergency Department Utilization - First 12 Months Following Engagement, per 1,000 Participants

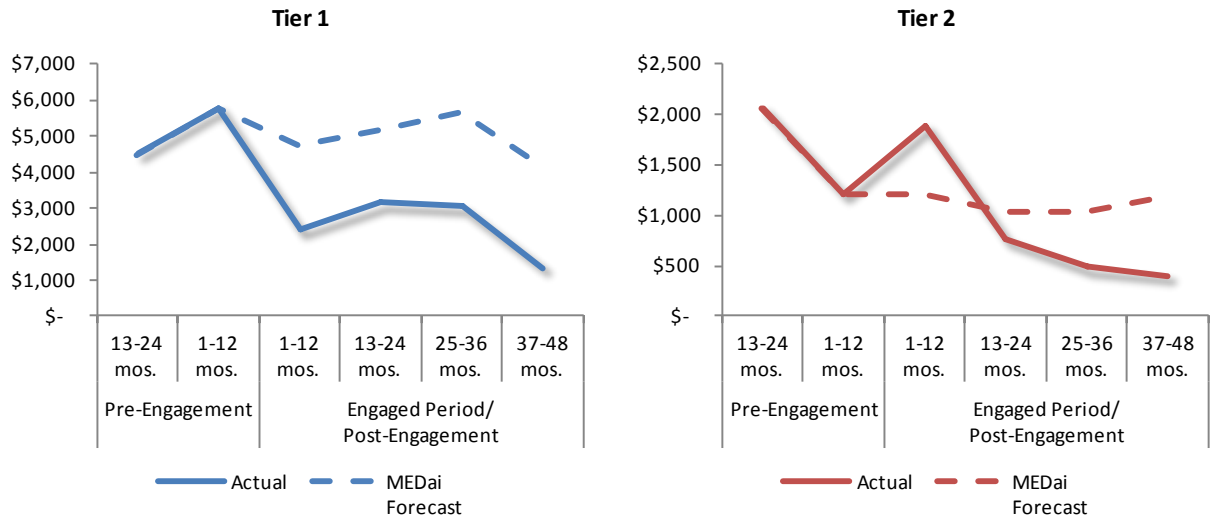


Medical Expenditures – Total and by Category of Service

Total PMPM medical expenditures for Tier 1 participants were consistently well below forecast during the 48 months following engagement (see exhibit 2-124).

Total PMPM medical expenditures for Tier 2 participants were above forecast for the first 12 months following engagement before dropping below forecast for the remaining 36 months.

Exhibit 2-124 – Participants with Cerebrovascular Accident as Most Expensive Diagnosis
Total PMPM Expenditures



Tier 1 participants saw significant decreases in hospital and physician expenditures from pre- to post-engagement, only partly offset by an increase in pharmacy expenditures. Tier 2 participants saw a significant increases across all categories of service, except for a slight decrease in dollar terms in behavioral health (see exhibit 2-125).

Exhibit 2-125 – Participants with Cerebrovascular Accident as Most Expensive Diagnosis PMPM Expenditures by Category of Service

Category of Service	Tier 1			Tier 2		
	Pre-Engagement: 1-12 months	First 12 months of Engagement	Percent Change	Pre-Engagement: 1-12 months	First 12 months of Engagement	Percent Change
Inpatient Hospital	$3,161	$437	-86.2%	$444	$958	115.6%
Outpatient Hospital	$304	$165	-45.7%	$112	$129	15.0%
Physician	$737	$228	-69.1%	$210	$317	51.0%
Behavioral Health (Psych.)	$8	$15	101.8%	$15	$8	-46.3%
Pharmacy	$201	$263	30.6%	$172	$173	0.5%
All Other	$1,372	$1,288	-6.1%	$257	$306	19.1%
Total	**$5,783**	**$2,396**	**-58.6%**	**$1,209**	**$1,890**	**56.2%**

Total Medical Expenditure Impact of Nurse Care Management

Overall, medical expenditure savings attributable to nurse care management across both tiers were $667 PMPM. Average PMPM expenditures for the 48 months following engagement were 69 percent of forecast (see exhibit 2-126).

Exhibit 2-126 – Participants with Cerebrovascular Accident as Most Expensive Diagnosis Forecast versus Actual PMPM Medical Expenditures

Engaged/Post-Engagement Period (months)	Tier1			Tier2			Tiers 1 & 2		
	MEDai Forecast	Actual (Dollars)	Actual (% of Forecast)	MEDai Forecast	Actual (Dollars)	Actual (% of Forecast)	MEDai Forecast	Actual (Dollars)	Actual (% of Forecast)
1 to 12	$4,741	$2,396	51%	$1,219	$1,890	155%	$2,126	$2,020	95%
13 to 24	$5,169	$3,125	60%	$1,032	$764	74%	$2,058	$1,350	66%
25 to 36	$5,681	$3,036	53%	$1,041	$481	46%	$2,387	$1,222	51%
37 to 48	$4,165	$1,356	33%	$1,199	$408	34%	$2,082	$690	33%
Overall: 1 to 48	**$4,977**	**$2,571**	**52%**	**$1,128**	**$1,094**	**97%**	**$2,156**	**$1,489**	**69%**

Depression Population Utilization and Expenditures Trends

The SoonerCare HMP through SFY 2013 engaged 2,534 Tier 1 and 9,093 Tier 2 participants with a depression diagnosis. Depression was the most expensive diagnosis at the time of engagement for approximately 27 percent of Tier 1 and 33 percent of Tier 2 participants with this diagnosis (see exhibit 2-127).

Exhibit 2-127 – Participants with Depression as Most Expensive Diagnosis

Enrollment Group	Participants with Diagnosis	Most Expensive Diagnosis	Percent Most Expensive
Tier 1	2,534	680	27%
Tier 2	9,093	3,020	33%
Tiers 1 & 2	**11,627**	**3,700**	**32%**

Nearly all participants with depression also were diagnosed with another Chronic Impact condition, the most common being hypertension and lower back pain (see exhibit 2-128).

Exhibit 2-128 – Participants with Depression Co-morbidity with Chronic Impact Conditions

Comorbidity	Participants	%
Depression	**11,627**	**100.0%**
	247	**2.1%**
+ Hypertension	8,375	72.0%
	141	1.2%
+ Lower Back Pain	6,825	58.7%
	196	1.7%
+ Diabetes	5,738	49.4%
	85	0.7%
+ Hyperlipidemia (High Cholesterol)	5,316	45.7%
	34	0.3%
+ COPD	5,244	45.1%
	46	0.4%

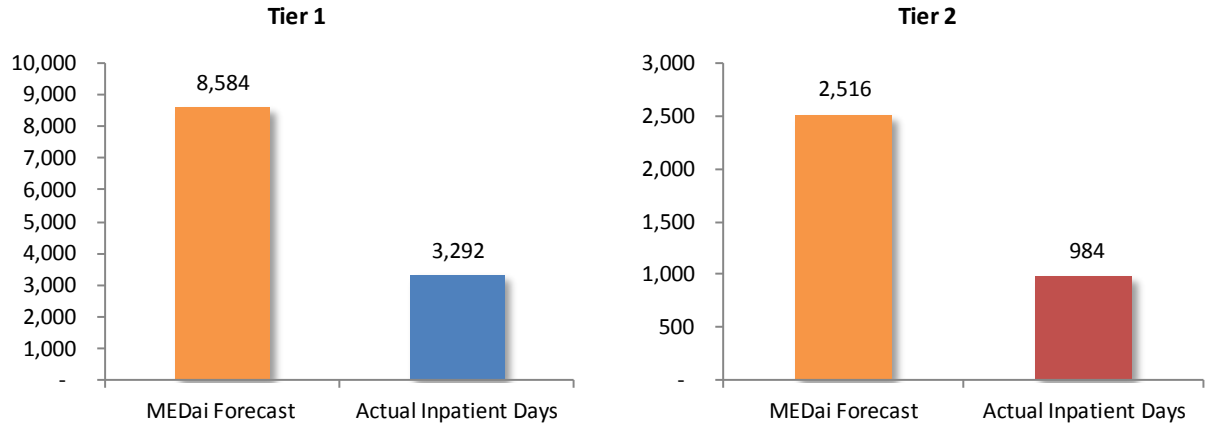
Participants with depression, the specified comorbidity, and additional comorbidities

Participants ONLY with depression and the specified comorbidity (no other comorbidities)

Utilization

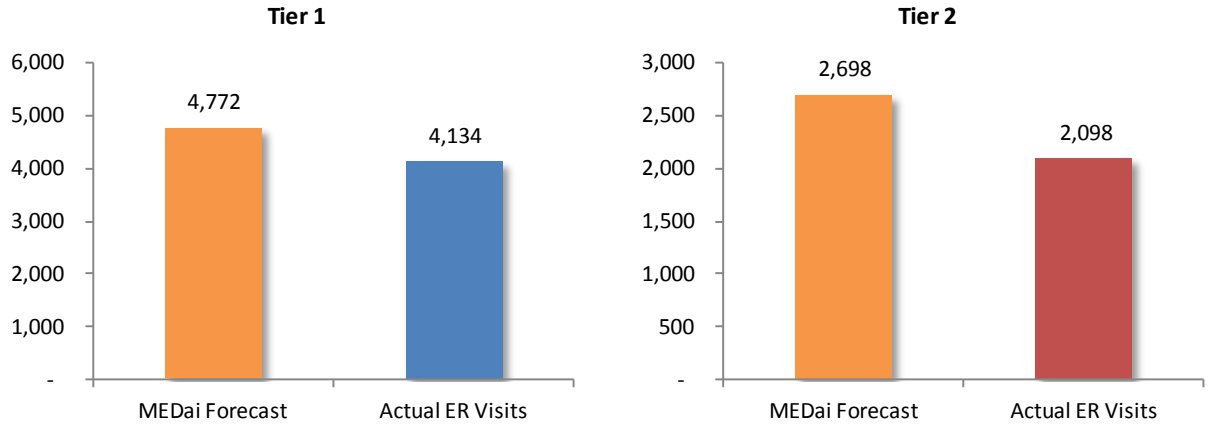
MEDai forecasted that Tier 1 participants would accrue 8,584 inpatient days per 1,000 participants in the first 12 months following engagement. The actual rate was 3,292, or 38 percent of forecast. Tier 2 participants accrued 984 inpatient days, or 39 percent of forecast (see exhibit 2-129).

Exhibit 2-129 – Participants with Depression as Most Expensive Diagnosis
Inpatient Utilization - First 12 Months Following Engagement, per 1,000 Participants



For Tier 1 participants, MEDai forecasted an emergency department visit rate of 4,772 per 1,000 participants. The actual rate was 4,134, or 87 percent of forecast. Tier 2 participants were forecasted to visit the emergency department 2,698 times per 1,000 participants, while the actual rate was 2,098 or 78 percent of forecast (see exhibit 2-130).

Exhibit 2-130 – Participants with Depression as Most Expensive Diagnosis
Emergency Department Utilization - First 12 Months Following Engagement, per 1,000 Participants

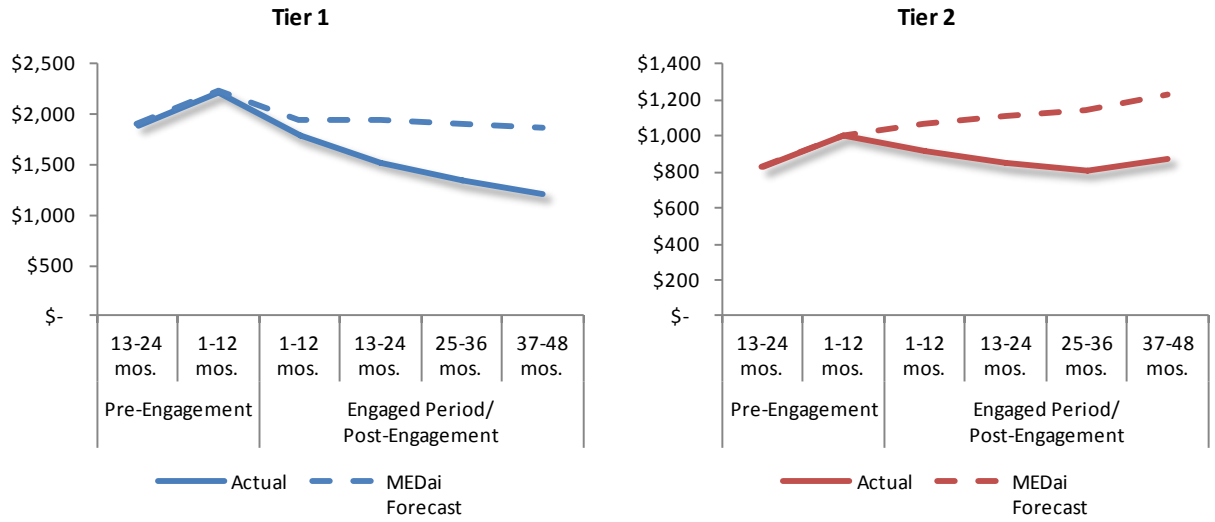


Medical Expenditures – Total and by Category of Service

Total PMPM medical expenditures for Tier 1 participants were below forecast for the 48 months following engagement, with the gap widening significantly after the first twelve months (see exhibit 2-131).

Total PMPM medical expenditures for Tier 2 participants also were below forecast for the 48 months following engagement.

Exhibit 2-131 – Participants with Depression as Most Expensive Diagnosis
Total PMPM Expenditures



From pre- to post-engagement, expenditures declined across nearly all major categories of service for both Tier 1 and Tier 2 participants, the only exception being pharmacy costs for Tier 2 participants, which increased slightly (see exhibit 2-132).

Exhibit 2-132 – Participants with Depression as Most Expensive Diagnosis
PMPM Expenditures by Category of Service

Category of Service	Tier 1			Tier 2		
	Pre-Engagement: 1-12 months	First 12 months of Engagement	Percent Change	Pre-Engagement: 1-12 months	First 12 months of Engagement	Percent Change
Inpatient Hospital	$739	$472	-36.2%	$173	$139	-20.1%
Outpatient Hospital	$226	$202	-10.7%	$129	$109	-15.6%
Physician	$410	$333	-18.8%	$210	$180	-14.4%
Behavioral Health (Psych.)	$334	$278	-16.9%	$177	$165	-6.8%
Pharmacy	$318	$303	-4.9%	$212	$221	4.6%
All Other	$207	$206	-0.1%	$106	$104	-2.1%
Total	**$2,233**	**$1,793**	**-19.7%**	**$1,007**	**$917**	**-8.9%**

Total Medical Expenditure Impact of Nurse Care Management

Overall, medical expenditure savings attributable to nurse care management across both tiers were $273 PMPM. Average PMPM expenditures for the 48 months following engagement were 78 percent of forecast (see exhibit 2-133).

Exhibit 2-133 – Participants with Depression as Most Expensive Diagnosis
Forecast versus Actual PMPM Medical Expenditures

Engaged/Post-Engagement Period (months)	Tier1			Tier2			Tiers 1 & 2		
	MEDai Forecast	Actual (Dollars)	Actual (% of Forecast)	MEDai Forecast	Actual (Dollars)	Actual (% of Forecast)	MEDai Forecast	Actual (Dollars)	Actual (% of Forecast)
1 to 12	$1,938	$1,793	93%	$1,069	$917	86%	$1,225	$1,073	88%
13 to 24	$1,952	$1,535	79%	$1,113	$845	76%	$1,257	$963	77%
25 to 36	$1,904	$1,342	71%	$1,150	$808	70%	$1,278	$899	70%
37 to 48	$1,866	$1,216	65%	$1,227	$876	71%	$1,338	$935	70%
Overall: 1 to 48	**$1,926**	**$1,552**	**81%**	**$1,119**	**$868**	**78%**	**$1,260**	**$987**	**78%**

HIV Population Utilization and Expenditures Trends

The SoonerCare HMP through SFY 2013 engaged 25 Tier 1 and 79 Tier 2 participants with an HIV diagnosis. HIV was the most expensive diagnosis at the time of engagement for approximately 12 percent of Tier 1 and 19 percent of Tier 2 participants with this diagnosis (see exhibit 2-134).

Exhibit 2-134 – Participants with HIV as Most Expensive Diagnosis

Enrollment Group	Participants with Diagnosis	Most Expensive Diagnosis	Percent Most Expensive
Tier 1	25	3	12%
Tier 2	79	15	19%
Tiers 1 & 2	**104**	**18**	**17%**

Over 98 percent of participants with HIV also were diagnosed with another Chronic Impact condition, the most common being hypertension and depression (see exhibit 2-135).

Exhibit 2-135 – Participants with HIV
Co-morbidity with Chronic Impact Conditions

Comorbidity	Participants	%
HIV	**104**	**100.0%**
	2	**1.9%**
+ Hypertension	86	82.7%
	1	1.0%
+ Depression	81	77.9%
	1	1.0%
+ Diabetes	73	70.2%
	0	0.0%
+ COPD	61	58.7%
	0	0.0%
+ Lower Back Pain	60	57.7%
	1	1.0%

Participants with HIV, the specified comorbidity, and additional comorbidities

Participants ONLY with HIV and the specified comorbidity (no other comorbidities)

The small number of participants having HIV as their most expensive diagnosis precluded further analysis of the group's utilization and expenditure trends. However, these individuals were included in the overall cost effectiveness analysis presented later in the report.

Hyperlipidemia Population Utilization and Expenditures Trends

The SoonerCare HMP through SFY 2013 engaged 1,906 Tier 1 and 6,559 Tier 2 participants with a hyperlipidemia diagnosis. Hyperlipidemia was the most expensive diagnosis at the time of engagement for approximately three percent of Tier 1 and five percent of Tier 2 participants with this diagnosis (see exhibit 2-136).

Exhibit 2-136 – Participants with Hyperlipidemia as Most Expensive Diagnosis

Enrollment Group	Participants with Diagnosis	Most Expensive Diagnosis	Percent Most Expensive
Tier 1	1,906	66	3%
Tier 2	6,559	338	5%
Tiers 1 & 2	**8,465**	**404**	**5%**

Nearly all participants with hyperlipidemia also were diagnosed with another Chronic Impact condition, the most common being hypertension and diabetes (see exhibit 2-137).

Exhibit 2-137 – Participants with Hyperlipidemia Co-morbidity with Chronic Impact Conditions

Comorbidity	Participants	%
Hyperlipidemia	**8,465**	**100.0%**
	29	**0.3%**
+ Hypertension	7,524	88.9%
	49	0.6%
+ Diabetes	5,368	63.4%
	21	0.2%
+ Depression	5,296	62.6%
	34	0.4%
+ Lower Back Pain	4,915	58.1%
	29	0.3%
+ COPD	4,504	53.2%
	13	0.2%

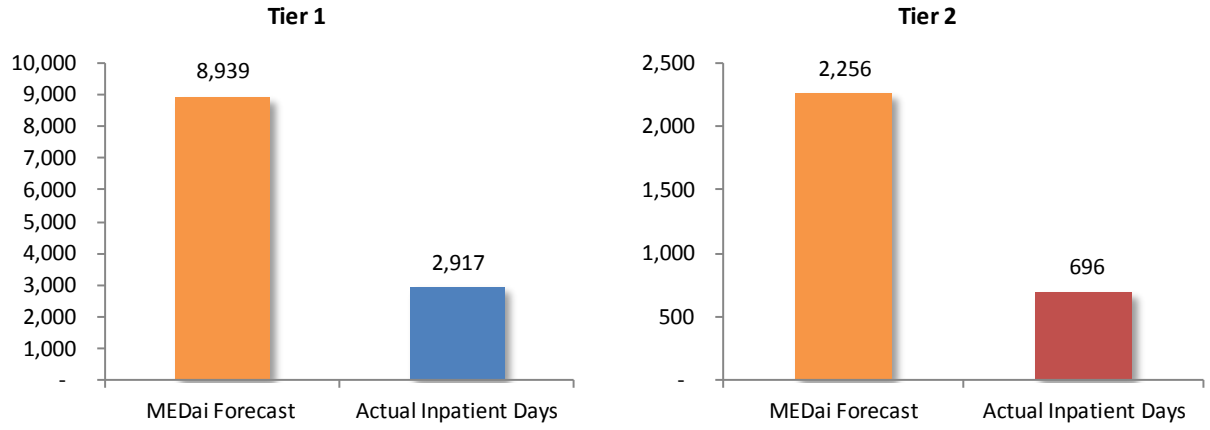
Participants with hyperlipidemia, the specified comorbidity, and additional comorbidities

Participants ONLY with hyperlipidemia and the specified comorbidity (no other comorbidities)

Utilization

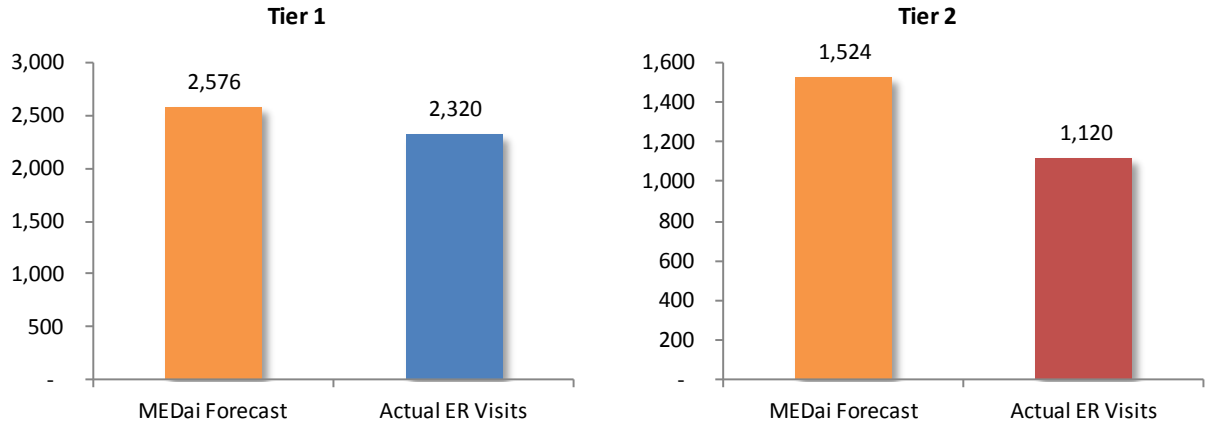
MEDai forecasted that Tier 1 participants would accrue 8,939 inpatient days per 1,000 participants in the first 12 months following engagement. The actual rate was 2,917, or 33 percent of forecast. Tier 2 participants accrued 696 inpatient days per 1,000 participants, or 31 percent of forecast (see exhibit 2-138).

Exhibit 2-138 – Participants with Hyperlipidemia as Most Expensive Diagnosis
Inpatient Utilization - First 12 Months Following Engagement, per 1,000 Participants



For Tier 1 participants, MEDai forecasted an emergency department visit rate of 2,576 per 1,000 participants. The actual rate was 2,320, or 90 percent of forecast. Tier 2 participants were forecasted to visit the emergency department 1,524 times per 1,000 participants, while the actual rate was 1,120, or 73 percent of forecast (see exhibit 2-139).

Exhibit 2-139 – Participants with Hyperlipidemia as Most Expensive Diagnosis
Emergency Department Utilization - First 12 Months Following Engagement, per 1,000 Participants

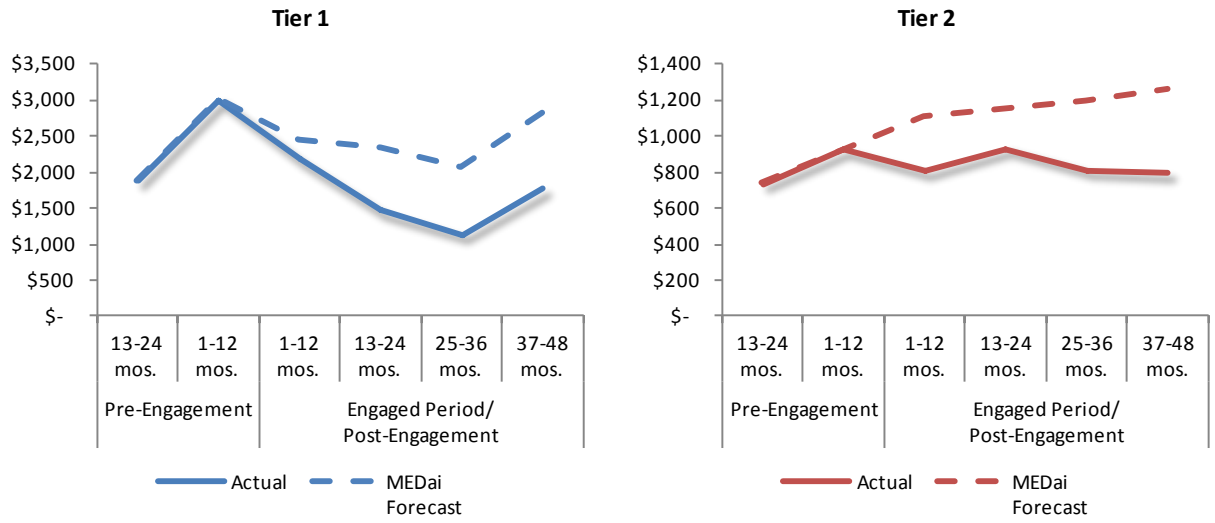


Medical Expenditures – Total and by Category of Service

Total PMPM medical expenditures for Tier 1 participants were consistently lower than the forecasted amount during the 48 months following engagement (see exhibit 2-140).

Total PMPM medical expenditures for Tier 2 participants also were below forecast for the entire 48 months, with the gap widening in months 25 to 48.

Exhibit 2-140 – Participants with Hyperlipidemia as Most Expensive Diagnosis
Total PMPM Expenditures



Both Tier 1 and Tier 2 participants saw significant decreases in expenditures in hospital and physician categories of service from pre- to post-engagement (see exhibit 2-141). Savings for Tier 1 participants were partially offset by increases in pharmacy costs and "all other" categories of service. Savings for Tier 2 participants were partially offset by increased expenditures for behavioral health and "all other" services.

Exhibit 2-141 – Participants with Hyperlipidemia as Most Expensive Diagnosis
PMPM Expenditures by Category of Service

Category of Service	Tier 1			Tier 2		
	Pre-Engagement: 1-12 months	First 12 months of Engagement	Percent Change	Pre-Engagement: 1-12 months	First 12 months of Engagement	Percent Change
Inpatient Hospital	$1,685	$933	-44.6%	$281	$194	-31.2%
Outpatient Hospital	$307	$192	-37.5%	$135	$120	-11.0%
Physician	$513	$384	-25.1%	$199	$166	-16.7%
Behavioral Health (Psych.)	$36	$35	-2.8%	$25	$31	25.3%
Pharmacy	$306	$389	27.0%	$203	$202	-0.6%
All Other	$170	$246	44.6%	$86	$95	10.6%
Total	**$3,017**	**$2,178**	**-27.8%**	**$929**	**$807**	**-13.1%**

Total Medical Expenditure Impact of Nurse Care Management

Overall, medical expenditure savings attributable to nurse care management across both tiers were $358 PMPM. Average PMPM expenditures for the 48 months following engagement were 73 percent of forecast (see exhibit 2-142).

Exhibit 2-142 – Participants with Hyperlipidemia as Most Expensive Diagnosis
Forecast versus Actual PMPM Medical Expenditures

Engaged/Post-Engagement Period (months)	Tier1			Tier2			Tiers 1 & 2		
	MEDai Forecast	Actual (Dollars)	Actual (% of Forecast)	MEDai Forecast	Actual (Dollars)	Actual (% of Forecast)	MEDai Forecast	Actual (Dollars)	Actual (% of Forecast)
1 to 12	$2,454	$2,178	89%	$1,113	$807	73%	$1,325	$1,023	77%
13 to 24	$2,339	$1,472	63%	$1,152	$935	81%	$1,304	$1,004	77%
25 to 36	$2,071	$1,150	56%	$1,202	$814	68%	$1,291	$848	66%
37 to 48	$2,827	$1,779	63%	$1,265	$795	63%	$1,371	$862	63%
Overall: 1 to 48	**$2,380**	**$1,765**	**74%**	**$1,164**	**$844**	**72%**	**$1,318**	**$960**	**73%**

Lower Back Pain Population Utilization and Expenditures Trends

The SoonerCare HMP through SFY 2013 engaged 1,990 Tier 1 and 7,765 Tier 2 participants with lower back pain. Lower back pain was the most expensive diagnosis at the time of engagement for approximately five percent of Tier 1 and 14 percent of Tier 2 participants with this diagnosis (see exhibit 2-143).

Exhibit 2-143 – Participants with Lower Back Pain as Most Expensive Diagnosis

Enrollment Group	Participants with Diagnosis	Most Expensive Diagnosis	Percent Most Expensive
Tier 1	1,990	98	5%
Tier 2	7,765	1,082	14%
Tiers 1 & 2	**9,755**	**1,180**	**12%**

Nearly all participants with lower back pain also were diagnosed with another Chronic Impact condition, the most common being hypertension and depression (see exhibit 2-144).

Exhibit 2-144 – Participants with Lower Back Pain Co-morbidity with Chronic Impact Conditions

Comorbidity	Participants	%
Lower Back Pain	**9,755**	**100.0%**
	131	**1.3%**
+ Hypertension	7,532	77.2%
	106	1.1%
+ Depression	6,798	69.7%
	196	2.0%
+ Diabetes	4,915	50.4%
	36	0.4%
+ Hyperlipidemia (High Cholesterol)	4,915	50.4%
	29	0.3%
+ COPD	4,821	49.4%
	44	0.5%

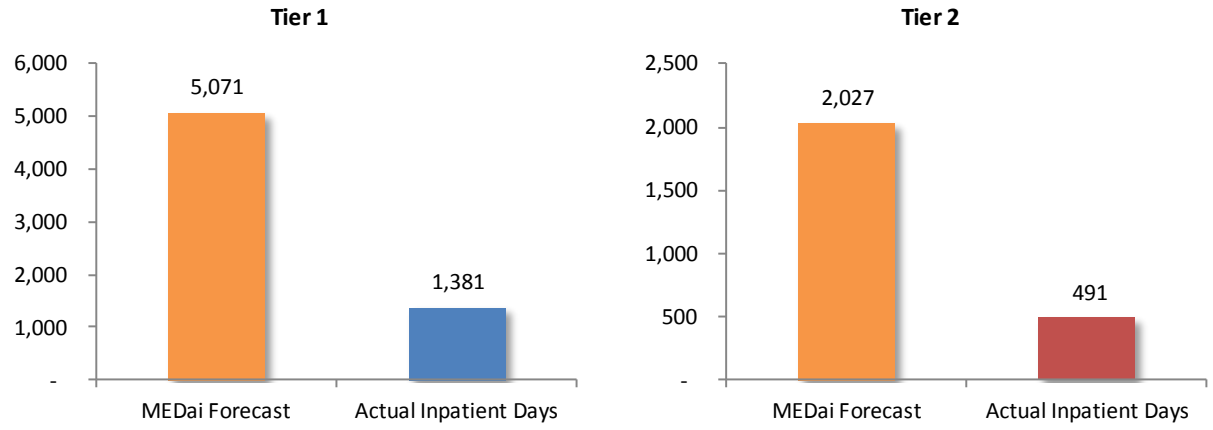
Participants with lower back pain, the specified comorbidity, and additional comorbidities

Participants ONLY with lower back pain and the specified comorbidity (no other comorbidities)

Utilization

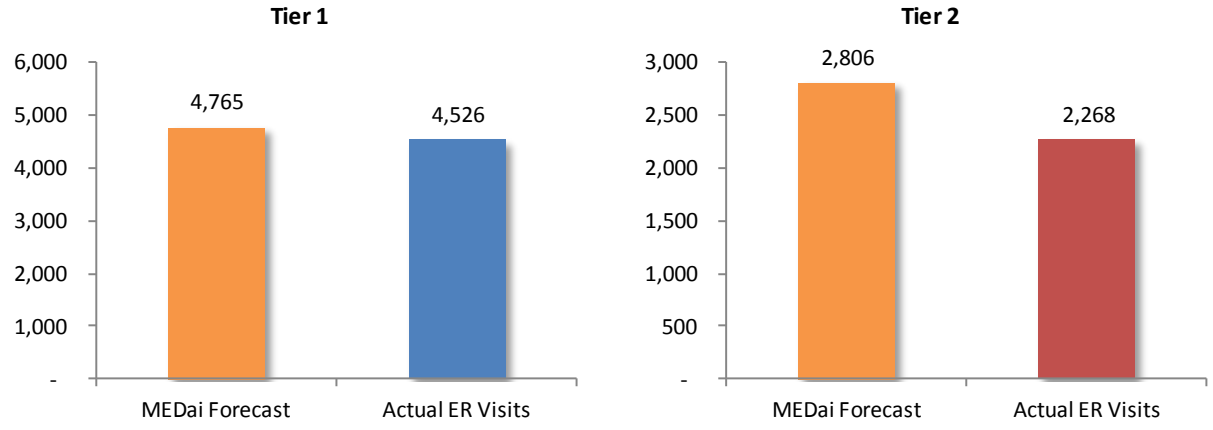
MEDai forecasted that Tier 1 participants would accrue 5,071 inpatient days per 1,000 participants in the first 12 months following engagement. The actual rate was 1,381, or 27 percent of forecast. Tier 2 participants accrued 491 inpatient days per 1,000 participants, or 24 percent of forecast (see exhibit 2-145).

Exhibit 2-145 – Participants with Lower Back Pain as Most Expensive Diagnosis
Inpatient Utilization - First 12 Months Following Engagement, per 1,000 Participants



For Tier 1 participants, MEDai forecasted an emergency department visit rate of 4,765 per 1,000 participants. The actual rate was 4,526, or 95 percent of forecast. Tier 2 participants were forecasted to visit the emergency department 2,806 times per 1,000 participants, while the actual rate was 2,268, or 81 percent of forecast (see exhibit 2-146).

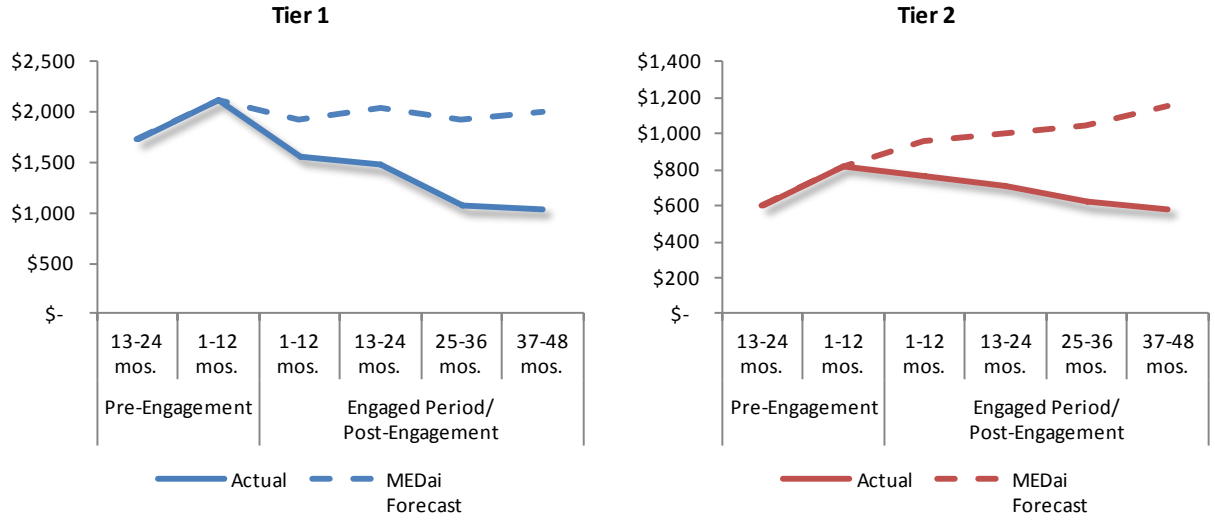
Exhibit 2-146 – Participants with Lower Back Pain as Most Expensive Diagnosis
Emergency Department Utilization - First 12 Months Following Engagement, per 1,000 Participants



Medical Expenditures – Total and by Category of Service

Total PMPM medical expenditures for both Tier 1 and Tier 2 participants were below forecast for the 48 months following engagement, with the gap widening over time (see exhibit 2-147).

Exhibit 2-147 – Participants with Lower Back Pain as Most Expensive Diagnosis
Total PMPM Expenditures



Tier 1 participants saw modest to significant decreases in expenditures from pre- to post-engagement for all categories of service except pharmacy. Tier 2 hospital and physician expenditures declined while other categories of service registered increases (see exhibit 2-148).

Exhibit 2-148 – Participants with Lower Back Pain as Most Expensive Diagnosis
PMPM Expenditures by Category of Service

Category of Service	Tier 1			Tier 2		
	Pre-Engagement: 1-12 months	First 12 months of Engagement	Percent Change	Pre-Engagement: 1-12 months	First 12 months of Engagement	Percent Change
Inpatient Hospital	$735	$251	-65.9%	$166	$106	-36.4%
Outpatient Hospital	$256	$249	-2.8%	$143	$126	-11.5%
Physician	$454	$322	-29.0%	$218	$207	-5.1%
Behavioral Health (Psych.)	$59	$47	-20.1%	$23	$27	21.6%
Pharmacy	$398	$474	18.9%	$174	$194	11.2%
All Other	$219	$213	-2.7%	$95	$104	9.2%
Total	**$2,122**	**$1,556**	**-26.7%**	**$819**	**$764**	**-6.7%**

Total Medical Expenditure Impact of Nurse Care Management

Overall, medical expenditure savings attributable to nurse care management across both tiers were $336 PMPM. Average PMPM expenditures for the 48 months following engagement were 69 percent of forecast (see exhibit 2-149).

2-149 – Participants with Lower Back Pain as Most Expensive Diagnosis
Forecast versus Actual PMPM Medical Expenditures

Engaged/Post-Engagement Period (months)	Tier1			Tier2			Tiers 1 & 2		
	MEDai Forecast	Actual (Dollars)	Actual (% of Forecast)	MEDai Forecast	Actual (Dollars)	Actual (% of Forecast)	MEDai Forecast	Actual (Dollars)	Actual (% of Forecast)
1 to 12	$1,937	$1,556	80%	$963	$764	79%	$1,040	$827	80%
13 to 24	$2,037	$1,467	72%	$1,007	$710	70%	$1,080	$764	71%
25 to 36	$1,928	$1,070	56%	$1,052	$614	58%	$1,120	$649	58%
37 to 48	$2,014	$1,047	52%	$1,155	$582	50%	$1,228	$622	51%
Overall: 1 to 48	**$1,971**	**$1,377**	**70%**	**$1,014**	**$699**	**69%**	**$1,088**	**$752**	**69%**

Migraine Headache Population Utilization and Expenditures Trends

The SoonerCare HMP through SFY 2013 engaged 749 Tier 1 and 2,764 Tier 2 participants with migraine headaches. Migraine headache was the most expensive diagnosis at the time of engagement for approximately seven percent of Tier 1 and 14 percent of Tier 2 participants with this diagnosis (see exhibit 2-150).

Exhibit 2-150 – Participants with Migraine Headache as Most Expensive Diagnosis

Enrollment Group	Participants with Diagnosis	Most Expensive Diagnosis	Percent Most Expensive
Tier 1	749	56	7%
Tier 2	2,764	396	14%
Tiers 1 & 2	**3,513**	**452**	**13%**

Nearly 99 percent of participants with migraine headaches also suffered from another Chronic Impact condition, the most common being depression and hypertension (see exhibit 2-151).

Exhibit 2-151 – Participants with Migraine Headache Co-morbidity with Chronic Impact Conditions

Comorbidity	Participants	%
Migraine Headaches	**3,513**	**100.0%**
	51	**1.5%**
+ Depression	2,679	76.3%
	79	2.2%
+ Hypertension	2,403	68.4%
	13	0.4%
+ Lower Back Pain	2,236	63.6%
	31	0.9%
+ Diabetes	1,637	46.6%
	9	0.3%
+ Asthma	1,600	45.5%
	26	0.7%

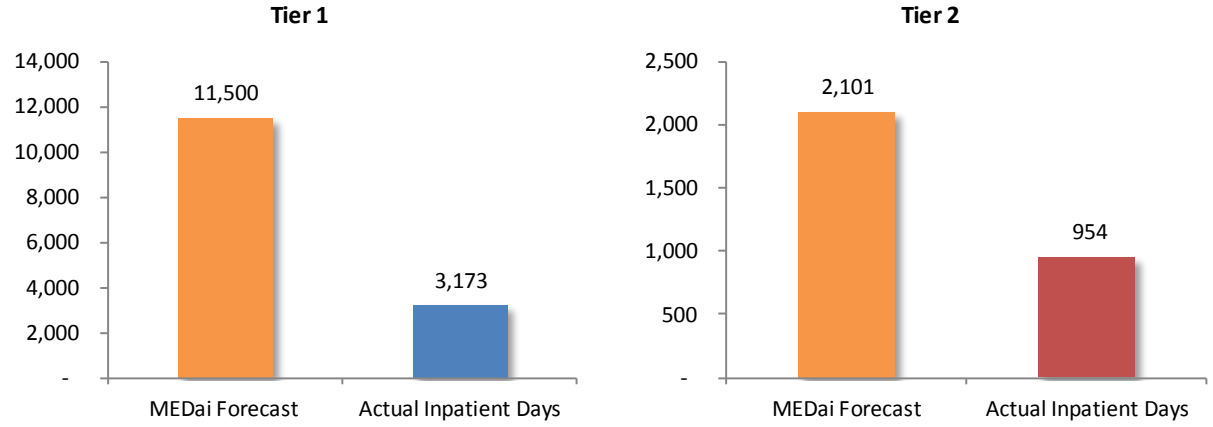
Participants with migraine headaches, the specified comorbidity, and additional comorbidities

Participants ONLY with migraine headaches and the specified comorbidity (no other comorbidities)

Utilization

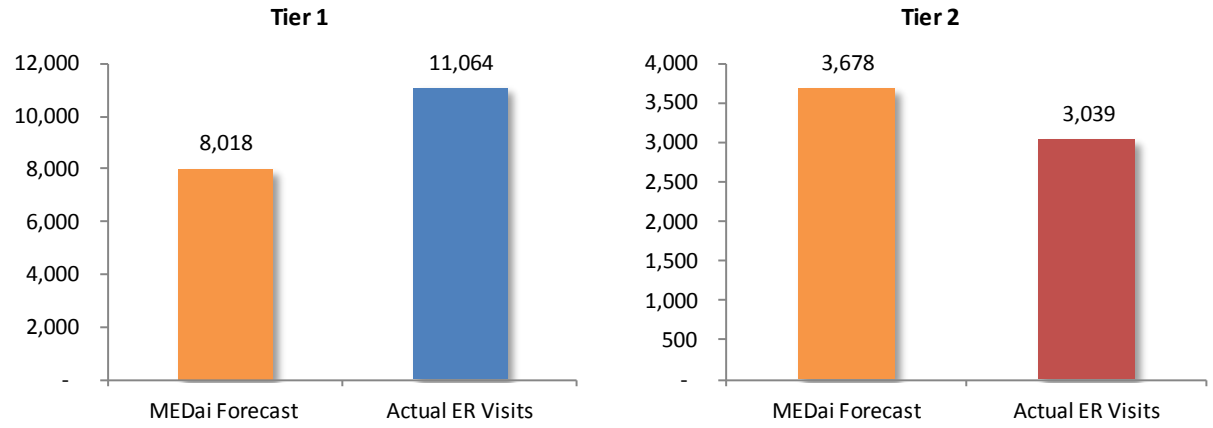
MEDai forecasted that Tier 1 participants would accrue 11,500 inpatient days per 1,000 participants in the first 12 months following engagement. The actual rate was 3,173, or 28 percent of forecast. Tier 2 participants accrued 954 inpatient days per 1,000 participants, or 45 percent of forecast (see exhibit 2-152).

Exhibit 2-152 – Participants with Migraine Headache as Most Expensive Diagnosis
Inpatient Utilization - First 12 Months Following Engagement, per 1,000 Participants



For Tier 1 participants, MEDai forecasted an emergency department visit rate of 8,018 per 1,000 participants. The actual rate was 11,064, or 38 percent above forecast. Tier 2 participants were forecasted to visit the emergency department 3,678 times per 1,000 participants, while the actual rate was 3,039, or 83 percent of forecast (see exhibit 2-153).

Exhibit 2-153 – Participants with Migraine Headache as Most Expensive Diagnosis
Emergency Department Utilization - First 12 Months Following Engagement, per 1,000 Participants

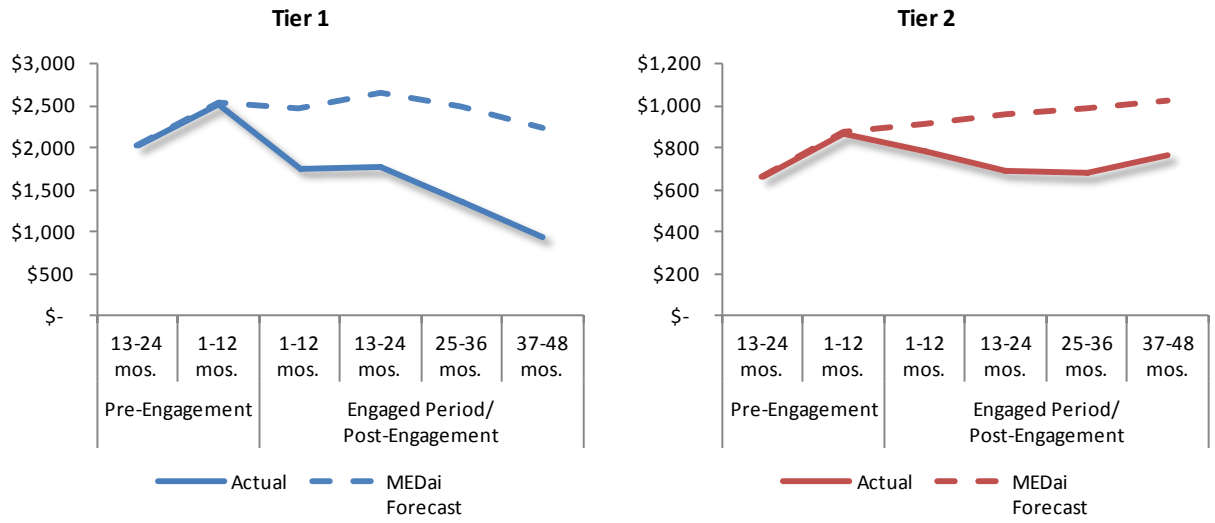


Medical Expenditures – Total and by Category of Service

Total PMPM medical expenditures for Tier 1 participants were consistently below forecast for the 48 months following engagement, with the gap widening over time (see exhibit 2-154).

Total PMPM medical expenditures for Tier 2 participants also were below forecast for the 48 months following engagement.

Exhibit 2-154 – Participants with Migraine Headache as Most Expensive Diagnosis
Total PMPM Expenditures



Tier 1 participants experienced decreases in all categories of service except behavioral health. Tier 2 participants experienced decreases in hospital and physician expenditures, which were partly offset by increases in other categories of service (see exhibit 2-155).

Exhibit 2-155 – Participants with Migraine Headache as Most Expensive Diagnosis
PMPM Expenditures by Category of Service

Category of Service	Tier 1			Tier 2		
	Pre-Engagement: 1-12 months	First 12 months of Engagement	Percent Change	Pre-Engagement: 1-12 months	First 12 months of Engagement	Percent Change
Inpatient Hospital	$696	$301	-56.7%	$187	$148	-21.0%
Outpatient Hospital	$393	$301	-23.5%	$164	$136	-17.3%
Physician	$588	$429	-27.1%	$236	$205	-13.2%
Behavioral Health (Psych.)	$36	$49	37.2%	$33	$35	7.6%
Pharmacy	$311	$296	-4.6%	$164	$171	4.4%
All Other	$515	$390	-24.2%	$92	$95	2.9%
Total	**$2,538**	**$1,767**	**-30.4%**	**$876**	**$790**	**-9.9%**

Total Medical Expenditure Impact of Nurse Care Management

Overall, medical expenditure savings attributable to nurse care management across both tiers were $311 PMPM. Average PMPM expenditures for the 48 months following engagement were 73 percent of forecast (see exhibit 2-156).

Exhibit 2-156 – Participants with Migraine Headache as Most Expensive Diagnosis Forecast versus Actual PMPM Medical Expenditures

Engaged/Post-Engagement Period (months)	Tier1			Tier2			Tiers 1 & 2		
	MEDai Forecast	Actual (Dollars)	Actual (% of Forecast)	MEDai Forecast	Actual (Dollars)	Actual (% of Forecast)	MEDai Forecast	Actual (Dollars)	Actual (% of Forecast)
1 to 12	$2,476	$1,767	71%	$919	$790	86%	$1,107	$908	82%
13 to 24	$2,663	$1,780	67%	$963	$695	72%	$1,187	$838	71%
25 to 36	$2,497	$1,359	54%	$986	$681	69%	$1,207	$780	65%
37 to 48	$2,243	$949	42%	$1,030	$771	75%	$1,249	$803	64%
Overall: 1 to 48	**$2,499**	**$1,571**	**63%**	**$955**	**$740**	**78%**	**$1,164**	**$853**	**73%**

Multiple Sclerosis Population Utilization and Expenditures Trends

The SoonerCare HMP through SFY 2013 engaged 108 Tier 1 and 296 Tier 2 participants with multiple sclerosis. Multiple sclerosis was the most expensive diagnosis at the time of engagement for approximately 13 percent of Tier 1 and 22 percent of Tier 2 participants with this diagnosis (see exhibit 2-157).

Exhibit 2-157 – Participants with Multiple Sclerosis as Most Expensive Diagnosis

Enrollment Group	Participants with Diagnosis	Most Expensive Diagnosis	Percent Most Expensive
Tier 1	108	14	13%
Tier 2	296	66	22%
Tiers 1 & 2	**404**	**80**	**20%**

Note: Because of the relatively small number of cases, all findings should be interpreted with caution.

Nearly all participants with multiple sclerosis also suffered from another Chronic Impact condition, the most common being hypertension and depression (see exhibit 2-158).

Exhibit 2-158 – Participants with Multiple Sclerosis Co-morbidity with Chronic Impact Conditions

Comorbidity	Participants	%
Multiple Sclerosis	**404**	**100.0%**
	5	**1.2%**
+ Hypertension	312	77.2%
	2	0.5%
+ Depression	306	75.7%
	1	0.2%
+ Lower Back Pain	238	58.9%
	1	0.2%
+ Diabetes	228	56.4%
	2	0.5%
+ Hyperlipidemia (High Cholesterol)	208	51.5%
	1	0.2%

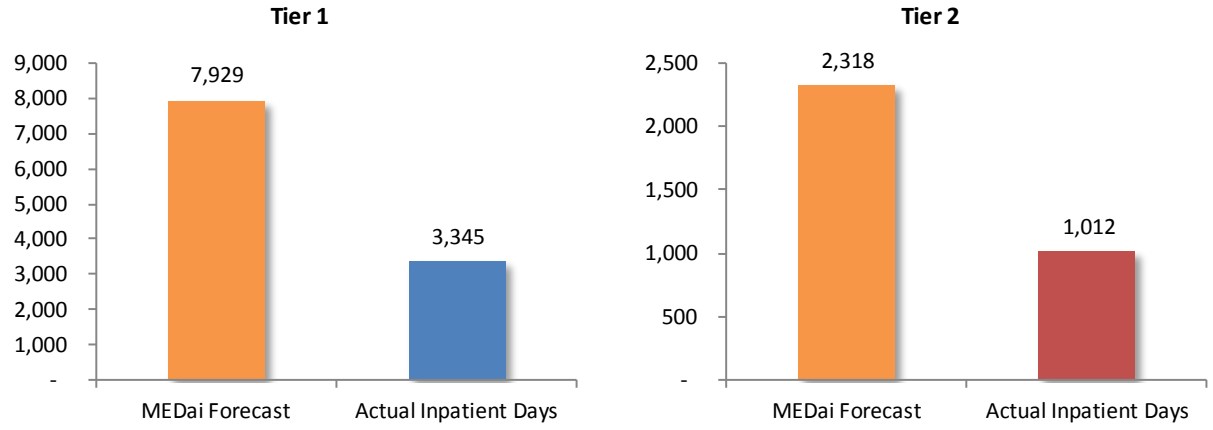
Participants with multiple sclerosis, the specified comorbidity, and additional comorbidities

Participants ONLY with multiple sclerosis and the specified comorbidity (no other comorbidities)

Utilization

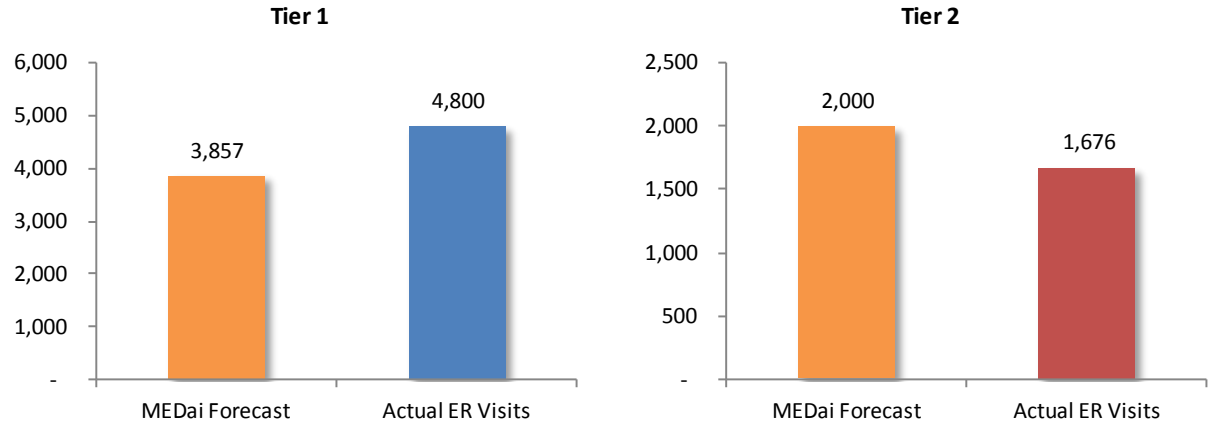
MEDai forecasted that Tier 1 participants would accrue 7,929 inpatient days per 1,000 participants in the first 12 months following engagement. The actual rate was 3,345, or 42 percent of forecast. Tier 2 participants accrued 1,012 inpatient days per 1,000 participants, or 44 percent of forecast (see exhibit 2-159).

Exhibit 2-159 – Participants with Multiple Sclerosis as Most Expensive Diagnosis
Inpatient Utilization - First 12 Months Following Engagement, per 1,000 Participants



For Tier 1 participants, MEDai forecasted an emergency department visit rate of 3,857 per 1,000 participants. The actual rate was 4,800, or 24 percent above forecast. Tier 2 participants were forecasted to visit the emergency department 2,000 times per 1,000 participants, while the actual rate was 1,676, or 84 percent of forecast (see exhibit 2-160).

Exhibit 2-160 – Participants with Multiple Sclerosis as Most Expensive Diagnosis
Emergency Department Utilization - First 12 Months Following Engagement, per 1,000 Participants

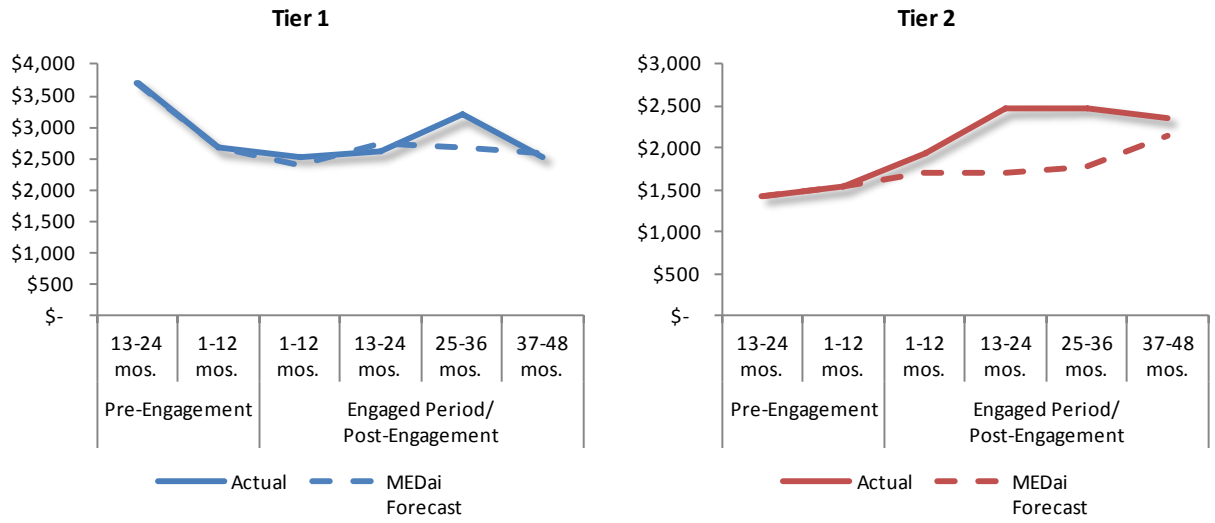


Medical Expenditures – Total and by Category of Service

Total PMPM medical expenditures for Tier 1 participants were nearly even with forecast for the 48 months following engagement, except for small spike in months 25 to 36 (see exhibit 2-161).

Total PMPM medical expenditures for Tier 2 participants were well above forecast for the first 36 months following engagement, before nearly closing the gap in months 37 to 48.

Exhibit 2-161 – Participants with Multiple Sclerosis as Most Expensive Diagnosis
Total PMPM Expenditures



Tier 1 participants saw significant decreases across inpatient hospital, outpatient hospital and physician services, which were nearly offset by increases in pharmacy expenditures. Tier 2 participants experienced increases across all categories of service except outpatient hospital and physician services (see exhibit 2-162).

Exhibit 2-162 – Participants with Multiple Sclerosis as Most Expensive Diagnosis
PMPM Expenditures by Category of Service

Category of Service	Tier 1			Tier 2		
	Pre-Engagement: 1-12 months	First 12 months of Engagement	Percent Change	Pre-Engagement: 1-12 months	First 12 months of Engagement	Percent Change
Inpatient Hospital	$427	$240	-43.7%	$56	$173	207.8%
Outpatient Hospital	$489	$359	-26.4%	$162	$106	-34.7%
Physician	$332	$224	-32.5%	$195	$182	-6.8%
Behavioral Health (Psych.)	$18	$35	102.3%	$8	$22	164.0%
Pharmacy	$1,249	$1,521	21.7%	$1,026	$1,340	30.7%
All Other	$157	$171	9.3%	$101	$130	28.1%
Total	**$2,671**	**$2,551**	**-4.5%**	**$1,548**	**$1,953**	**26.1%**

Total Medical Expenditure Impact of Nurse Care Management

Overall, the medical expenditure deficit attributable to nurse care management across both tiers was $427 PMPM. Average PMPM expenditures for the 48 months following engagement were 122 percent of forecast (see exhibit 2-163).

Exhibit 2-163 – Participants with Multiple Sclerosis as Most Expensive Diagnosis
Forecast versus Actual PMPM Medical Expenditures

Engaged/Post-Engagement Period (months)	Tier1			Tier2			Tiers 1 & 2		
	MEDai Forecast	Actual (Dollars)	Actual (% of Forecast)	MEDai Forecast	Actual (Dollars)	Actual (% of Forecast)	MEDai Forecast	Actual (Dollars)	Actual (% of Forecast)
1 to 12	$2,399	$2,551	106%	$1,713	$1,953	114%	$1,836	$2,059	112%
13 to 24	$2,750	$2,628	96%	$1,709	$2,473	145%	$1,895	$2,501	132%
25 to 36	$2,676	$3,191	119%	$1,787	$2,491	139%	$1,915	$2,592	135%
37 to 48	$2,578	$2,538	98%	$2,161	$2,362	109%	$2,201	$2,379	108%
Overall: 1 to 48	**$2,577**	**$2,695**	**105%**	**$1,782**	**$2,268**	**127%**	**$1,911**	**$2,338**	**122%**

Renal Failure Population Utilization and Expenditures Trends

The SoonerCare HMP through SFY 2013 engaged 842 Tier 1 and 1,190 Tier 2 participants with renal failure. Renal failure was the most expensive diagnosis at the time of engagement for approximately seven percent of Tier 1 and eight percent of Tier 2 participants with this diagnosis (see exhibit 2-164).

Exhibit 2-164 – Participants with Renal Failure as Most Expensive Diagnosis

Enrollment Group	Participants with Diagnosis	Most Expensive Diagnosis	Percent Most Expensive
Tier 1	842	62	7%
Tier 2	1,190	91	8%
Tiers 1 & 2	**2,032**	**153**	**8%**

Note: Because of the relatively small number of cases, all findings should be interpreted with caution.

Nearly all participants with renal failure also suffered from another Chronic Impact condition, the most common being hypertension and diabetes (see exhibit 2-165).

Exhibit 2-165 – Participants with Renal Failure Co-morbidity with Chronic Impact Conditions

Comorbidity	Participants	%
Renal Failure	**2,032**	**100.0%**
	2	**0.1%**
+ Hypertension	1,884	92.7%
	8	0.4%
+ Diabetes	1,403	69.0%
	2	0.1%
+ Depression	1,289	63.4%
	10	0.5%
+ Hyperlipidemia (High Cholesterol)	1,270	62.5%
	0	0.0%
+ COPD	1,220	60.0%
	2	0.1%

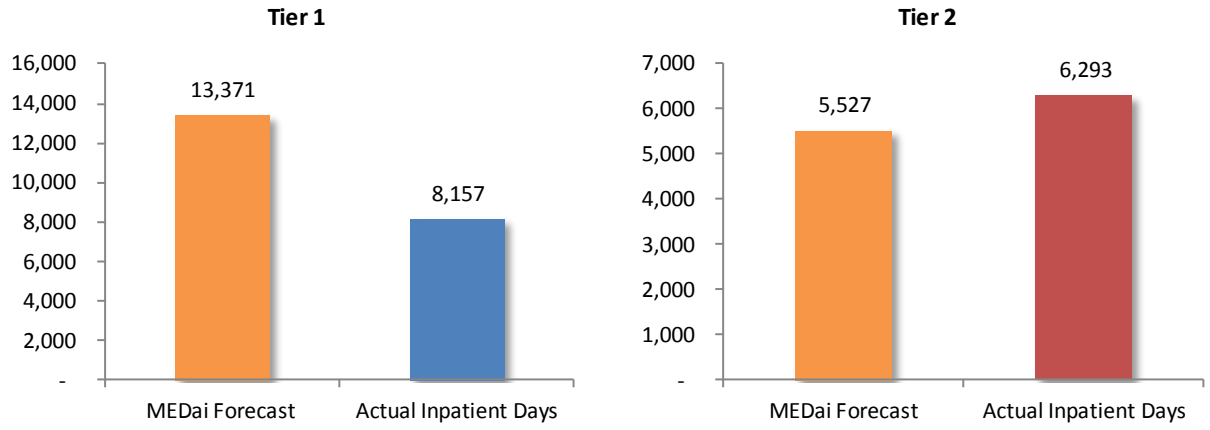
Participants with renal failure, the specified comorbidity, and additional comorbidities

Participants ONLY with renal failure and the specified comorbidity (no other comorbidities)

Utilization

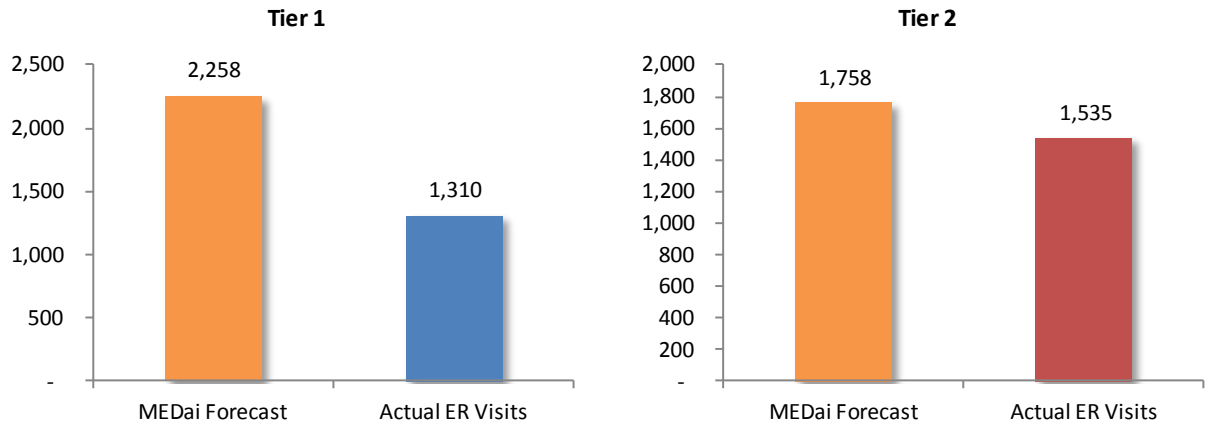
MEDai forecasted that Tier 1 participants would accrue 13,371 inpatient days per 1,000 participants in the first 12 months following engagement. The actual rate was 8,157, or 61 percent of forecast. Tier 2 participants accrued 6,293 inpatient days per 1,000 participants, or 114 percent of forecast (see exhibit 2-166).

Exhibit 2-166 – Participants with Renal Failure as Most Expensive Diagnosis
Inpatient Utilization - First 12 Months Following Engagement, per 1,000 Participants



For Tier 1 participants, MEDai forecasted an emergency department visit rate of 2,258 per 1,000 participants. The actual rate was 1,310, or 58 percent of forecast. Tier 2 participants were forecasted to visit the emergency department 1,758 times per 1,000 participants, while the actual rate was 1,535, or 87 percent of forecast (see exhibit 2-167).

Exhibit 2-167 – Participants with Renal Failure as Most Expensive Diagnosis
Emergency Department Utilization - First 12 Months Following Engagement, per 1,000 Participants

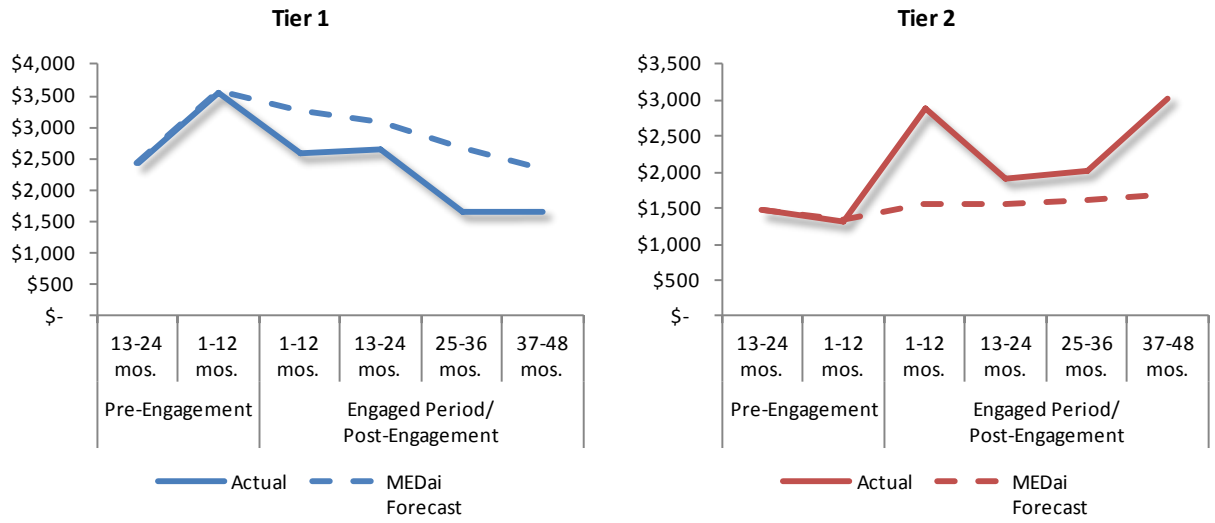


Medical Expenditures – Total and by Category of Service

Total PMPM medical expenditures for Tier 1 participants were consistently below forecast over the 48 months following engagement (see exhibit 2-168).

Total PMPM medical expenditures for Tier 2 participants were above forecast over the 48 months following engagement, although the size of the gap varied over time.

Exhibit 2-168 – Participants with Renal Failure as Most Expensive Diagnosis
Total PMPM Expenditures



Tier 1 participants experienced decreases in inpatient hospital, physician and pharmacy expenditures, which were partly offset by an increase in outpatient hospital expenditures (see exhibit 2-169). Tier 2 participants saw increases in nearly all categories of service.

Exhibit 2-169 – Participants with Renal Failure as Most Expensive Diagnosis
PMPM Expenditures by Category of Service

Category of Service	Tier 1			Tier 2		
	Pre-Engagement: 1-12 months	First 12 months of Engagement	Percent Change	Pre-Engagement: 1-12 months	First 12 months of Engagement	Percent Change
Inpatient Hospital	$1,964	$1,205	-38.6%	$467	$1,731	270.9%
Outpatient Hospital	$144	$212	47.1%	$106	$153	44.9%
Physician	$616	$499	-19.0%	$218	$367	68.9%
Behavioral Health (Psych.)	$12	$18	51.2%	$12	$9	-22.7%
Pharmacy	$522	$329	-37.0%	$387	$395	2.0%
All Other	$310	$332	7.2%	$148	$230	55.5%
Total	**$3,567**	**$2,595**	**-27.3%**	**$1,336**	**$2,885**	**115.9%**

Total Medical Expenditure Impact of Nurse Care Management

Overall, the medical expenditure deficit attributable to nurse care management across both tiers was $294 PMPM. Average PMPM expenditures for the 48 months following engagement were 114 percent of forecast (see exhibit 2-170).

Exhibit 2-170 – Participants with Renal Failure as Most Expensive Diagnosis
Forecast versus Actual PMPM Medical Expenditures

Engaged/Post-Engagement Period (months)	Tier1			Tier2			Tiers 1 & 2		
	MEDai Forecast	Actual (Dollars)	Actual (% of Forecast)	MEDai Forecast	Actual (Dollars)	Actual (% of Forecast)	MEDai Forecast	Actual (Dollars)	Actual (% of Forecast)
1 to 12	$3,265	$2,595	79%	$1,554	$2,885	186%	$2,241	$2,769	124%
13 to 24	$3,069	$2,666	87%	$1,556	$1,920	123%	$2,102	$2,189	104%
25 to 36	$2,670	$1,670	63%	$1,611	$2,039	127%	$1,950	$1,921	99%
37 to 48	$2,325	$1,676	72%	$1,700	$3,047	179%	$1,940	$2,520	130%
Overall: 1 to 48	**$2,992**	**$2,342**	**78%**	**$1,584**	**$2,435**	**154%**	**$2,107**	**$2,401**	**114%**

Rheumatoid Arthritis Population Utilization and Expenditures Trends

The SoonerCare HMP through SFY 2013 engaged 325 Tier 1 and 1,139 Tier 2 participants with rheumatoid arthritis. Rheumatoid arthritis was the most expensive diagnosis at the time of engagement for approximately nine percent of Tier 1 and 17 percent of Tier 2 participants with this diagnosis (see exhibit 2-171).

Exhibit 2-171 – Participants with Rheumatoid Arthritis as Most Expensive Diagnosis

Enrollment Group	Participants with Diagnosis	Most Expensive Diagnosis	Percent Most Expensive
Tier 1	325	29	9%
Tier 2	1,139	196	17%
Tiers 1 & 2	**1,464**	**225**	**15%**

Note: Because of the relatively small number of cases, all findings should be interpreted with caution.

Nearly all participants with rheumatoid arthritis also were diagnosed with another Chronic Impact condition, the most common being hypertension and depression (see exhibit 2-172).

Exhibit 2-172 – Participants with Rheumatoid Arthritis Co-morbidity with Chronic Impact Conditions

Comorbidity	Participants	%
Rheumatoid Arthritis	**1,464**	**100.0%**
	15	**1.0%**
+ Hypertension	1,198	81.8%
	7	0.5%
+ Depression	1,028	70.2%
	9	0.6%
+ Lower Back Pain	977	66.7%
	4	0.3%
+ COPD	843	57.6%
	4	0.3%
+ Diabetes	831	56.8%
	8	0.5%

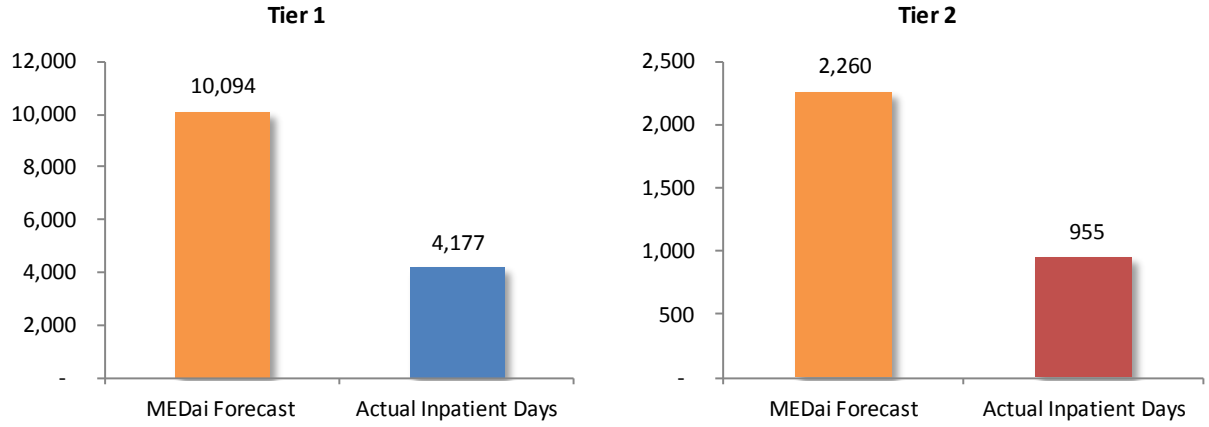
Participants with rheumatoid arthritis, the specified comorbidity, and additional comorbidities

Participants ONLY with rheumatoid arthritis and the specified comorbidity (no other comorbidities)

Utilization

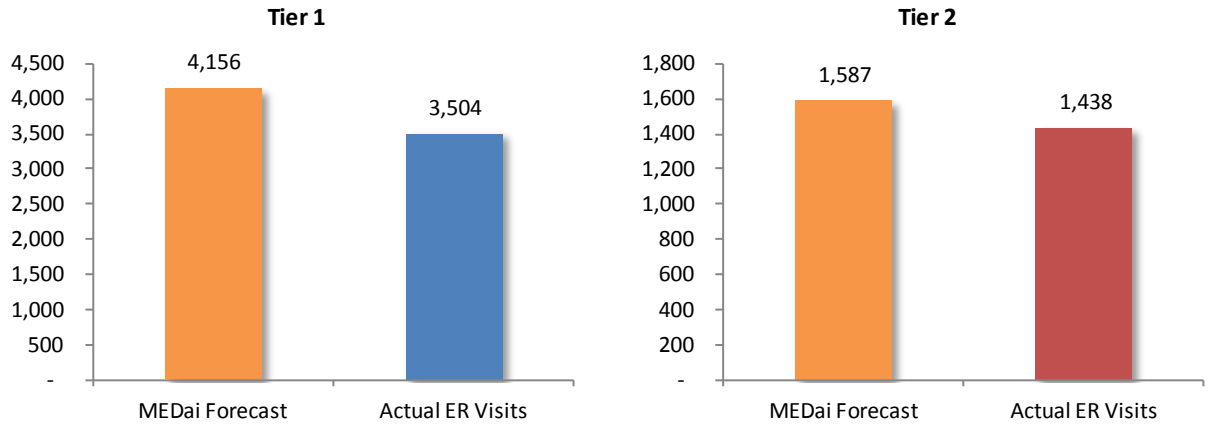
MEDai forecasted that Tier 1 participants would accrue 10,094 inpatient days per 1,000 participants in the first 12 months following engagement. The actual rate was 4,177, or 41 percent of forecast. Tier 2 participants accrued 955 inpatient days per 1,000 participants, or 42 percent of forecast (see exhibit 2-173).

Exhibit 2-173 – Participants with Rheumatoid Arthritis as Most Expensive Diagnosis
Inpatient Utilization - First 12 Months Following Engagement, per 1,000 Participants



For Tier 1 participants, MEDai forecasted an emergency department visit rate of 4,156 per 1,000 participants. The actual rate was 3,504, or 84 percent of forecast. Tier 2 participants were forecasted to visit the emergency department 1,587 times per 1,000 participants, while the actual rate was 1,438, or 91 percent of forecast (see exhibit 2-174).

Exhibit 2-174 – Participants with Rheumatoid Arthritis as Most Expensive Diagnosis
Emergency Department Utilization - First 12 Months Following Engagement, per 1,000 Participants

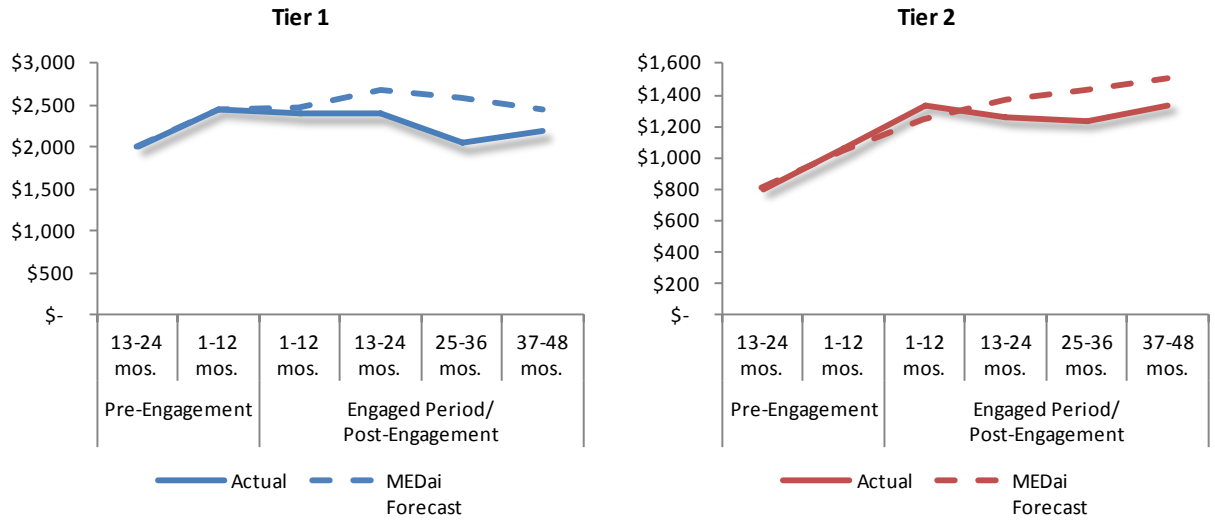


Medical Expenditures – Total and by Category of Service

Total PMPM medical expenditures for Tier 1 participants were below forecast for the 48 months following engagement, although the gap narrowed in months 37 to 48 (see exhibit 2-175).

Total PMPM medical expenditures for Tier 2 participants were slightly above forecast for the first 12 months following engagement before dropping below forecast for the remaining 36 months.

Exhibit 2-175 – Participants with Rheumatoid Arthritis as Most Expensive Diagnosis
Total PMPM Expenditures



Tier 1 participants experienced decreased expenditures in pharmacy and "all other" categories of service, which were nearly offset by increases in all other areas (see exhibit 2-176). Tier 2 participants experienced increased expenditures in all categories of service except outpatient hospital.

Exhibit 2-176 – Participants with Rheumatoid Arthritis as Most Expensive Diagnosis
PMPM Expenditures by Category of Service

Category of Service	Tier 1			Tier 2		
	Pre-Engagement: 1-12 months	First 12 months of Engagement	Percent Change	Pre-Engagement: 1-12 months	First 12 months of Engagement	Percent Change
Inpatient Hospital	$737	$805	9.3%	$155	$228	47.0%
Outpatient Hospital	$195	$268	37.8%	$137	$137	-0.4%
Physician	$498	$610	22.6%	$219	$274	25.2%
Behavioral Health (Psych.)	$26	$37	42.3%	$7	$16	130.0%
Pharmacy	$486	$364	-25.1%	$436	$536	22.9%
All Other	$512	$301	-41.3%	$96	$144	49.4%
Total	**$2,452**	**$2,385**	**-2.8%**	**$1,050**	**$1,334**	**27.0%**

Total Medical Expenditure Impact of Nurse Care Management

Overall, medical expenditure savings attributable to nurse care management across both tiers were $93 PMPM. Average PMPM expenditures for the 48 months following engagement were 94 percent of forecast (see exhibit 2-177).

Exhibit 2-177– Participants with Rheumatoid Arthritis as Most Expensive Diagnosis Forecast versus Actual PMPM Medical Expenditures

Engaged/Post-Engagement Period (months)	Tier1			Tier2			Tiers 1 & 2		
	MEDai Forecast	Actual (Dollars)	Actual (% of Forecast)	MEDai Forecast	Actual (Dollars)	Actual (% of Forecast)	MEDai Forecast	Actual (Dollars)	Actual (% of Forecast)
1 to 12	$2,484	$2,385	96%	$1,251	$1,334	107%	$1,402	$1,462	104%
13 to 24	$2,677	$2,384	89%	$1,375	$1,249	91%	$1,529	$1,383	90%
25 to 36	$2,584	$2,038	79%	$1,438	$1,231	86%	$1,561	$1,318	84%
37 to 48	$2,463	$2,181	89%	$1,501	$1,332	89%	$1,619	$1,437	89%
Overall: 1 to 48	**$2,556**	**$2,291**	**90%**	**$1,358**	**$1,288**	**95%**	**$1,499**	**$1,406**	**94%**

Schizophrenia Population Utilization and Expenditures Trends

The SoonerCare HMP through SFY 2013 engaged 1,131 Tier 1 and 2,999 Tier 2 participants with schizophrenia. Schizophrenia was the most expensive diagnosis at the time of engagement for approximately 29 percent of Tier 1 and 21 percent of Tier 2 participants with this diagnosis (see exhibit 2-178).

Exhibit 2-178 – Participants with Schizophrenia as Most Expensive Diagnosis

Enrollment Group	Participants with Diagnosis	Most Expensive Diagnosis	Percent Most Expensive
Tier 1	1,131	331	29%
Tier 2	2,999	626	21%
Tiers 1 & 2	**4,130**	**957**	**23%**

Nearly 99 percent of participants with schizophrenia also were diagnosed with another Chronic Impact condition, the most common being depression and hypertension (see exhibit 2-179).

Exhibit 2-179 – Participants with Schizophrenia Co-morbidity with Chronic Impact Conditions

Comorbidity	Participants	%
Schizophrenia	**4,130**	**100.0%**
	48	**1.2%**
+ Depression	3,184	77.1%
	67	1.6%
+ Hypertension	3,176	76.9%
	23	0.6%
+ Lower Back Pain	2,453	59.4%
	9	0.2%
+ Diabetes	2,293	55.5%
	16	0.4%
+ COPD	2,224	53.8%
	15	0.4%

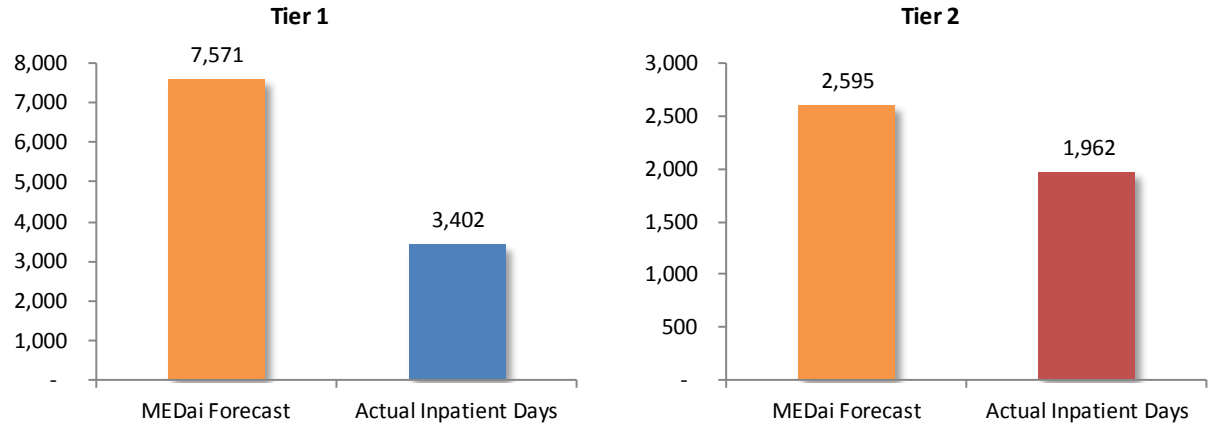
Participants with schizophrenia, the specified comorbidity, and additional comorbidities

Participants ONLY with schizophrenia and the specified comorbidity (no other comorbidities)

Utilization

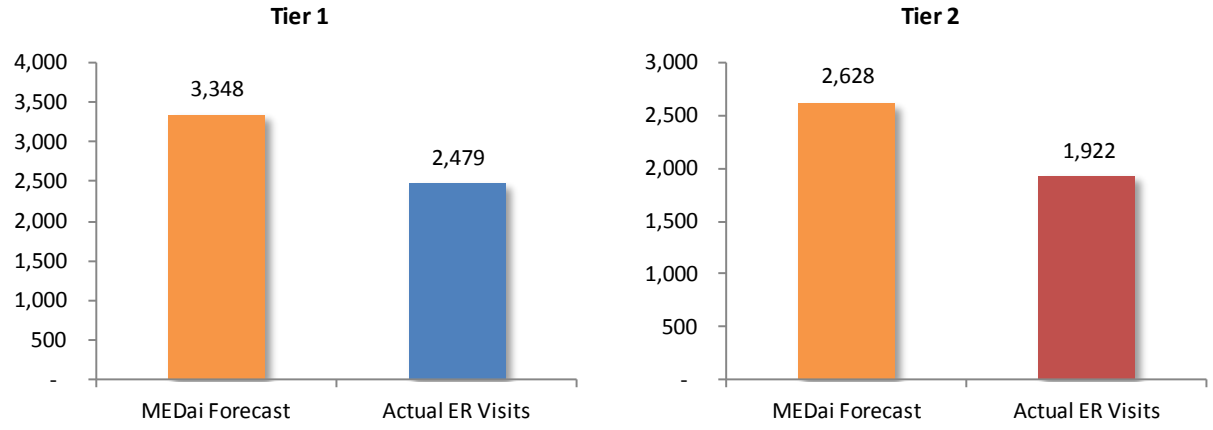
MEDai forecasted that Tier 1 participants would accrue 7,571 inpatient days per 1,000 participants in the first 12 months following engagement. The actual rate was 3,402, or 45 percent of forecast. Tier 2 participants accrued 1,962 inpatient days, or 76 percent of forecast (see exhibit 2-180).

Exhibit 2-180 – Participants with Schizophrenia as Most Expensive Diagnosis
Inpatient Utilization - First 12 Months Following Engagement, per 1,000 Participants



For Tier 1 participants, MEDai forecasted an emergency department visit rate of 3,348 per 1,000 participants. The actual rate was 2,479, or 74 percent of forecast. Tier 2 participants were forecasted to visit the emergency department 2,628 times per 1,000 participants, while the actual rate was 1,922, or 73 percent of forecast (see exhibit 2-181).

Exhibit 2-181 – Participants with Schizophrenia as Most Expensive Diagnosis
Emergency Department Utilization - First 12 Months Following Engagement, per 1,000 Participants

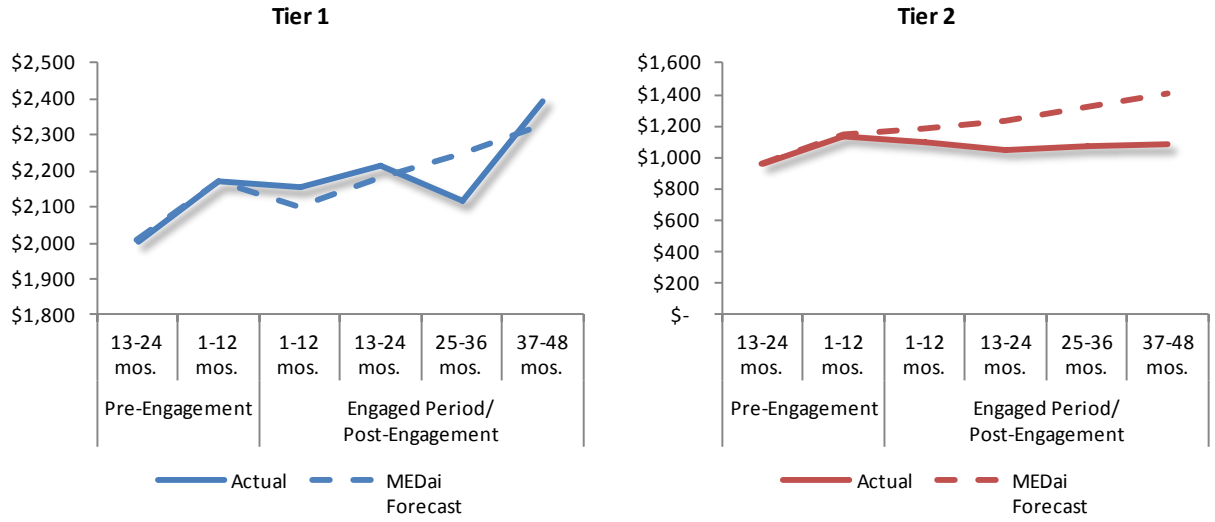


Medical Expenditures – Total and by Category of Service

Total PMPM medical expenditures for Tier 1 participants were close to forecast in the 48 months following engagement, except for a drop in months 25 to 36 (see exhibit 2-182).

Total PMPM medical expenditures for Tier 2 participants were below forecast for the 48 months following engagement, with the gap gradually widening over time.

Exhibit 2-182 – Participants with Schizophrenia as Most Expensive Diagnosis
Total PMPM Expenditures



Tier 1 and Tier 2 participants both experienced double digit percentage decreases in behavioral health expenditures, along with more modest decreases in most other categories of service (see exhibit 2-183).

Exhibit 2-183 – Participants with Schizophrenia as Most Expensive Diagnosis
PMPM Expenditures by Category of Service

Category of Service	Tier 1			Tier 2		
	Pre-Engagement: 1-12 months	First 12 months of Engagement	Percent Change	Pre-Engagement: 1-12 months	First 12 months of Engagement	Percent Change
Inpatient Hospital	$317	$339	6.9%	$173	$170	-1.7%
Outpatient Hospital	$117	$110	-5.9%	$99	$90	-8.7%
Physician	$239	$235	-1.8%	$170	$162	-5.2%
Behavioral Health (Psych.)	$669	$576	-14.0%	$210	$179	-14.7%
Pharmacy	$653	$627	-4.0%	$391	$381	-2.8%
All Other	$175	$271	54.4%	$102	$126	22.8%
Total	**$2,170**	**$2,156**	**-0.6%**	**$1,145**	**$1,107**	**-3.4%**

Total Medical Expenditure Impact of Nurse Care Management

Overall, medical expenditure savings attributable to nurse care management across both tiers were $108 PMPM. Average PMPM expenditures for the 48 months following engagement were 93 percent of forecast (see exhibit 2-184).

Exhibit 2-184 – Participants with Schizophrenia as Most Expensive Diagnosis
Forecast versus Actual PMPM Medical Expenditures

Engaged/Post-Engagement Period (months)	Tier1			Tier2			Tiers 1 & 2		
	MEDai Forecast	Actual (Dollars)	Actual (% of Forecast)	MEDai Forecast	Actual (Dollars)	Actual (% of Forecast)	MEDai Forecast	Actual (Dollars)	Actual (% of Forecast)
1 to 12	$2,102	$2,156	103%	$1,187	$1,107	93%	$1,501	$1,467	98%
13 to 24	$2,180	$2,215	102%	$1,231	$1,056	86%	$1,571	$1,472	94%
25 to 36	$2,250	$2,118	94%	$1,317	$1,081	82%	$1,685	$1,489	88%
37 to 48	$2,327	$2,396	103%	$1,412	$1,085	77%	$1,767	$1,593	90%
Overall: 1 to 48	**$2,193**	**$2,200**	**100%**	**$1,258**	**$1,083**	**86%**	**$1,599**	**$1,491**	**93%**

PMPM Utilization and Expenditures Trend Summary

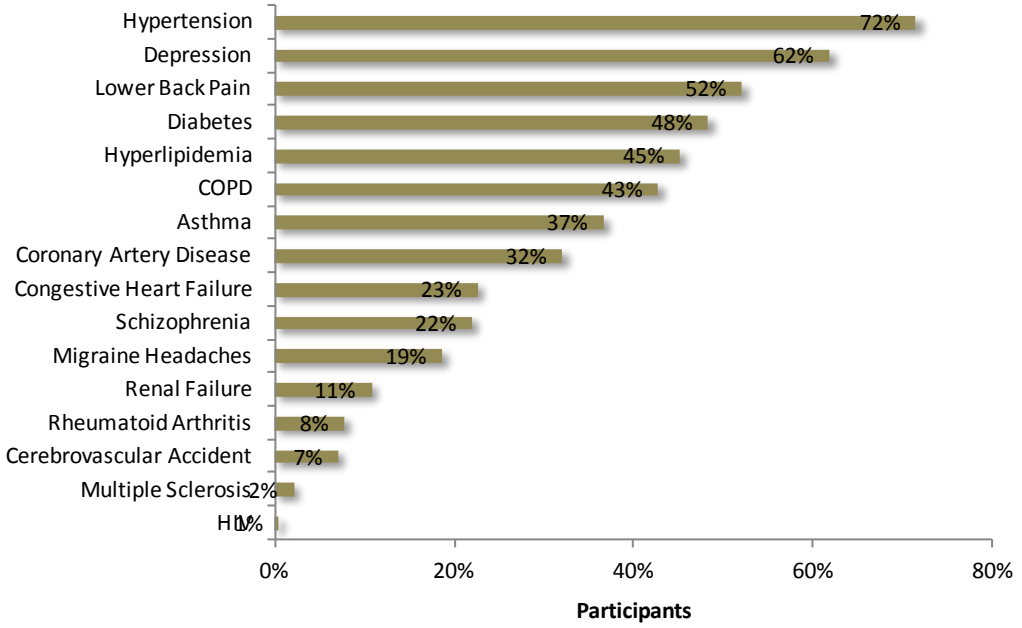
This section presents consolidated trend data across all nurse care managed participants, regardless of diagnosis. For slightly over 60 percent of both Tier 1 and Tier 2 participants, the most expensive diagnosis at the time of engagement was one of the six target Chronic Impact conditions (asthma, COPD, congestive heart failure, coronary artery disease, diabetes and hypertension) (see exhibit 2-185). By comparison, the percentages through SFY 2012 were 63 percent for Tier 1 and 64 percent for Tier 2.

Exhibit 2-185 – Participants with Target Chronic Impact Condition as Most Expensive Diagnosis

Enrollment Group	Total Participants*	Most Expensive Condition: Target Condition	Percent with Target Condition as Most Expensive
Tier 1	3,589	2,227	62.1%
Tier 2	15,084	9,178	60.8%

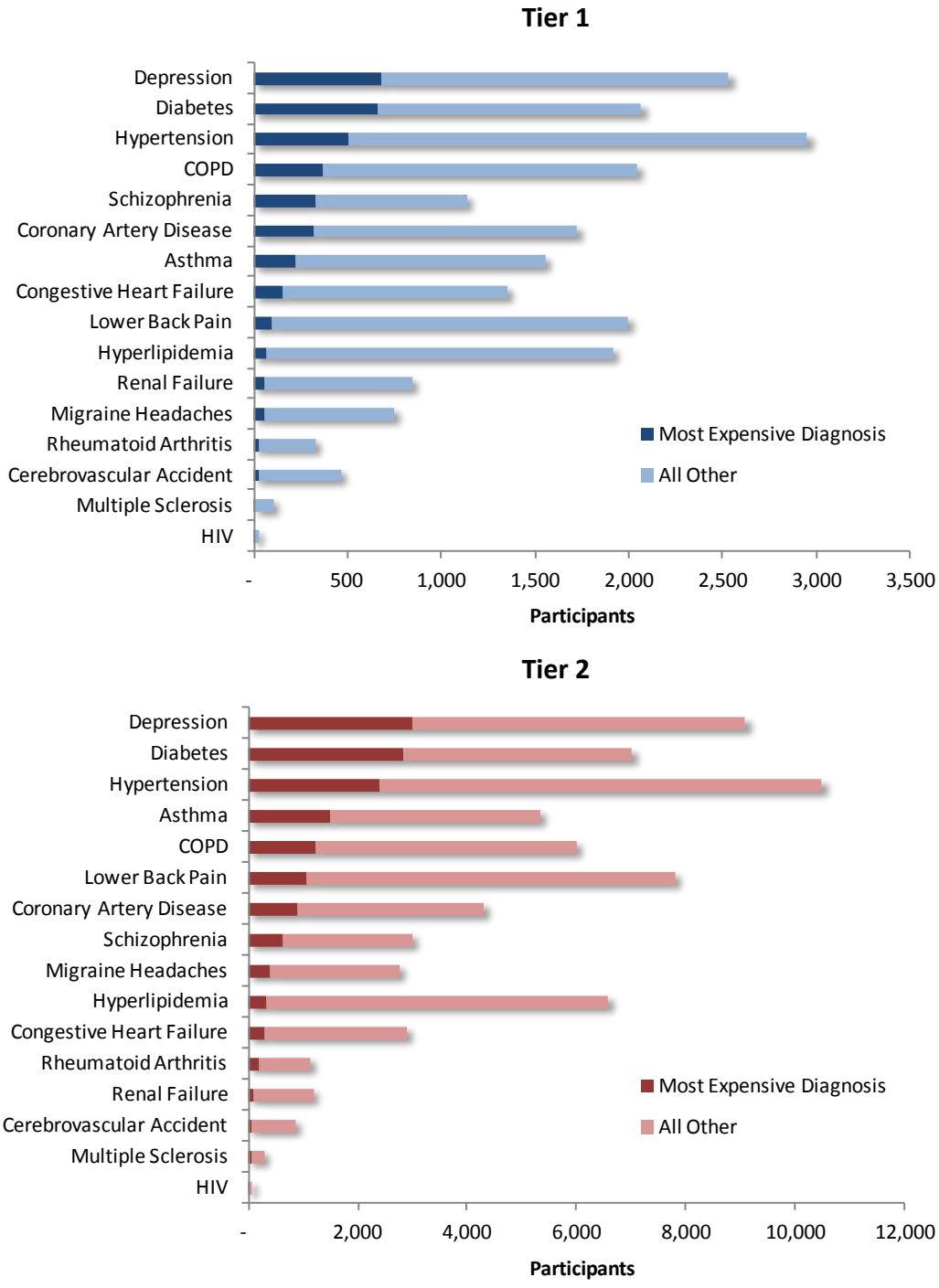
Among all participants, hypertension was the most common co-morbidity (72 percent), followed by depression (62 percent), lower back pain (52 percent), diabetes (48 percent) and hyperlipidemia (45 percent) (see exhibit 2-186).

Exhibit 2-186 – All Participants – Prevalence of Co-morbidities



Depression was the most expensive condition for the largest number of both Tier 1 and Tier 2 participants (dark shading on exhibit), while hypertension was the most prevalent condition overall, including co-morbidities. Conditions are ordered top-to-bottom from most to fewest number of participants with the specified condition as their most expensive at the time of engagement (see exhibit 2-187).

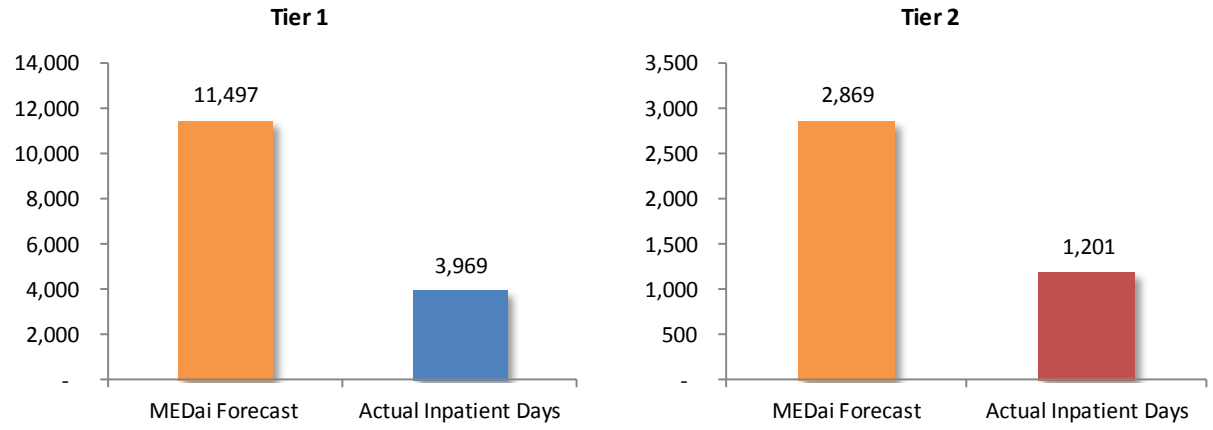
Exhibit 2-187 – All Participants – Prevalence of Chronic Impact Conditions by Tier



Utilization

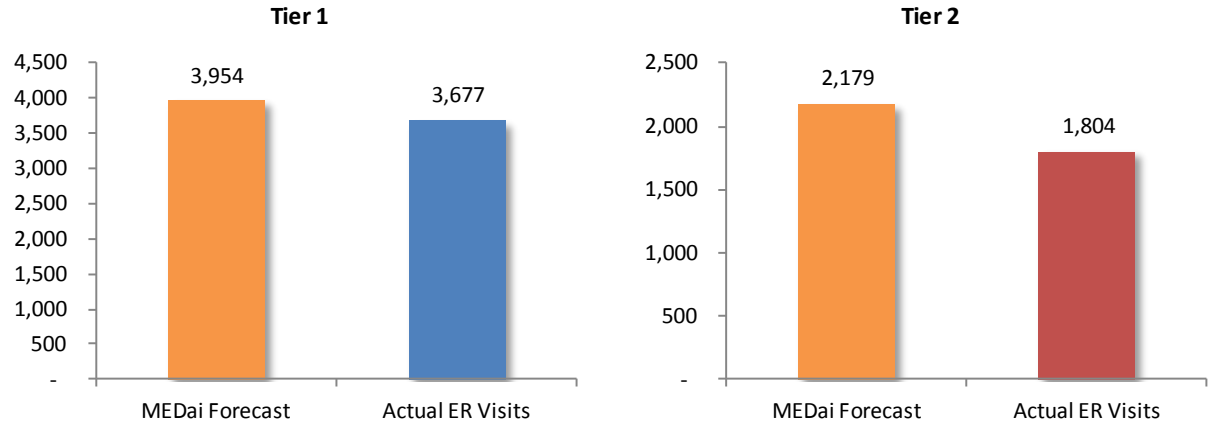
MEDai forecasted that Tier 1 participants would accrue 11,497 inpatient days per 1,000 participants in the first 12 months following engagement. Claims data showed the actual rate was 3,969, or 35 percent of forecast. Tier 2 participants accrued 1,201 inpatient days, or 42 percent of forecast (see exhibit 2-188).

Exhibit 2-188 – All Participants – Inpatient Utilization, per 1,000 Participants First 12 Months Following Engagement



For Tier 1 participants, MEDai forecasted an emergency department visit rate of 3,954 per 1,000 participants. The actual rate was 3,677, or 93 percent of forecast. Tier 2 participants were forecasted to visit the emergency department 2,179 times per 1,000 participants, while the actual rate was 1,804, or 83 percent of forecast (see 2-189).

Exhibit 2-189 – All Participants – Emergency Department Utilization, per 1,000 Participants First 12 Months Following Engagement

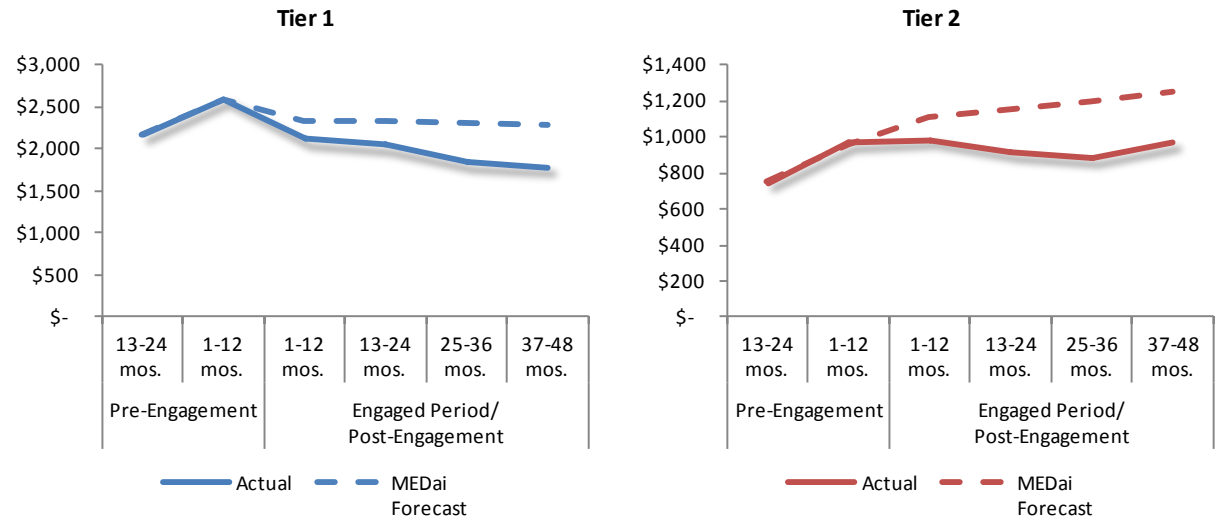


Medical Expenditures – Total and by Category of Service

Total PMPM medical expenditures for Tier 1 participants were on average 11 percent below forecast for the first 24 months of member engagement. The gap widened to 21 percent below forecast in months 25 to 36 and remained at that level in months 37 to 48 (see exhibit 2-190).

Total PMPM medical expenditures for Tier 2 participants also were 11 percent below the forecasted amount for months 1 to 12. The gap widened to 21 percent below the forecasted amount for months 13 to 24 and 26 percent below forecast in months 25 to 36, before closing slightly to 23 percent in months 37 to 48.

Exhibit 2-190 – All Participants – Total PMPM Expenditures



Tier 1 participants experienced decreases in expenditures across all categories of service during the first 12 months of engagement except "all other". The greatest reductions occurred with respect to inpatient hospital and physician services (see exhibit 2-191).

Tier 2 participants experienced decreases in several categories of service but these were offset by increases in other categories. Total PMPM expenditures rose by a modest two percent.

Because the category of service data is only for the first 12 months of engagement it does not fully capture the ultimate impact of participation in the program. The results are more dramatic for Tier 1 participants because their higher pre-engagement hospital and physician expenses offer a more significant opportunity for near term savings. This advantage gradually dissipates over time.

Exhibit 2-191 – All Participants – PMPM Expenditures by Category of Service

Category of Service	Tier 1			Tier 2		
	Pre-Engagement: 1-12 months	First 12 months of Engagement	Percent Change	Pre-Engagement: 1-12 months	First 12 months of Engagement	Percent Change
Inpatient Hospital	$1,045	$672	-35.7%	$233	$234	0.5%
Outpatient Hospital	$234	$209	-10.5%	$125	$114	-8.8%
Physician	$450	$356	-20.8%	$205	$196	-4.4%
Behavioral Health (Psych.)	$159	$140	-11.7%	$62	$61	-2.2%
Pharmacy	$400	$392	-2.0%	$229	$251	9.4%
All Other	$310	$342	10.3%	$108	$128	18.1%
Total	**$2,597**	**$2,111**	**-18.7%**	**$962**	**$983**	**2.2%**

Total Medical Expenditure Impact of Nurse Care Management

Overall, medical expenditure savings attributable to nurse care management across both tiers were $240 PMPM. Average PMPM expenditures for the 48 months following engagement were 86 percent of forecast for Tier 1 participants, 81 percent of forecast for Tier 2 participants and 83 percent of forecast for the total nurse care managed population (see exhibit 2-192).

Exhibit 2-192 – All Participants – Forecast versus Actual PMPM Expenditures

Engaged/Post-Engagement Period (months)	Tier1			Tier2			Tiers 1 & 2		
	MEDai Forecast	Actual (Dollars)	Actual (% of Forecast)	MEDai Forecast	Actual (Dollars)	Actual (% of Forecast)	MEDai Forecast	Actual (Dollars)	Actual (% of Forecast)
1 to 12	$2,337	$2,111	90%	$1,106	$983	89%	$1,337	$1,195	89%
13 to 24	$2,331	$2,040	88%	$1,157	$911	79%	$1,369	$1,114	81%
25 to 36	$2,324	$1,845	79%	$1,195	$881	74%	$1,399	$1,056	75%
37 to 48	$2,278	$1,798	79%	$1,249	$965	77%	$1,439	$1,118	78%
Overall: 1 to 48	**$2,325**	**$1,995**	**86%**	**$1,158**	**$938**	**81%**	**$1,372**	**$1,132**	**83%**

Nurse Care Management Cost Effectiveness Analysis

Over time, the SoonerCare HMP should demonstrate its efficacy through a reduction in the relative PMPM and aggregate costs of engaged members versus what would have occurred absent enrollment in nurse care management. PHPG performed a cost effectiveness analysis for both tier groups by carrying forward and expanding the medical expenditure impact findings from the previous section and adding program administrative expenses to the analysis. To be cost effective, nurse care management must demonstrate lower expenditures even after factoring-in the program's administrative component.[37]

PHPG analyzed cost effectiveness over the entire history of the program, including both engaged and post-engaged (where applicable) periods for all participants. The inclusion of the entire time span represents a slightly broader analysis than was used in the previous section, which focused on three twelve-month segments. The entire history through SFY 2013 was included in the cost effectiveness analysis to calculate the program's aggregate surplus or deficit.

The data in this section is divided between engaged and post-engaged periods. Analyzing participant experience after disenrollment (where applicable) is important to determining the performance of the program against stated objectives, including patient self-management of care and overall program cost effectiveness.

Administrative Expenses

SoonerCare HMP administrative expenses include salary, benefit and overhead costs for persons working in the SoonerCare HMP unit, plus Telligen vendor payments. The OHCA provided PHPG with detailed information on expenditures in both areas going back to initial agency planning and start-up activities.

SoonerCare HMP unit expenses were allocated between nurse care management and practice facilitation using factors provided by the OHCA; only nurse care management expenses were included in the analysis (practice facilitation expenses were included in a separate cost effectiveness analysis presented in chapter three).

OHCA salary and benefit costs were included for staff assigned to the SoonerCare HMP unit. Costs were prorated for employees working less than full time on the SoonerCare HMP.

Overhead expenses (rent, travel, etc.) were allocated based on the unit's share of total OHCA salary/benefit expenses in SFY 2007 (0.9 percent), 2008 (1.6 percent), 2009 (1.3 percent), 2010

[37] For the purposes of the cost effectiveness analysis only, PHPG altered MEDai forecasts for members whose cost for the year prior to engagement exceeded $144,000, as MEDai forecasts have an upper limit of $144,000. To ensure they would not skew the cost effectiveness test results, PHPG set the forecasts for these members equal to prior year costs, assuming no increase or decrease in medical costs.

(1.4 percent), 2011 (1.4 percent), 2012 (1.4 percent) and 2013 (1.4 percent). No specific allocation was made for MEDai activities, as these are occurring under a pre-existing contract.

Telligen vendor payments for start-up activities began in the second quarter of SFY 2008. OHCA provided detailed invoices that PHPG used to allocate fees between nurse care management and practice facilitation. Fees that could not be categorized based on invoice descriptions were allocated equally to each program component, with only nurse care management payments included in the analysis.

OHCA and Telligen administrative expenses were split equally between the two tier groups and divided by total participant "engaged" member months to derive an indirect administrative PMPM cost for each tier group.[38] The amounts were $36.85 for Tier 1 and $8.69 for Tier 2. Appendix D presents detailed information on the indirect administrative cost calculation.

The indirect administration PMPM values were added to the blended tier-specific monthly Nurse Care Management fee for SFY 2008 through 2013 to arrive at a total PMPM administrative cost for each tier, as presented in exhibit 2-193.

Exhibit 2-193 – Nurse Care Management PMPM Administrative Cost

Tier Group	PMPM Indirect Admin: Startup	PMPM Indirect Admin: Ongoing	PMPM Indirect Admin: Total	PMPM Telligen Fee[39]	Total PMPM Admin
Tier 1	$7.94	$25.66	$33.60	$186.80	**$220.40**
Tier 2	$1.99	$6.43	$8.42	$46.73	**$55.15**

[38] Although Tier 2 has more participants, OHCA staff members believe their time has been divided evenly between the two tiers due to the more intensive nature of care management activities for Tier 1. PHPG elected to divide Telligen indirect administrative expenditures evenly for this reason.

[39] Fees have varied across fiscal years. This represents a weighted average based on participants' months in each year and includes member months only for members included in the utilization/expenditure and cost effectiveness analyses (i.e., engaged more than two months as of June 30, 2013).

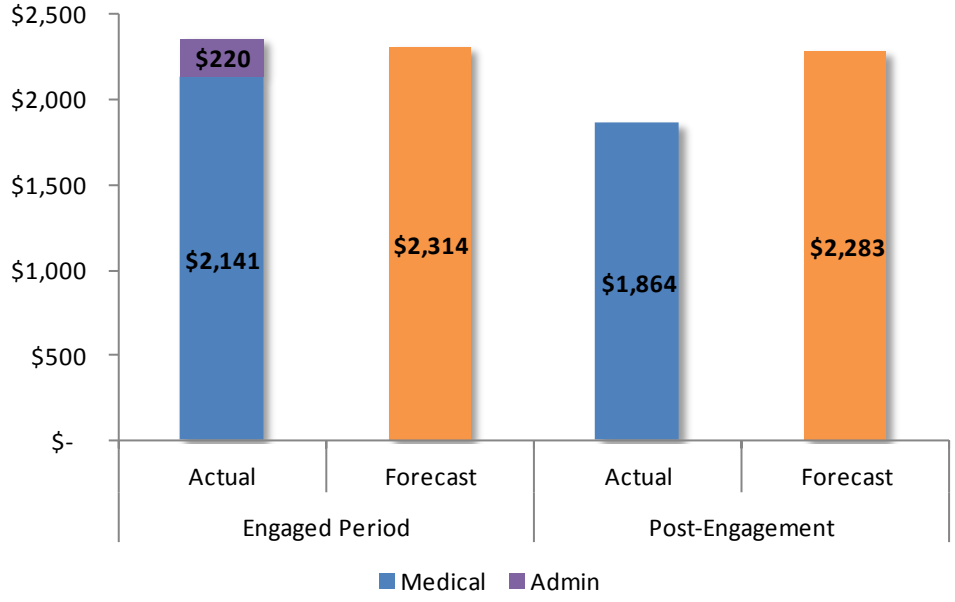
PMPM Medical Expenses and Cost-Effectiveness

PHPG performed cost-effectiveness tests by comparing forecasted costs to actual costs during the engaged and post-engagement periods. Results for both tiers are presented below.

Tier 1 Findings

As shown in the previous section, Tier 1 participant medical expenditures were slightly below forecast during the engaged period and significantly below forecast for the post-engaged period. The addition of Tier 1 PMPM administrative costs increased total expenditures during the engaged period slightly above forecasted costs. However, the savings achieved post-engagement substantially outweighed the initial slight deficit (see exhibit 2-194).

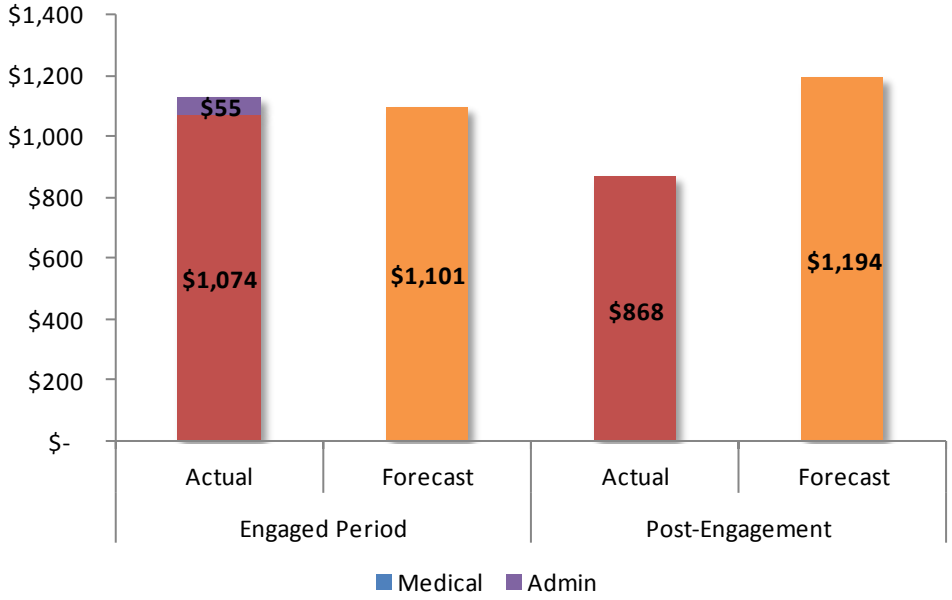
Exhibit 2-194 – Nurse Care Management PMPM Cost Effectiveness Test – Tier 1



Tier 2 Findings

Tier 2 participant expenditures also were slightly above forecast for the engaged period, after accounting for administrative expenses. However, as with Tier 1, the savings achieved post-engagement significantly outweighed the initial deficit (see exhibit 2-195).

Exhibit 2-195 – Nurse Care Management PMPM Cost Effectiveness Test – Tier 2



Aggregate Cost Effectiveness Test

PHPG multiplied member months by PMPM values to calculate the aggregate cost impact of nurse care management through SFY 2013. Summary results are presented in exhibit 2-196; detailed calculations are presented in Appendix D.

Exhibit 2-196 – Aggregate Cost Effectiveness Test*

Enrollment Group	Engaged Period			Post-Engagement			Total Aggregate Savings/ (Deficit)
	Member Months	PMPM Savings/ (Deficit)	Aggregate Savings/ (Deficit)	Member Months	PMPM Savings/ (Deficit)	Aggregate Savings/ (Deficit)	
Tier 1	45,684	$ (47.12)	$ (2,152,605)	67,045	$ 419.00	$ 28,091,849	$ 25,939,244
Tier 2	182,236	$ (28.99)	$ (5,282,602)	316,183	$ 326.49	$ 103,230,719	$ 97,948,117
Total	**227,920**	**$ (32.62)**	**$ (7,435,207)**	**383,228**	**$ 342.67**	**$ 131,322,568**	**$ 123,887,361**

*PMPM savings/(deficit) figures are rounded. Aggregate savings/(deficit) reflect exact PMPM to five decimal places.

The Tier 1 population, while generating a small deficit (two percent) during the first 12 months of engagement as measured against $106 million in total medical claims costs, achieved significant savings (18 percent) in months 13 and beyond, as measured against $153 million in total medical claims costs.

Tier 2 participants also generated a small deficit (three percent) during the first 12 months of engagement as measured against $201 million in total medical claims costs; savings during the later period amounted to 27 percent, as measured against $378 million in total claim costs.

Overall, the nurse care management portion of the SoonerCare HMP through SFY 2013 achieved aggregate savings in excess of $124 million, or approximately 15 percent of total forecasted medical claims costs.

The $124 million figure is $37 million higher than the $87 million in aggregate savings accrued through SFY 2012 (see exhibit 2-197).

Exhibit 2-197 – Nurse Care Management Cost Effectiveness by Fiscal Year

State Fiscal Year	Forecasted Medical Expenditures	Actual Medical Expenditures	Forecast versus Actual	Medical Savings	Administrative Expenses	Net Savings
2008	$ 2,370,408	$ 2,117,896	89%	$ 252,512	$ (58,369)	$ 194,143
2009	$ 63,576,713	$ 56,576,807	89%	$ 6,999,906	$ (1,563,881)	$ 5,436,025
2010	$ 118,030,470	$ 100,251,467	85%	$ 17,779,003	$ (2,868,509)	$ 14,910,494
2011	$ 178,889,718	$ 146,722,148	82%	$ 32,167,570	$ (4,300,212)	$ 27,867,358
2012	$ 232,059,115	$ 188,449,355	81%	$ 43,609,760	$ (5,505,616)	$ 38,104,144
2013	$ 248,065,846	$ 204,867,610	83%	$ 43,198,236	$ (5,823,040)	$ 37,375,196
Total	**$ 842,992,269**	**$ 698,985,281**	**83%**	**$ 144,006,988**	**$ (20,119,627)**	**$ 123,887,361**

Nurse Care Management Evaluation - Summary of Key Findings

Nurse care management neared full enrollment at the end of the program's first full year of operations and maintained full enrollment through SFY 2011. Enrollment dipped in early SFY 2012 as the OHCA and Telligen made a concerted effort to graduate participants who had achieved their self-management goals, before moving back toward capacity by the end of the fiscal year. In February 2013, the OHCA and Telligen began making changes to decrease the enrollment of new members and transition current members in preparation for the "second generation" SoonerCare HMP, which would begin July 2013.

Telligen continued to meet contract requirements in SFY 2013 and participants remained very positive about the program, with nearly 90 percent describing themselves as very satisfied with their nurse care manager and the SoonerCare HMP overall. Only about 25 percent of survey respondents reported an improvement in their health, but nearly all that did see an improvement attributed it to the program's services. Most of the former participants (classified as "dropouts" by Telligen) valued the program and would like to re-enroll. A significant minority of the population that initially "opted out" when contacted also would like another chance to enroll.

The results of the quality of care analysis were favorable, when comparing SoonerCare HMP participants to an "eligible but not enrolled" population. The participant compliance rate exceeded the comparison group rate on 16 of 21 diagnosis-specific measures (76 percent). The most impressive results, relative to the comparison group, were observed for participants with chronic obstructive pulmonary disease, congestive heart failure, diabetes and hypertension.

Evidence of the program's impact on utilization and expenditures, first documented in SFY 2010, continues to grow. Actual PMPM expenditures remain below MEDai forecasts and aggregate savings now stand at approximately $124 million.

CHAPTER 3 – PRACTICE FACILITATION AND PROVIDER EDUCATION EVALUATION

This chapter presents evaluation findings for the practice facilitation/provider education component of the SoonerCare HMP. The chapter begins with an overview of practice facilitation, followed by evaluation results in four areas:

- Audit of Telligen
- Practice facilitation provider satisfaction survey
- Expenditure trends
- Cost effectiveness analysis

Each section begins with a description of the specific evaluation measures and evaluation methodology, followed by a detailed presentation of results.

Overview of the Practice Facilitation/Provider Education Model

Telligen has a team of practice facilitators in Oklahoma providing in-office assistance to OHCA-designated primary care providers. The program is voluntary and offered at no charge to the provider. Practice facilitators assist primary care providers and their office staff to improve their efficiency and quality of care through the following activities:

- Reviewing claims and clinical records using a standardized audit tool to determine provider deficiencies;
- Assessing primary care providers' care processes for potential improvement;
- Developing and implementing educational and other interventions based on the results of the audit tool and care process assessment;
- Providing quarterly continuing practice evaluation reports to primary care providers including, but not limited to, SoonerCare HMP enrollee participation and medical regimen adherence and performance against selected QM/QI measures; and
- Evaluating such interventions for acceptance, response and effectiveness and documenting successful interventions for inclusion in OHCA's Practice Facilitation Procedure Manual.

During SFY 2011, the OHCA and Telligen revised the practice facilitation recruitment process by requiring interested practices to undergo an application process. Practices complete an application which is reviewed by the OHCA. The OHCA's HMP director and manager meet with practices face-to-face. The shift towards engaging practices earlier in the process is believed to facilitate an increased investment in the program and its objectives by practices.

After a practice is selected for facilitation services, the practice facilitator works with the practice team, and consults with the OHCA as necessary, to outline the most appropriate implementation schedule of core components. Core practice facilitation components include:

- Foundational/infrastructural development;
- Full practice assessment/evaluation;
- Process improvement interventions; and
- Registry implementation.

During the initial time onsite, the practice facilitator observes office processes and flows, meets with the provider and key staff to determine goals and action plans and assists the office in completing a clinic self-assessment. The practice facilitator also audits charts of chronic disease patients to look for gaps in care. Based on the findings of the assessments and audit, the practice facilitator works with the provider and his/her staff to improve practice efficiency and effectiveness.

Providers engaged in practice facilitation also receive training in the CareMeasures™ Data Registry. CareMeasures™ is an electronic patient registry used by office personnel to securely collect clinical data on patients with chronic conditions for quality measurement purposes.

Practice facilitators install CareMeasures™ and assist with the initial entry of patient data into the data system. Providers and key staff then receive training on how to use CareMeasures™ on an ongoing basis. The information they enter is uploaded monthly to Telligen, where it is used to track provider quality of care using Healthcare Effectiveness Data and Information Set (HEDIS®) and HEDIS®-like measures.

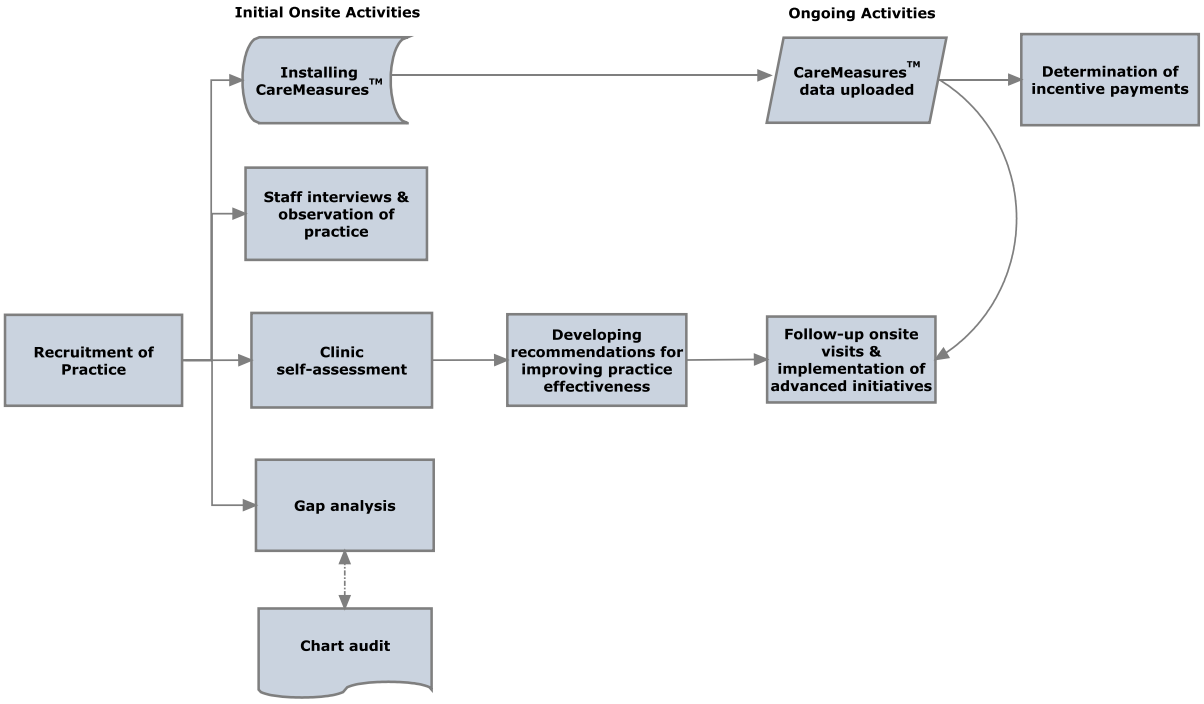
Practices that master the core components work with the practice facilitator on implementing advanced concepts, which include developing and employing utilization of a patient education library; behavioral health screening processes, referral resources and coordination; educational resources; community resources; and motivational interviewing.

With the input of the OHCA, practice facilitators also organize, plan and administer collaborative training sessions to which all practice facilitation providers are invited. The collaboratives are designed to improve chronic and preventive care and to promote partnerships within the provider community. Meeting locations are rotated throughout the state.

Reward incentives also are available to providers who participate in practice facilitation. The incentive program is described in detail later in the chapter.

Exhibit 3-1 summarizes the practice facilitation process.

Exhibit 3-1 – Practice Facilitation Process



Telligen also is responsible for undertaking broad-based education through quarterly mailings to primary care providers throughout the state. The education addresses both treatment of chronic illnesses and delivery of preventive care.

Telligen Audit – Practice Facilitation and Provider Education

PHPG's audit of Telligen examined its compliance with contractual standards related to staffing, practice facilitation and provider education. PHPG also compared audit findings to reports previously submitted by Telligen to the OHCA, to validate the accuracy of Telligen's data.

The specific evaluation measures addressed through the audit included both "structure" and "process" items, as summarized in exhibit 3-2.

Exhibit 3-2 – Audit Evaluation Measures – Practice Facilitation and Provider Education

Measure Type	Measure	Applies to
Structure	Practice Facilitator staffing	Practice Facilitation sites
Process	Practice Facilitation assessments	Practice Facilitation sites
	Quarterly mailings	All providers
	Monthly collaboratives	Practice Facilitation sites
	Incentive payments	Practice Facilitation sites

Practice Facilitator Staffing

Overview: Telligen is required to maintain a staff of eight field-based practice facilitators.

Evaluation Findings: PHPG reviewed Telligen practice facilitator staffing during SFY 2013 to verify compliance with the staffing standard. During this period, Telligen experienced some staff turnover and leaves of absence. In the event that a practice facilitator leaves, the caseloads may be transitioned to other practice facilitators or the practice facilitator manager until the position becomes filled. Telligen reported having all positions filled at the time of the audit.

Since implementation of the program, 96 practices have at least initiated practice facilitation and 50 continue to participate in the practice facilitation initiative. At the end of SFY 2013, each practice facilitator had an individual caseload of between two and eight practices. The number of practices within each practice facilitator's caseload generally depends on practice sizes, experience of the practice facilitator and the number of available practice facilitators.

Conclusion: Telligen met contract standards for staffing.

Practice Facilitation Baseline Assessment

Overview: Practice facilitators spend several weeks onsite at newly-assigned practices. The exact amount of time spent at each practice is determined by the level of need to implement practice facilitation services. During the initial phase of practice facilitation, the practice facilitator compiles information on the practice, including quality improvement and disease identification processes, patient education, community resource use, practice policies and procedures, staff input on efficiency and quality of care and overall practice interest for in-services.

Providers and practice staff also complete a "Clinical Practice Self-Evaluation Study" – a compilation survey that evaluates a practice's chronic illness resources, quality improvement activities, office efficiency and level of care for four chronic conditions: heart failure, coronary artery disease, diabetes and hypertension. Once the assessments are completed, the practice facilitator shares the results with the entire practice.

Practice facilitators also perform chart audits to obtain baseline data on the practice's patients with chronic conditions. This baseline is used to create a priority list for the practice to improve quality of care and office efficiency. Plan Do Study Act (PDSA) Worksheets are then completed. These worksheets describe the plan for change, necessary steps and the responsible parties to implement any changes. Education also is provided on quality improvement using various tools and resources (for example, the Doctor's Office Quality-Information Technology (DOC-IT) approach). Other activities include development of pre- and post-facilitation flow charts.

Evaluation Findings: Five practices started practice facilitation during SFY 2013. Expected activities were performed at each practice.

In anticipation of changes to the SoonerCare HMP, Telligen did not begin facilitation efforts at any practices after February 2013. During the months that followed, Telligen transitioned and prepared existing practices for new program components.

Conclusion: Telligen met contract standards for performance of practice facilitation assessments.

Provider Education – Quarterly Mailings

Overview: Telligen is required to mail-out educational materials on a quarterly basis to SoonerCare primary care providers throughout Oklahoma. The mailings generally include national and statewide chronic disease data, recommendations on patient education and information on additional resources for providers.

Telligen provides a list of suggested topics to the OHCA and the OHCA makes the final selection. Telligen's SoonerCare HMP Medical Director composes the materials, which are then mailed to

an OHCA-designated list of providers. Telligen generates and distributes the educational materials to providers through an automated system.

Evaluation Findings: Three mailings were distributed during SFY 2013. Exhibit 3-3 below provides a synopsis of the SFY 2013 mailings.

Exhibit 3-3 – Quarterly Mailing Topics

Mailing Date	Topic	Summary
September 2012	**Hypertension: Present but not accounted for!**	• Prevalence of hypertension in Oklahoma • Classification and management of blood pressure for adults • Algorithm for the treatment of hypertension
December 2012	**Antibiotic Overuse: It's Time to Get Smart!**	• Synopsis of studies linking higher antibiotic prescription rates with a higher proportion of microbial organisms that are resistant to antibiotics • Examples of common infections inappropriately treated with antibiotics • Centers for Disease Control (CDC) resources to facilitate the discussion of appropriate use of antibiotics with patients
March 2013	**HMP Transition Information**	• Letter to participating practices informing them of the start of the "second generation" program in July 2013 • Introduction of key features of the new program including academic detailing and nurse care management services provided by health coaches embedded in high target practices • Options for continued participation in the program and use of CareMeasures™ registry

Conclusion: In March 2013, Telligen notified practices of upcoming changes to the SoonerCare HMP to take effect in July 2013. A mailing was not sent in June 2013 since the "second generation" program would begin the following month.

Monthly Collaboratives

Overview: With the aid of the OHCA, practice facilitators also organize, plan and administer collaborative sessions to which practice facilitation providers are invited. The monthly collaboratives are designed to improve chronic and preventive care and to promote partnerships within the provider community. Meeting locations are rotated throughout the state.

Evaluation Findings: Meetings were held monthly from July 2012 through May 2013, with the exception of February 2013. The February collaborative was rescheduled for April, resulting in two meetings being held that month. The meetings generally featured overviews of participating providers; examination of the relationship between performance improvement and chronic condition; and a round table or panel discussion.

In SFY 2010, Telligen management reported exploring potential methods to encourage provider participation, including offering financial incentive payments for attendance. In addition to providers, clinic owners and staff participating on a quality improvement team would be eligible for an incentive payment for attendance and participation.

Beginning in June 2011, the OHCA and Telligen made the first payments using this updated incentive plan. Providers who attend and participate at regional collaborative meetings receive an incentive payment. Clinic owners other than the provider who attend the collaborative also receive a clinic payment, as well as clinic staff who participate in the practice's quality improvement team.

During the second quarter of 2012, the incentive program was revised to provide $250 to attending and participating providers and $100 to clinic staff on the quality improvement team. Practices are required to actively participate in discussions to qualify.

The OHCA and Telligen management also initiated a new format for collaboratives to improve discussions. Changes include conducting collaboratives in small groups and in a round table discussion format to foster clinic engagement. Discussions also are led by practices and practice facilitators rather than by the program's OHCA and Telligen medical directors. In addition, performance data is shared at the collaboratives to encourage performance improvement among the practices.

Conclusion: Telligen met the contractual requirements to hold monthly collaborative meetings and continued to take steps to encourage practice participation.

Incentive Payments

Overview: Providers who participate in practice facilitation have several opportunities to earn incentive payments. As discussed above, providers who attend and participate at regional collaborative meetings are eligible to receive a payment of $250. Clinic staff members who participate on the quality improvement team are encouraged to attend and participate at the meetings. Staff members are eligible to receive a payment of $100. Participation is defined by activities including presenting basic clinic information and introducing staff; presenting PDSA cycles; and giving recommendations for program change. Practices are eligible for one payment per year.

All providers engaged in practice facilitation receive training in the CareMeasures™ Data Registry. Each practice selects at least one target chronic disease process to report patient data in CareMeasures™. The chronic disease processes currently available for tracking include: asthma, chronic obstructive pulmonary disease, congestive heart failure, coronary artery disease, diabetes mellitus and hypertension. Providers also may elect to report on their preventive care related to breast cancer, colorectal cancer, influenza vaccination, pneumonia vaccination and tobacco cessation.

The revised incentive program requires new practices (i.e., never have been paid for reporting) to input applicable data into CareMeasures™ (or electronic health record or other registry) on a monthly basis. Practices also are required to be actively involved in the requirement for the majority of the measurement period, which is defined as four out of six months. The amount is pro-rated based on the number of members tracked in the disease registry. Data entry by the practice facilitator does not meet the criteria for this incentive; practices are required to input their own data on a monthly basis to be eligible. The "pay-for-reporting" incentive is paid out at the end of the second and fourth quarters for the year and is available for 12 months following the period of active facilitation (for a maximum of four quarters).

Practices that demonstrate a 10 percent relative improvement on their quality measure sets for the clinical suites chosen by the practice for quality improvement are eligible to receive a "pay-for-performance improvement" incentive. Performance improvement compares data over a 12-month period to performance level in the preceding year.

In addition, practices may be eligible for a "pay-for-process improvement" incentive for establishing education processes, including establishment and maintenance of an accessible patient education resource library for use by the provider and/or staff to enhance members' health knowledge and healthcare participation. To qualify for this payment, the patient education library must be organized and systematic; inclusive of the most common-place chronic diseases; maintained with up-to-date resources; routinely utilized at chronic disease patient encounters; actively involved in requirement for majority of measurement period; and documented that library is actively used. Payments also are available for practices that provide direct support of community/evidence-based education programs such as Living Longer Living Stronger and diabetes education.

Exhibit 3-4 provides an overview of the SoonerCare HMP incentive plan.

Exhibit 3-4 – SoonerCare HMP Practice Facilitation Incentive Plan

Incentive Description	Amount	Requirements
Pay for Attending and Participating in Collaborative Meetings		
Attendance and participation at regional collaborative meetings	• Provider – $250 • Clinic QI-Team Staff – $100 • One payment per year per practice	Attendance and active participation at collaborative meetings
Pay for Reporting		
Reporting chronic disease quality measures on a monthly basis through the CareMeasures™ patient registry and data warehouse	• 1-50 members – $500/clinical suite • 51-100 members – $750/clinical suite • 1,000 members – $1,000/clinical suite • Maximum amount dependent on number of members and clinical suites (ranging from $1,000 to $3,000 per year) • Available only for 12 months following period of active facilitation (for a maximum of four quarters)	Practice inputs applicable data into CareMeasures™ (or electronic health record/other registry) on a monthly basis with active involvement in the requirement for the majority of measurement period defined as four out of six months
Pay for Performance Improvement		
Demonstration of 10% relative improvement on quality measure sets for clinical suites chosen by practice for quality improvement	• $500 per clinical suite which has 10% relative improvement in core measures (must be actively working on all measures within the suite) over the 12-month period compared to performance level in the preceding year • Maximum amount of $2,000 per year • Paid out annually	Improvement calculated by Telligen based on data submitted to CareMeasures™ data warehouse
Pay for Process Improvement		
Education processes and/or advanced education processes	• $500 for establishment, maintenance and utilization of patient education library and/or $250 for direct support of community/evidence-based education programs • $1,000 maximum payout per practice (one time only) • Paid out in the quarter following establishment of the library	Current and accessible patient education resource library for use by provider/staff to enhance members' health knowledge and health care participation; direct support of evidence-based programming

Evaluation Findings: Telligen has made pay-for-participation payments to all eligible practices.

Thirty-five practices received payment for attending collaboratives during SFY 2013.

Telligen tracks provider reporting into CareMeasures™ on an automated basis. Telligen also automatically calculates and tracks composite scores by practice.

During SFY 2013, actively facilitated practices were reporting in CareMeasures™. With the exception of practices that were working with their practice facilitator to enter data into CareMeasures™, all other practices previously were paid for all four quarters of reporting and no longer eligible for payment. Of the practices eligible to receive payment for performance improvement, 33 practices demonstrated a 10 percent relative improvement over a 12 month period and received payments. Payments ranged from $500 to $1,500.

Forty-three practices were paid in 2011 for implementing an education process. In SFY 2013, only one practice was eligible and received payment for the pay-for-process improvement for education processes.

Conclusion: The structure for calculating and making incentive payments is in place and being managed in accordance with contractual requirements.

Practice Facilitation Provider Satisfaction Survey

PHPG conducts an ongoing survey of provider offices that participate in practice facilitation to gather information on provider perceptions and satisfaction with the experience. PHPG has conducted 78 surveys since April 2009.

Survey Methodology and Structure

The OHCA provides to PHPG the names of primary care practices and providers who have completed the initial onsite portion of practice facilitation. PHPG sends introductory letters informing providers they will be contacted by telephone to complete a survey. (The introductory letter and survey instrument are available in Appendix F.)

PHPG waits a minimum of four business days for the letters to arrive before initiating telephone outreach calls. The OHCA Health Management Program Coordinator also assists by contacting providers to encourage their participation in the survey. Providers who are unreachable by phone are sent the survey instrument in the mail or by fax.

The survey instrument consists of 26 questions in five areas:

- Practice demographics
- Decision to participate in practice facilitation
- Practice facilitation components
- Practice facilitation outcomes
- Nurse care management

Survey responses can be furnished by providers and/or members of the practice staff. Only practice staff members with direct experience and knowledge of the program are permitted to respond to the survey in lieu of the provider. PHPG screens non-physician respondents to verify their involvement with the program before conducting the survey.

In January 2013, PHPG initiated a follow-up survey for providers who have been engaged in practice facilitation for at least two years. The follow-up survey explores in greater depth previous survey responses, changes made to practices and suggestions for program improvement. Nine practices participated in the follow-up survey in time to be included in this report.

Survey Margin of Error and Confidence Levels

The provider survey results, like the member survey, are based on a sample of the total practice facilitation population, and therefore, contain a margin of error. Ninety-six practices have undergone some phase of practice facilitation and 50 continue to participate. Seventy-eight practices have participated in the survey, yielding a margin of error of +/- 4.83 percent.

Practice Facilitation Survey Findings

The survey respondents included 71 general/family medicine practices, four general internal medicine practices, one general pediatrics practice, one multi-practice clinic and one urgent care provider. Most (59 percent) reported that they primarily treat Medicaid patients, and approximately 77 percent reported having been Medicaid providers for at least five years.

Decision to Participate

Survey respondents cited a variety of reasons for deciding to participate in practice facilitation. However, the largest segment, at 38 percent, expressed a desire to improve care management and outcomes of patients with chronic conditions, aligning with the OHCA's own objectives for the program. The second largest segment, at 14 percent, was interested in receiving assistance in redesigning practice workflows.

Respondents were asked to rate the importance of the specific activities typically performed by practice facilitators. Respondents were asked to rate their importance regardless of the practice's actual experience.

Each of the activities was rated "very important" by at least 59 percent of the respondents (see exhibit 3-5). The baseline assessment received the highest rating (82.1 percent), followed by receiving information on the prevalence of chronic diseases among their patients (76.9 percent) and receiving ongoing education and assistance (74.4 percent).

Exhibit 3-5 **– Importance of Practice Facilitation Components**

Practice Facilitation Component	Level of Importance (Composite)			
	Very Important	Somewhat Important	Not too Important	Not at all Important/ N/A
1. Receiving information on the prevalence of chronic diseases among your patients	76.9%	17.9%	5.1%	0.0%
2. Receiving a baseline assessment of how well you have been managing the care of your patients with chronic diseases	82.1%	17.9%	0.0%	0.0%
3. Receiving focused training in evidence-based practice guidelines for chronic conditions	69.2%	30.8%	0.0%	0.0%
4. Receiving assistance in redesigning office workflows and policies and procedures for management of patients with chronic diseases	59.0%	41.0%	0.0%	0.0%
5. Identifying performance measures to track your improvement in managing the care of your patients with chronic diseases	73.1%	25.6%	1.3%	0.0%

Practice Facilitation Component	Level of Importance (Composite)			
	Very Important	Somewhat Important	Not too Important	Not at all Important/ N/A
6. Having a Practice Facilitator on-site to work with you and your staff	60.3%	28.2%	10.3%	1.3%
7. Receiving quarterly reports on your progress with respect to identified performance measures	69.2%	29.5%	1.3%	0.0%
8. Receiving ongoing education and assistance after conclusion of the initial on-site activities	74.4%	19.2%	5.1%	1.3%

Helpfulness of Program Components

Respondents were next asked to rate the helpfulness of the same practice facilitation components in terms of improving their management of patients with chronic conditions. The majority of practices reported each of the activities to be very helpful (see exhibit 3-6).

Among the practices that participated in the follow-up survey, the most helpful component cited was receiving progress reports on identified performance measures. The progress reports are shared with providers and at broader collaborative meetings. Respondents to the follow-up survey found the collaborative meetings useful because they provide an opportunity for practices to compare their performance to that of their peers.

A higher percentage of follow-up survey respondents also found having focused training in evidence-based practice guidelines, identifying performance measures to track improvement, receiving onsite assistance from practice facilitators and receiving ongoing education and assistance to be very helpful.

Exhibit 3-6 – Helpfulness of Practice Facilitation Components

Practice Facilitation Component	Follow-up Survey	Level of Helpfulness (Composite)				
	Very Helpful	Very Helpful	Somewhat Helpful	Not too Helpful	Not at all Helpful	Activity did not Occur
1. Receiving information on the prevalence of chronic diseases among your patients	***66.7%***	***62.8%***	26.9%	7.7%	0.0%	2.6%
2. Receiving a baseline assessment of how well you have been managing the care of your patients with chronic diseases	***66.7%***	***74.4%***	19.2%	5.1%	0.0%	1.3%
3. Receiving focused training in evidence-based practice guidelines for chronic conditions	***77.8%***	***64.1%***	24.4%	10.3%	0.0%	1.3%

Practice Facilitation Component	Follow-up Survey	Level of Helpfulness (Composite)				
	Very Helpful	Very Helpful	Somewhat Helpful	Not too Helpful	Not at all Helpful	Activity did not Occur
4. Receiving assistance in redesigning office workflows and policies and procedures for management of patients with chronic diseases	***55.6%***	***55.1%***	32.1%	10.3%	0.0%	2.6%
5. Identifying performance measures to track your improvement in managing the care of your patients with chronic diseases	***77.8%***	***69.2%***	21.8%	6.4%	0.0%	2.6%
6. Having a Practice Facilitator on-site to work with you and your staff	***77.8%***	***67.9%***	17.9%	10.3%	2.6%	1.3%
7. Receiving quarterly reports on your progress with respect to identified performance measures	***88.9%***	***66.7%***	24.4%	3.8%	0.0%	5.1%
8. Receiving ongoing education and assistance after conclusion of the initial on-site activities	***77.8%***	***69.2%***	15.4%	10.3%	1.3%	3.8%

Program Impact

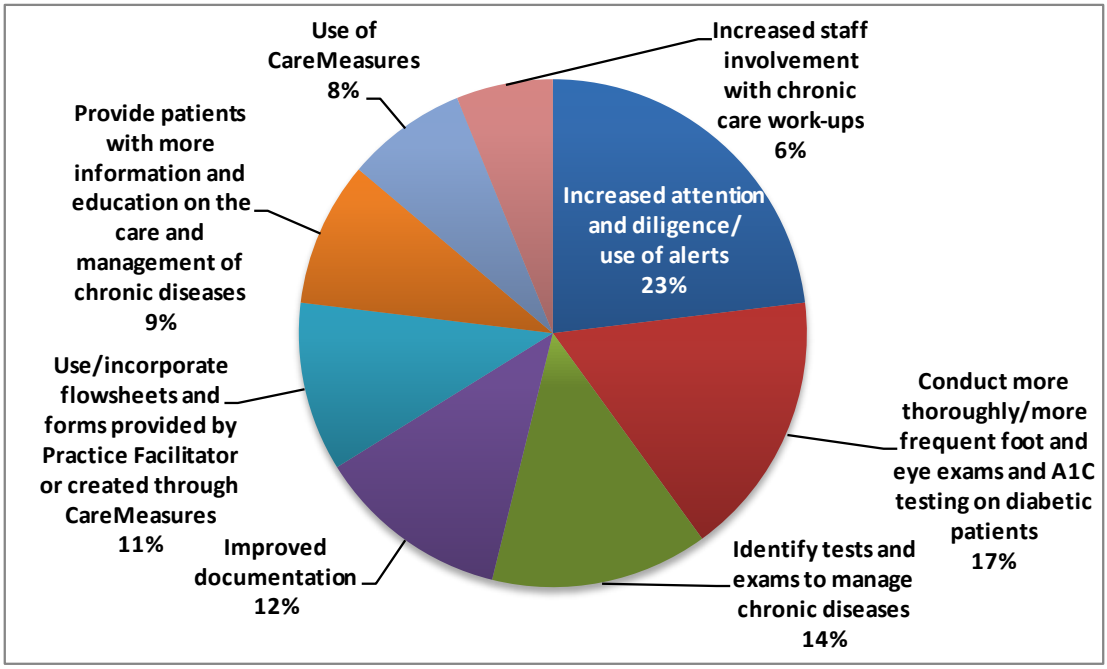
Eighty-seven percent of the surveyed practices reported making changes in the management of their patients with chronic conditions as a result of participating in practice facilitation. The few that did not report making changes indicated they had incorporated the facilitator's recommendations prior to the exercise or had just completed practice facilitation at the time of the survey and were in the process of implementing changes.

When asked to name what changes were made, many cited activities directly related to quality of care. Twenty-three percent reported a general increase in attention and diligence in care. Respondents also reported setting alerts in their electronic health records systems to notify them of tests to order and items to discuss during patient visits.

Seventeen percent of practices reported conducting more thorough exams on patients with diabetes and improving their post-exam documentation. Specific actions included making foot and eye exams and HbA1c testing on diabetic patients a priority and using the materials provided by their practice facilitator to create guides for best practices in diabetic care. Some respondents noted that their patients have become accustomed to taking off their shoes and socks immediately upon entering the examination room.

Twelve percent of the practices mentioned making general improvements in patient documentation, and 11 percent stated they are incorporating the flow sheets and other forms provided by their practice facilitation nurse. Six percent reported that their staff is more involved with chronic care work-ups, which has increased the practice's efficiency over time (see exhibit 3-7).

Exhibit 3-7 – Changes Made by Practice



Note: Respondents permitted to give multiple reasons.

All respondents to the follow-up survey indicated that their practice has made changes in the management of patients with chronic conditions as the result of participating in the Practice Facilitation initiative. Respondents generally cited implementing tracking procedures to ensure that patients, as stated by one provider, "don't fall through the cracks" for testing.

CareMeasures™

One of the key documentation and patient tracking components of practice facilitation is CareMeasures™, a web based electronic patient registry that securely collects clinical data on SoonerCare HMP participants for quality measurement purposes. Seventy-three percent of surveyed practices reported using CareMeasures™ while another five percent reported that they were still being trained in its use.[40] Among the practices using CareMeasures™ to track performance improvement, 72 percent found it to be a useful tool. All follow-up survey respondents reported using CareMeasures™ for reporting and found it to be useful.

[40] A provider who responded "no" indicated that it was practice staff, not the provider, that used CareMeasures™.

When initially surveyed, some solo practitioners and smaller practices indicated that CareMeasures™ training and data entry required a considerable investment of staff time, which they considered burdensome. During subsequent interviews with staff, PHPG asked whether this perception had changed over time.

Practice staff replied that it took a significant amount of time to become familiarized with the process. However, most now find CareMeasures™ data entry to be easier, in part due to introduction of a more user-friendly version of the application interface and in part to gaining familiarity with the reporting process. Several practices reported using CareMeasures™ to track privately insured and Medicare patients, as well as chronic disease measures outside of those addressed through the SoonerCare HMP.

Practices that participated in PHPG's follow-up survey also cited use of CareMeasures™ for identifying additional care opportunities and trends among patients with chronic conditions. A few respondents recommended that CareMeasures™ allow for compatibility and integration with the practice's electronic health records system to avoid duplication of work.

Incentive Payments

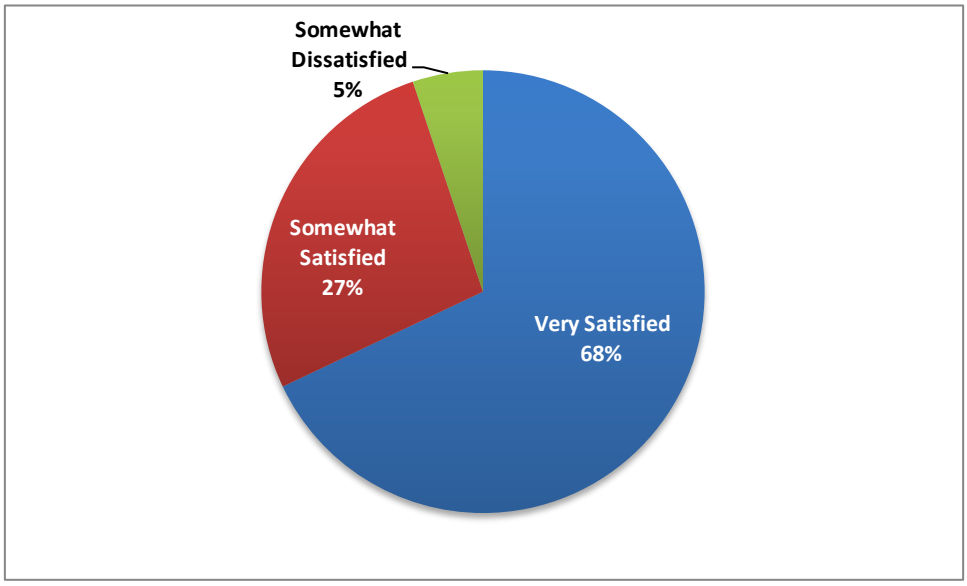
Providers are eligible for various incentive payments, including for submitting data through CareMeasures™, demonstrating improvements in care over time and attending monthly collaboratives. Eighty-two percent of the survey respondents were aware of the various incentive payments being offered for their participation in the initiative.

Although the availability of incentive payments was not a primary motivation for participating in practice facilitation, most providers stated the incentive payments made it more likely they would continue to participate. Some indicated that incentive payments helped to encourage staff to become more involved with the initiative, including CareMeasures™ data entry, collaborative meeting participation and spending more time to educate patients on chronic conditions.

Overall Satisfaction

Eighty-six percent of the practices credited the program with improving their management of patients with chronic conditions. Sixty-eight percent reported being "very satisfied" with their experience, and another 27 percent were somewhat satisfied (see exhibit 3-8).

Exhibit 3-8 – Satisfaction with Practice Facilitation Experience



Almost all of the surveyed practices (91 percent) said they would recommend the practice facilitation initiative to other physicians caring for patients with chronic conditions. Many indicated that they want the OHCA to offer the program to more practices.

All follow-up survey respondents felt that their practices had become more effective as the result of the Practice Facilitation initiative. Likewise, all reported being very satisfied with the overall experience and would recommend the initiative to their colleagues.

Recommendations for Improvement

Despite reporting high levels of satisfaction, some providers had suggestions for improving the program.

Recommendations included:

- Have the practice facilitators on-site more frequently and for longer periods of time, particularly to assist with data entry and use of CareMeasures™

- Make CareMeasures™ more user-friendly for providers[41]
- Provide more support and assistance for CareMeasures™ data entry
- Tailor the program and forms to suit the needs of the practice for efficiency
- Enable providers to demonstrate to the OHCA that patients are non-compliant
- Limit the need to switch practice facilitators
- Allow for compatibility and integration of CareMeasures™ with practices' electronic health record systems
- Encourage staff and residents to become more involved in the program

Among follow-up survey respondents, four practices reported having monthly contact with their Practice Facilitators, two practices reported contact twice a week and three practices reported weekly contact. All practices described the level of contact as meeting their needs. In addition to on-site visits, practice facilitators interacted with practices via phone and email depending on the needs of the practice.

PHPG followed up with Telligen management regarding some of the recommendations made by recently surveyed practices. Telligen management reported experiencing staffing turnover during 2012, which resulted in some practices working with more than one practice facilitator. At the time of the 2013 audit, Telligen reported being fully staffed.

During PHPG's prior discussions with Telligen, management also reported working with practices to identify options for integration of CareMeasures™ with other systems used by the practice. However, given the extensive costs required to develop the necessary integration pathways, the practices have elected to keep their systems separate rather than invest additional resources to make modifications.

The OHCA and Telligen also have developed incentive payments for practice staff involvement, including attendance at monthly collaboratives. During SFY 2012, practice facilitators began working with medical assistants in the practices on techniques for engaging patients in self-management. This continued in SFY 2013. Telligen also continued to work with academic centers/residency clinics to encourage staff and resident involvement in the program. Staff members who work as part of the quality team are eligible to receive incentive payments for attendance at the regional collaborative meetings.

[41] Some recommendations were made prior to introduction of the more user-friendly data entry format.

Nurse Care Management

Before concluding the survey, respondents were asked if any of their patients were participating in nurse care management; 62 percent answered "yes." Seventy-seven percent of these respondents stated they believe that the nurse care managers are having a positive impact on their patients.

Among the follow-up respondents, seven of the nine practices reported that the nurse care managers are having a positive impact on patients. As stated by one provider: "Nurse care managers understand the patient's level of understanding and are able to better communicate at [the patient's] level." As noted by another provider, nurse care managers are making an impact "...because they [nurse care managers] can go to the home and meet with the patient on their time without distractions."

One follow-up respondent indicated that he/she has not seen any difference in the care of patients. Another stated that program should focus on providing psychiatric management of patients.

Among the practices with patients in nurse care management, 65 percent also reported being consulted by a nurse care manager. Although most of the practices had received reports and requests for information from the nurse care managers, some did not consider this to be true consultation. Rather, these providers expected nurse care managers to work with them directly and collaboratively.

At the same time, some providers acknowledged it is difficult to allocate time to discuss a patient's care in-person or via phone with the nurse care manager. These providers recommended that nurse care managers contact them at the start of the care management process to discuss patient care and goals and to facilitate care coordination. Once this has occurred, a monthly or quarterly written update on the status of their patients would suffice as a means of ongoing communication.

Some nurse care managers have taken additional steps to facilitate collaboration with their members' providers, including accompanying members to their primary care provider visits and communicating via phone or in person with providers on members' care and treatment plans.

The OHCA's Health Access Network (HAN) pilot program works with providers to coordinate and improve the quality of care for SoonerCare members. During SFY 2011, the OHCA and Telligen began exploring opportunities to facilitate collaboration and resources among nurse care managers, practice facilitators and participating providers. The program was expanded to include more practices during SFY 2012.

These recent initiatives served as precursors to the OHCA's decision in SFY 2014 to place health coaches in the offices of participating providers who have undergone practice facilitation.

Summary of Key Findings

Providers who have completed the onsite portion of practice facilitation view the SoonerCare HMP very favorably. The most common reason cited for participating was to improve care management of patients with chronic conditions. Eighty-six percent of respondents credited the program with helping them to achieve this objective.

When asked to cite specific changes, providers were able to offer examples, including conducting more thorough foot and eye exams of diabetic patients, providing more information to patients on how to self-manage their disease and doing a better job of documenting patient care.

Overall, 95 percent of providers described themselves as very or somewhat satisfied with their experiences in the program. Ninety-one percent would recommend the program to a colleague. A strong majority of providers (77 percent) credited nurse care managers with having a positive impact on their patients.

Quality of Care Analysis

Providers engaged in practice facilitation receive training in the CareMeasures™ Data Registry. CareMeasures™ is an electronic patient registry used by office personnel to securely collect clinical data on patients with chronic conditions selected by the practice for quality measurement purposes. The information they enter is uploaded to Telligen, where it is used to track provider quality of care using National Quality Forum-endorsed quality of care measures.

In SFY 2013, all active provider sites that participated in practice facilitation reported their monthly results for CareMeasures™. As was the case for the previous annual reports, practices focused only on those measures they could commit to improve by implementing quality improvement processes. At a minimum, each site reported on at least one diagnosis and its corresponding measures. All SFY 2013 patients were in the registry for the entire year.

Quality of Care Analysis Methodology

Telligen generates monthly reports on the number of patients entered into the registry, by practice site and diagnostic category, and the portion in compliance with CareMeasures™ clinical measures. The reports include 15 diagnosis-specific clinical measures, six population-wide prevention measures and eight tobacco-cessation measures.[42] (Please refer to Appendix E for a listing of the measures and their definitions.)

PHPG compared the final Telligen SFY 2013 report, containing data for June 2013, to the same reports for June 2012 (12-month longitudinal analysis) and June 2009 (48-month longitudinal analysis). The comparison to June 2009 was intended to identify quality of care trends going back to the start of the program.

In addition, PHPG calculated compliance percentages for the entire SoonerCare Choice population to serve as a HEDIS®-like comparison, where applicable, to CareMeasures™ for the SFY 2013 period. To match the selected portion of the HMP population, PHPG selected SoonerCare members who had at least six months of enrollment in SFY 2013. PHPG used HEDIS® guidelines but substituted the state fiscal year period for the standard HEDIS® calendar year cycle.

Finally, PHPG performed a separate analysis of 19 practices identified by the OHCA as "high buy-in" participants, meaning they had demonstrated a higher than average level of interest and commitment to the program. PHPG compared compliance percentages for these practices to other sites to document any differences in performance during SFY 2013.

[42] In past reports, 29 diagnosis-specific clinical measures were reported. However, 14 measures related to Coronary Artery Disease (CAD) and Congestive Heart Failure (CHF) were not implemented or reported by practices in SFY 2013.

PHPG excluded any practice comparisons for a measure where there were fewer than five patients in the denominator, as the findings for such a small patient base were not considered reliable. In such cases, all other data is presented for informational purposes only.

Findings for the diagnosis-specific measures are presented below, followed by the prevention and tobacco cessation measures. For each measure, the first comparison displayed is the year-over-year compliance percentages, followed by the SFY 2009 to SFY 2013 comparison and then the high buy-in practices analysis, where applicable.

Asthma

CareMeasures™ includes two asthma measures:

- ASTHMA-01[43] - Percent of patients ages 5 to 40 with a diagnosis of asthma who were evaluated during at least one office visit within 12 months for the frequency (numeric) of daytime and nocturnal asthma symptoms
- ASTHMA-04 - Percent of patients ages 5 to 40 with a diagnosis of mild, moderate or severe persistent asthma who were prescribed either the preferred long-term control medication (inhaled corticosteroid) or an acceptable alternative treatment

Longitudinal Analysis 2012 - 2013

The compliance rate for individuals who had at least one office visit (ASTHMA-01) within 12 months increased significantly, rising from 61.4 percent in SFY 2012 to 85.9 percent in SFY 2013 (see exhibit 3-9). The improvement in this measure may be due to a greater focus on the assessment of asthma symptoms and to improved provider documentation of such during patient visits.

The compliance rate for corticosteroid prescriptions (ASTHMA-04) remained at 100 percent in SFY 2013.

Exhibit 3-9 – CareMeasures™ Asthma Clinical Measures 2012 - 2013

Measure	June 2012 Findings Percent Compliant	June 2013 Findings Percent Compliant	2012-2013 Comparison % Point Change	2013 SoonerCare Medicaid Findings Percent Compliant
1. Percent of patients 5 to 40 with a diagnosis of asthma who were evaluated during at least one office visit within 12 months for the frequency (numeric) of daytime and nocturnal asthma symptoms	61.4%	85.9%	24.5%	N/A
4. Percent of patients 5 to 40 with a diagnosis of mild, moderate or severe persistent asthma who were prescribed either the preferred long-term control medication (inhaled corticosteroid) or an acceptable alternative treatment	100.0%	100.0%	0.0%	N/A

[43] The measure identifiers (e.g., ASTHMA-01) are included in the report for reader reference and do not necessarily correspond to how the measures are designated by Telligen within the CareMeasures™ registry.

Longitudinal Analysis 2009 - 2013

The compliance rate on both measures rose considerably between SFY 2009 and SFY 2013. Compliance for the office visit measure (ASTHMA-01) increased by 74.1 percentage points while corticosteroid prescription compliance (ASTHMA-04) increased by 80.3 percentage points (see exhibit 3-10).

It should be noted that the two asthma measures were added to the CareMeasures™ reporting system in spring 2009, which reduced the number of reporting months and likely lowered the SFY 2009 reported compliance rate. Even taking this into account, the findings demonstrate a significant improvement in compliance among practice facilitation sites.

Exhibit 3-10 – CareMeasures™ Asthma Clinical Measures 2009 - 2013

	June 2009 Findings	June 2013 Findings	2009-2013 Comparison
Measure	**Percent Compliant**	**Percent Compliant**	**% Point Change**
1. Percent of patients 5 to 40 with a diagnosis of asthma who were evaluated during at least one office visit within 12 months for the frequency (numeric) of daytime and nocturnal asthma symptoms	11.8%	85.9%	74.1%
4. Percent of patients 5 to 40 with a diagnosis of mild, moderate or severe persistent asthma who were prescribed either the preferred long-term control medication (inhaled corticosteroid) or an acceptable alternative treatment	19.7%	100.0%	80.3%

High Buy-in Practices

The compliance rate for individuals who had at least one office visit within 12 months was slightly lower for the high buy-in practices than those of other practices in SFY 2013. The compliance rate for individuals with an asthma diagnosis who were prescribed medication in SFY 2013 was 100 percent for both high buy-in practices and all other practices (see exhibit 3-11).

Exhibit 3-11 – CareMeasures™ Asthma Clinical Measures - High Buy-in Practices

Measure	June 2013 Findings – All Other Percent Compliant	June 2013 Findings – High Buy-in Percent Compliant	High Buy-in to All Other Comparison % Point Change
1. Percent of patients 5 to 40 with a diagnosis of asthma who were evaluated during at least one office visit within 12 months for the frequency (numeric) of daytime and nocturnal asthma symptoms	87.7%	83.3%	(4.4%)
4. Percent of patients 5 to 40 with a diagnosis of mild, moderate or severe persistent asthma who were prescribed either the preferred long-term control medication (inhaled corticosteroid) or an acceptable alternative treatment	100.0%	100.0%	0.0%

Chronic Obstructive Pulmonary Disease (COPD)

Two measures for chronic obstructive pulmonary disease (COPD) were reported in SFY 2013 by a sample of the SoonerCare practices:

- COPD-01 - Percentage of patients ages 18 years and older with a diagnosis of chronic obstructive pulmonary disease (COPD) who had spirometry evaluation results documented
- COPD-02 - Percentage of patients ages 18 years and older with a diagnosis of chronic obstructive pulmonary disease (COPD), who have an FEV1/FVC less than 70 percent and have symptoms, who were prescribed an inhaled bronchodilator

Longitudinal Analysis 2012 - 2013

The compliance rate for patients who had spirometry results documented (COPD-01) in SFY 2013 increased substantially to 81.0 percent from 44.3 percent in SFY 2012 (see exhibit 3-12). The SFY 2013 rate was well above the 31.5 percent Medicaid HMO National Committee for Quality Assurance (NCQA) HEDIS® measure result for adults 40 years of age and older with a new diagnosis or newly active COPD who received spirometry testing to confirm the diagnosis (2013 results for 2012 measurement year).

The compliance rate for patients who were prescribed an inhaled bronchodilator (COPD-02) in SFY 2013 remained at 91.7 percent, which suggests sustained improvements both in compliance and in reporting.

Exhibit 3-12 – CareMeasures™ Chronic Obstructive Pulmonary Disease Clinical Measures 2012 - 2013

Measure	June 2012 Findings Percent Compliant	June 2013 Findings Percent Compliant	2012-2013 Comparison % Point Change	2013 SoonerCare Medicaid Findings Percent Compliant
1. Spirometry Evaluation	44.3%	81.0%	36.7%	N/A
2. Bronchodilator Therapy	91.7%	91.7%	0.0%	N/A

Longitudinal Analysis 2009 - 2013

The COPD measures were implemented for practices in SFY 2010 and the compliance rate on both measures rose dramatically between SFY 2011 and SFY 2013. Compliance for patients who had spirometry results documented (COPD-01) increased by 58.3 percentage points while the compliance for patients who were prescribed an inhaled bronchodilator (COPD-02) increased by 86.9 percentage points (see exhibit 3-13).

Exhibit 3-13 – CareMeasures™ Chronic Obstructive Pulmonary Disease Clinical Measures 2011 - 2013

	June 2011 Findings	June 2013 Findings	2011-2013 Comparison	2013 SoonerCare Medicaid Findings
Measure	Percent Compliant	Percent Compliant	% Point Change	Percent Compliant
1. Spirometry Evaluation	22.7%	81.0%	58.3%	N/A
2. Bronchodilator Therapy	4.8%	91.7%	86.9%	N/A

High Buy-in Practices

PHPG excluded practice comparisons between high buy-in and other practices for COPD as no high buy-in practices reported on these measures in SFY 2013.

Diabetes Mellitus (DM)

CareMeasures™ includes nine diabetes mellitus (DM) measures:

- DM-01 - Percent of patients 18 to 75 with DM receiving one or more A1c test(s) per year
- DM-02 - Percent of patients 18 to 75 with DM who had most recent hemoglobin A1c greater than 9 percent
- DM-03 - Percent of patients 18 to 75 with DM who had most recent blood pressure in control (< 140/80 mmHg)
- DM-04 - Percent of patients 18 to 75 with DM receiving at least one lipid profile (or all component tests)
- DM-05 - Percent of patients 18 to 75 with DM with most recent LDL-C < 130 mg/dl
- DM-05W- Percent of patients 18 to 75 with DM who had most recent LDL-C level in control (less than 100 mg/dl)
- DM-06 - Percent of patients 18 to 75 with DM who received urine protein screening or medical attention for nephropathy during at least one office visit within 12 months
- DM-07 - Percent of patients 18 to 75 with diagnosis of DM who had dilated eye exam
- DM-08 - Percent of patients 18 to 75 with DM who had a foot exam

Longitudinal Analysis 2012 - 2013

Diabetes compliance rates continued to vary greatly across measures but all demonstrated improvement from SFY 2012 to SFY 2013. Compliance rates for seven of the nine measures were above 50 percent in SFY 2013. Two measures – percentage of patients with diabetes with most recent LDL-C < 100 mg/dl (DM-05W) and percentage of patients who had a dilated eye exam (DM-07) – remained below 50 percent.

The percentage of patients who received one or more A1c test(s) per year (DM-01) rose from 79.6 percent in SFY 2012 to 87.1 percent in SFY 2013 (see exhibit 3-14). The 2013 (2012 measurement year) Medicaid HMO NCQA HEDIS® measure result for the percentage of patients 18 to 75 with diagnosis of DM who had an A1c test was 83 percent.

The percentage of patients who had most recent hemoglobin A1c less than nine percent (DM-02) increased by 7.5 percentage points. The percentage of patients who had their recent blood pressure in control (<140/80 mmHg) was 71.7 percent in SFY 2013. The 2013 Medicaid HMO NCQA HEDIS® measure result for the percentage of patients 18 to 75 who had their recent blood pressure in control (<140/80 mmHg) was 37.8 percent.

The percentage of patients who had at least one lipid profile (DM-04) was 69.1 percent in SFY 2013. The 2013 Medicaid HMO NCQA HEDIS® measure result for the percentage of patients 18 to 75 who had who had at least one lipid profile was 75.5 percent, which exceeded the SFY 2013 rate.

The percentage of patients with diabetes who had their most recent LDL-C < 130 mg/dl (DM-05) increased from 47.1 percent in SFY 2012 to 53.1 percent in SFY 2013.

The percentage of patients who had their most recent LDL-C level in control (less than 100 mg/dl) was 33.3 percent in SFY 2013. The 2013 Medicaid HMO NCQA HEDIS® measure result for the percentage of patients 18 to 75 who had LDL-C control (less than 100 mg/dl) was fairly consistent at 33.9 percent. Continued emphasis should be placed on practices to obtain the required cholesterol screening during the measurement period. Patients should receive ongoing education about the importance of diet, exercise and health risk factors in an effort to lower their cholesterol levels.

Similarly, the percentage of patients with diabetes who received a urine protein screening (DM-06) increased from 52.7 percent in SFY 2012 to 59 percent in SFY 2013.

The percentage of patients who had a dilated eye exam (DM-07) was 49.2 percent in SFY 2013. The 2013 Medicaid HMO NCQA HEDIS® measure result for the percentage of patients 18 to 75 with diagnosis of DM who had a dilated eye exam was 53.2 percent, which slightly exceeded the SFY 2013 rate.

Obtaining reports from eye doctors was noted to be an issue. To remedy this, Telligen attempted to establish a simple way of communicating results but compliance remained low. This was relevant to DM-07 results because the eye exam measure is not complete until Telligen receives a report on a patient's chart.

The percentage of patients with diabetes who had a foot exam (DM-08) increased from 52.4 percent in SFY 2012 to 64.2 percent in SFY 2013.

Three CareMeasures™ (DM-01, DM-06 and DM-07) were compared to the entire SoonerCare Choice population. The compliance percentages for all three measures were found to be greater in the SFY 2013 SoonerCare HMP population.

Exhibit 3-14 – CareMeasures™ Diabetes Mellitus Clinical Measures 2012 - 2013

Measure	June 2012 Findings Percent Compliant	June 2013 Findings Percent Compliant	2012-2013 Comparison % Point Change	2013 SoonerCare Medicaid Findings Percent Compliant
1. Percent of patients 18 to 75 with DM receiving one or more A1c test(s) per year	79.6%	87.1%	7.5%	76.1%
2. Percent of patients 18 to 75 with DM who had most recent hemoglobin A1c less than 9 percent	59.5%	67.0%	7.5%	N/A
3. Percent of patients 18 to 75 with DM who had most recent blood pressure in control (<140/80 mmHg)	67.8%	71.7%	3.9%	N/A
4. Percent of patients 18 to 75 with DM receiving at least one lipid profile (or all component tests)	62.7%	69.1%	6.4%	N/A
5. Percent of patients 18 to 75 with DM with most recent LDL-C < 130 mg/dl	47.1%	53.1%	6.0%	N/A
5W. Percent of patients 18 to 75 with DM who had most recent LDL-C level in control (less than 100 mg/dl)	30.6%	33.3%	2.7%	N/A
6. Percent of patients 18 to 75 with DM who received urine protein screening or medical attention for nephropathy during at least one office visit within 12 months	52.7%	59.0%	6.3%	29.7%
7. Percent of patients 18 to 75 with diagnosis of DM who had dilated eye exam	37.7%	49.2%	11.5%	30.5%
8. Percent of patients 18 to 75 with DM who had a foot exam	52.4%	64.2%	11.8%	N/A

Longitudinal Analysis 2009 - 2013

Compliance for eight of the nine measures increased from SFY 2009 to SFY 2013 (see exhibit 3-15). The greatest increase was among the percentage of patients who had a dilated eye exam (DM-07) but this measure still remains below 50 percent.

The percentage of patients who had most recent hemoglobin A1c less than nine percent (DM-02) decreased from 82.8 percent in SFY 2012 to 67 percent in SFY 2013. Identifying patients with HbA1c values greater than nine percent provides an opportunity for each practice to focus attention and services on those patients who are in poor control and at highest risk. Practices

should have tracking systems to facilitate appropriate management and follow-up for these patients since ongoing monitoring and patient education about diet, exercise and health risks is necessary. There also should be increased efforts made to increase patient compliance with lab testing.

Exhibit 3-15 – CareMeasures™ Diabetes Mellitus Clinical Measures 2009 - 2013

	June 2009 Findings	June 2013 Findings	2009-2013 Comparison
Measure	**Percent Compliant**	**Percent Compliant**	**% Point Change**
1. Percent of patients 18 to 75 with DM receiving one or more A1c test(s) per year	73.7%	87.1%	13.4%
2. Percent of patients 18 to 75 with DM who had most recent hemoglobin A1c less than 9 percent	82.8%	67.0%	(15.8%)
3. Percent of patients 18 to 75 with DM who had most recent blood pressure in control (<140/80 mmHg)	45.0%	71.7%	26.7%
4. Percent of patients 18 to 75 with DM receiving at least one lipid profile (or all component tests)	58.3%	69.1%	10.8%
5. Percent of patients 18 to 75 with DM with most recent LDL-C < 130 mg/dl	46.4%	53.1%	6.7%
5W. Percent of patients 18 to 75 with DM who had most recent LDL-C level in control (less than 100 mg/dl)	32.0%	33.3%	1.3%
6. Percent of patients 18 to 75 with DM who received urine protein screening or medical attention for nephropathy during at least one office visit within 12 months	45.0%	59.0%	14.0%
7. Percent of patients 18 to 75 with diagnosis of DM who had dilated eye exam	16.5%	49.2%	32.7%
8. Percent of patients 18 to 75 with DM who had a foot exam	34.3%	64.2%	29.9%

High Buy-in Practices

The high buy-in practice compliance rate exceeded the rate for other practices on three of the nine diabetes measures (see exhibit 3-16). For the other six measures, the rate for all other practices slightly exceeded the high buy-in rate. According to Telligen, patient compliance was low in completing lab tests, such as A1c and LDL-Cs. The low compliance rates contributed to the lower number of patients reported in the CareMeasures™ database. Physicians and nurses reminded members and gave prescriptions to them for the lab tests but members did not follow up and have lab work completed.

Exhibit 3-16 – CareMeasures™ Diabetes Mellitus Clinical Measures – High Buy-in Practices

	June 2013 Findings – All Other	June 2013 Findings – High Buy-in	High Buy-in to All Other Comparison
Measure	**Percent Compliant**	**Percent Compliant**	**% Point Change**
1. Percent of patients 18 to 75 with DM receiving one or more A1c test(s) per year	87.5%	86.5%	(1.0%)
2. Percent of patients 18 to 75 with DM who had most recent hemoglobin A1c less than 9 percent	69.2%	64.1%	(5.1%)
3. Percent of patients 18 to 75 with DM who had most recent blood pressure in control (<140/80 mmHg)	73.0%	69.8%	(3.2%)
4. Percent of patients 18 to 75 with DM receiving at least one lipid profile (or all component tests)	67.9%	70.8%	2.9%
5. Percent of patients 18 to 75 with DM with most recent LDL-C < 130 mg/dl	55.6%	49.6%	(6.0%)
5W. Percent of patients 18 to 75 with DM who had most recent LDL-C level in control (less than 100 mg/dl)	34.1%	32.2%	(1.9%)
6. Percent of patients 18 to 75 with DM who received urine protein screening or medical attention for nephropathy during at least one office visit within 12 months	58.9%	59.1%	0.2%
7. Percent of patients 18 to 75 with diagnosis of DM who had dilated eye exam	45.3%	54.4%	9.1%
8. Percent of patients 18 to 75 with DM who had a foot exam	66.9%	60.4%	(6.5%)

Hypertension (HTN)

CareMeasures™ includes two hypertension (HTN) measures:

- HTN-01 - Percent of patients with blood pressure measurement recorded among all patient visits for patients 18 and older with diagnosed HTN
- HTN-02 - Percent of patients 18 and older who had a diagnosis of HTN and whose blood pressure was adequately controlled (< 140/90 mmHg) during the measurement year

Longitudinal Analysis 2012 - 2013

The compliance rate for both hypertension measures increased slightly from SFY 2012 to SFY 2013. The compliance rate for recorded blood pressure measurements (HTN-01) remained high from SFY 2012 to SFY 2013 (see exhibit 3-17). The percentage of patients with adequate blood pressure control (HTN-02) was 69.4 percent, which surpassed the 2013 Medicaid HMO NCQA HEDIS® rate of 56.3 percent.

Exhibit 3-17 – CareMeasures™ Hypertension Clinical Measures 2012 - 2013

Measure	June 2012 Findings Percent Compliant	June 2013 Findings Percent Compliant	2012-2013 Comparison % Point Change	2013 SoonerCare Medicaid Findings Percent Compliant
1. Percent of patients with blood pressure measurement recorded among all patient visits for patients 18 and older with diagnosed HTN	98.6%	98.8%	0.2%	N/A
2. Percent of patients 18 and older who had a diagnosis of HTN and whose blood pressure was adequately controlled (< 140/90 mmHg) during the measurement year	66.2%	69.4%	3.2%	N/A

Longitudinal Analysis 2009 - 2013

The compliance rate for blood pressure screening (HTN-01) remained fairly constant from SFY 2009 to SFY 2013 (see exhibit 3-18). There was a moderate increase observed in the compliance rate for adequate blood pressure control (HTN-02).

Exhibit 3-18 – CareMeasures™ Hypertension Clinical Measures 2009 - 2013

	June 2009 Findings	June 2013 Findings	2009-2013 Comparison
Measure	**Percent Compliant**	**Percent Compliant**	**% Point Change**
1. Percent of patients with blood pressure measurement recorded among all patient visits for patients 18 and older with diagnosed HTN	99.7%	98.8%	(0.9%)
2. Percent of patients 18 and older who had a diagnosis of HTN and whose blood pressure was adequately controlled (< 140/90 mmHg) during the measurement year	62.8%	69.4%	6.6%

High Buy-in Practices

There were nearly universal compliance rates observed among both the general and high buy-in practice facilitation groups on measure HTN-01 (see exhibit 3-19). The high buy-in practice compliance rate was slightly lower than the rate for other practices on the adequate blood pressure control measure (HTN-02).

Exhibit 3-19 – CareMeasures™ Hypertension Clinical Measures – High Buy-in Practices

	June 2013 Findings – All Other	June 2013 Findings – High Buy-in	High Buy-in to All Other Comparison
Measure	**Percent Compliant**	**Percent Compliant**	**% Point Change**
1. Percent of patients with blood pressure measurement recorded among all patient visits for patients 18 and older with diagnosed HTN	98.6%	99.1%	0.5%
2. Percent of patients 18 and older who had a diagnosis of HTN and whose blood pressure was adequately controlled (< 140/90 mmHg) during the measurement year	70.8%	67.7%	(3.1%)

Prevention

CareMeasures™ includes six prevention measures:

- PC-01 - Percent of women 50 to 69 who had a mammogram to screen for breast cancer within 24 months
- PC-02 - Percent of patients 50 to 80 who received the appropriate colorectal cancer screening
- PC-03 - Percent of patients 18 and older who received an influenza vaccination during the measurement period
- PC-04 - Percent of patients 18 and older who have ever received a pneumococcal vaccine
- PC-05 - Percent of patients identified as tobacco users who received cessation intervention during the measurement period
- PC-06 - Percentage of patients ages 18 years and older with a calculated BMI in the past six months or during the current visit documented in the medical record and if the most recent BMI is outside of normal parameters, a follow-up plan is documented

Longitudinal Analysis 2012 - 2013

All six prevention measures showed improvement from SFY 2012 to SFY 2013, although five of the six measures are still below 50 percent (see exhibit 3-20). The breast cancer screening through mammography rate increased slightly from 34 percent in SFY 2012 to 39.4 percent in SFY 2013. This was still below the 51.9 percent rate reported for the 2013 Medicaid HMO NCQA HEDIS® measure (percentage of women 40–69 years of age who had at least one mammogram to screen for breast cancer in the past two years).

Additional efforts should be made by practices to educate patients about the importance of mammogram screening and assisting patients to schedule mammograms on a routine basis since mammograms detect, on average, about 80 percent to 90 percent of breast cancers in women.

The compliance rate for colorectal cancer screening (PC-02) improved slightly to 20 percent but remains low. The rates for the influenza vaccination (PC-03) increased by 23.7 percentage points while the rates for the pneumonia vaccination (PC-04) remained fairly constant from SFY 2012 to SFY 2013.

One measure, tobacco users who received cessation intervention (PC-05), increased by 16.2 percentage points but remains low at 20 percent. Ironically, the compliance rate may be

depressed in part due to education of providers by Telligen regarding what constitutes complete and billable tobacco cessation counseling.

The compliance rate for BMI and follow-up improved dramatically, increasing from 49.4 percent in SFY 2012 to 90.7 percent in SFY 2013. The findings suggest an improved focus on counseling, patient education and behavioral interventions to raise awareness of the risks inherent in obesity as well as to promote healthy eating and weight loss.

There is an ongoing need for improvement in preventive activities and patient education related to the majority of these measures. Additionally, similar to previous years, some providers are not administering the vaccines due to cost and are instead referring patients to community-based organizations. Tracking and documenting then become an issue, which contributes to some of the low percentages. Telligen also reports that some practices tend to concentrate more resources on the clinical measures and not as much on the prevention measures.

Three CareMeasures™ (PC-01, PC-02 and PC-03) were compared to the entire SoonerCare Choice population. The compliance percentages for all three measures were found to be greater in the SFY 2013 SoonerCare HMP population (see exhibit 3-20).

Exhibit 3-20 – CareMeasures™ Prevention Clinical Measures 2012 - 2013

	June 2012 Findings	June 2013 Findings	2012-2013 Comparison	2013 SoonerCare Medicaid Findings
Measure	**Percent Compliant**	**Percent Compliant**	**% Point Change**	**Percent Compliant**
1. Percent of women 50 to 69 who had a mammogram to screen for breast cancer within 24 months	34.0%	39.4%	5.4%	28.6%
2. Percent of patients 50 to 80 who received the appropriate colorectal cancer screening	19.2%	20.0%	0.8%	10.3%
3. Percent of patients 18 and older who received an influenza vaccination during the measurement period	13.4%	37.1%	23.7%	1.4%
4. Percent of patients 18 and older who have ever received a pneumococcal vaccine	8.3%	12.5%	4.2%	N/A
5. Percent of patients identified as tobacco users who received cessation intervention during the measurement period	3.8%	20.0%	16.2%	N/A
6. BMI and follow-up documented	49.4%	90.7%	41.3%	N/A

Longitudinal Analysis 2009 - 2013

Compliance rates for five of six measures increased from SFY 2009 to SFY 2013, although the five measures remain below 50 percent (see exhibit 3-21). PC-06 was implemented in SFY 2011, and the compliance rate for this measure has increased during the evaluation period of SFY 2011 to SFY 2013.

Exhibit 3-21 – CareMeasures™ Prevention Clinical Measures 2009 - 2013

	June 2009 Findings	June 2013 Findings	2009-2013 Comparison
Measure	**Percent Compliant**	**Percent Compliant**	**% Point Change**
1. Percent of women 50 to 69 who had a mammogram to screen for breast cancer within 24 months	7.5%	39.4%	31.9%
2. Percent of patients 50 to 80 who received the appropriate colorectal cancer screening	2.5%	20.0%	17.5%
3. Percent of patients 18 and older who received an influenza vaccination during the measurement period	5.6%	37.1%	31.5%
4. Percent of patients 18 and older who have ever received a pneumococcal vaccine	2.5%	12.5%	10.0%
5. Percent of patients identified as tobacco users who received cessation intervention during the measurement period	7.5%	20.0%	12.5%
6. BMI and follow-up documented[44]	28.5%	90.7%	62.2%

[44] The measure PC-06 is defined as the percentage of patients ages 18 years and older with a calculated BMI in the past six months or during the current visit documented in the medical record and if the most recent BMI is outside of normal parameters, a follow-up plan is documented. PC-06 was a new measure for SFY 2011. The compliance findings presented are for SFY 2011 and SFY 2013 and include the percentage point change for that period.

High Buy-in Practices

The compliance rates for the high buy-in practices were lower for three of six measures than those of all other practices in SFY 2013. The compliance rate for the high buy-in practices was slightly higher than those of all other practices in SFY 2013 for colorectal screening (see exhibit 3-22).

PHPG excluded practice comparisons between high buy-in and other practices for tobacco users who received a pneumococcal vaccine (PC-04) and cessation intervention (PC-05) since there were fewer than five patients in the denominator. The compliance rate for all other practices is listed for informational purposes only.

Exhibit 3-22 – CareMeasures™ Prevention Clinical Measures – High Buy-in Practices

	June 2013 Findings – All Other	June 2013 Findings – High Buy-in	High Buy-in to All Other Comparison
Measure	**Percent Compliant**	**Percent Compliant**	**% Point Change**
1. Percent of women 50 to 69 who had a mammogram to screen for breast cancer within 24 months	44.2%	36.0%	(8.2%)
2. Percent of patients 50 to 80 who received the appropriate colorectal cancer screening	18.0%	21.1%	3.1%
3. Percent of patients 18 and older who received an influenza vaccination during the measurement period	51.6%	3.7%	(47.9%)
4. Percent of patients 18 and older who have ever received a pneumococcal vaccine	16.7%	N/A	N/A
5. Percent of patients identified as tobacco users who received cessation intervention during the measurement period	20.0%	N/A	N/A
6. BMI and follow-up documented	96.4%	74.6%	(21.8%)

Tobacco Cessation

CareMeasures™ includes eight tobacco cessation measures (in addition to the measure reported under prevention):

- TOB-01 - Percent of patients 10 and older where inquiry about tobacco use was recorded
- TOB-02 - Percent of patients 10 and older who use tobacco where act of assessing the patient's readiness to quit tobacco use was recorded
- TOB-03 - Percent of patients 10 and older who use tobacco where the act of advising the patient to quit tobacco use was recorded
- TOB-04 - Percent of patients 10 and older who use tobacco where assistance with developing a behavioral quit plan was provided
- TOB-05 - Percent of patients 18 and older who use tobacco where medication use was recommended to aid their quit plan
- TOB-06 - Percent of patients 10 and older who use tobacco who were provided motivational treatment to quit tobacco use
- TOB-07 - Percent of patients 10 and older who use tobacco, and who are ready to quit using tobacco, where a follow up was scheduled
- TOB-08 - Percent of patients 10 and older who were former tobacco users where assistance with relapse prevention was provided

Longitudinal Analysis 2012 - 2013

Compliance rates for five of the eight tobacco cessation measures increased from SFY 2012 to SFY 2013 (see exhibit 3-23). PHPG excluded comparisons for tobacco users who received assistance with relapse prevention (PC-08) since there were fewer than five patients in the denominator. The compliance rate for inquiring and recording tobacco use (TOB-01) declined slightly. There was a moderate decline in the rate for providing motivational treatment to quit tobacco use (TOB-06).

According to Telligen, providers who are enrolled in the tobacco cessation measurement group are very diligent about "asking" about tobacco cessation during a patient history and physical. However, the providers tend to stop the tobacco cessation intervention process (5A Intervention Model) after this first "A", instead of initiating the remainder of the process during routine office visits for acute issues. As noted in the prevention section, PHPG has found that providers who are educated on the 5A Intervention Model tend to become more conservative in submitting claims for performance of tobacco cessation counseling, doing so only when all five components have been performed.

Another factor still contributing to the low compliance rate appears to be the data entry process into the CareMeasures™ registry. Some practice staff members contend the process is time consuming. In fact, a few practices elected to discontinue reporting on the tobacco measures because of the administrative burden associated with data entry.

Other practices have created worksheets for patient charts to be used by providers for the 5As but often, when tobacco cessation intervention is documented on the worksheet, the information is not entered into CareMeasures™ registry. The lack of data entry causes a decrease in reported (though not actual) measure compliance.

Practice facilitators who are entering data into the CareMeasures™ registry when performing chart audits often find that this data has not been recorded in the registry. Telligen continues to educate providers and staff on how to and the importance of entering the data into CareMeasures™.

Exhibit 3-23 – CareMeasures™ Tobacco Cessation Clinical Measures 2012 - 2013

Measure	June 2012 Findings Percent Compliant	June 2013 Findings Percent Compliant	2012-2013 Comparison % Point Change	2013 SoonerCare Medicaid Findings Percent Compliant
1. Percent of patients 10 and older where inquiry about tobacco use was recorded	63.9%	60.6%	(3.3%)	N/A

Measure	June 2012 Findings Percent Compliant	June 2013 Findings Percent Compliant	2012-2013 Comparison % Point Change	2013 SoonerCare Medicaid Findings Percent Compliant
2. Percent of patients 10 and older who use tobacco where act of assessing the patient's readiness to quit tobacco use was recorded	51.5%	75.7%	24.2%	N/A
3. Percent of patients 10 and older who use tobacco where the act of advising the patient to quit tobacco use was recorded	59.6%	95.5%	35.9%	N/A
4. Percent of patients 10 and older who use tobacco where assistance with developing a behavioral quit plan was provided	70.4%	77.8%	7.4%	N/A
5. Percent of patients 18 and older who use tobacco where medication use was recommend to aid their quit plan	37.0%	65.0%	28.0%	N/A
6. Percent of patients 10 and older who use tobacco who were provided motivational treatment to quit tobacco use	61.1%	40.9%	(20.2%)	N/A
7. Percent of patients 10 and older who use tobacco, and who are ready to quit using tobacco, where a follow up was scheduled	18.5%	25.5%	7.0%	N/A
8. Percent of patients 10 and older who were former tobacco users where assistance with relapse prevention was provided	28.6%	N/A	N/A	N/A

Longitudinal Analysis 2009 - 2013

Compliance rates for five of the eight measures increased from SFY 2009 to SFY 2013 (see exhibit 3-24). This suggests that education targeted at providers in order to focus efforts on the 5As during office visits and follow-up with their patients has made a positive impact. Education and continued chart audits also should be performed by Telligen to assess the quantity and quality of data entry for tobacco measures into the CareMeasures™ registry. The compliance rates for inquiring and recording tobacco use (TOB-01) as well as for providing motivational treatment to quit tobacco use (TOB-06) declined moderately.

According to Telligen, some providers had challenges with performing follow-up documentation as it related to inquiring about the 5As. While providers initially asked every patient on every visit, there was subsequent non-compliance on follow-up visits.

Exhibit 3-24 – CareMeasures™ Tobacco Cessation Clinical Measures 2009 - 2013

	June 2009 Findings	June 2013 Findings	2009-2013 Comparison
Measure	**Percent Compliant**	**Percent Compliant**	**% Point Change**
1. Percent of patients 10 and older where inquiry about tobacco use was recorded	77.1%	60.6%	(16.5%)
2. Percent of patients 10 and older who use tobacco where act of assessing the patient's readiness to quit tobacco use was recorded	55.6%	75.7%	20.1%
3. Percent of patients 10 and older who use tobacco where the act of advising the patient to quit tobacco use was recorded	32.8%	95.5%	62.7%
4. Percent of patients 10 and older who use tobacco where assistance with developing a behavioral quit plan was provided	73.8%	77.8%	4.0%
5. Percent of patients 18 and older who use tobacco where medication use was recommend to aid their quit plan	50.0%	65.0%	15.0%
6. Percent of patients 10 and older who use tobacco who were provided motivational treatment to quit tobacco use	63.3%	40.9%	(22.4%)
7. Percent of patients 10 and older who use tobacco, and who are ready to quit using tobacco, where a follow up was scheduled	10.3%	25.0%	14.7%

Measure	June 2009 Findings Percent Compliant	June 2013 Findings Percent Compliant	2009-2013 Comparison % Point Change
8. Percent of patients 10 and older who were former tobacco users where assistance with relapse prevention was provided	57.1%	N/A	N/A

High Buy-in Practices

PHPG excluded practice comparisons between high buy-in and other practices for tobacco cessation as no high buy-in practices reported on these measures in SFY 2013.

Summary of Key Findings

A general summary of key findings is presented below. The first comparison displayed is the year-over-year compliance percentage comparison summary, followed by the SFY 2009 to SFY 2013 comparison and the high buy-in practice analysis.

Longitudinal Analysis 2012 - 2013

Eighty-three percent (24 out of 29) of the CareMeasures™ findings improved from SFY 2012 to SFY 2013. Seven percent (2 out of 29) declined. The remaining three measures did not change or could not be tracked longitudinally because there were fewer than five patients in the denominator in SFY 2013.

Findings for the diagnosis-specific clinical measures demonstrated considerable increases in compliance rates for diabetes, hypertension, asthma and COPD. Two measures remained unchanged from SFY 2012 to SFY 2013. The compliance rate for corticosteroid prescriptions (ASTHMA-04) remained at 100 percent in SFY 2013. The compliance rate for patients who were prescribed an inhaled bronchodilator (COPD-02) remained 91.7 percent.

Findings for the prevention measures also demonstrated across the board increases in compliance rates, with considerable improvement observed for influenza vaccination (PC-03) and BMI screening and follow-up (PC-06). However, the rates remain relatively low in absolute terms, underscoring the need for continued education to bring compliance rates up to the levels reported by NCQA for Medicaid HMOs.

The majority of tobacco cessation measures (five out of eight) improved, while two measures declined and one could not be tracked longitudinally because there were fewer than five patients in the denominator in SFY 2013.

Six of nine CareMeasures™ (DM-01, DM-06, DM-07, PC-01, PC-02 and PC-03) were compared to the entire SoonerCare Choice population. Three measures (CAD-02, CAD-03 and HF-01) were not compared in SFY 2013 because no practices reported any of the Coronary Artery Disease (CAD) or Congestive Heart Failure (CHF) measures. The compliance percentages for all six measures were found to be greater in the SFY 2013 SoonerCare HMP population.

Longitudinal Analysis 2009 – 2013

Eighty-three percent (24 out of 29) of the CareMeasures™ findings improved during the longitudinal evaluation period. Nearly 14 percent (4 out of 29) declined. One measure, (TOB-08), could not be tracked longitudinally because there were fewer than five patients in the denominator in SFY 2013.

Findings for the diagnosis-specific clinical measures demonstrated considerable increases in compliance rates for diabetes, hypertension, asthma and COPD. Only one measure (DM-02) experienced a decline from SFY 2009 to SFY 2013.

All six prevention measures improved. Tobacco cessation results were mixed, with five of eight measures demonstrating moderate increases in compliance and two measures showing a decline. As discussed in last year's report, this decline may be attributable at least in part to more conservative reporting and billing activities by providers as the result of practice facilitation. As noted previously, TOB-08 could not be tracked longitudinally because there were fewer than five patients in the denominator in SFY 2013.

High Buy-in Practices

PHPG also performed a separate analysis of 19 practices identified by the OHCA as "high buy-in" participants, meaning they had demonstrated a higher than average level of interest and commitment to the program. PHPG compared compliance percentages for these practices to other sites to document any differences in performance during SFY 2013.

The high buy-in practices demonstrated better performance on nearly 30 percent (5 of 17) of the measures for which a comparison could be made. The high buy-in practices demonstrated poorer performance on eleven measures. One measure, ASTHMA-04, had the same findings for high buy-in compared to all other practices. According to Telligen, outcomes for the high buy-in practices may have declined due to the challenge of managing a larger number of measures, including the repetition of questions to be asked of patients, as well as time constraints for patient encounters, data collection and documentation.

As noted earlier, PHPG excluded any practice comparisons for a measure where there were fewer than five patients in the denominator, as the findings for such a small patient base were not considered reliable. As such, high buy-in practices had comparable findings for 17 measures in SFY 2013. High buy-in practices did not report on the following measures in SFY 2013: CAD (9 measures), COPD (2 measures), HF (5 measures), or Tobacco (8 measures). Two measures, PC-04 and PC-05, had fewer than five patients in the denominator.

This is in contrast to SFY 2012 where high buy-in practices had comparable findings for 23 measures. High buy-in practices did not report on the following measures in SFY 2012: CAD (9 measures) and COPD (2 measures). Nine measures had fewer than five patients in the denominator (HF-01, HF-02, HF-03, HF-04, HF-05, HF-06, PC-04, PC-05 and TOB-07).

Expenditure Trend Analysis

Overview

Practice facilitation, if effective, should have an observable impact on PMPM expenditures for patients with chronic conditions. Improvement in the quality of care should yield better outcomes in the form of lower acute care costs.

This section includes information for patients with chronic conditions treated at practice facilitation sites. The analysis includes the six conditions targeted for improvement and tracked through CareMeasures™: asthma, COPD, coronary artery disease, diabetes, congestive heart failure and hypertension.

It also includes ten other chronic conditions used by MEDai in calculation of the chronic impact score for potential nurse care managed participants: cerebrovascular accident (stroke), depression, HIV, hyperlipidemia (high cholesterol), lower back pain, migraine headache, multiple sclerosis, renal failure, rheumatoid arthritis and schizophrenia. PHPG considered it reasonable to include these additional conditions in the expenditure analysis since improvements in care management should transcend any particular disease.

Similar to the method used for the nurse care management evaluation, PHPG analyzed per member per month (PMPM) medical expenditures for patients treated during the evaluation period compared to MEDai forecasts. Due to a small number of providers entering the program in SFY 2013, PHPG expanded the analysis in the previous report to include additional evaluation periods. The SFY 2012 report presented results for the first 12 months following provider initiation into practice facilitation, months 13 to 24 and months 25 and beyond; this report will present results separately for months 25 to 36 and 37 to 48.

Exhibits summarizing the results for the sixteen conditions and practice facilitation overall during the three evaluation periods are included in Appendix G of the report. Key findings are presented starting on the second following page, after "Methodology for Creation of Expenditure Dataset". The six targeted conditions are presented first, followed by the other ten conditions and results for the sixteen conditions in aggregate.

Methodology for Creation of Expenditure Dataset

The practice facilitation dataset was developed from the complete Medicaid claims and eligibility extract provided by the state.

To be included in the analysis, patients must have received at least one service from a practice facilitation provider following the provider's initiation into practice facilitation.[45,46] Each

[45] There were approximately 48,000 members as of June 30, 2013.

evaluation period includes experience only for patients who received a service from a practice facilitation provider in the same or prior evaluation period. Patients only were included in their diagnostic category with the greatest expenditures during the post-initiation period.

For the first evaluation period, MEDai forecast data for patients was extracted from the member forecast file corresponding to the month in which they first saw a provider after that provider's initiation into practice facilitation[47]. Forecast data for the following evaluation periods were calculated by applying an annual growth factor based on the experience of other SoonerCare members.

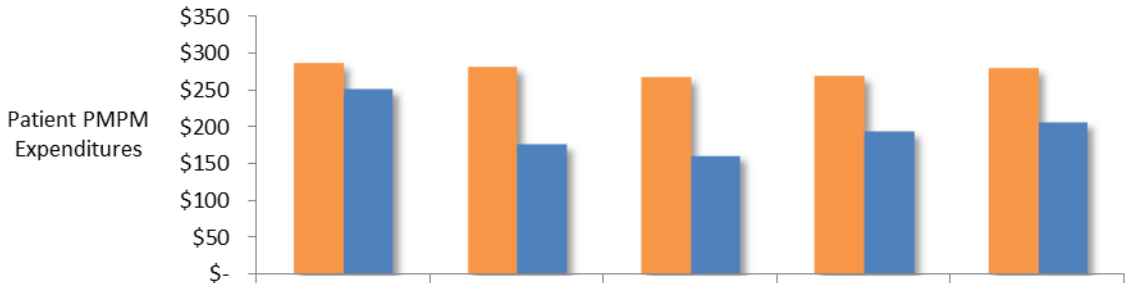
Some conditions have relatively small numbers of patients for which the condition is the most expensive diagnosis. This can result in significant variation in PMPM expenditures from year to year. Expenditure findings for these diagnoses should be interpreted with caution.

[46] Previous reports (SFY 2011 and earlier) included all patients who received a service from a Practice Facilitation provider during the 24 months prior to provider initiation into the program, even if no services were received after initiation of practice facilitation. Due to a greater volume of patients, beginning in SFY 2012, PHPG was able to perform a more targeted analysis limited only to patients who saw a Practice Facilitation provider after initiation.
[47] This is a refinement to the methodology used in earlier reports, when patient experience was compared against a forecast beginning with the provider's practice facilitation initiation date (regardless of when the patient actually saw that provider after initiation).

Target Condition: Asthma

PMPM medical expenditures for patients with asthma were consistently below forecast over the 48 months after the patients' first contact with the provider (following the provider's initiation into practice facilitation). PMPM savings averaged $73 (26 percent) through SFY 2013 (see exhibit 3-25).

Exhibit 3-25 – Forecast versus Actual PMPM Medical Expenditures: Asthma

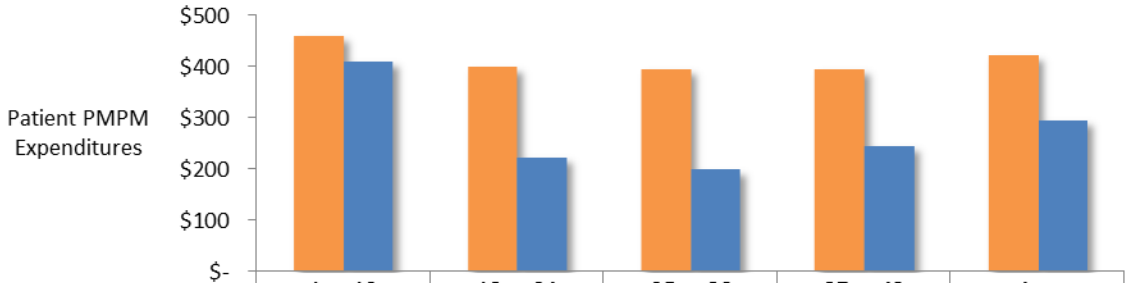


	1 to 12	13 to 24	25 to 36	37 to 48	Any
MEDai Forecast	$287	$281	$268	$269	$280
Actual	$252	$176	$162	$194	$207
Percent of Forecast	87.6%	62.7%	60.5%	72.1%	73.8%

Target Condition: COPD

PMPM medical expenditures for patients with COPD were consistently below forecast. PMPM savings averaged $127 (30 percent) through SFY 2013 (see exhibit 3-26).

Exhibit 3-26 – Forecast versus Actual PMPM Medical Expenditures: COPD

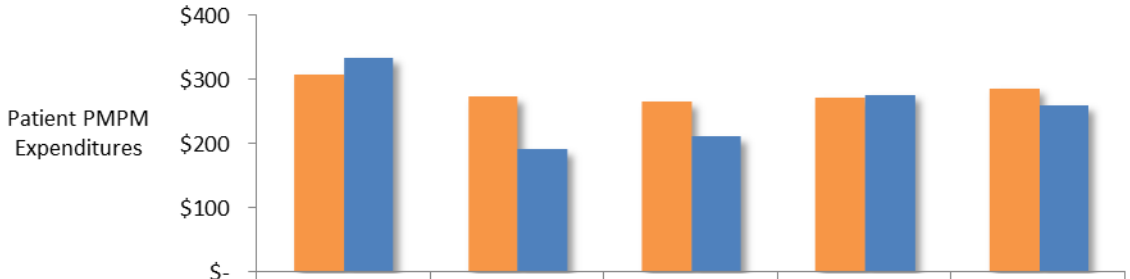


	1 to 12	13 to 24	25 to 36	37 to 48	Any
MEDai Forecast	$460	$399	$396	$396	$423
Actual	$411	$223	$199	$246	$296
Percent of Forecast	89.3%	55.8%	50.2%	62.1%	70.0%

Target Condition: Congestive Heart Failure

PMPM medical expenditures for patients with congestive heart failure were above forecast for the first 12 months before dropping below forecast in months 13 to 36. PMPM costs were nearly even with forecast in months 37 to 48. PMPM savings over the entire 48 month period averaged $26 (nine percent) (see exhibit 3-27).

Exhibit 3-27 – Forecast versus Actual PMPM Medical Expenditures: Congestive Heart Failure

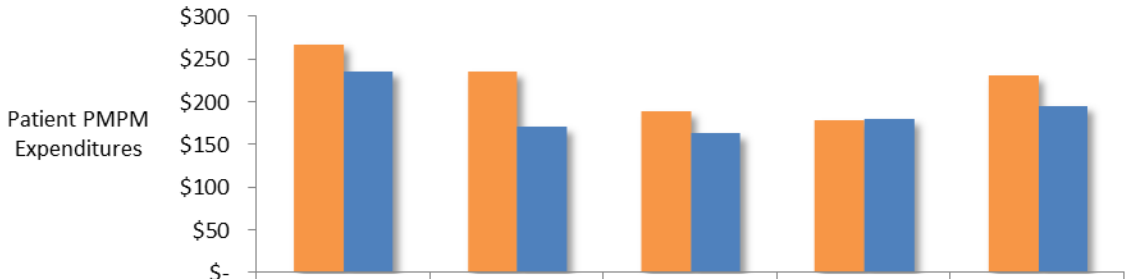


	1 to 12	13 to 24	25 to 36	37 to 48	Any
	Months After Patient's First Contact with Provider				
MEDai Forecast	$309	$273	$266	$273	$286
Actual	$334	$191	$211	$277	$260
Percent of Forecast	108.2%	70.0%	79.5%	101.5%	91.0%

Target Condition: Coronary Artery Disease

PMPM medical expenditures for patients with coronary artery disease were below or nearly even with forecast over the 48-month period. PMPM savings averaged $35 (15 percent) through SFY 2013 (see exhibit 3-28).

Exhibit 3-28 – Forecast versus Actual PMPM Medical Expenditures: Coronary Artery Disease

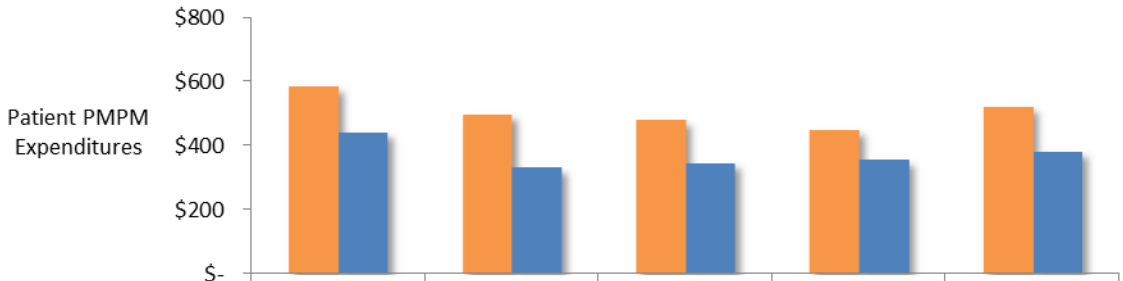


	1 to 12	13 to 24	25 to 36	37 to 48	Any
	Months After Patient's First Contact with Provider				
MEDai Forecast	$267	$235	$189	$178	$230
Actual	$236	$171	$163	$180	$195
Percent of Forecast	88.3%	72.7%	86.4%	101.0%	84.8%

Target Condition: Diabetes Mellitus

PMPM medical expenditures for patients with diabetes were consistently below forecast. PMPM savings averaged $140 (27 percent) through SFY 2013 (see exhibit 3-29).

Exhibit 3-29 – Forecast versus Actual PMPM Medical Expenditures: Diabetes

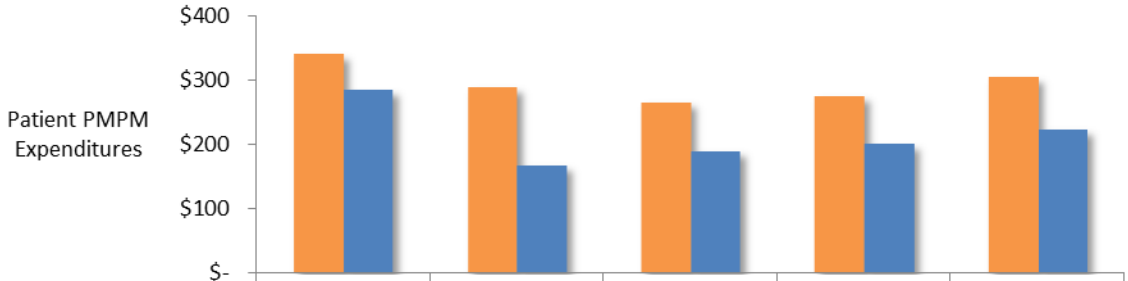


	1 to 12	13 to 24	25 to 36	37 to 48	Any
MEDai Forecast	$583	$498	$479	$449	$521
Actual	$441	$331	$345	$354	$381
Percent of Forecast	75.7%	66.4%	72.0%	78.9%	73.2%

Target Condition: Hypertension

PMPM medical expenditures for patients with hypertension were consistently below forecast. PMPM savings averaged $81 (27 percent) through SFY 2013 (see exhibit 3-30).

Exhibit 3-30 – Forecast versus Actual PMPM Medical Expenditures: Hypertension

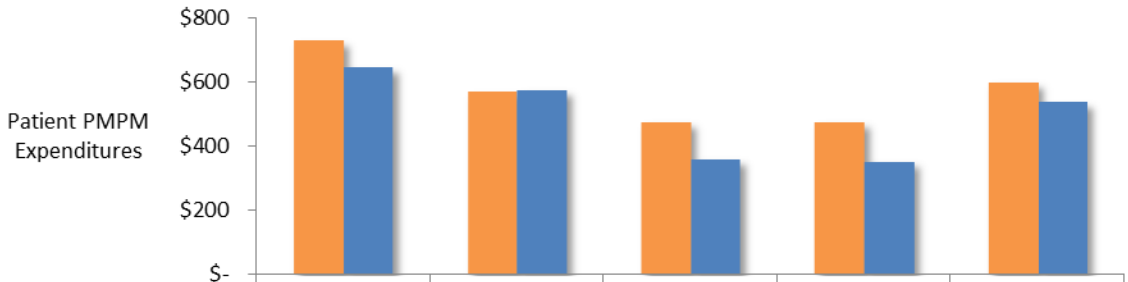


	1 to 12	13 to 24	25 to 36	37 to 48	Any
MEDai Forecast	$341	$290	$266	$277	$305
Actual	$286	$168	$191	$202	$224
Percent of Forecast	83.7%	58.0%	71.6%	72.9%	73.3%

Chronic Impact Score Condition: Cerebrovascular Accident (Stroke)

PMPM medical expenditures for stroke patients were below or nearly even with forecast over the 48-month period. PMPM savings averaged $62 (10 percent) through SFY 2013 (see exhibit 3-31).

Exhibit 3-31 – Forecast versus Actual PMPM Medical Expenditures: Cerebrovascular Accident

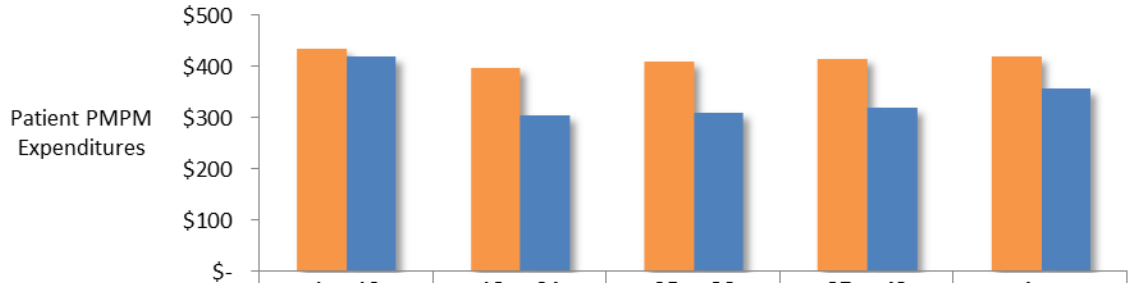


	1 to 12	13 to 24	25 to 36	37 to 48	Any
MEDai Forecast	$731	$570	$476	$476	$600
Actual	$647	$576	$360	$353	$538
Percent of Forecast	88.6%	101.0%	75.7%	74.1%	89.7%

Chronic Impact Score Condition: Depression

PMPM medical expenditures for patients with depression were consistently below forecast. PMPM savings averaged $64 (15 percent) through SFY 2013 (see exhibit 3-32).

Exhibit 3-32 – Forecast versus Actual PMPM Medical Expenditures: Depression

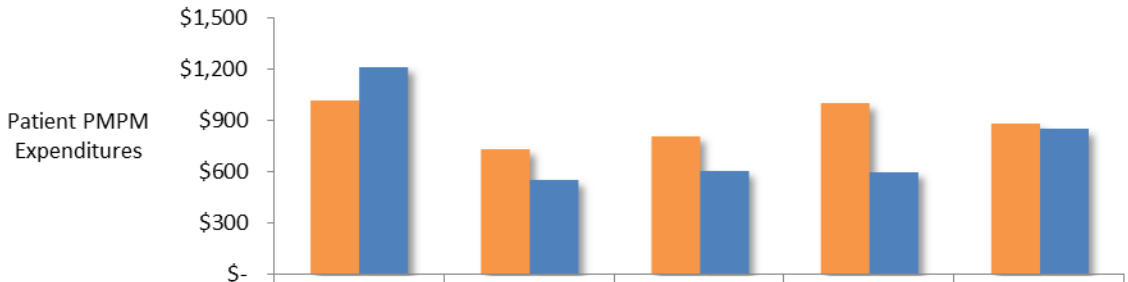


	1 to 12	13 to 24	25 to 36	37 to 48	Any
MEDai Forecast	$434	$398	$410	$416	$420
Actual	$419	$305	$310	$319	$356
Percent of Forecast	96.5%	76.8%	75.6%	76.7%	84.9%

Chronic Impact Score Condition: HIV

PMPM medical expenditures for patients with HIV were above forecast for the first 12 months before dropping below forecast in months 13 to 48. PMPM savings over the entire 48 month period averaged $30 (three percent) (see exhibit 3-33).

Exhibit 3-33 – Forecast versus Actual PMPM Medical Expenditures: HIV

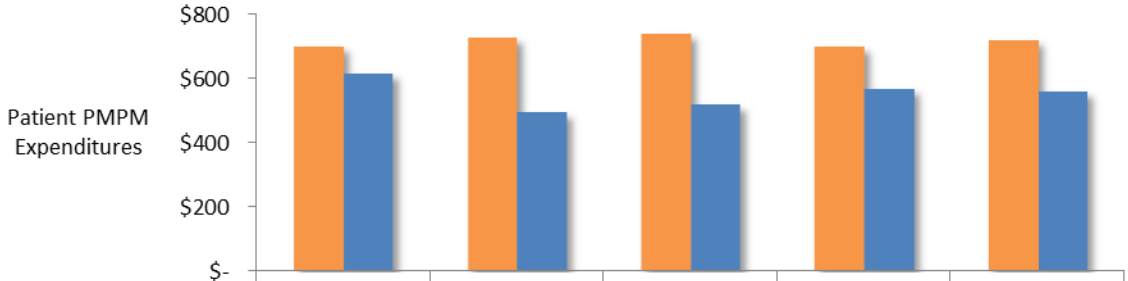


	1 to 12	13 to 24	25 to 36	37 to 48	Any
MEDai Forecast	$1,022	$736	$811	$1,003	$882
Actual	$1,218	$553	$608	$603	$852
Percent of Forecast	119.2%	75.1%	74.9%	60.1%	96.6%

Chronic Impact Score Condition: Hyperlipidemia (High Cholesterol)

PMPM medical expenditures for patients with hyperlipidemia were consistently below forecast. PMPM savings averaged $161 (22 percent) through SFY 2013 (see exhibit 3-34).

Exhibit 3-34 – Forecast versus Actual PMPM Medical Expenditures: Hyperlipidemia

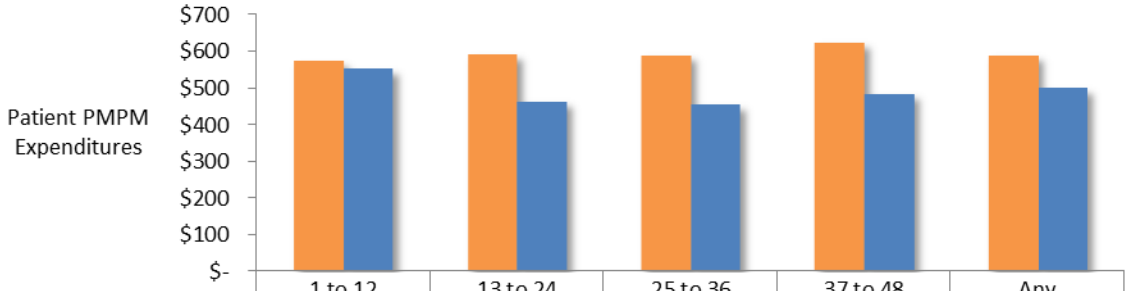


	1 to 12	13 to 24	25 to 36	37 to 48	Any
MEDai Forecast	$702	$728	$741	$700	$721
Actual	$616	$495	$518	$569	$560
Percent of Forecast	87.8%	68.0%	70.0%	81.2%	77.6%

Chronic Impact Score Condition: Lower Back Pain

PMPM medical expenditures for patients with lower back pain were consistently below forecast. PMPM savings averaged $90 (15 percent) through SFY 2013 (see exhibit 3-35).

Exhibit 3-35 – Forecast versus Actual PMPM Medical Expenditures: Lower Back Pain

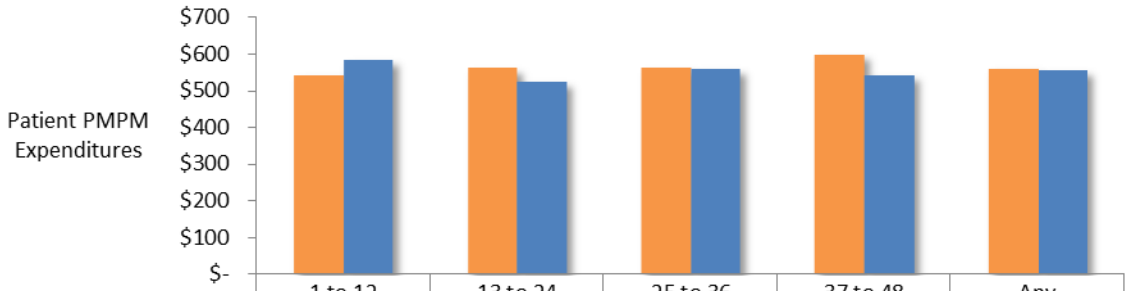


	1 to 12	13 to 24	25 to 36	37 to 48	Any
MEDai Forecast	$572	$592	$590	$624	$589
Actual	$551	$463	$454	$484	$499
Percent of Forecast	96.3%	78.2%	77.1%	77.6%	84.7%

Chronic Impact Score Condition: Migraine Headaches

PMPM medical expenditures for patients with migraine headaches were above forecast for the first 12 months before running at or slightly below forecast in months 13 to 48. PMPM savings over the entire 48 month period averaged $5 (one percent) (see exhibit 3-36).

Exhibit 3-36 – Forecast versus Actual PMPM Medical Expenditures: Migraine Headaches

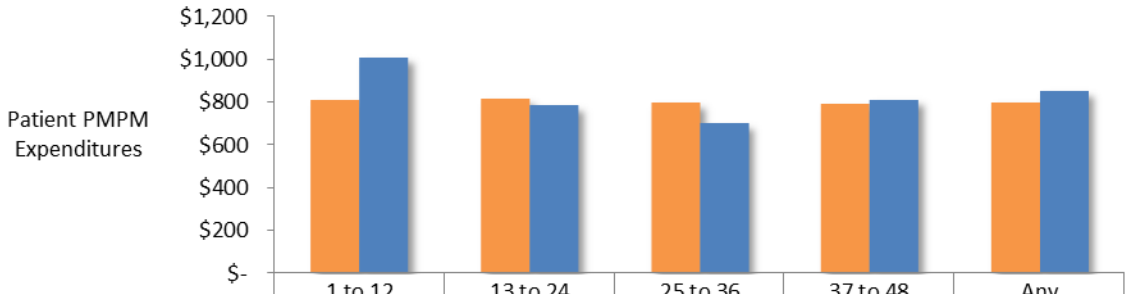


	1 to 12	13 to 24	25 to 36	37 to 48	Any
MEDai Forecast	$543	$562	$563	$600	$562
Actual	$584	$525	$560	$544	$557
Percent of Forecast	107.7%	93.5%	99.5%	90.7%	99.2%

Chronic Impact Score Condition: Multiple Sclerosis

PMPM medical expenditures for patients with multiple sclerosis were above forecast for the first 12 months before running approximately equal to forecast in months 13 to 48. The PMPM deficit over the entire 48 month period averaged $52 (seven percent). Findings should be interpreted with caution as there were a relatively small number of patients with this diagnosis (see exhibit 3-37).

Exhibit 3-37 – Forecast versus Actual PMPM Medical Expenditures: Multiple Sclerosis

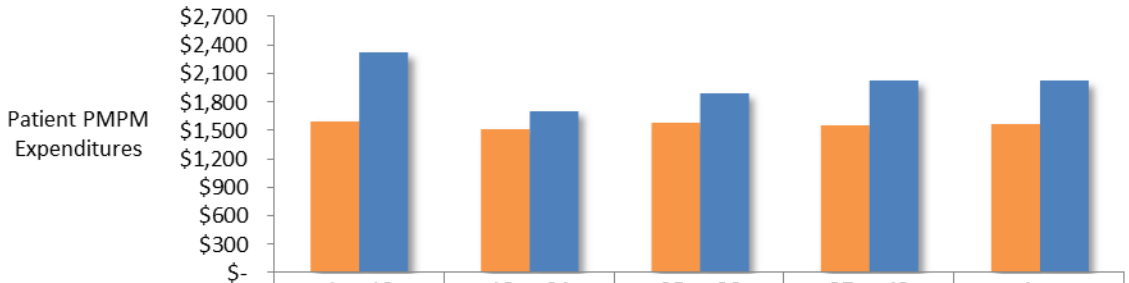


	1 to 12	13 to 24	25 to 36	37 to 48	Any
MEDai Forecast	$807	$815	$797	$791	$800
Actual	$1,010	$783	$699	$812	$852
Percent of Forecast	125.1%	96.1%	87.7%	102.7%	106.5%

Chronic Impact Score Condition: Renal Failure

PMPM medical expenditures for patients with renal failure were consistently above forecast. The PMPM deficit averaged $452 (29 percent) through SFY 2013. Findings should be interpreted with caution as there were a relatively small number of patients with this diagnosis (see exhibit 3-38).

Exhibit 3-38 – Forecast versus Actual PMPM Medical Expenditures: Renal Failure

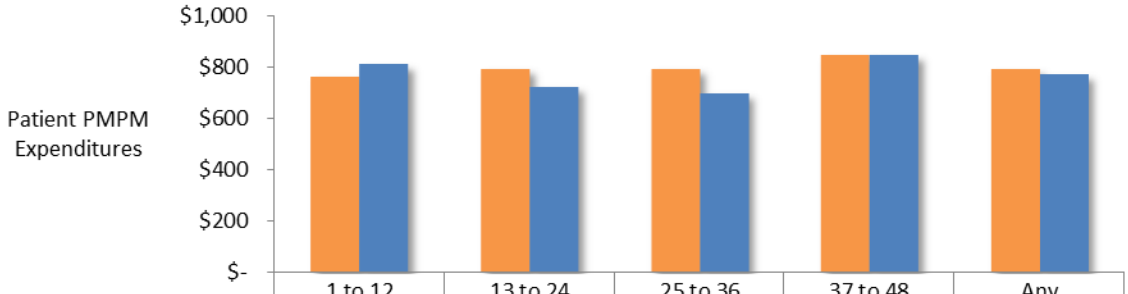


	1 to 12	13 to 24	25 to 36	37 to 48	Any
MEDai Forecast	$1,599	$1,516	$1,573	$1,547	$1,568
Actual	$2,320	$1,706	$1,893	$2,024	$2,020
Percent of Forecast	145.1%	112.5%	120.3%	130.8%	128.8%

Chronic Impact Score Condition: Rheumatoid Arthritis

PMPM medical expenditures for patients with rheumatoid arthritis were slightly above forecast for the first 12 months before running below or nearly equal to forecast in months 13 to 48. PMPM savings averaged $19 (two percent) through SFY 2013. Findings should be interpreted with caution as there were a relatively small number of patients with this diagnosis (see exhibit 3-39).

Exhibit 3-39 – Forecast versus Actual PMPM Medical Expenditures: Rheumatoid Arthritis

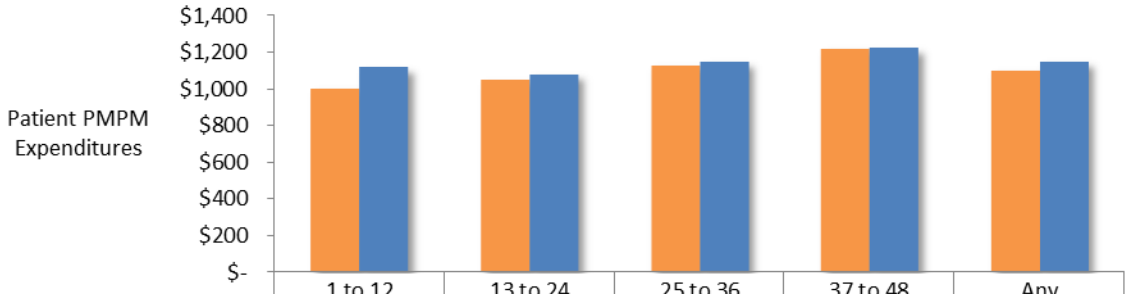


	1 to 12	13 to 24	25 to 36	37 to 48	Any
MEDai Forecast	$767	$797	$796	$848	$793
Actual	$813	$725	$700	$850	$774
Percent of Forecast	106.1%	91.0%	87.9%	100.3%	97.6%

Chronic Impact Score Condition: Schizophrenia

PMPM medical expenditures for patients with schizophrenia were above forecast for the first 12 months before running nearly equal to forecast in months 13 to 48. The PMPM deficit averaged $48 (four percent) through SFY 2013 (see exhibit 3-40).

Exhibit 3-40 – Forecast versus Actual PMPM Medical Expenditures: Schizophrenia

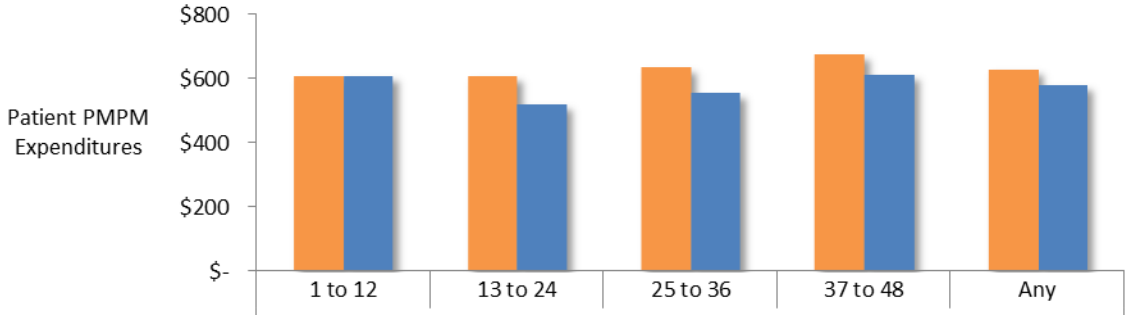


	1 to 12	13 to 24	25 to 36	37 to 48	Any
MEDai Forecast	$1,004	$1,047	$1,130	$1,221	$1,101
Actual	$1,117	$1,081	$1,149	$1,224	$1,149
Percent of Forecast	111.3%	103.3%	101.7%	100.2%	104.4%

PMPM Expenditure Trend Summary

PMPM medical expenditures for all patients, regardless of condition, were even with forecast during the first 12 months after first encounter with a provider who had undergone practice facilitation. Expenditures were an average of 14 percent below forecast in the remaining three evaluation periods, although the gap between forecast and actual decreased slightly over time (see exhibit 3-41). PMPM savings averaged $49 (eight percent) through SFY 2013.

Exhibit 3-41 – Forecast versus Actual PMPM Medical Expenditures: All Patients



	1 to 12	13 to 24	25 to 36	37 to 48	Any
MEDai Forecast	$607	$609	$635	$675	$629
Actual	$609	$520	$556	$613	$580
Percent of Forecast	100.4%	85.4%	87.4%	90.8%	92.2%

Practice Facilitation Cost Effectiveness Analysis

PHPG conducted a formal cost effectiveness analysis of practice facilitation by adding SoonerCare HMP administrative expenses to the medical expenditure data presented in the summary portion of the previous section. The combined medical and administrative expenses represent the appropriate values for measuring the overall cost effectiveness of the practice facilitation initiative.

Appendix H contains detailed cost effectiveness tables. The methodology and key findings are presented below.

Administrative Expenses

SoonerCare HMP administrative expenses were calculated using the same methodology as described in chapter two for nurse care management. SoonerCare HMP unit expenses were allocated between nurse care management and practice facilitation using factors provided by the OHCA, with only practice facilitation expenses included in the analysis.

Telligen vendor payments for start-up activities were similarly divided into nurse care management and practice facilitation categories, with only the latter retained. Operational expenses were segmented by state fiscal year.

OHCA and Telligen administrative payments were combined and divided by total member months for patients of practice facilitation sites to derive an administrative PMPM cost. Averaged over fiscal years 2008 through 2013, total PMPM administrative costs were a modest $9.23.

Cost-Effectiveness Test

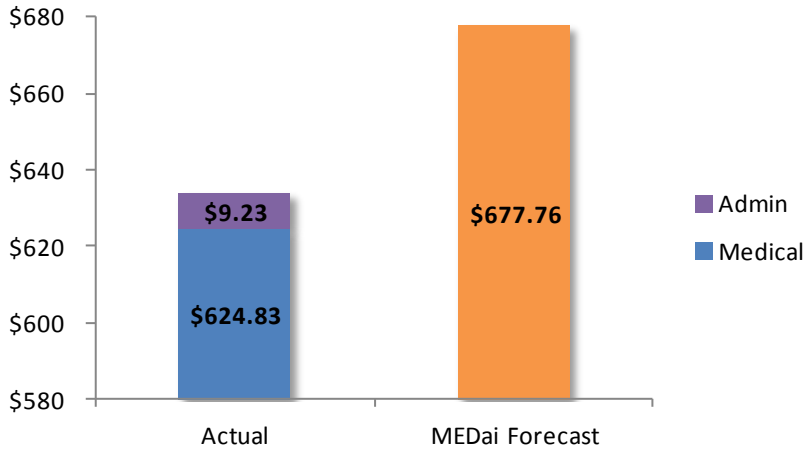
PHPG performed a cost-effectiveness test utilizing MEDai forecast data available for patients receiving care at active practice facilitation sites. Patients were identified for the MEDai analysis if they received at least one service from a provider currently participating in practice facilitation at any time following the provider's initiation date.[48]

Similar to the method used for the nurse care management evaluation, PHPG analyzed PMPM medical expenditures for patients treated during the evaluation period compared to MEDai forecasts. As only a few new providers entered the program in SFY 2013, PHPG elected to build on the SFY 2011 and SFY 2012 analyses by separately evaluating expenditures during months 25 to 36 and 37 to 48 following the member's first encounter with the provider following initiation. Expenditures as percent of forecasts by evaluation period and MEDai Chronic Impact condition are presented in Appendix G.

[48] Criteria revised from previous reports. See Methodology section of Expenditure Analysis.

The PMPM values presented below combine patient experience across all four post-provider initiation evaluation periods (1 to 12 months, 13 to 24 months, 25 to 36 months and 37 to 48 months). PMPM expenditures for practice facilitation patients (post-provider initiation) averaged $634 through SFY 2013, after factoring-in program administrative expenses. This compared favorably to a $678 PMPM expenditure forecast for the same patients absent practice facilitation (see exhibit 3-42).

Exhibit 3-42 – Practice Facilitation PMPM Cost Effectiveness Test



The net difference in PMPM expenditures (forecast minus actual) through SFY 2013 was $43.70. This figure, when multiplied by practice facilitation site member months yields ***aggregate savings of $58 million (state and federal dollars), or 6.4 percent as measured against total forecasted medical claims costs.***

The PMPM differential through SFY 2013 was lower than the differential of $74.91 documented in the SFY 2012 annual report, even as aggregate savings rose by approximately $12 million. (The greater aggregate savings resulted from the additional member months associated with another year of activity.)

The universe of providers participating in practice facilitation has been relatively static for the past several years. The decline in PMPM savings may reflect a diminishing impact from practice facilitation as providers move several years beyond their initiation into the program. If so, this would support the OHCA's decision to bring health coaches into the offices of providers who have undergone practice facilitation, as a means of better supporting the care management activities of these providers over the long term.

Practice Facilitation Evaluation - Summary of Key Findings

PHPG's audit of the practice facilitation process found that Telligen was performing activities in accordance with contract standards. Participating practices remain satisfied with the program and nearly 90 percent credited practice facilitation with improving their management of patients with chronic conditions. Most reported making changes in chronic patient care management as the result of onsite activities and most are committed to remaining in the program over the long term.

Quality of care trends remain generally positive, based on CareMeasures™ data, with improvement observed in 83 percent of the measures as compared to SFY 2012. Findings for the diagnosis-specific clinical measures demonstrated considerable increases in compliance rates for asthma, COPD, diabetes and hypertension. In addition, patients of practice facilitation providers showed higher compliance rates than the general Medicaid population on all six measures for which data was available to make a comparison.

Practice facilitation also continues to have a significant impact on expenditures. Estimated savings through SFY 2013 stand at nearly $58 million.

CHAPTER 4 – SOONERCARE HMP RETURN ON INVESTMENT

Introduction

The SoonerCare HMP required an upfront investment of administrative dollars for Telligen staffing and implementation activities and for staffing of a dedicated program unit within the OHCA. The program incurs ongoing administrative expenditures associated with Telligen's provision of nurse care management and practice facilitation and the OHCA's program management and quality oversight activities.

The value of the program is measurable on multiple axes, including quality of care, member and provider satisfaction, improvement in service utilization and overall impact on medical expenditures. The last criterion is arguably the most important, as progress in other areas should ultimately result in medical expenditures remaining below the level that would have occurred absent the program.

PHPG examined the program's return on investment (ROI) through SFY 2013, by comparing administrative expenditures to medical savings. The figures used for the ROI calculation were taken from Appendices D and H, which contain detailed cost effectiveness data for nurse care management and practice facilitation, respectively.

ROI Results

Exhibit 4-1 below presents ROI results by SoonerCare HMP component and for the program overall. As it illustrates, all program components have achieved a significant positive ROI. The ROI for the program in total is 562 percent (the corresponding figure through SFY 2012 was 524 percent). Put another way, ***the SoonerCare HMP has generated over six dollars in medical savings for every dollar in administrative expenditures.***

Exhibit 4-1 – SoonerCare HMP ROI (State and Federal Dollars)

Component	Administrative Costs	Medical Savings	Net Savings	Return on Investment
NCM (All)	($20,119,627)	$144,006,988	$123,887,361	616%
NCM Tier 1	*($10,068,727)*	*$36,007,971*	*$25,939,244*	*258%*
NCM Tier 2	*($10,050,900)*	*$107,999,018*	*$97,948,117*	*975%*
Practice Facilitation	($12,251,082)	$70,245,367	$57,994,284	473%
TOTAL Program	**($32,370,709)**	**$214,252,355**	**$181,881,645**	**562%**

APPENDIX A – PARTICIPANT SURVEY & FOCUS GROUP MATERIALS

Appendix A includes the advance letter sent to SoonerCare HMP participants and survey instrument. The instrument also includes questions specific to persons who indicate they either have dropped out or opted out of nurse care management. Finally, this appendix also includes the guide utilized by the moderator for focus group interviews.

The SoonerCare Program needs your help! The SoonerCare Health Management Program has asked the Pacific Health Policy Group (PHPG) to conduct a survey to find out how your experiences have been in the program and if you are happy with your health care. You were chosen because you or a child living with you was offered a chance to enroll in our SoonerCare Health Management Program.

The survey will be over the phone and will only take about 10 minutes of your time. In the next few days, someone working on behalf of SoonerCare will be calling you.

THE SURVEY IS VOLUNTARY! If you decide not to complete the survey, it will NOT affect your benefits.

However, we want to hear from you hope you will agree to help. Anything you tell us in the survey will be kept confidential.

If you have any questions, you can reach us toll-free at 1-888-941-9358. If you would like to take the survey right away, you may call the same number any time during the hours of 9 a.m. and 5 p.m.

We look forward to speaking with you soon.

HMP ELIGIBLE SURVEY

INTRODUCTION & CONSENT

Hello, my name is _____ and I am calling on behalf of the Oklahoma SoonerCare program. May I please speak to {RESPONDENT NAME}?
[IF SPEAKING WITH RESPONDENT, GO TO INTRO1.]
[IF RESPONDENT IS NOT AVAILABLE, GO TO INTRO2.]

INTRO1. **We are conducting a study to find out about the kind of help SoonerCare members need managing their health care and what they think about the quality of the health care they receive. Your household was chosen because someone in it was offered a chance to enroll in the SoonerCare Health Management Program.**

You may choose to do this interview or not. If you do participate, your responses will be kept private. Your decision to do the interview will not affect any SoonerCare benefits you get. The questions should take about ten minutes to answer.

You can ask me any questions during this survey, and you may stop at any time. If you are unsure of an answer, just do your best to choose a response -- there are no right or wrong answers.

I'd like to begin the interview now, but before we begin, do you have any questions about the survey?

[ANSWER ANY QUESTIONS AND PROCEED TO QUESTION 1]

INTRO2. [SCHEDULE TIME TO CALL BACK]

Can you tell me a convenient time to call back to speak with (him/her)?

[RECORD CALL BACK TIME]

PROGRAM AWARENESS & ENROLLMENT STATUS

1. The SoonerCare program is a health insurance program offered by the state. Are you currently enrolled in SoonerCare?[49]
    a. Yes
    b. No → [ASK IF ENROLLED IN MEDICAID. IF NO, TERMINATE]

2. Some SoonerCare members with health care needs receive help through a special program known as the SoonerCare Health Management Program. Have you heard of it?
    a. Yes
    b. No → [TERMINATE]

[49] All questions include a "Don't Know/Refuse" option (unprompted). Questions are reworded for parents/guardians answering for children.

3. Were you contacted and offered a chance to enroll in the SoonerCare Health Management Program?
    a. Yes
    b. No → [TERMINATE]
4. Did you decide to enroll?
    a. Yes
    b. No → [GO TO QUESTION 7]
    c. Not yet, but still considering → [GO TO QUESTION 9]
5. Are you still enrolled today in the SoonerCare Health Management Program?
    a. Yes
    b. No → [GO TO QUESTION 8]
6. How long have you been enrolled in the SoonerCare Health Management Program?
    a. Less than one month
    b. One to two months
    c. Three to four months
    d. Four to six months
    e. More than six months
7. Why did you decide not to enroll in the SoonerCare Health Management Program? [DO NOT PROMPT. RECORD ALL REASONS – READ BACK ANSWERS AND ASK TO CHOOSE MOST IMPORTANT REASON] → [GO TO QUESTION 9]
    a. Not aware of program/was not asked to enroll
    b. Did not understand purpose of the program
    c. Satisfied with doctor/current health care access
    d. Do not wish to self-manage care/receive health education
    e. Do not want to be evaluated by Nurse Care Manager
    f. Tried to enroll but was unsuccessful [SPECIFY REASON IN COMMENTS]
    g. Have no health needs at this time
    h. Other [SPECIFY IN COMMENTS]

8. Why did you decide to disenroll from the SoonerCare Health Management Program? [DO NOT PROMPT. RECORD ALL REASONS – READ BACK ANSWERS AND ASK TO CHOOSE MOST IMPORTANT REASON] → [GO TO QUESTION 9]
    a. Not aware of program/did not know was enrolled
    b. Did not understand purpose of the program
    c. Satisfied with doctor/current health care access without program
    d. Doctor recommended I disenroll
    e. Do not wish to self-manage care/receive health education
    f. Do not want to be evaluated by Nurse Care Manager
    g. Dislike Nurse Care Manager
    h. Have no health needs at this time
    i. Other [SPECIFY IN COMMENTS]
9. Would you like to have someone contact you about enrolling [re-enrolling] in the SoonerCare Health Management Program? [RECORD ANSWER AND TERMINATE]
    a. Yes
    b. No

USUAL SOURCE OF CARE

Next I am going to ask a few questions about where you get your health care.

10. Do you have a regular doctor or nurse practitioner you usually see if you need a check-up, want advice about a health problem or get sick or hurt?
    a. Yes
    b. No → [GO TO QUESTION 13]
11. What is your regular doctor or nurse practitioner's name? [RECORD NAME]
12. How long have you been going to this doctor or nurse practitioner? [RECORD ANSWER AND GO TO QUESTION 13]
    a. Less than six months
    b. At least six months but less than one year
    c. At least one year but less than three years
    d. At least three years but less than five years
    e. Five years or more
13. In the last twelve months, where did you usually get health care?
    a. A Clinic?
    b. An urgent care center?
    c. An Emergency Room?
    d. Other [SPECIFY IN COMMENTS]
    e. No usual place

14. A health care provider is a doctor, nurse or anyone else you would see for health care. In the past twelve months, have you seen a doctor or other health care provider three or more times for the same condition or problem?
    a. Yes
    b. No
15. What was the problem or condition? [RECORD ALL CONDITIONS]
16. Not including trips to the emergency room, in the past twelve months, how many times have you seen a doctor or other health care provider for any reason? [RECORD NUMBER]
17. In the past twelve months, how many times have you been seen in an emergency room for any reason? [RECORD NUMBER]

DECISION TO ENROLL IN HEALTH MANAGEMENT PROGRAM

Next I want to ask about your decision to enroll in the SoonerCare Health Management Program.

18. How did you learn about the SoonerCare Health Management Program? [DO NOT PROMPT]
    a. Received information in the mail
    b. Received a call
    c. Doctor referred me
    d. Other [SPECIFY IN COMMENTS]
19. What were your reasons for deciding to enroll in the SoonerCare Health Management Program? [DO NOT PROMPT - RECORD ALL ANSWERS]
    a. Learn how to better manage health problems
    b. Learn how to identify changes in health
    c. Have someone to call with questions about health
    d. Get help making health care appointments
    e. Personal doctor recommended I enroll
    f. Improve my health
    g. Was invited to enroll/No specific reason
    h. Other [SPECIFY IN COMMENTS]
20. Among the reasons you just gave, what was your <u>most important</u> reason for deciding to enroll?

HMP EXPERIENCE – NURSE CARE MANAGER

Now I'm going to ask you a few questions about your experience in the SoonerCare Health Management Program, starting with your Nurse Care Manager.

21. How soon after you enrolled in the SoonerCare Health Management Program were you contacted by your Nurse Care Manager?
    a. Contacted at time of enrollment
    b. Less than one week
    c. One to two weeks
    d. More than two weeks
    e. Have not been contacted – enrolled two weeks ago or less
    f. Have not been contacted – enrolled two to four weeks ago
    g. Have not been contacted – enrolled more than four weeks ago
22. Can you tell me the name of your Nurse Care Manager?
    a. Yes [RECORD NAME]
    b. No
23. About when was the last time you spoke to your Nurse Care Manager?
    a. Within the last week
    b. One to two weeks ago
    c. Two to four weeks ago
    d. More than four weeks ago
    e. Have not spoken to Nurse Care Manager since being evaluated
    f. Have never spoken to Nurse Care Manager
24. How many times have you spoken to your Nurse Care Manager since enrolling in the SoonerCare Health Management Program, either in person or over the phone? This includes your evaluation. [RECORD NUMBER]
25. [TIER 1 ENROLLEES ONLY (IF KNOWN)] How many times have you met your Nurse Care Manager in person? [RECORD NUMBER]
26. Did you Nurse Care Manager give you a telephone number to call if you needed help with your care?
    a. Yes
    b. No → [GO TO QUESTION 30]
27. Have you tried to call your Nurse Care Manager at the number you were given?
    a. Yes
    b. No → [GO TO QUESTION 30]

28. Thinking about the last time you called your Nurse Care Manager, what was the reason for your call? [DO NOT PROMPT]
    a. Routine health question
    b. Urgent health problem
    c. Seeking assistance in scheduling appointment
    d. Returning call from Nurse Care Manager
    e. Other [SPECIFY IN COMMENTS]
29. Did you reach your Nurse Care Manager immediately? [IF NO] How quickly did you get a call back?
    a. Reached immediately (at time of call)
    b. Called back within one hour
    c. Called back in more than one hour but same day
    d. Called back the next day
    e. Called back two or more days later
    f. Never called back
    g. Other [SPECIFY IN COMMENTS]

30. Which of the following things has your Nurse Care Manager done for you? Has your Nurse Care Manager:

	Yes	No
a. Asked questions about your health problems or concerns		
b. Provided instructions about taking care of your health problems or concerns		
c. Helped you to identify changes in your health that might be an early sign of a problem		
d. Answered questions about your health		
e. Helped you to make and keep health care appointments for medical problems		
f. Helped you to make and keep health care appointments for mental health or substance abuse problems		

31. [ASK FOR EACH "YES" ACTIVITY IN Q30] Thinking about what your Nurse Care Manager has done for you, please tell me how satisfied you are with the help you received. Tell me if you are Very Satisfied, Somewhat Satisfied, Somewhat Dissatisfied or Very Dissatisfied. [REPEAT CHOICES FOR EACH ITEM]

	Very Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Very Dissatisfied
a. Learning about you and your health care needs				
b. Getting easy to understand instructions about taking care of health problems or concerns				
c. Getting help identifying changes in your health that might be an early sign of a problem				
d. Answering questions about your health				
e. Helping you make and keep health care appointments for medical problems				
f. Helping you make and keep health care appointments for mental health or substance abuse problems				

32. Overall, how satisfied are you with the help you have received from your Nurse Care Manager? Would you say you are Very Satisfied, Somewhat Satisfied, Somewhat Dissatisfied or Very Dissatisfied?
    a. Very Satisfied
    b. Somewhat Satisfied
    c. Somewhat Dissatisfied
    d. Very Dissatisfied

HMP EXPERIENCE – WEBSITE

33. Did you know that the SoonerCare Health Management Program has a website?
    a. Yes
    b. No → [GO TO QUESTION 37]
34. Have you ever visited the website?
    a. Yes
    b. No → [GO TO QUESTION 37]
35. Thinking about the last time you visited the website, what was your reason for visiting it? [DO NOT PROMPT]
    a. Seeking general information about the program
    b. Routine health question/seeking general health information
    c. Urgent health problem
    d. Seeking assistance in scheduling appointment
    e. No specific reason
    f. Other [SPECIFY IN COMMENTS]
36. Was the website helpful to you?
    a. Yes
    b. No

HMP – OVERALL SATISFACTION

37. Overall, how satisfied are you with your experience in the SoonerCare Health Management Program? Would you say are Very Satisfied, Somewhat Satisfied, Somewhat Dissatisfied or Very Dissatisfied?
    a. Very satisfied
    b. Somewhat satisfied
    c. Somewhat dissatisfied
    d. Very dissatisfied

38. Would you recommend the SoonerCare Health Management Program to a friend who has health care needs like yours?
    a. Yes
    b. No
39. Do you have any suggestions for improving the SoonerCare Health Management Program? [RECORD ALL RECOMMENDATIONS]

HEALTH STATUS & DEMOGRAPHICS

We're almost done. I just have a few more questions.

40. Overall, how would you rate your health today? Would you say it is excellent, good, fair or poor?
    a. Excellent
    b. Good
    c. Fair
    d. Poor
41. Compared to before you enrolled in the SoonerCare Health Management Program, how has your health changed? Would you say your health is better, worse or about the same?
    a. Better
    b. Worse → [GO TO QUESTION 43]
    c. About the same → [GO TO QUESTION 43]
42. Do you think the SoonerCare Health Management Program has contributed to your improvement in health?
    a. Yes
    b. No
43. What is your age? [RECORD AGE]
44. Are you of Hispanic or Latino origin or descent?
    a. Yes
    b. No
45. I am now going to ask about your race. I will read you a list of choices. You may choose one or more.
    a. White
    b. Black or African American
    c. Asian
    d. Native Hawaiian or other Pacific Islander
    e. American Indian or Alaska Native
    f. Another race

Those are all the questions I have today. We may contact you again in about six months to follow-up and learn if anything about your health care has changed. **Thank you for your help!**

HMP FOCUS GROUP INTERVIEW GUIDE

I. Introduction

- Purpose

    - We've been asked by SoonerCare to conduct this focus group to find out what your experiences have been like with the Health Management Program. The information we learn today will be used by us to evaluate the program and how the program can be improved.

- Ground Rules

    - You can choose whether or not to participate in the focus group and can stop at any time.
    - There are no right or wrong answers to the focus group questions. Every person's experience and opinions are important so we would like to hear from everyone.
    - We also want you to feel comfortable sharing when sensitive issues may come up so what is said in this room stays here. We also ask that only one individual speak at a time in the group in the group.
    - Although the focus group will be tape recorded, your responses will remain anonymous and no names will be mentioned.
    - What you say here today will not affect your SoonerCare benefits in anyway.

- Participant Introductions

    - Name
    - Age
    - City
    - Whether you are in the program or another family member is
    - How long you have been in the Health Management Program
    - What were your reasons or expectations for participating in this program

II. Nurse Care Management Services

- What has your nurse done for you and what is the typical monthly interaction you have with your nurse

- Have you found these things to be helpful

- How often does your nurse call/visit you? Do you think it should be more or less

- Do you like working with your nurse

- How many nurse care managers have you had since enrolling in the program

    - Explore further if more than 1

- Have you made any changes to your health since participating in this program? If so, what kinds of changes

    - Making and keeping appointments with providers
    - Taking medications
    - Diet and exercise/lifestyle changes

- What kinds of challenges are you experiencing that may be hindering you from making these changes

- Have you noticed an improvement in your health since participating in this program

    - Explore further

- Do you think you need a nurse to help you manage your care

    - Explore further

- Why are you no longer in the program

    - How has your health changed
    - Would you like to re-enroll in the program

III. Current Health Care Utilization

- Where do you usually get your healthcare

    - Do you have a regular doctor, physicians assistant or nurse that you see

        - If no, why not
        - How long have you been going to this provider
        - How often do you visit your provider

- Since being enrolled in the program have you been seeing your provider more or less frequently

    - Making more or less appointments and keeping the appointments
    - Same for emergency room

- Where do you usually go to get your health care

- Have you told your provider that you are in this program

- How does your provider feel about your decision

- Has your nurse given you the same or different information than your provider

IV. Suggestions and Recommendations

- What do you like most about the program
- What do you like the least about the program
- If you could change this program to make it better, what would you want to see

END INTERVIEW

APPENDIX B – PARTICIPANT SURVEY CROSSTABS

Appendix B includes active participant responses to all survey questions. The data is cross-tabulated by the following characteristics:

- Tier Group
- Respondent Age (under 21, 21 – 44, 45 and over)
- Respondent Gender
- Respondent Place of Residence (Urban/Rural)

Survey Questions	April 2009-June 2013: Active Participants									
	All (N=3924)	Tier		Age			Gender		Location	
		Tier 1	Tier 2	Under 21	21 to 44	45 and older	Male	Female	Urban	Rural
1) Are you currently enrolled in SoonerCare?										
A. Yes	**3924** *100.0%*	**1258** *100.0%*	**2666** *100.0%*	**370** *100.0%*	**944** *100.0%*	**2610** *100.0%*	**1289** *100.0%*	**2635** *100.0%*	**1924** *100.0%*	**2000** *100.0%*
B. No	**0** *0.0%*	**0** *0.0%*	**0** *0.0%*	**0** *0.0%*	**0** *0.0%*	**0** *0.0%*	**0** *0.0%*	**0** *0.0%*	**0** *0.0%*	**0** *0.0%*
2) Have you heard of the Health Management Program (HMP)?										
A. Yes	**3924** *100.0%*	**1258** *100.0%*	**2666** *100.0%*	**370** *100.0%*	**944** *100.0%*	**2610** *100.0%*	**1289** *100.0%*	**2635** *100.0%*	**1924** *100.0%*	**2000** *100.0%*
B. No	**0** *0.0%*	**0** *0.0%*	**0** *0.0%*	**0** *0.0%*	**0** *0.0%*	**0** *0.0%*	**0** *0.0%*	**0** *0.0%*	**0** *0.0%*	**0** *0.0%*
3) Were you contacted and offered a chance to enroll in the HMP?										
A. Yes	**3923** *99.97%*	**1258** *100.0%*	**2665** *99.96%*	**370** *100.0%*	**944** *100.0%*	**2609** *99.96%*	**1289** *100.0%*	**2634** *99.96%*	**1924** *100.0%*	**1999** *99.95%*
B. No	**0** *0.00%*	**0** *0.0%*	**0** *0.00%*	**0** *0.0%*	**0** *0.0%*	**0** *0.00%*	**0** *0.0%*	**0** *0.00%*	**0** *0.0%*	**0** *0.00%*
C. Contacted HMP after hearing about it	**1** *0.03%*	**0** *0.0%*	**1** *0.04%*	**0** *0.0%*	**0** *0.0%*	**1** *0.04%*	**0** *0.0%*	**1** *0.04%*	**0** *0.0%*	**1** *0.05%*
4) Did you decide to enroll?										
A. Yes	**3923** *99.97%*	**1258** *100.0%*	**2665** *99.96%*	**369** *99.7%*	**944** *100.0%*	**2610** *100.0%*	**1289** *100.0%*	**2634** *99.96%*	**1923** *99.95%*	**2000** *100.0%*
B. No	**0** *0.00%*	**0** *0.0%*	**0** *0.00%*	**0** *0.0%*	**0** *0.0%*	**0** *0.0%*	**0** *0.0%*	**0** *0.00%*	**0** *0.00%*	**0** *0.0%*
C. Yes, but services no longer needed so plan to disenroll	**1** *0.03%*	**0** *0.0%*	**1** *0.04%*	**1** *0.3%*	**0** *0.0%*	**0** *0.0%*	**0** *0.0%*	**1** *0.04%*	**1** *0.05%*	**0** *0.0%*
5) Are you still enrolled today in the HMP?										
A. Yes	**3924** *100.0%*	**1258** *100.0%*	**2666** *100.0%*	**370** *100.0%*	**944** *100.0%*	**2610** *100.0%*	**1289** *100.0%*	**2635** *100.0%*	**1924** *100.0%*	**2000** *100.0%*
B. No	**0** *0.0%*	**0** *0.0%*	**0** *0.0%*	**0** *0.0%*	**0** *0.0%*	**0** *0.0%*	**0** *0.0%*	**0** *0.0%*	**0** *0.0%*	**0** *0.0%*

Survey Questions	April 2009-June 2013: Active Participants									
	All (N=3924)	Tier		Age			Gender		Location	
		Tier 1	Tier 2	Under 21	21 to 44	45 and older	Male	Female	Urban	Rural
6) How long have you been enrolled in the HMP?										
A. Less than 1 month	**73**	**30**	**43**	**9**	**16**	**48**	**29**	**44**	**32**	**41**
	1.9%	*2.4%*	*1.6%*	*2.4%*	*1.7%*	*1.8%*	*2.2%*	*1.7%*	*1.7%*	*2.1%*
B. 1 to 2 months	**936**	**324**	**612**	**103**	**241**	**592**	**283**	**653**	**502**	**434**
	23.9%	*25.8%*	*23.0%*	*27.8%*	*25.5%*	*22.7%*	*22.0%*	*24.8%*	*26.1%*	*21.7%*
C. 3 to 4 months	**1385**	**300**	**1085**	**135**	**339**	**911**	**454**	**931**	**665**	**720**
	35.3%	*23.8%*	*40.7%*	*36.5%*	*35.9%*	*34.9%*	*35.2%*	*35.3%*	*34.6%*	*36.0%*
D. 5 to 6 months	**497**	**132**	**365**	**50**	**128**	**319**	**171**	**326**	**233**	**264**
	12.7%	*10.5%*	*13.7%*	*13.5%*	*13.6%*	*12.2%*	*13.3%*	*12.4%*	*12.1%*	*13.2%*
E. More than 6 months	**682**	**333**	**349**	**44**	**141**	**497**	**231**	**451**	**327**	**355**
	17.4%	*26.5%*	*13.1%*	*11.9%*	*14.9%*	*19.0%*	*17.9%*	*17.1%*	*17.0%*	*17.8%*
F. Don't remember/N/A	**351**	**139**	**212**	**29**	**79**	**243**	**121**	**230**	**165**	**186**
	8.9%	*11.0%*	*8.0%*	*7.8%*	*8.4%*	*9.3%*	*9.4%*	*8.7%*	*8.6%*	*9.3%*
7) Do you have a regular doctor or nurse practitioner you usually see?										
A. Yes	**3651**	**1179**	**2472**	**349**	**860**	**2442**	**1195**	**2456**	**1758**	**1893**
	93.0%	*93.7%*	*92.7%*	*94.3%*	*91.1%*	*93.6%*	*92.7%*	*93.2%*	*91.4%*	*94.7%*
B. No	**268**	**76**	**192**	**21**	**83**	**164**	**94**	**174**	**161**	**107**
	6.8%	*6.0%*	*7.2%*	*5.7%*	*8.8%*	*6.3%*	*7.3%*	*6.6%*	*8.4%*	*5.4%*
C. N/A/Refused	**5**	**3**	**2**	**0**	**1**	**4**	**0**	**5**	**5**	**0**
	0.1%	*0.2%*	*0.1%*	*0.0%*	*0.1%*	*0.2%*	*0.0%*	*0.2%*	*0.3%*	*0.0%*
8) How long have you been going to this doctor or nurse practitioner?	*(N=3654)*									
A. Less than 6 months	**691**	**231**	**460**	**34**	**167**	**490**	**204**	**487**	**383**	**308**
	18.9%	*19.6%*	*18.6%*	*9.7%*	*19.4%*	*20.0%*	*17.1%*	*19.8%*	*21.7%*	*16.3%*
B. At least 6 months but less than 1 year	**617**	**195**	**422**	**49**	**165**	**403**	**200**	**417**	**315**	**302**
	16.9%	*16.5%*	*17.1%*	*14.0%*	*19.2%*	*16.5%*	*16.7%*	*17.0%*	*17.9%*	*16.0%*
C. At least 1 year but less than 3 years	**1187**	**385**	**802**	**103**	**298**	**786**	**400**	**787**	**568**	**619**
	32.5%	*32.6%*	*32.4%*	*29.5%*	*34.6%*	*32.2%*	*33.5%*	*32.0%*	*32.2%*	*32.7%*
D. At least 3 years but less than 5 years	**417**	**128**	**289**	**54**	**89**	**274**	**145**	**272**	**189**	**228**
	11.4%	*10.8%*	*11.7%*	*15.5%*	*10.3%*	*11.2%*	*12.1%*	*11.1%*	*10.7%*	*12.1%*
E. More than 5 years	**645**	**210**	**435**	**103**	**123**	**419**	**215**	**430**	**256**	**389**
	17.7%	*17.8%*	*17.6%*	*29.5%*	*14.3%*	*17.1%*	*18.0%*	*17.5%*	*14.5%*	*20.6%*

Survey Questions	April 2009-June 2013: Active Participants									
	All (N=3924)	Tier		Age			Gender		Location	
		Tier 1	Tier 2	Under 21	21 to 44	45 and older	Male	Female	Urban	Rural
F. Don't remember/N/A/Refused	97	32	65	6	19	72	31	66	51	46
	2.7%	2.7%	2.6%	1.7%	2.2%	2.9%	2.6%	2.7%	2.9%	2.4%
9) In the last 12 months, where did you get health care?	(N=3922)									
A. Clinic	1828	551	1277	149	455	1224	597	1231	954	874
	46.6%	43.8%	47.9%	40.3%	48.2%	46.9%	46.3%	46.8%	49.6%	43.7%
B. Urgent Care Center	12	4	8	1	5	6	4	8	5	7
	0.3%	0.3%	0.3%	0.3%	0.5%	0.2%	0.3%	0.3%	0.3%	0.4%
C. Emergency Room	80	36	44	3	29	48	29	51	45	35
	2.0%	2.9%	1.7%	0.8%	3.1%	1.8%	2.2%	1.9%	2.3%	1.8%
D. Provider's Office	1849	601	1248	209	418	1222	612	1237	841	1008
	47.1%	47.8%	46.8%	56.5%	44.3%	46.9%	47.5%	47.0%	43.7%	50.4%
E. No Usual Place	15	3	12	1	1	13	6	9	4	11
	0.4%	0.2%	0.5%	0.3%	0.1%	0.5%	0.5%	0.3%	0.2%	0.6%
F. Other	28	14	14	1	3	24	12	16	11	17
	0.7%	1.1%	0.5%	0.3%	0.3%	0.9%	0.9%	0.6%	0.6%	0.9%
G. More than 1 Place	92	41	51	6	25	61	25	67	51	41
	2.3%	3.3%	1.9%	1.6%	2.6%	2.3%	1.9%	2.5%	2.7%	2.1%
H. N/A/refused	18	7	11	0	8	10	4	14	12	6
	0.5%	0.6%	0.4%	0.0%	0.8%	0.4%	0.3%	0.5%	0.6%	0.3%
10) In the past 12 months, have you seen a health care provider 3 or more times for the same condition or problem?	(N=3922)									
A. Yes	3448	1154	2294	298	829	2321	1115	2333	1707	1741
	87.9%	91.8%	86.1%	80.5%	87.8%	89.0%	86.5%	88.6%	88.8%	87.1%
B. No	463	97	366	71	113	279	171	292	208	255
	11.8%	7.7%	13.7%	19.2%	12.0%	10.7%	13.3%	11.1%	10.8%	12.8%
C. Don't remember/N/A	11	6	5	1	2	8	3	8	8	3
	0.3%	0.5%	0.2%	0.3%	0.2%	0.3%	0.2%	0.3%	0.4%	0.2%
11) What was the problem or condition?										

Survey Questions	April 2009-June 2013: Active Participants									
	All (N=3924)	Tier		Age			Gender		Location	
		Tier 1	Tier 2	Under 21	21 to 44	45 and older	Male	Female	Urban	Rural
12) Not including trips to the ER, how many times have you seen a health care provider in the past 12 months?	*(N=3921)*									
A. 0	**31** 0.8%	**13** *1.0%*	**18** *0.7%*	**2** *0.5%*	**10** *1.1%*	**19** *0.7%*	**16** *1.2%*	**15** *0.6%*	**12** *0.6%*	**19** *1.0%*
B. 1	**47** 1.2%	**8** *0.6%*	**39** *1.5%*	**5** *1.4%*	**13** *1.4%*	**29** *1.1%*	**18** *1.4%*	**29** *1.1%*	**27** *1.4%*	**20** *1.0%*
C. 2	**128** 3.3%	**30** *2.4%*	**98** *3.7%*	**23** *6.2%*	**33** *3.5%*	**72** *2.8%*	**55** *4.3%*	**73** *2.8%*	**54** *2.8%*	**74** *3.7%*
D. 3	**204** 5.2%	**48** *3.8%*	**156** *5.9%*	**24** *6.5%*	**46** *4.9%*	**134** *5.1%*	**73** *5.7%*	**131** *5.0%*	**93** *4.8%*	**111** *5.6%*
E. 4	**381** 9.7%	**93** *7.4%*	**288** *10.8%*	**40** *10.8%*	**80** *8.5%*	**261** *10.0%*	**142** *11.0%*	**239** *9.1%*	**179** *9.3%*	**202** *10.1%*
F. 5	**249** 6.4%	**70** *5.6%*	**179** *6.7%*	**33** *8.9%*	**54** *5.7%*	**162** *6.2%*	**94** *7.3%*	**155** *5.9%*	**120** *6.2%*	**129** *6.5%*
G. 6	**299** 7.6%	**79** *6.3%*	**220** *8.3%*	**32** *8.7%*	**58** *6.1%*	**209** *8.0%*	**104** *8.1%*	**195** *7.4%*	**123** *6.4%*	**176** *8.8%*
H. 7	**115** 2.9%	**27** *2.1%*	**88** *3.3%*	**19** *5.1%*	**19** *2.0%*	**77** *3.0%*	**37** *2.9%*	**78** *3.0%*	**61** *3.2%*	**54** *2.7%*
I. 8	**163** 4.2%	**48** *3.8%*	**115** *4.3%*	**17** *4.6%*	**26** *2.8%*	**120** *4.6%*	**53** *4.1%*	**110** *4.2%*	**85** *4.4%*	**78** *3.9%*
J. 9	**60** 1.5%	**16** *1.3%*	**44** *1.7%*	**3** *0.8%*	**14** *1.5%*	**43** *1.6%*	**22** *1.7%*	**38** *1.4%*	**24** *1.2%*	**36** *1.8%*
K. 10 or more	**1970** 50.2%	**706** *56.2%*	**1264** *47.4%*	**147** *39.8%*	**525** *55.6%*	**1298** *49.8%*	**596** *46.2%*	**1374** *52.2%*	**1002** *52.1%*	**968** *48.4%*
L. Unsure/refused/N/A	**274** 7.0%	**119** *9.5%*	**155** *5.8%*	**24** *6.5%*	**66** *7.0%*	**184** *7.1%*	**79** *6.1%*	**195** *7.4%*	**142** *7.4%*	**132** *6.6%*
13) In the past 12 months, how many times have you been seen in the ER?	*(N=3921)*									
A. 0	**1398** 35.7%	**352** *28.0%*	**1046** *39.3%*	**123** *33.3%*	**268** *28.4%*	**1007** *38.6%*	**512** *39.7%*	**886** *33.7%*	**637** *33.1%*	**761** *38.1%*
B. 1	**934** 23.8%	**273** *21.7%*	**661** *24.8%*	**84** *22.8%*	**212** *22.5%*	**638** *24.5%*	**302** *23.4%*	**632** *24.0%*	**453** *23.6%*	**481** *24.1%*
C. 2	**583** 14.9%	**182** *14.5%*	**401** *15.1%*	**62** *16.8%*	**153** *16.2%*	**368** *14.1%*	**182** *14.1%*	**401** *15.2%*	**305** *15.9%*	**278** *13.9%*

Survey Questions	April 2009-June 2013: Active Participants									
	All (N=3924)	Tier		Age			Gender		Location	
		Tier 1	Tier 2	Under 21	21 to 44	45 and older	Male	Female	Urban	Rural
D. 3	342	136	206	33	87	222	101	241	178	164
	8.7%	10.8%	7.7%	8.9%	9.2%	8.5%	7.8%	9.2%	9.3%	8.2%
E. 4	207	79	128	20	65	122	55	152	98	109
	5.3%	6.3%	4.8%	5.4%	6.9%	4.7%	4.3%	5.8%	5.1%	5.5%
F. 5	103	49	54	12	32	59	24	79	55	48
	2.6%	3.9%	2.0%	3.3%	3.4%	2.3%	1.9%	3.0%	2.9%	2.4%
G. 6	85	42	43	11	27	47	27	58	48	37
	2.2%	3.3%	1.6%	3.0%	2.9%	1.8%	2.1%	2.2%	2.5%	1.9%
H. 7	23	8	15	2	10	11	4	19	10	13
	0.6%	0.6%	0.6%	0.5%	1.1%	0.4%	0.3%	0.7%	0.5%	0.7%
I. 8	36	20	16	4	14	18	14	22	23	13
	0.9%	1.6%	0.6%	1.1%	1.5%	0.7%	1.1%	0.8%	1.2%	0.7%
J. 9	7	3	4	0	3	4	3	4	4	3
	0.2%	0.2%	0.2%	0.0%	0.3%	0.2%	0.2%	0.2%	0.2%	0.2%
K. 10 or more	125	73	52	12	55	58	39	86	73	52
	3.2%	5.8%	2.0%	3.3%	5.8%	2.2%	3.0%	3.3%	3.8%	2.6%
L. Unsure/refused/N/A	78	40	38	6	18	54	26	52	38	40
	2.0%	3.2%	1.4%	1.6%	1.9%	2.1%	2.0%	2.0%	2.0%	2.0%
14) How did you learn about the HMP?	(N=3921)									
A. Received information in the mail	753	292	461	51	165	537	292	461	346	407
	19.2%	23.2%	17.3%	13.8%	17.5%	20.6%	22.7%	17.5%	18.0%	20.4%
B. Received a call	2440	653	1787	277	649	1514	742	1698	1235	1205
	62.2%	51.9%	67.1%	75.1%	68.8%	58.1%	57.6%	64.5%	64.3%	60.3%
C. Doctor referred me	126	58	68	10	18	98	51	75	61	65
	3.2%	4.6%	2.6%	2.7%	1.9%	3.8%	4.0%	2.8%	3.2%	3.3%
D. Other /N/A	519	230	289	22	86	411	183	336	239	280
	13.2%	18.3%	10.8%	6.0%	9.1%	15.8%	14.2%	12.8%	12.4%	14.0%
E. More than 1 manner	83	24	59	9	26	48	21	62	41	42
	2.1%	1.9%	2.2%	2.4%	2.8%	1.8%	1.6%	2.4%	2.1%	2.1%
15) What were your reasons for deciding to enroll in the HMP?	(N=3921)									
A. Learn how to better manage health problems	581	185	396	56	150	375	181	400	300	281
	14.8%	14.7%	14.9%	15.2%	15.9%	14.4%	14.0%	15.2%	15.6%	14.1%
B. Learn how to identify changes in health	9	1	8	2	1	6	0	9	4	5
	0.2%	0.1%	0.3%	0.5%	0.1%	0.2%	0.0%	0.3%	0.2%	0.3%

Survey Questions	April 2009-June 2013: Active Participants									
	All (N=3924)	Tier		Age			Gender		Location	
		Tier 1	Tier 2	Under 21	21 to 44	45 and older	Male	Female	Urban	Rural
C. Have someone to call with questions about health	221 5.6%	28 *2.2%*	193 *7.2%*	22 *6.0%*	59 *6.3%*	140 *5.4%*	54 *4.2%*	167 *6.3%*	119 *6.2%*	102 *5.1%*
D. Get help making health care appointments	13 0.3%	4 *0.3%*	9 *0.3%*	0 *0.0%*	4 *0.4%*	9 *0.3%*	4 *0.3%*	9 *0.3%*	9 *0.5%*	4 *0.2%*
E. Personal doctor recommended I enroll	64 1.6%	36 *2.9%*	28 *1.1%*	3 *0.8%*	6 *0.6%*	55 *2.1%*	19 *1.5%*	45 *1.7%*	36 *1.9%*	28 *1.4%*
F. Improve my health	396 10.1%	106 *8.4%*	290 *10.9%*	26 *7.0%*	108 *11.4%*	262 *10.0%*	139 *10.8%*	257 *9.8%*	183 *9.5%*	213 *10.7%*
G. Was invited to enroll/no specific reason	1447 36.9%	418 *33.3%*	1029 *38.6%*	138 *37.4%*	347 *36.8%*	962 *36.9%*	529 *41.0%*	918 *34.9%*	665 *34.6%*	782 *39.1%*
H. Other/N/A	269 6.9%	127 *10.1%*	142 *5.3%*	24 *6.5%*	42 *4.4%*	203 *7.8%*	90 *7.0%*	179 *6.8%*	137 *7.1%*	132 *6.6%*
I. More than 1 reason	921 23.5%	352 *28.0%*	569 *21.4%*	98 *26.6%*	227 *24.0%*	596 *22.9%*	273 *21.2%*	648 *24.6%*	469 *24.4%*	452 *22.6%*
16) Among the reasons you gave, what was your most important reason for deciding to enroll?	*(N=3921)*									
A. Learn how to better manage health problems	892 22.7%	297 *23.6%*	595 *22.3%*	97 *26.3%*	231 *24.5%*	564 *21.6%*	267 *20.7%*	625 *23.7%*	471 *24.5%*	421 *21.1%*
B. Learn how to identify changes in health	22 0.6%	10 *0.8%*	12 *0.5%*	2 *0.5%*	5 *0.5%*	15 *0.6%*	3 *0.2%*	19 *0.7%*	12 *0.6%*	10 *0.5%*
C. Have someone to call with questions about health	475 12.1%	102 *8.1%*	373 *14.0%*	49 *13.3%*	124 *13.1%*	302 *11.6%*	124 *9.6%*	351 *13.3%*	228 *11.9%*	247 *12.4%*
D. Get help making health care appointments	33 0.8%	7 *0.6%*	26 *1.0%*	5 *1.4%*	8 *0.8%*	20 *0.8%*	8 *0.6%*	25 *0.9%*	23 *1.2%*	10 *0.5%*
E. Personal doctor recommended I enroll	70 1.8%	40 *3.2%*	30 *1.1%*	3 *0.8%*	7 *0.7%*	60 *2.3%*	23 *1.8%*	47 *1.8%*	38 *2.0%*	32 *1.6%*
F. Improve my health	494 12.6%	140 *11.1%*	354 *13.3%*	30 *8.1%*	126 *13.3%*	338 *13.0%*	170 *13.2%*	324 *12.3%*	228 *11.9%*	266 *13.3%*
G. Was invited to enroll/no specific reason	1460 37.2%	421 *33.5%*	1039 *39.0%*	139 *37.7%*	350 *37.1%*	971 *37.2%*	533 *41.3%*	927 *35.2%*	673 *35.0%*	787 *39.4%*
H. Other/N/A	400 10.2%	191 *15.2%*	209 *7.8%*	39 *10.6%*	75 *7.9%*	286 *11.0%*	144 *11.2%*	256 *9.7%*	208 *10.8%*	192 *9.6%*
I. More than 1 reason	75 1.9%	49 *3.9%*	26 *1.0%*	5 *1.4%*	18 *1.9%*	52 *2.0%*	17 *1.3%*	58 *2.2%*	41 *2.1%*	34 *1.7%*

Survey Questions	April 2009-June 2013: Active Participants									
	All (N=3924)	Tier		Age			Gender		Location	
		Tier 1	Tier 2	Under 21	21 to 44	45 and older	Male	Female	Urban	Rural
17) How soon after you enrolled were you contacted by your Nurse Care Manager?	*(N=3921)*									
A. Contacted at time of enrollment	**1147** 29.3%	**277** *22.0%*	**870** *32.7%*	**150** *40.7%*	**290** *30.7%*	**707** *27.1%*	**352** *27.3%*	**795** *30.2%*	**556** *28.9%*	**591** *29.6%*
B. Less than 1 weeks	**1105** 28.2%	**325** *25.9%*	**780** *29.3%*	**106** *28.7%*	**307** *32.5%*	**692** *26.5%*	**319** *24.7%*	**786** *29.9%*	**551** *28.7%*	**554** *27.7%*
C. 1 to 2 weeks	**380** 9.7%	**128** *10.2%*	**252** *9.5%*	**38** *10.3%*	**106** *11.2%*	**236** *9.0%*	**123** *9.5%*	**257** *9.8%*	**183** *9.5%*	**197** *9.9%*
D. More than 2 weeks	**238** 6.1%	**120** *9.5%*	**118** *4.4%*	**15** *4.1%*	**44** *4.7%*	**179** *6.9%*	**88** *6.8%*	**150** *5.7%*	**117** *6.1%*	**121** *6.1%*
E. Have not been contacted - enrolled 2 weeks ago or less	**4** 0.1%	**3** *0.2%*	**1** *0.0%*	**1** *0.3%*	**0** *0.0%*	**3** *0.1%*	**1** *0.1%*	**3** *0.1%*	**2** *0.1%*	**2** *0.1%*
F. Have not been contacted - enrolled 2 to 4 weeks ago	**5** 0.1%	**2** *0.2%*	**3** *0.1%*	**0** *0.0%*	**1** *0.1%*	**4** *0.2%*	**3** *0.2%*	**2** *0.1%*	**2** *0.1%*	**3** *0.2%*
G. Have not been contacted - enrolled more than 4 weeks ago	**13** 0.3%	**10** *0.8%*	**3** *0.1%*	**6** *1.6%*	**2** *0.2%*	**5** *0.2%*	**6** *0.5%*	**7** *0.3%*	**6** *0.3%*	**7** *0.4%*
H. Don't remember/N/A	**1029** 26.2%	**392** *31.2%*	**637** *23.9%*	**53** *14.4%*	**194** *20.6%*	**782** *30.0%*	**397** *30.8%*	**632** *24.0%*	**505** *26.3%*	**524** *26.2%*
18) Can you tell me the name of your Nurse Care Manager?	*(N=3921)*									
A. Yes	**2230** 56.9%	**827** *65.8%*	**1403** *52.7%*	**145** *39.3%*	**523** *55.4%*	**1562** *59.9%*	**682** *52.9%*	**1548** *58.8%*	**1080** *56.2%*	**1150** *57.5%*
B. No	**1685** 43.0%	**428** *34.0%*	**1257** *47.2%*	**223** *60.4%*	**419** *44.4%*	**1043** *40.0%*	**604** *46.9%*	**1081** *41.1%*	**836** *43.5%*	**849** *42.5%*
C. N/A	**6** 0.2%	**2** *0.2%*	**4** *0.2%*	**1** *0.3%*	**2** *0.2%*	**3** *0.1%*	**3** *0.2%*	**3** *0.1%*	**6** *0.3%*	**0** *0.0%*
19) About when was the last time you spoke to your Nurse Care Manager?	*(N=3916)*									
A. Within last week	**993** *25.4%*	**343** *27.3%*	**650** *24.4%*	**88** *23.8%*	**226** *24.0%*	**679** *26.1%*	**324** *25.2%*	**669** *25.4%*	**469** *24.4%*	**524** *26.2%*
B. 1 to 2 weeks ago	**666** *17.0%*	**202** *16.1%*	**464** *17.5%*	**67** *18.2%*	**140** *14.9%*	**459** *17.6%*	**208** *16.2%*	**458** *17.4%*	**319** *16.6%*	**347** *17.4%*
C. 2 to 4 weeks ago	**1616** *41.3%*	**488** *38.8%*	**1128** *42.4%*	**149** *40.4%*	**403** *42.8%*	**1064** *40.8%*	**541** *42.0%*	**1075** *40.9%*	**806** *42.0%*	**810** *40.6%*

Survey Questions	April 2009-June 2013: Active Participants									
	All (N=3924)	Tier		Age			Gender		Location	
		Tier 1	Tier 2	Under 21	21 to 44	45 and older	Male	Female	Urban	Rural
D. More than 4 weeks ago	495 12.6%	162 12.9%	333 12.5%	45 12.2%	137 14.5%	313 12.0%	155 12.0%	340 12.9%	247 12.9%	248 12.4%
E. Haven't spoken to Nurse Care Manager since being evaluated	15 0.4%	10 0.8%	5 0.2%	3 0.8%	4 0.4%	8 0.3%	7 0.5%	8 0.3%	7 0.4%	8 0.4%
F. Have never spoken to Nurse Care Manager	18 0.5%	10 0.8%	8 0.3%	5 1.4%	4 0.4%	9 0.3%	9 0.7%	9 0.3%	10 0.5%	8 0.4%
G. Don't remember/N/A	113 2.9%	42 3.3%	71 2.7%	12 3.3%	28 3.0%	73 2.8%	43 3.3%	70 2.7%	61 3.2%	52 2.6%
20) How many times have you spoken to your Nurse Care Manager since enrolling in the HMP?	(N=3916)									
A. 0	27 0.7%	16 1.3%	11 0.4%	8 2.2%	6 0.6%	13 0.5%	15 1.2%	12 0.5%	14 0.7%	13 0.7%
B. 1	167 4.3%	61 4.9%	106 4.0%	19 5.1%	52 5.5%	96 3.7%	56 4.4%	111 4.2%	85 4.4%	82 4.1%
C. 2	553 14.1%	194 15.4%	359 13.5%	60 16.3%	147 15.6%	346 13.3%	164 12.7%	389 14.8%	294 15.3%	259 13.0%
D. 3	1050 26.8%	243 19.3%	807 30.3%	108 29.3%	266 28.2%	676 26.0%	359 27.9%	691 26.3%	513 26.7%	537 26.9%
E. 4	696 17.8%	147 11.7%	549 20.6%	65 17.6%	162 17.2%	469 18.0%	213 16.6%	483 18.4%	328 17.1%	368 18.4%
F. 5	334 8.5%	107 8.5%	227 8.5%	34 9.2%	74 7.9%	226 8.7%	115 8.9%	219 8.3%	151 7.9%	183 9.2%
G. 6	296 7.6%	91 7.2%	205 7.7%	27 7.3%	76 8.1%	193 7.4%	103 8.0%	193 7.3%	149 7.8%	147 7.4%
H. 7 or more	598 15.3%	294 23.4%	304 11.4%	31 8.4%	123 13.1%	444 17.0%	207 16.1%	391 14.9%	291 15.2%	307 15.4%
I. At least 1 time per month	17 0.4%	11 0.9%	6 0.2%	0 0.0%	5 0.5%	12 0.5%	7 0.5%	10 0.4%	9 0.5%	8 0.4%
J. Don't remember/unsure	178 4.5%	93 7.4%	85 3.2%	17 4.6%	31 3.3%	130 5.0%	48 3.7%	130 4.9%	85 4.4%	93 4.7%
21) [Tier 1 only] How many times have you met your Nurse Care Manager in person?	(N=1257)									
A. 0	44 3.5%	44 3.5%	N/A	12 13.5%	10 3.6%	22 2.5%	16 3.7%	28 3.4%	32 5.0%	12 2.0%

Survey Questions	April 2009-June 2013: Active Participants									
	All (N=3924)	Tier		Age			Gender		Location	
		Tier 1	Tier 2	Under 21	21 to 44	45 and older	Male	Female	Urban	Rural
B. 1	**158**	**158**	**N/A**	**19**	**45**	**94**	**47**	**111**	**79**	**79**
	12.6%	*12.6%*		*21.3%*	*16.4%*	*10.5%*	*10.9%*	*13.5%*	*12.3%*	*12.9%*
C. 2	**260**	**260**	**N/A**	**18**	**53**	**189**	**85**	**175**	**138**	**122**
	20.7%	*20.7%*		*20.2%*	*19.3%*	*21.1%*	*19.7%*	*21.2%*	*21.4%*	*19.9%*
D. 3	**251**	**251**	**N/A**	**16**	**57**	**178**	**91**	**160**	**129**	**122**
	20.0%	*20.0%*		*18.0%*	*20.8%*	*19.9%*	*21.1%*	*19.4%*	*20.0%*	*19.9%*
E. 4	**110**	**110**	**N/A**	**8**	**21**	**81**	**40**	**70**	**56**	**54**
	8.8%	*8.8%*		*9.0%*	*7.7%*	*9.1%*	*9.3%*	*8.5%*	*8.7%*	*8.8%*
F. 5	**55**	**55**	**N/A**	**1**	**14**	**40**	**19**	**36**	**26**	**29**
	4.4%	*4.4%*		*1.1%*	*5.1%*	*4.5%*	*4.4%*	*4.4%*	*4.0%*	*4.7%*
G. 6 or more	**306**	**306**	**N/A**	**14**	**62**	**230**	**109**	**197**	**146**	**160**
	24.3%	*24.3%*		*15.7%*	*22.6%*	*25.7%*	*25.2%*	*23.9%*	*22.7%*	*26.1%*
H. At least 1 time per month	**11**	**11**	**N/A**	**0**	**4**	**7**	**6**	**5**	**5**	**6**
	0.9%	*0.9%*		*0.0%*	*1.5%*	*0.8%*	*1.4%*	*0.6%*	*0.8%*	*1.0%*
I. Don't remember/N/A	**62**	**62**	**N/A**	**1**	**8**	**53**	**19**	**43**	**33**	**29**
	4.9%	*4.9%*		*1.1%*	*2.9%*	*5.9%*	*4.4%*	*5.2%*	*5.1%*	*4.7%*
22) Did your Nurse Care Manager give you a telephone number to call if you needed help with your care?	***(N=3912)***									
A. Yes	**3774**	**1207**	**2567**	**356**	**913**	**2505**	**1239**	**2535**	**1844**	**1930**
	96.5%	*96.2%*	*96.6%*	*96.5%*	*97.0%*	*96.3%*	*96.4%*	*96.5%*	*96.1%*	*96.8%*
B. No	**108**	**38**	**70**	**9**	**23**	**76**	**33**	**75**	**56**	**52**
	2.8%	*3.0%*	*2.6%*	*2.4%*	*2.4%*	*2.9%*	*2.6%*	*2.9%*	*2.9%*	*2.6%*
C. Didn't have first visit yet	**5**	**5**	**0**	**3**	**0**	**2**	**1**	**4**	**3**	**2**
	0.1%	*0.4%*	*0.0%*	*0.8%*	*0.0%*	*0.1%*	*0.1%*	*0.2%*	*0.2%*	*0.1%*
D. Don't remember/N/A	**25**	**5**	**20**	**1**	**5**	**19**	**12**	**13**	**16**	**9**
	0.6%	*0.4%*	*0.8%*	*0.3%*	*0.5%*	*0.7%*	*0.9%*	*0.5%*	*0.8%*	*0.5%*
23) Have you tried to call your Nurse Care Manager at the number you were given?	***(N=3774)***									
A. Yes	**1146**	**454**	**692**	**78**	**266**	**802**	**361**	**785**	**573**	**573**
	30.4%	*37.6%*	*27.0%*	*21.9%*	*29.1%*	*32.0%*	*29.1%*	*31.0%*	*31.1%*	*29.7%*
B. No	**2627**	**752**	**1875**	**278**	**646**	**1703**	**878**	**1749**	**1270**	**1357**
	69.6%	*62.3%*	*73.0%*	*78.1%*	*70.8%*	*68.0%*	*70.9%*	*69.0%*	*68.9%*	*70.3%*
C. N/A	**1**	**1**	**0**	**0**	**1**	**0**	**0**	**1**	**1**	**0**
	0.0%	*0.1%*	*0.0%*	*0.0%*	*0.1%*	*0.0%*	*0.0%*	*0.0%*	*0.1%*	*0.0%*

Survey Questions	April 2009-June 2013: Active Participants									
	All (N=3924)	Tier		Age			Gender		Location	
		Tier 1	Tier 2	Under 21	21 to 44	45 and older	Male	Female	Urban	Rural
24) Thinking about the last time you called your Nurse, what was the reason for your call?	*(N=1146)*									
A. Routine health question	**687** *59.9%*	**233** *51.3%*	**454** *65.6%*	**49** *62.8%*	**159** *59.8%*	**479** *59.7%*	**216** *59.8%*	**471** *60.0%*	**336** *58.6%*	**351** *61.3%*
B. Urgent health problem	**29** *2.5%*	**18** *4.0%*	**11** *1.6%*	**0** *0.0%*	**7** *2.6%*	**22** *2.7%*	**6** *1.7%*	**23** *2.9%*	**12** *2.1%*	**17** *3.0%*
C. Seeking assistance in scheduling an appointment	**133** *11.6%*	**90** *19.8%*	**43** *6.2%*	**9** *11.5%*	**31** *11.7%*	**93** *11.6%*	**34** *9.4%*	**99** *12.6%*	**77** *13.4%*	**56** *9.8%*
D. Returning call from Nurse Care Manager	**123** *10.7%*	**23** *5.1%*	**100** *14.5%*	**12** *15.4%*	**32** *12.0%*	**79** *9.9%*	**38** *10.5%*	**85** *10.8%*	**63** *11.0%*	**60** *10.5%*
E. Other/N/A	**170** *14.8%*	**88** *19.4%*	**82** *11.8%*	**8** *10.3%*	**37** *13.9%*	**125** *15.6%*	**65** *18.0%*	**105** *13.4%*	**85** *14.8%*	**85** *14.8%*
F. More than 1 reason	**4** *0.3%*	**2** *0.4%*	**2** *0.3%*	**0** *0.0%*	**0** *0.0%*	**4** *0.5%*	**2** *0.6%*	**2** *0.3%*	**0** *0.0%*	**4** *0.7%*
25) Did you reach your Nurse Care Manager immediately?	*(N=1146)*									
A. Reached immediately (at time of call)	**613** *53.5%*	**269** *59.3%*	**344** *49.7%*	**44** *56.4%*	**140** *52.6%*	**429** *53.5%*	**190** *52.6%*	**423** *53.9%*	**301** *52.5%*	**312** *54.5%*
B. Called back within 1 hour	**196** *17.1%*	**67** *14.8%*	**129** *18.6%*	**9** *11.5%*	**57** *21.4%*	**130** *16.2%*	**52** *14.4%*	**144** *18.3%*	**103** *18.0%*	**93** *16.2%*
C. Called back in more than 1 hour but same day	**142** *12.4%*	**46** *10.1%*	**96** *13.9%*	**6** *7.7%*	**32** *12.0%*	**104** *13.0%*	**46** *12.7%*	**96** *12.2%*	**66** *11.5%*	**76** *13.3%*
D. Called back the next day	**75** *6.5%*	**20** *4.4%*	**55** *7.9%*	**10** *12.8%*	**14** *5.3%*	**51** *6.4%*	**30** *8.3%*	**45** *5.7%*	**40** *7.0%*	**35** *6.1%*
E. Called back 2 or more days later	**22** *1.9%*	**9** *2.0%*	**13** *1.9%*	**2** *2.6%*	**3** *1.1%*	**17** *2.1%*	**6** *1.7%*	**16** *2.0%*	**9** *1.6%*	**13** *2.3%*
F. Never called back	**51** *4.5%*	**28** *6.2%*	**23** *3.3%*	**4** *5.1%*	**8** *3.0%*	**39** *4.9%*	**19** *5.3%*	**32** *4.1%*	**30** *5.2%*	**21** *3.7%*
G. Other	**47** *4.1%*	**15** *3.3%*	**32** *4.6%*	**3** *3.8%*	**12** *4.5%*	**32** *4.0%*	**18** *5.0%*	**29** *3.7%*	**24** *4.2%*	**23** *4.0%*

Survey Questions	April 2009-June 2013: Active Participants									
	All (N=3924)	Tier		Age			Gender		Location	
		Tier 1	Tier 2	Under 21	21 to 44	45 and older	Male	Female	Urban	Rural
26) Which of the following things has your Nurse done for you?	*(N=3909)*									
(1) Asked questions about your health problems or concerns										
A. Yes	**3847**	**1221**	**2626**	**356**	**928**	**2563**	**1260**	**2587**	**1885**	**1962**
	98.4%	*97.4%*	*98.9%*	*96.7%*	*98.6%*	*98.6%*	*98.1%*	*98.6%*	*98.2%*	*98.6%*
B. No	**27**	**15**	**12**	**4**	**3**	**20**	**7**	**20**	**15**	**12**
	0.7%	*1.2%*	*0.5%*	*1.1%*	*0.3%*	*0.8%*	*0.5%*	*0.8%*	*0.8%*	*0.6%*
C. Have not had first visit/too soon	**18**	**10**	**8**	**4**	**5**	**9**	**9**	**9**	**7**	**11**
	0.5%	*0.8%*	*0.3%*	*1.1%*	*0.5%*	*0.3%*	*0.7%*	*0.3%*	*0.4%*	*0.6%*
D. Unsure/N/A	**17**	**8**	**9**	**4**	**5**	**8**	**8**	**9**	**12**	**5**
	0.4%	*0.6%*	*0.3%*	*1.1%*	*0.5%*	*0.3%*	*0.6%*	*0.3%*	*0.6%*	*0.3%*
(2) Provided instructions about taking care of your health problems or concerns										
A. Yes	**3711**	**1156**	**2555**	**337**	**895**	**2479**	**1208**	**2503**	**1817**	**1894**
	94.9%	*92.2%*	*96.2%*	*91.6%*	*95.1%*	*95.3%*	*94.1%*	*95.4%*	*94.7%*	*95.2%*
B. No	**156**	**76**	**80**	**23**	**35**	**98**	**54**	**102**	**79**	**77**
	4.0%	*6.1%*	*3.0%*	*6.3%*	*3.7%*	*3.8%*	*4.2%*	*3.9%*	*4.1%*	*3.9%*
C. Have not had first visit/too soon	**18**	**10**	**8**	**4**	**5**	**9**	**9**	**9**	**7**	**11**
	0.5%	*0.8%*	*0.3%*	*1.1%*	*0.5%*	*0.3%*	*0.7%*	*0.3%*	*0.4%*	*0.6%*
D. Unsure/N/A	**24**	**12**	**12**	**4**	**6**	**14**	**13**	**11**	**16**	**8**
	0.6%	*1.0%*	*0.5%*	*1.1%*	*0.6%*	*0.5%*	*1.0%*	*0.4%*	*0.8%*	*0.4%*
(3) Helped you to identify changes in your health that might be an early sign of a problem										
A. Yes	**2048**	**662**	**1386**	**145**	**507**	**1396**	**658**	**1390**	**998**	**1050**
	52.4%	*52.8%*	*52.2%*	*39.4%*	*53.9%*	*53.7%*	*51.2%*	*53.0%*	*52.0%*	*52.8%*
B. No	**1792**	**550**	**1242**	**211**	**418**	**1163**	**594**	**1198**	**887**	**905**
	45.8%	*43.9%*	*46.8%*	*57.3%*	*44.4%*	*44.7%*	*46.3%*	*45.6%*	*46.2%*	*45.5%*
C. Have not had first visit/too soon	**19**	**11**	**8**	**4**	**5**	**10**	**10**	**9**	**7**	**12**
	0.5%	*0.9%*	*0.3%*	*1.1%*	*0.5%*	*0.4%*	*0.8%*	*0.3%*	*0.4%*	*0.6%*
D. Unsure/N/A	**50**	**31**	**19**	**8**	**11**	**31**	**22**	**28**	**27**	**23**
	1.3%	*2.5%*	*0.7%*	*2.2%*	*1.2%*	*1.2%*	*1.7%*	*1.1%*	1.4%	1.2%

Survey Questions	April 2009-June 2013: Active Participants									
	All (N=3924)	Tier		Age			Gender		Location	
		Tier 1	Tier 2	Under 21	21 to 44	45 and older	Male	Female	Urban	Rural
(4) Answered questions about your health										
A. Yes	**3648**	**1149**	**2499**	**333**	**876**	**2439**	**1177**	**2471**	**1790**	**1858**
	93.3%	*91.6%*	*94.1%*	*90.5%*	*93.1%*	*93.8%*	*91.7%*	*94.1%*	*93.3%*	*93.4%*
B. No	**216**	**80**	**136**	**26**	**53**	**137**	**85**	**131**	**105**	**111**
	5.5%	*6.4%*	*5.1%*	*7.1%*	*5.6%*	*5.3%*	*6.6%*	*5.0%*	*5.5%*	*5.6%*
C. Member didn't ask	**3**	**3**	**0**	**1**	**1**	**1**	**2**	**1**	**2**	**1**
	0.1%	*0.2%*	*0.0%*	*0.3%*	*0.1%*	*0.0%*	*0.2%*	*0.0%*	*0.1%*	*0.1%*
D. Have not had first visit/too soon	**18**	**10**	**8**	**4**	**5**	**9**	**9**	**9**	**7**	**11**
	0.5%	*0.8%*	*0.3%*	*1.1%*	*0.5%*	*0.3%*	*0.7%*	*0.3%*	*0.4%*	*0.6%*
E. Unsure/N/A	**24**	**12**	**12**	**4**	**6**	**14**	**11**	**13**	**15**	**9**
	0.6%	*1.0%*	*0.5%*	*1.1%*	*0.6%*	*0.5%*	*0.9%*	*0.5%*	*0.8%*	*0.5%*
(5) Helped you to make and keep health care appointments for medical problems										
A. Yes	**1757**	**555**	**1202**	**121**	**450**	**1186**	**521**	**1236**	**886**	**871**
	44.9%	*44.3%*	*45.3%*	*32.9%*	*47.8%*	*45.6%*	*40.6%*	*47.1%*	*46.2%*	*43.8%*
B. No	**2091**	**666**	**1425**	**236**	**475**	**1380**	**736**	**1355**	**1004**	**1087**
	53.5%	*53.1%*	*53.7%*	*64.1%*	*50.5%*	*53.1%*	*57.3%*	*51.6%*	*52.3%*	*54.6%*
C. Have not had first visit/too soon	**21**	**12**	**9**	**4**	**5**	**12**	**11**	**10**	**8**	**13**
	0.5%	*1.0%*	*0.3%*	*1.1%*	*0.5%*	*0.5%*	*0.9%*	*0.4%*	*0.4%*	*0.7%*
D. Unsure/N/A	**40**	**21**	**19**	**7**	**11**	**22**	**16**	**24**	**21**	**19**
	1.0%	*1.7%*	*0.7%*	*1.9%*	*1.2%*	*0.8%*	*1.2%*	*0.9%*	*1.1%*	*1.0%*
(6) Helped you to make and keep health care appointments for mental health or substance abuse problems										
A. Yes	**812**	**234**	**578**	**40**	**228**	**544**	**221**	**591**	**405**	**407**
	20.8%	*18.7%*	*21.8%*	*10.9%*	*24.2%*	*20.9%*	*17.2%*	*22.5%*	*21.1%*	*20.5%*
B. No	**3024**	**982**	**2042**	**315**	**689**	**2020**	**1034**	**1990**	**1477**	**1547**
	77.4%	*78.3%*	*76.9%*	*85.6%*	*73.2%*	*77.7%*	*80.5%*	*75.8%*	*77.0%*	*77.7%*
C. Have not had first visit/too soon	**21**	**12**	**9**	**4**	**5**	**12**	**11**	**10**	**8**	**13**
	0.5%	*1.0%*	*0.3%*	*1.1%*	*0.5%*	*0.5%*	*0.9%*	*0.4%*	*0.4%*	*0.7%*
D. Unsure/N/A	**52**	**26**	**26**	**9**	**19**	**24**	**18**	**34**	**29**	**23**
	1.3%	*2.1%*	*1.0%*	*2.4%*	*2.0%*	*0.9%*	*1.4%*	*1.3%*	*1.5%*	*1.2%*

Survey Questions	April 2009-June 2013: Active Participants									
	All (N=3924)	Tier		Age			Gender		Location	
		Tier 1	Tier 2	Under 21	21 to 44	45 and older	Male	Female	Urban	Rural
27) For each activity performed, how satisfied have you been with the help you have received?										
(1) Learning about you and your health care needs	*(N=3847)*									
A. Very satisfied	**3440**	**1084**	**2356**	**323**	**828**	**2289**	**1114**	**2326**	**1663**	**1777**
	89.4%	*88.8%*	*89.7%*	*90.7%*	*89.2%*	*89.3%*	*88.4%*	*89.9%*	*88.2%*	*90.6%*
B. Somewhat satisfied	**347**	**111**	**236**	**31**	**92**	**224**	**123**	**224**	**186**	**161**
	9.0%	*9.1%*	*9.0%*	*8.7%*	*9.9%*	*8.7%*	*9.8%*	*8.7%*	*9.9%*	*8.2%*
C. Somewhat dissatisfied	**33**	**17**	**16**	**1**	**3**	**29**	**13**	**20**	**18**	**15**
	0.9%	*1.4%*	*0.6%*	*0.3%*	*0.3%*	*1.1%*	*1.0%*	*0.8%*	*1.0%*	*0.8%*
D. Very dissatisfied	**22**	**9**	**13**	**0**	**5**	**17**	**9**	**13**	**15**	**7**
	0.6%	*0.7%*	*0.5%*	*0.0%*	*0.5%*	*0.7%*	*0.7%*	*0.5%*	*0.8%*	*0.4%*
E. Unsure/N/A	**5**	**0**	**5**	**1**	**0**	**4**	**1**	**4**	**3**	**2**
	0.1%	*0.0%*	*0.2%*	*0.3%*	*0.0%*	*0.2%*	*0.1%*	*0.2%*	*0.2%*	*0.1%*
(2) Getting easy to understand instructions about taking care of health problems or concerns	*(N=3711)*									
A. Very satisfied	**3354**	**1042**	**2312**	**306**	**814**	**2234**	**1084**	**2270**	**1619**	**1735**
	90.4%	*90.1%*	*90.5%*	*90.8%*	*90.9%*	*90.1%*	*89.7%*	*90.7%*	*89.1%*	*91.6%*
B. Somewhat satisfied	**316**	**98**	**218**	**30**	**78**	**208**	**109**	**207**	**173**	**143**
	8.5%	*8.5%*	*8.5%*	*8.9%*	*8.7%*	*8.4%*	*9.0%*	*8.3%*	*9.5%*	*7.6%*
C. Somewhat dissatisfied	**24**	**12**	**12**	**0**	**2**	**22**	**10**	**14**	**12**	**12**
	0.6%	*1.0%*	*0.5%*	*0.0%*	*0.2%*	*0.9%*	*0.8%*	*0.6%*	*0.7%*	*0.6%*
D. Very dissatisfied	**13**	**4**	**9**	**0**	**1**	**12**	**4**	**9**	**10**	**3**
	0.4%	*0.3%*	*0.4%*	*0.0%*	*0.1%*	*0.5%*	*0.3%*	*0.4%*	*0.6%*	*0.2%*
E. Unsure/N/A	**4**	**0**	**4**	**1**	**0**	**3**	**1**	**3**	**3**	**1**
	0.1%	*0.0%*	*0.2%*	*0.3%*	*0.0%*	*0.1%*	*0.1%*	*0.1%*	*0.2%*	*0.1%*

Survey Questions	April 2009-June 2013: Active Participants									
	All (N=3924)	Tier		Age			Gender		Location	
		Tier 1	Tier 2	Under 21	21 to 44	45 and older	Male	Female	Urban	Rural
(3) Getting help identifying changes in your health that might be an early sign of a problem	*(N=2048)*									
A. Very satisfied	**1905**	**622**	**1283**	**136**	**471**	**1298**	**611**	**1294**	**925**	**980**
	93.0%	*94.0%*	*92.6%*	*93.8%*	*92.9%*	*93.0%*	*92.9%*	*93.1%*	*92.7%*	*93.3%*
B. Somewhat satisfied	**133**	**37**	**96**	**8**	**35**	**90**	**44**	**89**	**67**	**66**
	6.5%	*5.6%*	*6.9%*	*5.5%*	*6.9%*	*6.4%*	*6.7%*	*6.4%*	*6.7%*	*6.3%*
C. Somewhat dissatisfied	**6**	**2**	**4**	**0**	**1**	**5**	**3**	**3**	**3**	**3**
	0.3%	*0.3%*	*0.3%*	*0.0%*	*0.2%*	*0.4%*	*0.5%*	*0.2%*	*0.3%*	*0.3%*
D. Very dissatisfied	**2**	**1**	**1**	**0**	**0**	**2**	**0**	**2**	**1**	**1**
	0.1%	*0.2%*	*0.1%*	*0.0%*	*0.0%*	*0.1%*	*0.0%*	*0.1%*	*0.1%*	*0.1%*
E. Unsure/N/A	**2**	**0**	**2**	**1**	**0**	**1**	**0**	**2**	**2**	**0**
	0.1%	*0.0%*	*0.1%*	*0.7%*	*0.0%*	*0.1%*	*0.0%*	*0.1%*	*0.2%*	*0.0%*
(4) Answering questions about your health	*(N=3648)*									
A. Very satisfied	**3320**	**1045**	**2275**	**305**	**797**	**2218**	**1069**	**2251**	**1615**	**1705**
	91.0%	*90.9%*	*91.0%*	*91.6%*	*91.0%*	*90.9%*	*90.8%*	*91.1%*	*90.2%*	*91.8%*
B. Somewhat satisfied	**299**	**96**	**203**	**27**	**75**	**197**	**100**	**199**	**157**	**142**
	8.2%	*8.4%*	*8.1%*	*8.1%*	*8.6%*	*8.1%*	*8.5%*	*8.1%*	*8.8%*	*7.6%*
C. Somewhat dissatisfied	**14**	**6**	**8**	**0**	**2**	**12**	**4**	**10**	**8**	**6**
	0.4%	*0.5%*	*0.3%*	*0.0%*	*0.2%*	*0.5%*	*0.3%*	*0.4%*	*0.4%*	*0.3%*
D. Very dissatisfied	**12**	**2**	**10**	**0**	**2**	**10**	**3**	**9**	**8**	**4**
	0.3%	*0.2%*	*0.4%*	*0.0%*	*0.2%*	*0.4%*	*0.3%*	*0.4%*	*0.4%*	*0.2%*
E. Unsure/N/A	**3**	**0**	**3**	**1**	**0**	**2**	**1**	**2**	**2**	**1**
	0.1%	*0.0%*	*0.1%*	*0.3%*	*0.0%*	*0.1%*	*0.1%*	*0.1%*	*0.1%*	*0.1%*
(5) Helping you make and keep health care appointments for medical problems	*(N=1757)*									
A. Very satisfied	**1668**	**524**	**1144**	**116**	**429**	**1123**	**495**	**1173**	**832**	**836**
	94.9%	*94.4%*	*95.2%*	*95.9%*	*95.3%*	*94.7%*	*95.0%*	*94.9%*	*93.9%*	*96.0%*
B. Somewhat satisfied	**83**	**29**	**54**	**4**	**19**	**60**	**24**	**59**	**50**	**33**
	4.7%	*5.2%*	*4.5%*	*3.3%*	*4.2%*	*5.1%*	*4.6%*	*4.8%*	*5.6%*	*3.8%*
C. Somewhat dissatisfied	**2**	**2**	**0**	**0**	**1**	**1**	**0**	**2**	**1**	**1**
	0.1%	*0.4%*	*0.0%*	*0.0%*	*0.2%*	*0.1%*	*0.0%*	*0.2%*	*0.1%*	*0.1%*
D. Very dissatisfied	**1**	**0**	**1**	**0**	**1**	**0**	**1**	**0**	**1**	**0**
	0.1%	*0.0%*	*0.1%*	*0.0%*	*0.2%*	*0.0%*	*0.2%*	*0.0%*	*0.1%*	*0.0%*
E. Unsure/N/A	**3**	**0**	**3**	**1**	**0**	**2**	**1**	**2**	**2**	**1**
	0.2%	*0.0%*	*0.2%*	*0.8%*	*0.0%*	*0.2%*	*0.2%*	*0.2%*	*0.2%*	*0.1%*

Survey Questions	April 2009-June 2013: Active Participants									
	All (N=3924)	Tier		Age			Gender		Location	
		Tier 1	Tier 2	Under 21	21 to 44	45 and older	Male	Female	Urban	Rural
(6) Helping you make and keep health care appointments for mental health or substance abuse problems	*(N=812)*									
A. Very satisfied	**770**	**219**	**551**	**39**	**215**	**516**	**214**	**556**	**387**	**383**
	94.8%	*93.6%*	*95.3%*	*97.5%*	*94.3%*	*94.9%*	*96.8%*	*94.1%*	*95.6%*	*94.1%*
B. Somewhat satisfied	**39**	**14**	**25**	**0**	**13**	**26**	**7**	**32**	**15**	**24**
	4.8%	*6.0%*	*4.3%*	*0.0%*	*5.7%*	*4.8%*	*3.2%*	*5.4%*	*3.7%*	*5.9%*
C. Somewhat dissatisfied	**1**	**1**	**0**	**0**	**0**	**1**	**0**	**1**	**1**	**0**
	0.1%	*0.4%*	*0.0%*	*0.0%*	*0.0%*	*0.2%*	*0.0%*	*0.2%*	*0.2%*	*0.0%*
D. Very dissatisfied	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	0.0%	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
E. Unsure/N/A	**2**	**0**	**2**	**1**	**0**	**1**	**0**	**2**	**2**	**0**
	0.2%	*0.0%*	*0.3%*	*2.5%*	*0.0%*	*0.2%*	*0.0%*	*0.3%*	*0.5%*	*0.0%*
28) Overall, how satisfied are you with your Nurse Care Manager?	*(N=3910)*									
A. Very satisfied	**3427**	**1078**	**2349**	**321**	**828**	**2278**	**1107**	**2320**	**1658**	**1769**
	87.6%	*85.9%*	*88.5%*	*87.0%*	*88.0%*	*87.6%*	*86.2%*	*88.3%*	*86.4%*	*88.8%*
B. Somewhat satisfied	**361**	**115**	**246**	**37**	**90**	**234**	**133**	**228**	**187**	**174**
	9.2%	*9.2%*	*9.3%*	*10.0%*	*9.6%*	*9.0%*	*10.4%*	*8.7%*	*9.7%*	*8.7%*
C. Somewhat dissatisfied	**38**	**20**	**18**	**2**	**5**	**31**	**14**	**24**	**22**	**16**
	1.0%	*1.6%*	*0.7%*	*0.5%*	*0.5%*	*1.2%*	*1.1%*	*0.9%*	*1.1%*	*0.8%*
D. Very dissatisfied	**34**	**19**	**15**	**2**	**6**	**26**	**10**	**24**	**23**	**11**
	0.9%	*1.5%*	*0.6%*	*0.5%*	*0.6%*	*1.0%*	*0.8%*	*0.9%*	*1.2%*	*0.6%*
E. Have not had first visit/too soon	**20**	**12**	**8**	**4**	**5**	**11**	**10**	**10**	**8**	**12**
	0.5%	*1.0%*	*0.3%*	*1.1%*	*0.5%*	*0.4%*	*0.8%*	*0.4%*	*0.4%*	*0.6%*
F. Unsure/N/A	**30**	**11**	**19**	**3**	**7**	**20**	**10**	**20**	**21**	**9**
	0.8%	*0.9%*	*0.7%*	*0.8%*	*0.7%*	*0.8%*	*0.8%*	*0.8%*	*1.1%*	*0.5%*
29) Did you know that the HMP has a website?	*(N=3910)*									
A. Yes	**1724**	**498**	**1226**	**174**	**452**	**1098**	**555**	**1169**	**850**	**874**
	44.1%	*39.7%*	*46.2%*	*47.2%*	*48.0%*	*42.2%*	*43.2%*	*44.5%*	*44.3%*	*43.9%*
B. No	**2138**	**738**	**1400**	**189**	**478**	**1471**	**713**	**1425**	**1041**	**1097**
	54.7%	*58.8%*	*52.7%*	*51.2%*	*50.8%*	*56.6%*	*55.5%*	*54.3%*	*54.2%*	*55.1%*

Survey Questions	April 2009-June 2013: Active Participants									
	All (N=3924)	Tier		Age			Gender		Location	
		Tier 1	Tier 2	Under 21	21 to 44	45 and older	Male	Female	Urban	Rural
C. Unsure/too soon/N/A	48 1.2%	19 1.5%	29 1.1%	6 1.6%	11 1.2%	31 1.2%	16 1.2%	32 1.2%	28 1.5%	20 1.0%
30) Have you ever visited the website?	*(N=1724)*									
A. Yes	51 3.0%	17 3.4%	34 2.8%	8 4.6%	24 5.3%	19 1.7%	14 2.5%	37 3.2%	36 4.2%	15 1.7%
B. No	1673 97.0%	481 96.6%	1192 97.2%	166 95.4%	428 94.7%	1079 98.3%	541 97.5%	1132 96.8%	814 95.8%	859 98.3%
31) Thinking about the last time you visited the website, what was your reason for visiting it?	*(N=51)*									
A. Seeking general information about the program	35 68.6%	9 52.9%	26 76.5%	5 62.5%	17 70.8%	13 68.4%	10 71.4%	25 67.6%	25 69.4%	10 66.7%
B. Routine health question/seeking general health information	4 7.8%	2 11.8%	2 5.9%	1 12.5%	1 4.2%	2 10.5%	0 0.0%	4 10.8%	3 8.3%	1 6.7%
C. Urgent health problem	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%
D. Seeking assistance in scheduling an appointment	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%
E. No specific reason	8 15.7%	3 17.6%	5 14.7%	1 12.5%	4 16.7%	3 15.8%	3 21.4%	5 13.5%	6 16.7%	2 13.3%
F. Other	2 3.9%	1 5.9%	1 2.9%	0 0.0%	1 4.2%	1 5.3%	0 0.0%	2 5.4%	1 2.8%	1 6.7%
G. More than 1 reason	2 3.9%	2 11.8%	0 0.0%	1 12.5%	1 4.2%	0 0.0%	1 7.1%	1 2.7%	1 2.8%	1 6.7%
32) Was the website helpful to you?	*(N=51)*									
A. Yes	47 92.2%	14 82.4%	33 97.1%	8 100.0%	21 87.5%	18 94.7%	13 92.9%	34 91.9%	33 91.7%	14 93.3%
B. No	2 3.9%	2 11.8%	0 0.0%	0 0.0%	2 8.3%	0 0.0%	1 7.1%	1 2.7%	1 2.8%	1 6.7%
C. Don't remember	2 3.9%	1 5.9%	1 2.9%	0 0.0%	1 4.2%	1 5.3%	0 0.0%	2 5.4%	2 5.6%	0 0.0%

Survey Questions	April 2009-June 2013: Active Participants									
	All (N=3924)	Tier		Age			Gender		Location	
		Tier 1	Tier 2	Under 21	21 to 44	45 and older	Male	Female	Urban	Rural
33) Overall, how satisfied are you with your whole experience in the HMP?	*(N=3910)*									
A. Very satisfied	**3388** *86.6%*	**1069** *85.2%*	**2319** *87.3%*	**318** *86.2%*	**824** *87.6%*	**2246** *86.4%*	**1091** *85.0%*	**2297** *87.5%*	**1643** *85.6%*	**1745** *87.6%*
B. Somewhat satisfied	**382** *9.8%*	**122** *9.7%*	**260** *9.8%*	**38** *10.3%*	**87** *9.2%*	**257** *9.9%*	**140** *10.9%*	**242** *9.2%*	**195** *10.2%*	**187** *9.4%*
C. Somewhat dissatisfied	**45** *1.2%*	**20** *1.6%*	**25** *0.9%*	**1** *0.3%*	**12** *1.3%*	**32** *1.2%*	**18** *1.4%*	**27** *1.0%*	**26** *1.4%*	**19** *1.0%*
D. Very dissatisfied	**35** *0.9%*	**19** *1.5%*	**16** *0.6%*	**2** *0.5%*	**6** *0.6%*	**27** *1.0%*	**10** *0.8%*	**25** *1.0%*	**23** *1.2%*	**12** *0.6%*
E. Have not had first visit/too soon	**20** *0.5%*	**12** *1.0%*	**8** *0.3%*	**4** *1.1%*	**5** *0.5%*	**11** *0.4%*	**10** *0.8%*	**10** *0.4%*	**8** *0.4%*	**12** *0.6%*
F. Unsure/N/A	**40** *1.0%*	**13** *1.0%*	**27** *1.0%*	**6** *1.6%*	**7** *0.7%*	**27** *1.0%*	**15** *1.2%*	**25** *1.0%*	**24** *1.3%*	**16** *0.8%*
34) Would you recommend the HMP to a friend who has health care needs like yours?	*(N=3910)*									
A. Yes	**3741** *95.7%*	**1180** *94.0%*	**2561** *96.5%*	**353** *95.7%*	**903** *96.0%*	**2485** *95.6%*	**1214** *94.5%*	**2527** *96.2%*	**1826** *95.2%*	**1915** *96.2%*
B. No	**86** *2.2%*	**38** *3.0%*	**48** *1.8%*	**6** *1.6%*	**18** *1.9%*	**62** *2.4%*	**39** *3.0%*	**47** *1.8%*	**46** *2.4%*	**40** *2.0%*
C. Have not had first visit/too soon	**25** *0.6%*	**16** *1.3%*	**9** *0.3%*	**4** *1.1%*	**7** *0.7%*	**14** *0.5%*	**11** *0.9%*	**14** *0.5%*	**10** *0.5%*	**15** *0.8%*
D. Unsure/Refused/N/A	**58** *1.5%*	**21** *1.7%*	**37** *1.4%*	**6** *1.6%*	**13** *1.4%*	**39** *1.5%*	**20** *1.6%*	**38** *1.4%*	**37** *1.9%*	**21** *1.1%*
35) Do you have any suggestions for improving the HMP?	*(N=3909)*									
A. Yes	**318** *8.1%*	**121** *9.6%*	**197** *7.4%*	**22** *6.0%*	**74** *7.9%*	**222** *8.5%*	**113** *8.8%*	**205** *7.8%*	**166** *8.7%*	**152** *7.6%*
B. No	**3514** *89.9%*	**1094** *87.2%*	**2420** *91.1%*	**345** *93.5%*	**845** *89.9%*	**2324** *89.4%*	**1147** *89.3%*	**2367** *90.2%*	**1712** *89.3%*	**1802** *90.5%*
C. Yes, but pertains to SoonerCare	**48** *1.2%*	**22** *1.8%*	**26** *1.0%*	**0** *0.0%*	**9** *1.0%*	**39** *1.5%*	**15** *1.2%*	**33** *1.3%*	**26** *1.4%*	**22** *1.1%*

Survey Questions	April 2009-June 2013: Active Participants									
	All (N=3924)	Tier		Age			Gender		Location	
		Tier 1	Tier 2	Under 21	21 to 44	45 and older	Male	Female	Urban	Rural
D. Too soon to tell/don't want to answer/N/A	29 0.7%	17 1.4%	12 0.5%	2 0.5%	12 1.3%	15 0.6%	9 0.7%	20 0.8%	14 0.7%	15 0.8%
36) Overall, how would you rate your health today?	*(N=3909)*									
A. Excellent	149 3.8%	39 3.1%	110 4.1%	37 10.0%	30 3.2%	82 3.2%	55 4.3%	94 3.6%	65 3.4%	84 4.2%
B. Good	939 24.0%	280 22.3%	659 24.8%	188 50.9%	222 23.6%	529 20.3%	325 25.3%	614 23.4%	472 24.6%	467 23.5%
C. Fair	1844 47.2%	555 44.3%	1289 48.5%	115 31.2%	482 51.3%	1247 48.0%	576 44.9%	1268 48.3%	891 46.5%	953 47.9%
D. Poor	971 24.8%	378 30.1%	593 22.3%	29 7.9%	205 21.8%	737 28.3%	325 25.3%	646 24.6%	487 25.4%	484 24.3%
E. N/A	6 0.2%	2 0.2%	4 0.2%	0 0.0%	1 0.1%	5 0.2%	3 0.2%	3 0.1%	3 0.2%	3 0.2%
37) Compared to before you enrolled in the HMP, how has your health changed?	*(N=3909)*									
A. Better	956 24.5%	307 24.5%	649 24.4%	87 23.6%	241 25.6%	628 24.2%	313 24.4%	643 24.5%	477 24.9%	479 24.1%
B. Worse	299 7.6%	103 8.2%	196 7.4%	14 3.8%	65 6.9%	220 8.5%	84 6.5%	215 8.2%	140 7.3%	159 8.0%
C. About the same	2633 67.4%	835 66.6%	1798 67.7%	266 72.1%	628 66.8%	1739 66.9%	876 68.2%	1757 66.9%	1293 67.4%	1340 67.3%
D. Not in HMP long enough	4 0.1%	1 0.1%	3 0.1%	0 0.0%	1 0.1%	3 0.1%	3 0.2%	1 0.0%	0 0.0%	4 0.2%
E. Unsure/N/A	17 0.4%	8 0.6%	9 0.3%	2 0.5%	5 0.5%	10 0.4%	8 0.6%	9 0.3%	8 0.4%	9 0.5%
38) Do you think the HMP has contributed to your improvement in health?	*(N=956)*									
A. Yes	882 92.3%	279 91.2%	603 92.8%	74 85.1%	219 90.5%	589 93.9%	289 92.3%	593 92.2%	442 92.9%	440 91.7%
B. No	66 6.9%	23 7.5%	43 6.6%	13 14.9%	22 9.1%	31 4.9%	22 7.0%	44 6.8%	31 6.5%	35 7.3%
C. Not in HMP long enough	1 0.1%	1 0.3%	0 0.0%	0 0.0%	0 0.0%	1 0.2%	0 0.0%	1 0.2%	1 0.2%	0 0.0%
D. Unsure/N/A	7 0.7%	3 1.0%	4 0.6%	0 0.0%	1 0.4%	6 1.0%	2 0.6%	5 0.8%	2 0.4%	5 1.0%

APPENDIX C – PARTICIPANT UTILIZATION AND EXPENDITURE DATA

Appendix C includes a full set of demographic, utilization and expenditure exhibits for nurse care managed participants. The exhibits are listed below.

Exhibit	***Description***
C-1	Members Selected for Potential Engagement
C-2	SoonerCare HMP Enrollment Summary – Engaged Members (Participants)
C-3	Expenditures for Participants
C-4	Expenditure Distribution for Participants
C-5	Highest Cost Participants – Expenditures as Percent of Total
C-6	Participants and Expenditures by Age Cohort
C-7	Participants and Expenditures by Urban/Rural
C-8	Incidence of Target Conditions for Participants
C-9	Most Common Diagnoses for Participants
C-10	Most Expensive (Incidence) Diagnoses for Participants
C-11	Physical Health Co-morbidity Summary for Participants
C-12	Behavioral Health Co-morbidity Summary for Participants
C-13	Frequency of Most Common Co-morbidities for Participants
C-14	Participants with Asthma with/without Behavioral Health Co-morbidity
C-15	Participants with COPD with/without Behavioral Health Co-morbidity
C-16	Participants with Heart Failure with/without Behavioral Health Co-morbidity
C-17	Participants with CAD with/without Behavioral Health Co-morbidity
C-18	Participants with Diabetes with/without Behavioral Health Co-morbidity
C-19	Participants with Hypertension with/without Behavioral Health Co-morbidity
C-20	Utilization and Expenditure Profile: Participants with Asthma
C-21	Utilization and Expenditure Profile: Participants with COPD
C-22	Utilization and Expenditure Profile: Participants with Heart Failure
C-23	Utilization and Expenditure Profile: Participants with CAD
C-24	Utilization and Expenditure Profile: Participants with Diabetes
C-25	Utilization and Expenditure Profile: Participants with Hypertension

Exhibit C-1 – Members Selected for Potential Engagement

Enrollment Group	Members Selected	Members Engaged	Percent Engaged
Tier 1	8,923	3,910	43.8%
Tier 2	40,210	16,051	39.9%
Tiers 1 & 2	**49,133**	**19,961**	**40.6%**

Notes

- *Includes all members selected through June 2013 MEDai extracts.*
- *"Members Selected" is an unduplicated count, i.e., "recycled" members are counted only once.*
- *Only 18,673 engaged members were included in the utilization/expenditure and cost effectiveness analyses, which only include members with at least two months of engagement as of June 30, 2013 and MEDai forecast data available at the time of engagement.*

Exhibit C-2 – SoonerCare HMP Enrollment Summary – Engaged Members (Participants)

Enrollment Group	Pre-Engagement: 13 to 24 months	Pre-Engagement: 1 to 12 months	Engaged Period	Post-Engagement
Tier 1				
Members	3,296	3,589	3,589	3,298
Member Months	34,888	41,958	45,421	66,116
Average Months per Member	10.6	11.7	12.7	20.0
Tier 2				
Members	13,395	15,084	15,084	14,525
Member Months	138,121	174,649	181,572	313,774
Average Months per Member	10.3	11.6	12.0	21.6
Tiers 1 & 2				
Members	16,691	18,673	18,673	17,823
Member Months	173,009	216,607	226,993	379,890
Average Months per Member	10.4	11.6	12.2	21.3

Notes

- *Includes only those engaged at least two months as of June 30, 2013, and had MEDai forecast data available at the time of engagement.*

Exhibit C-3 – Expenditures for Participants

Enrollment Group	Pre-Engagement: 13 to 24 months	Pre-Engagement: 1 to 12 months	Engaged Period	Post-Engagement
Tier 1				
Expenditures	$ 75,827,161	$ 108,964,296	$ 97,700,101	$ 124,660,397
Member Months	34,888	41,958	45,421	66,116
Per Member, Per Month Costs	$ 2,173	$ 2,597	$ 2,151	$ 1,885
Tier 2				
Expenditures	$ 103,936,252	$ 168,049,442	$ 195,538,200	$ 273,813,312
Member Months	138,121	174,649	181,572	313,774
Per Member, Per Month Costs	$ 753	$ 962	$ 1,077	$ 873
Tiers 1 & 2				
Expenditures	$ 179,763,412	$ 277,013,738	$ 293,238,301	$ 398,473,709
Member Months	173,009	216,607	226,993	379,890
Per Member, Per Month Costs	$ 1,039	$ 1,279	$ 1,292	$ 1,049

Notes

- *Includes only those engaged at least two months as of June 30, 2013, and had MEDai forecast data available at the time of engagement.*
- *Dates of service through June 30, 2013, paid through September 2013.*

Exhibit C-4 – Expenditure Distribution for Participants

Enrollment Group	Pre-Engagement: 1 to 12 months		Engaged Period	
	Clients	Percent of Clients	Clients	Percent of Clients
Tier 1				
Less than $1,000	13	0.4%	217	6.0%
$1,000-$4,999	1,843	51.4%	1,418	39.5%
$5,000-$24,999	1,051	29.3%	638	17.8%
$25,000-$49,999	164	4.6%	746	20.8%
$50,000 and over	518	14.4%	570	15.9%
Total	**3,589**	**100.0%**	**3,589**	**100.0%**
Tier 2				
Less than $1,000	250	1.7%	2,344	15.5%
$1,000-$4,999	9,733	64.5%	5,343	35.4%
$5,000-$24,999	960	6.4%	1,410	9.3%
$25,000-$49,999	3,934	26.1%	5,189	34.4%
$50,000 and over	207	1.4%	798	5.3%
Total	**15,084**	**100.0%**	**15,084**	**100.0%**
Tiers 1 & 2				
Less than $1,000	263	1.4%	2,561	13.7%
$1,000-$4,999	11,576	62.0%	6,761	36.2%
$5,000-$24,999	2,011	10.8%	2,048	11.0%
$25,000-$49,999	4,098	21.9%	5,935	31.8%
$50,000 and over	725	3.9%	1,368	7.3%
Total	**18,673**	**100.0%**	**18,673**	**100.0%**

Notes

- *Includes only those engaged at least two months as of June 30, 2013, and had MEDai forecast data available at the time of engagement.*
- *Dates of service through June 30, 2013, paid through September 2013.*

Exhibit C-5 – Highest Cost Participants – Expenditures as Percent of Total

Enrollment Group	Pre-Engagement: 1 to 12 months		Engaged Period	
	Expenditures	Percent of Expenditures	Expenditures	Percent of Expenditures
Tier 1				
Top 5%	$ 23,113,082	21.2%	$ 9,177,195	9.4%
Top 10%	$ 35,651,630	32.7%	$ 16,190,344	16.6%
Top 20%	$ 53,415,831	49.0%	$ 29,394,732	30.1%
Total	**$ 108,964,296**	**100.0%**	**$ 97,700,101**	**100.0%**
Tier 2				
Top 5%	$ 36,172,186	21.5%	$ 13,720,717	7.0%
Top 10%	$ 55,587,131	33.1%	$ 25,384,740	13.0%
Top 20%	$ 83,325,799	49.6%	$ 45,930,847	23.5%
Total	**$ 168,049,442**	**100.0%**	**$ 195,538,200**	**100.0%**
Tiers 1 & 2				
Top 5%	$ 59,285,268	21.4%	$ 22,897,912	7.8%
Top 10%	$ 91,238,761	32.9%	$ 41,575,084	14.2%
Top 20%	$ 136,741,630	49.4%	$ 75,325,579	25.7%
Total	**$ 277,013,738**	**100.0%**	**$ 293,238,301**	**100.0%**

Notes

- *Includes only those engaged at least two months as of June 30, 2013, and had MEDai forecast data available at the time of engagement.*
- *Dates of service through June 30, 2013, paid through September 2013.*
- *Percentages calculated based on expenditures for each tier separately during specified time period.*

Exhibit C-6 – Participants and Expenditures by Age Cohort

Enrollment Group	Members	Percent of Members	Pre-Engagement: 1 to 12 months		Engaged Period	
			Expenditures	Percent of Expenditures	Expenditures	Percent of Expenditures
Tier 1						
Less than 21	369	10.2%	$ 15,450,203	14.2%	$ 7,207,148	7.4%
21-34	396	10.9%	$ 12,096,907	11.1%	$ 8,692,629	8.9%
35-49	1,190	32.8%	$ 34,309,053	31.5%	$ 33,511,907	34.3%
50 and over	1,670	46.1%	$ 47,108,133	43.2%	$ 48,288,416	49.4%
Total	**3,625**	**100.0%**	**$ 108,964,296**	**100.0%**	**$ 97,700,101**	**100.0%**
Tier 2						
Less than 21	2,207	14.5%	$ 29,158,500	17.4%	$ 18,112,858	9.3%
21-34	2,009	13.2%	$ 21,756,529	12.9%	$ 14,814,207	7.6%
35-49	4,700	31.0%	$ 52,470,654	31.2%	$ 60,417,762	30.9%
50 and over	6,256	41.2%	$ 64,663,759	38.5%	$ 102,193,374	52.3%
Total	**15,172**	**100.0%**	**$ 168,049,442**	**100.0%**	**$ 195,538,200**	**100.0%**
Tiers 1 & 2						
Less than 21	2,576	13.7%	$ 44,608,703	16.1%	$ 25,320,006	8.6%
21-34	2,405	12.8%	$ 33,853,436	12.2%	$ 23,506,836	8.0%
35-49	5,890	31.3%	$ 86,779,706	31.3%	$ 93,929,669	32.0%
50 and over	7,926	42.2%	$ 111,771,892	40.3%	$ 150,481,790	51.3%
Total	**18,797**	**100.0%**	**$ 277,013,738**	**100.0%**	**$ 293,238,301**	**100.0%**

Notes

- *Includes only those engaged at least two months as of June 30, 2013, and had MEDai forecast data available at the time of engagement.*
- *Dates of service through June 30, 2013, paid through September 2013.*
- *Percentages calculated based on expenditures for each tier separately during specified time period.*

Exhibit C-7 – Participants and Expenditures by Urban/Rural

Enrollment Group	Members	Percent of Members	Pre-Engagement: 1 to 12 months		Engaged Period	
			Expenditures	Percent of Expenditures	Expenditures	Percent of Expenditures
Tier 1						
Urban	1,932	53.8%	$ 58,822,741	54.0%	$ 53,682,334	54.9%
Rural	1,657	46.2%	$ 50,141,554	46.0%	$ 44,017,767	45.1%
Total	**3,589**	**100.0%**	**$ 108,964,296**	**100.0%**	**$ 97,700,101**	**100.0%**
Tier 2						
Urban	7,956	52.7%	$ 88,993,115	53.0%	$ 100,935,730	51.6%
Rural	7,128	47.3%	$ 79,056,327	47.0%	$ 94,602,470	48.4%
Total	**15,084**	**100.0%**	**$ 168,049,442**	**100.0%**	**$ 195,538,200**	**100.0%**
Tiers 1 & 2						
Urban	9,888	53.0%	$ 147,815,857	53.4%	$ 154,618,064	52.7%
Rural	8,785	47.0%	$ 129,197,881	46.6%	$ 138,620,237	47.3%
Total	**18,673**	**100.0%**	**$ 277,013,738**	**100.0%**	**$ 293,238,301**	**100.0%**

Notes

- *Includes only those engaged at least two months as of June 30, 2013, and had MEDai forecast data available at the time of engagement.*
- *Dates of service through June 30, 2013, paid through September 2013.*
- *Percentages calculated based on expenditures for each tier separately during specified time period.*

Exhibit C-8 – Incidence of Target Conditions for Participants

Target Condition	Tier 1		Tier 2	
	Number of Members	Percent of Total	Number of Members	Percent of Total
Asthma	1,547	43.1%	5,324	35.3%
COPD	2,033	56.6%	5,972	39.6%
Congestive Heart Failure	1,348	37.6%	2,890	19.2%
Coronary Artery Disease	1,719	47.9%	4,295	28.5%
Diabetes	2,058	57.3%	6,991	46.3%
Hypertension	2,937	81.8%	10,446	69.3%
Total (Unduplicated)	**3,589**	**100.0%**	**15,084**	**100.0%**

Notes

- *Includes only those engaged at least two months as of June 30, 2013, and had MEDai forecast data available at the time of engagement.*
- *Members diagnosed with more than one target condition were included in both categories.*

Exhibit C-9 – Most Common Diagnoses for Participants

Diagnosis	Tier 1		Tier 2	
	Members	% of Total	Members	% of Total
Diabetes	601	16.7%	2,384	15.8%
Psychoses	688	19.2%	1,957	13.0%
Neurotic, Personality or Other Mental Disorder	317	8.8%	1,770	11.7%
Disease of Musculoskeletal System	260	7.2%	1,812	12.0%
Chronic Obstructive Pulmonary Disease	161	4.5%	715	4.7%
Nervous System Disease	69	1.9%	597	4.0%
Hypertension	85	2.4%	545	3.6%
Heart Disease	184	5.1%	406	2.7%
Neoplasm	200	5.6%	304	2.0%
Injury	54	1.5%	225	1.5%
Respiratory Disease	34	0.9%	206	1.4%
Other Metabolic or Immunity Disorder	26	0.7%	136	0.9%
Other Viral Disease	17	0.5%	123	0.8%
Disease of Urinary System	23	0.6%	112	0.7%
Disease of Skin	39	1.1%	92	0.6%
Cerebral Palsy	25	0.7%	77	0.5%
Anemia	30	0.8%	63	0.4%
Disease of Genital Organs	5	0.1%	88	0.6%
Renal Disease	40	1.1%	53	0.4%
Disorder of Thyroid Gland	6	0.2%	86	0.6%
Disorder of the Eye	4	0.1%	86	0.6%
Liver Disease	33	0.9%	52	0.3%
Circulatory Disease	18	0.5%	53	0.4%
Congenital Anomolies	10	0.3%	55	0.4%
Disease of the Esophagus	2	0.1%	41	0.3%
Other	658	18.3%	3,046	20.2%
Total	**3,589**	**100.0%**	**15,084**	**100.0%**

Notes

- *Diagnosis codes truncated to the first three characters.*
- *Data based on claims experience 2/08 through 6/13.*
- *Includes only those engaged at least two months as of June 30, 2013, and had MEDai forecast data available at the time of engagement.*
- *Only includes the top 25 most common diagnoses.*

Exhibit C-10 – Most Expensive (Incidence) Diagnoses for Participants

Diagnosis	Tier 1		Tier 2	
	Members	% of Total	Members	% of Total
Neurotic, Personality or Other Mental Disorder	425	11.8%	2,103	13.9%
Psychoses	607	16.9%	1,695	11.2%
Disease of Musculoskeletal System	212	5.9%	1,596	10.6%
Diabetes	301	8.4%	1,350	8.9%
Chronic Obstructive Pulmonary Disease	144	4.0%	694	4.6%
Nervous System Disease	104	2.9%	694	4.6%
Heart Disease	198	5.5%	490	3.2%
Hypertension	117	3.3%	523	3.5%
Neoplasm	141	3.9%	291	1.9%
Injury	78	2.2%	320	2.1%
Other Metabolic or Immunity Disorder	112	3.1%	270	1.8%
Respiratory Disease	40	1.1%	215	1.4%
Disorder of the Eye	17	0.5%	208	1.4%
Disease of Genital Organs	12	0.3%	210	1.4%
Anemia	58	1.6%	119	0.8%
Disease of the Esophagus	34	0.9%	135	0.9%
Obesity	29	0.8%	140	0.9%
Circulatory Disease	30	0.8%	115	0.8%
Disease of Urinary System	28	0.8%	111	0.7%
Disease of Skin	31	0.9%	106	0.7%
Renal Disease	43	1.2%	76	0.5%
Cerebral Palsy	27	0.8%	89	0.6%
Other Viral Disease	18	0.5%	91	0.6%
Complications of Pregnancy	7	0.2%	83	0.6%
Disorder of Thyroid Gland	21	0.6%	64	0.4%
Other	755	21.0%	3,296	21.9%
Total	**3,589**	**100.0%**	**15,084**	**100.0%**

Notes

- *Diagnosis codes truncated to the first three characters.*
- *Data based on claims experience 2/08 through 6/13.*
- *Includes only those engaged at least two months as of June 30, 2013, and had MEDai forecast data available at the time of engagement.*
- *Only includes the top 25 most expensive (incidence) diagnoses.*

Exhibit C-11 – Physical Health Co-morbidity Summary for Participants

Number of Target Chronic Impact Conditions	Tier 1		Tier 2	
	Number of Members	Percent of Total	Number of Members	Percent of Total
0	186	5.2%	1,505	10.0%
1	434	12.1%	3,112	20.6%
2	647	18.0%	3,915	26.0%
3	663	18.5%	3,064	20.3%
4	720	20.1%	2,024	13.4%
5	589	16.4%	1,096	7.3%
6	350	9.8%	368	2.4%
Total Members	**3,589**	**100.0%**	**15,084**	**100.0%**

Notes

- *Includes only those engaged at least two months as of June 30, 2013, and had MEDai forecast data available at the time of engagement.*
- *Conditions included are the priority conditions targeted by Telligen.*

Exhibit C-12 – Behavioral Health Co-morbidity Summary for Participants

Physical Condition Co-Occuring with Behavioral Health Diagnosis	Tier 1		Tier 2	
	Number of Members	Percent of Total	Number of Members	Percent of Total
Asthma	822	46.4%	2,736	42.1%
COPD	998	56.4%	2,794	43.0%
Congestive Heart Failure	552	31.2%	1,203	18.5%
Coronary Artery Disease	771	43.5%	1,760	27.1%
Diabetes	994	56.1%	3,051	47.0%
Hypertension	1,478	83.5%	4,764	73.4%
Total (Unduplicated)	**1,771**	**100.0%**	**6,493**	**100.0%**

Notes

- *Includes only those engaged at least two months as of June 30, 2013, and had MEDai forecast data available at the time of engagement.*
- *Conditions included are the priority conditions targeted by Telligen.*
- *To be included, a behavioral health diagnosis had to be one of the client's top three most common diagnoses during the evaluation period.*

Exhibit C-13 – Frequency of Most Common Co-morbidities for Participants

Participants with chronic impact condition, the specified comorbidity, and additional comorbidities

Participants ONLY with chronic impact condition and the specified comorbidity (no other comorbidities)

Comorbidity	Tier 1		Comorbidity	Tier 2	
	Participants	%		Participants	%
Asthma	**1,547**	**100.0%**	**Asthma**	**5,324**	**100.0%**
	8	**0.5%**		**131**	**2.5%**
+ Hypertension	1,297	83.8%	+ Hypertension	3,677	69.1%
	5	0.3%		63	1.2%
+ Depression	1,206	78.0%	+ Depression	3,495	65.6%
	20	1.3%		127	2.4%
+ COPD	1,079	69.7%	+ Lower Back Pain	2,889	54.3%
	3	0.2%		34	0.6%
+ Lower Back Pain	980	63.3%	+ COPD	2,676	50.3%
	5	0.3%		41	0.8%
+ Diabetes	973	62.9%	+ Diabetes	2,631	49.4%
	2	0.1%		38	0.7%
Coronary Artery Disease	**1,719**	**100.0%**	**Coronary Artery Disease**	**4,295**	**100.0%**
	1	**0.1%**		**17**	**0.4%**
+ Hypertension	1,627	94.6%	+ Hypertension	3,792	88.3%
	4	0.2%		23	0.5%
+ Hyperlipidemia (High Cholesterol)	1,261	73.4%	+ Hyperlipidemia (High Cholesterol)	2,803	65.3%
	2	0.1%		7	0.2%
+ COPD	1,236	71.9%	+ Depression	2,551	59.4%
	3	0.2%		17	0.4%
+ Depression	1,212	70.5%	+ Diabetes	2,523	58.7%
	0	0.0%		4	0.1%
+ Diabetes	1,173	68.2%	+ COPD	2,416	56.3%
	2	0.1%		8	0.2%
Hypertension	**2,937**	**100.0%**	**Hypertension**	**10,446**	**100.0%**
	12	**0.4%**		**116**	**1.1%**
+ Depression	2,072	70.5%	+ Depression	6,268	60.0%
	16	0.5%		125	1.2%
+ Diabetes	1,841	62.7%	+ Lower Back Pain	5,795	55.5%
	17	0.6%		101	1.0%
+ COPD	1,840	62.6%	+ Diabetes	5,734	54.9%
	10	0.3%		108	1.0%
+ Hyperlipidemia (High Cholesterol)	1,803	61.4%	+ Hyperlipidemia (High Cholesterol)	5,721	54.8%
	3	0.1%		46	0.4%
+ Lower Back Pain	1,737	59.1%	+ COPD	4,800	46.0%
	5	0.2%		53	0.5%

Participants with chronic impact condition, the specified comorbidity, and additional comorbidities

Participants ONLY with chronic impact condition and the specified comorbidity (no other comorbidities)

Comorbidity	Tier 1		Comorbidity	Tier 2	
	Participants	%		Participants	%
Congestive Heart Failure	**1,348**	**100.0%**	**Congestive Heart Failure**	**2,890**	**100.0%**
	5	**0.4%**		**17**	**0.6%**
+ Hypertension	1,278	94.8%	+ Hypertension	2,516	87.1%
	6	0.4%		16	0.6%
+ COPD	1,041	77.2%	+ Depression	1,798	62.2%
	1	0.1%		19	0.7%
+ Coronary Artery Disease	979	72.6%	+ Diabetes	1,796	62.1%
	0	0.0%		8	0.3%
+ Hyperlipidemia (High Cholesterol)	960	71.2%	+ Hyperlipidemia (High Cholesterol)	1,751	60.6%
	0	0.0%		0	0.0%
+ Diabetes	938	69.6%	+ COPD	1,709	59.1%
	3	0.2%		5	0.2%
COPD	**2,033**	**100.0%**	**COPD**	**5,972**	**100.0%**
	5	**0.2%**		**58**	**1.0%**
+ Hypertension	1,840	90.5%	+ Hypertension	4,800	80.4%
	10	0.5%		53	0.9%
+ Depression	1,516	74.6%	+ Depression	3,701	62.0%
	5	0.2%		40	0.7%
+ Diabetes	1,304	64.1%	+ Lower Back Pain	3,535	59.2%
	2	0.1%		41	0.7%
+ Hyperlipidemia (High Cholesterol)	1,297	63.8%	+ Hyperlipidemia (High Cholesterol)	3,207	53.7%
	0	0.0%		13	0.2%
+ Lower Back Pain	1,286	63.3%	+ Diabetes	3,091	51.8%
	3	0.1%		19	0.3%
Cerebrovascular Accident (Stroke)	**465**	**100.0%**	**Cerebrovascular Accident (Stroke)**	**871**	**100.0%**
	2	**0.4%**		**4**	**0.5%**
+ Hypertension	437	94.0%	+ Hypertension	762	87.5%
	4	0.9%		6	0.7%
+ Depression	345	74.2%	+ Hyperlipidemia (High Cholesterol)	545	62.6%
	0	0.0%		2	0.2%
+ Hyperlipidemia (High Cholesterol)	326	70.1%	+ Depression	519	59.6%
	0	0.0%		5	0.6%
+ Coronary Artery Disease	317	68.2%	+ Diabetes	486	55.8%
	0	0.0%		1	0.1%
+ COPD	308	66.2%	+ Coronary Artery Disease	456	52.4%
	0	0.0%		0	0.0%

Participants with chronic impact condition, the specified comorbidity, and additional comorbidities

Participants ONLY with chronic impact condition and the specified comorbidity (no other comorbidities)

Comorbidity	Tier 1		Comorbidity	Tier 2	
	Participants	%		Participants	%
Depression	**2,521**	**100.0%**	**Depression**	**9,059**	**100.0%**
	32	**1.3%**		**213**	**2.4%**
+ Hypertension	2,072	82.2%	+ Hypertension	6,268	69.2%
	16	0.6%		125	1.4%
+ Lower Back Pain	1,555	61.7%	+ Lower Back Pain	5,243	57.9%
	16	0.6%		180	2.0%
+ COPD	1,516	60.1%	+ Diabetes	4,236	46.8%
	5	0.2%		71	0.8%
+ Diabetes	1,481	58.7%	+ Hyperlipidemia (High Cholesterol)	3,933	43.4%
	13	0.5%		28	0.3%
+ Hyperlipidemia (High Cholesterol)	1,363	54.1%	+ COPD	3,701	40.9%
	6	0.2%		40	0.4%
Diabetes	**2,058**	**100.0%**	**Diabetes**	**6,991**	**100.0%**
	11	**0.5%**		**88**	**1.3%**
+ Hypertension	1,841	89.5%	+ Hypertension	5,734	82.0%
	17	0.8%		108	1.5%
+ Depression	1,481	72.0%	+ Depression	4,236	60.6%
	13	0.6%		71	1.0%
+ Hyperlipidemia (High Cholesterol)	1,343	65.3%	+ Hyperlipidemia (High Cholesterol)	4,025	57.6%
	1	0.0%		20	0.3%
+ COPD	1,304	63.4%	+ Lower Back Pain	3,712	53.1%
	2	0.1%		34	0.5%
+ Lower Back Pain	1,203	58.5%	+ COPD	3,091	44.2%
	2	0.1%		19	0.3%
HIV	**25**	**100.0%**	**HIV**	**79**	**100.0%**
	1	**4.0%**		**1**	**1.3%**
+ Hypertension	22	88.0%	+ Hypertension	64	81.0%
	0	0.0%		1	1.3%
+ Diabetes	22	88.0%	+ Depression	60	75.9%
	0	0.0%		0	0.0%
+ Depression	21	84.0%	+ Diabetes	51	64.6%
	1	4.0%		0	0.0%
+ Coronary Artery Disease	15	60.0%	+ COPD	46	58.2%
	0	0.0%		0	0.0%
+ Congestive Heart Failure	15	60.0%	+ Lower Back Pain	46	58.2%
	0	0.0%		1	1.3%

Participants with chronic impact condition, the specified comorbidity, and additional comorbidities

Participants ONLY with chronic impact condition and the specified comorbidity (no other comorbidities)

Comorbidity	Tier 1		Comorbidity	Tier 2	
	Participants	%		Participants	%
Hyperlipidemia	**1,906**	**100.0%**	**Hyperlipidemia**	**6,559**	**100.0%**
	3	**0.2%**		**26**	**0.4%**
+ Hypertension	1,803	94.6%	+ Hypertension	5,721	87.2%
	3	0.2%		46	0.7%
+ Depression	1,363	71.5%	+ Diabetes	4,025	61.4%
	6	0.3%		20	0.3%
+ Diabetes	1,343	70.5%	+ Depression	3,933	60.0%
	1	0.1%		28	0.4%
+ COPD	1,297	68.0%	+ Lower Back Pain	3,744	57.1%
	0	0.0%		27	0.4%
+ Coronary Artery Disease	1,261	66.2%	+ COPD	3,207	48.9%
	2	0.1%		13	0.2%
Lower Back Pain	**1,990**	**100.0%**	**Lower Back Pain**	**7,765**	**100.0%**
	7	**0.4%**		**124**	**1.6%**
+ Hypertension	1,737	87.3%	+ Hypertension	5,795	74.6%
	5	0.3%		101	1.3%
+ Depression	1,555	78.1%	+ Depression	5,243	67.5%
	16	0.8%		180	2.3%
+ COPD	1,286	64.6%	+ Hyperlipidemia (High Cholesterol)	3,744	48.2%
	3	0.2%		27	0.3%
+ Diabetes	1,203	60.5%	+ Diabetes	3,712	47.8%
	2	0.1%		34	0.4%
+ Hyperlipidemia (High Cholesterol)	1,171	58.8%	+ COPD	3,535	45.5%
	2	0.1%		41	0.5%
Migraine Headaches	**749**	**100.0%**	**Migraine Headaches**	**2,764**	**100.0%**
	3	**0.4%**		**48**	**1.7%**
+ Hypertension	629	84.0%	+ Depression	2,068	74.8%
	0	0.0%		73	2.6%
+ Depression	611	81.6%	+ Hypertension	1,774	64.2%
	6	0.8%		13	0.5%
+ Lower Back Pain	530	70.8%	+ Lower Back Pain	1,706	61.7%
	1	0.1%		30	1.1%
+ Diabetes	455	60.7%	+ Asthma	1,188	43.0%
	0	0.0%		24	0.9%
+ COPD	435	58.1%	+ Diabetes	1,182	42.8%
	0	0.0%		9	0.3%

Participants with chronic impact condition, the specified comorbidity, and additional comorbidities

Participants ONLY with chronic impact condition and the specified comorbidity (no other comorbidities)

Comorbidity	Tier 1		Comorbidity	Tier 2	
	Participants	%		Participants	%
Multiple Sclerosis	**108**	**100.0%**	**Multiple Sclerosis**	**296**	**100.0%**
	0	**0.0%**		**5**	**1.7%**
+ Hypertension	93	86.1%	+ Depression	220	74.3%
	0	0.0%		1	0.3%
+ Depression	86	79.6%	+ Hypertension	219	74.0%
	0	0.0%		2	0.7%
+ Diabetes	69	63.9%	+ Lower Back Pain	171	57.8%
	0	0.0%		0	0.0%
+ Lower Back Pain	67	62.0%	+ Diabetes	159	53.7%
	1	0.9%		2	0.7%
+ COPD	65	60.2%	+ Hyperlipidemia (High Cholesterol)	146	49.3%
	0	0.0%		0	0.0%
Renal Failure	**842**	**100.0%**	**Renal Failure**	**1,190**	**100.0%**
	0	**0.0%**		**2**	**0.2%**
+ Hypertension	800	95.0%	+ Hypertension	1,084	91.1%
	7	0.8%		1	0.1%
+ Diabetes	606	72.0%	+ Diabetes	797	67.0%
	1	0.1%		1	0.1%
+ COPD	573	68.1%	+ Hyperlipidemia (High Cholesterol)	733	61.6%
	1	0.1%		0	0.0%
+ Depression	572	67.9%	+ Depression	717	60.3%
	4	0.5%		6	0.5%
+ Coronary Artery Disease	545	64.7%	+ COPD	647	54.4%
	0	0.0%		1	0.1%
Rheumatoid Arthritis	**325**	**100.0%**	**Rheumatoid Arthritis**	**1,139**	**100.0%**
	0	**0.0%**		**15**	**1.3%**
+ Hypertension	295	90.8%	+ Hypertension	903	79.3%
	1	0.3%		6	0.5%
+ Depression	254	78.2%	+ Depression	774	68.0%
	1	0.3%		8	0.7%
+ Lower Back Pain	237	72.9%	+ Lower Back Pain	740	65.0%
	0	0.0%		4	0.4%
+ COPD	223	68.6%	+ COPD	620	54.4%
	0	0.0%		4	0.4%
+ Diabetes	220	67.7%	+ Diabetes	611	53.6%
	0	0.0%		8	0.7%

Participants with chronic impact condition, the specified comorbidity, and additional comorbidities

Participants ONLY with chronic impact condition and the specified comorbidity (no other comorbidities)

Comorbidity	Tier 1		Comorbidity	Tier 2	
	Participants	%		Participants	%
Schizophrenia	**1,131**	**100.0%**	**Schizophrenia**	**2,999**	**100.0%**
	8	**0.7%**		**40**	**1.3%**
+ Hypertension	958	84.7%	+ Depression	2,249	75.0%
	6	0.5%		52	1.7%
+ Depression	935	82.7%	+ Hypertension	2,218	74.0%
	15	1.3%		17	0.6%
+ COPD	714	63.1%	+ Lower Back Pain	1,768	59.0%
	3	0.3%		9	0.3%
+ Diabetes	710	62.8%	+ Diabetes	1,583	52.8%
	5	0.4%		11	0.4%
+ Lower Back Pain	685	60.6%	+ COPD	1,510	50.4%
	0	0.0%		12	0.4%

Notes

- *Includes only those engaged at least two months as of June 30, 2013, and had MEDai forecast data available at the time of engagement.*
- *Based on primary diagnosis indicated on claims from 02/08 through 06/13.*
- *Total occurrences based on total occurrences of each condition.*
- *Percentages are based on participants in specified diagnostic category.*
- *Conditions listed are Chronic Impact Score conditions used by MEDai.*
- *Only top five most frequent co-morbidities are listed for each diagnostic category.*

Exhibit C-14 – Participants with Asthma with/without Behavioral Health Co-morbidity

Enrollment Group	With Behavioral Health Disorder											
	Engaged/Post-Engagement:											
	1 to 12 months			13 to 24 months			25 to 36 months			37 to 48 months		
	MEDai Forecast	Actual	Actual as % of Forecast	MEDai Forecast	Actual	Actual as % of Forecast	MEDai Forecast	Actual	Actual as % of Forecast	MEDai Forecast	Actual	Actual as % of Forecast
Tier 1	$ 2,117	$ 2,070	98%	$ 2,156	$ 2,049	95%	$ 2,167	$ 1,811	84%	$ 2,063	$ 1,769	86%
Tier 2	$ 1,083	$ 1,071	99%	$ 1,139	$ 1,011	89%	$ 1,177	$ 1,022	87%	$ 1,246	$ 1,084	87%
Tiers 1 & 2	**$ 1,318**	**$ 1,298**	**99%**	**$ 1,358**	**$ 1,235**	**91%**	**$ 1,383**	**$ 1,187**	**86%**	**$ 1,418**	**$ 1,228**	**87%**

Enrollment Group	Without Behavioral Health Disorder											
	Engaged/Post-Engagement:											
	1 to 12 months			13 to 24 months			25 to 36 months			37 to 48 months		
	MEDai Forecast	Actual	Actual as % of Forecast	MEDai Forecast	Actual	Actual as % of Forecast	MEDai Forecast	Actual	Actual as % of Forecast	MEDai Forecast	Actual	Actual as % of Forecast
Tier 1	$ 2,796	$ 2,711	97%	$ 2,800	$ 2,592	93%	$ 2,874	$ 2,446	85%	$ 2,796	$ 2,429	87%
Tier 2	$ 1,149	$ 1,108	96%	$ 1,199	$ 1,061	88%	$ 1,247	$ 1,032	83%	$ 1,294	$ 1,109	86%
Tiers 1 & 2	**$ 1,501**	**$ 1,451**	**97%**	**$ 1,528**	**$ 1,375**	**90%**	**$ 1,580**	**$ 1,321**	**84%**	**$ 1,603**	**$ 1,381**	**86%**

Notes

- *Includes only those engaged at least two months as of June 30, 2013, and had MEDai forecast data available at the time of engagement.*
- *To be included in "with behavioral health disorder," behavioral health diagnosis had to be one of the client's top three most common diagnoses during the evaluation period.*
- *Primary condition (e.g., asthma) did not have to be the patient's most expensive (incidence) diagnosis.*

Exhibit C-15 – Participants with COPD with/without Behavioral Health Co-morbidity

Enrollment Group	With Behavioral Health Disorder											
	Engaged/Post-Engagement:											
	1 to 12 months			13 to 24 months			25 to 36 months			37 to 48 months		
	MEDai Forecast	Actual	Actual as % of Forecast	MEDai Forecast	Actual	Actual as % of Forecast	MEDai Forecast	Actual	Actual as % of Forecast	MEDai Forecast	Actual	Actual as % of Forecast
Tier 1	$ 2,219	$ 2,144	97%	$ 2,225	$ 2,192	98%	$ 2,221	$ 1,904	86%	$ 2,169	$ 1,733	80%
Tier 2	$ 1,212	$ 1,184	98%	$ 1,270	$ 1,144	90%	$ 1,309	$ 1,119	85%	$ 1,357	$ 1,208	89%
Tiers 1 & 2	**$ 1,472**	**$ 1,431**	**97%**	**$ 1,506**	**$ 1,403**	**93%**	**$ 1,526**	**$ 1,305**	**86%**	**$ 1,542**	**$ 1,328**	**86%**

Enrollment Group	Without Behavioral Health Disorder											
	Engaged/Post-Engagement:											
	1 to 12 months			13 to 24 months			25 to 36 months			37 to 48 months		
	MEDai Forecast	Actual	Actual as % of Forecast	MEDai Forecast	Actual	Actual as % of Forecast	MEDai Forecast	Actual	Actual as % of Forecast	MEDai Forecast	Actual	Actual as % of Forecast
Tier 1	$ 2,721	$ 2,580	95%	$ 2,662	$ 2,489	93%	$ 2,665	$ 2,283	86%	$ 2,669	$ 2,311	87%
Tier 2	$ 1,225	$ 1,195	98%	$ 1,279	$ 1,154	90%	$ 1,322	$ 1,126	85%	$ 1,360	$ 1,274	94%
Tiers 1 & 2	**$ 1,584**	**$ 1,527**	**96%**	**$ 1,595**	**$ 1,459**	**91%**	**$ 1,628**	**$ 1,390**	**85%**	**$ 1,657**	**$ 1,509**	**91%**

Notes

- *Includes only those engaged at least two months as of June 30, 2013, and had MEDai forecast data available at the time of engagement.*
- *To be included in "with behavioral health disorder," behavioral health diagnosis had to be one of the client's top three most common diagnoses during the evaluation period.*
- *Primary condition (e.g., asthma) did not have to be the patient's most expensive (incidence) diagnosis.*

Exhibit C-16 – Participants with Heart Failure with/without Behavioral Health Co-morbidity

Enrollment Group	With Behavioral Health Disorder											
	Engaged/Post-Engagement:											
	1 to 12 months			13 to 24 months			25 to 36 months			37 to 48 months		
	MEDai Forecast	Actual	Actual as % of Forecast	MEDai Forecast	Actual	Actual as % of Forecast	MEDai Forecast	Actual	Actual as % of Forecast	MEDai Forecast	Actual	Actual as % of Forecast
Tier 1	$ 2,349	$ 2,340	100%	$ 2,338	$ 2,635	113%	$ 2,321	$ 2,230	96%	$ 2,234	$ 2,055	92%
Tier 2	$ 1,298	$ 1,306	101%	$ 1,351	$ 1,195	88%	$ 1,388	$ 1,286	93%	$ 1,472	$ 1,415	96%
Tiers 1 & 2	**$ 1,622**	**$ 1,626**	**100%**	**$ 1,640**	**$ 1,616**	**99%**	**$ 1,639**	**$ 1,540**	**94%**	**$ 1,659**	**$ 1,573**	**95%**

Enrollment Group	Without Behavioral Health Disorder											
	Engaged/Post-Engagement:											
	1 to 12 months			13 to 24 months			25 to 36 months			37 to 48 months		
	MEDai Forecast	Actual	Actual as % of Forecast	MEDai Forecast	Actual	Actual as % of Forecast	MEDai Forecast	Actual	Actual as % of Forecast	MEDai Forecast	Actual	Actual as % of Forecast
Tier 1	$ 2,751	$ 2,639	96%	$ 2,682	$ 2,523	94%	$ 2,649	$ 2,255	85%	$ 2,557	$ 2,325	91%
Tier 2	$ 1,385	$ 1,487	107%	$ 1,454	$ 1,450	100%	$ 1,497	$ 1,443	96%	$ 1,515	$ 1,628	107%
Tiers 1 & 2	**$ 1,812**	**$ 1,848**	**102%**	**$ 1,817**	**$ 1,767**	**97%**	**$ 1,833**	**$ 1,679**	**92%**	**$ 1,811**	**$ 1,826**	**101%**

Notes

- *Includes only those engaged at least two months as of June 30, 2013, and had MEDai forecast data available at the time of engagement.*
- *To be included in "with behavioral health disorder," behavioral health diagnosis had to be one of the client's top three most common diagnoses during the evaluation period.*
- *Primary condition (e.g., asthma) did not have to be the patient's most expensive (incidence) diagnosis.*

Exhibit C-17 – Participants with CAD with/without Behavioral Health Co-morbidity

Enrollment Group	With Behavioral Health Disorder											
	Engaged/Post-Engagement:											
	1 to 12 months			13 to 24 months			25 to 36 months			37 to 48 months		
	MEDai Forecast	Actual	Actual as % of Forecast	MEDai Forecast	Actual	Actual as % of Forecast	MEDai Forecast	Actual	Actual as % of Forecast	MEDai Forecast	Actual	Actual as % of Forecast
Tier 1	$ 2,204	$ 2,133	97%	$ 2,228	$ 2,053	92%	$ 2,234	$ 1,832	82%	$ 2,172	$ 1,737	80%
Tier 2	$ 1,242	$ 1,263	102%	$ 1,297	$ 1,196	92%	$ 1,331	$ 1,211	91%	$ 1,382	$ 1,214	88%
Tiers 1 & 2	**$ 1,529**	**$ 1,523**	**100%**	**$ 1,566**	**$ 1,444**	**92%**	**$ 1,581**	**$ 1,383**	**87%**	**$ 1,591**	**$ 1,353**	**85%**

Enrollment Group	Without Behavioral Health Disorder											
	Engaged/Post-Engagement:											
	1 to 12 months			13 to 24 months			25 to 36 months			37 to 48 months		
	MEDai Forecast	Actual	Actual as % of Forecast	MEDai Forecast	Actual	Actual as % of Forecast	MEDai Forecast	Actual	Actual as % of Forecast	MEDai Forecast	Actual	Actual as % of Forecast
Tier 1	$ 2,503	$ 2,431	97%	$ 2,466	$ 2,400	97%	$ 2,436	$ 2,110	87%	$ 2,320	$ 2,088	90%
Tier 2	$ 1,297	$ 1,275	98%	$ 1,356	$ 1,206	89%	$ 1,395	$ 1,195	86%	$ 1,417	$ 1,318	93%
Tiers 1 & 2	**$ 1,619**	**$ 1,584**	**98%**	**$ 1,640**	**$ 1,511**	**92%**	**$ 1,660**	**$ 1,427**	**86%**	**$ 1,644**	**$ 1,511**	**92%**

Notes

- *Includes only those engaged at least two months as of June 30, 2013, and had MEDai forecast data available at the time of engagement.*
- *To be included in "with behavioral health disorder," behavioral health diagnosis had to be one of the client's top three most common diagnoses during the evaluation period.*
- *Primary condition (e.g., asthma) did not have to be the patient's most expensive (incidence) diagnosis.*

Exhibit C-18 – Participants with Diabetes with/without Behavioral Health Co-morbidity

Enrollment Group	With Behavioral Health Disorder											
	Engaged/Post-Engagement:											
	1 to 12 months			13 to 24 months			25 to 36 months			37 to 48 months		
	MEDai Forecast	Actual	Actual as % of Forecast	MEDai Forecast	Actual	Actual as % of Forecast	MEDai Forecast	Actual	Actual as % of Forecast	MEDai Forecast	Actual	Actual as % of Forecast
Tier 1	$ 2,130	$ 2,048	96%	$ 2,175	$ 2,161	99%	$ 2,184	$ 1,986	91%	$ 2,123	$ 1,810	85%
Tier 2	$ 1,168	$ 1,153	99%	$ 1,222	$ 1,086	89%	$ 1,267	$ 1,078	85%	$ 1,330	$ 1,125	85%
Tiers 1 & 2	**$ 1,400**	**$ 1,369**	**98%**	**$ 1,443**	**$ 1,336**	**93%**	**$ 1,474**	**$ 1,283**	**87%**	**$ 1,505**	**$ 1,276**	**85%**

Enrollment Group	Without Behavioral Health Disorder											
	Engaged/Post-Engagement:											
	1 to 12 months			13 to 24 months			25 to 36 months			37 to 48 months		
	MEDai Forecast	Actual	Actual as % of Forecast	MEDai Forecast	Actual	Actual as % of Forecast	MEDai Forecast	Actual	Actual as % of Forecast	MEDai Forecast	Actual	Actual as % of Forecast
Tier 1	$ 2,642	$ 2,460	93%	$ 2,643	$ 2,441	92%	$ 2,663	$ 2,298	86%	$ 2,635	$ 2,312	88%
Tier 2	$ 1,192	$ 1,111	93%	$ 1,247	$ 1,067	86%	$ 1,293	$ 1,057	82%	$ 1,321	$ 1,173	89%
Tiers 1 & 2	**$ 1,492**	**$ 1,390**	**93%**	**$ 1,523**	**$ 1,339**	**88%**	**$ 1,565**	**$ 1,304**	**83%**	**$ 1,585**	**$ 1,402**	**88%**

Notes

- *Includes only those engaged at least two months as of June 30, 2013, and had MEDai forecast data available at the time of engagement.*
- *To be included in "with behavioral health disorder," behavioral health diagnosis had to be one of the client's top three most common diagnoses during the evaluation period.*
- *Primary condition (e.g., asthma) did not have to be the patient's most expensive (incidence) diagnosis.*

Exhibit C-19 – Participants with Hypertension with/without Behavioral Health Co-morbidity

Enrollment Group	With Behavioral Health Disorder											
	Engaged/Post-Engagement:											
	1 to 12 months			13 to 24 months			25 to 36 months			37 to 48 months		
	MEDai Forecast	Actual	Actual as % of Forecast	MEDai Forecast	Actual	Actual as % of Forecast	MEDai Forecast	Actual	Actual as % of Forecast	MEDai Forecast	Actual	Actual as % of Forecast
Tier 1	$ 2,084	$ 1,991	96%	$ 2,091	$ 1,954	93%	$ 2,098	$ 1,778	85%	$ 2,053	$ 1,694	82%
Tier 2	$ 1,147	$ 1,071	93%	$ 1,197	$ 1,015	85%	$ 1,241	$ 994	80%	$ 1,301	$ 1,069	82%
Tiers 1 & 2	**$ 1,364**	**$ 1,284**	**94%**	**$ 1,398**	**$ 1,226**	**88%**	**$ 1,427**	**$ 1,165**	**82%**	**$ 1,460**	**$ 1,201**	**82%**

Enrollment Group	Without Behavioral Health Disorder											
	Engaged/Post-Engagement:											
	1 to 12 months			13 to 24 months			25 to 36 months			37 to 48 months		
	MEDai Forecast	Actual	Actual as % of Forecast	MEDai Forecast	Actual	Actual as % of Forecast	MEDai Forecast	Actual	Actual as % of Forecast	MEDai Forecast	Actual	Actual as % of Forecast
Tier 1	$ 2,643	$ 2,392	91%	$ 2,607	$ 2,303	88%	$ 2,612	$ 2,088	80%	$ 2,525	$ 2,044	81%
Tier 2	$ 1,167	$ 1,058	91%	$ 1,221	$ 986	81%	$ 1,263	$ 954	76%	$ 1,292	$ 1,052	81%
Tiers 1 & 2	**$ 1,460**	**$ 1,323**	**91%**	**$ 1,483**	**$ 1,234**	**83%**	**$ 1,520**	**$ 1,170**	**77%**	**$ 1,533**	**$ 1,246**	**81%**

Notes

- *Includes only those engaged at least two months as of June 30, 2013, and had MEDai forecast data available at the time of engagement.*
- *To be included in "with behavioral health disorder," behavioral health diagnosis had to be one of the client's top three most common diagnoses during the evaluation period.*
- *Primary condition (e.g., asthma) did not have to be the patient's most expensive (incidence) diagnosis.*

Exhibit C-20 – Utilization and Expenditure Profile: Participants with Asthma

Forecast versus Actual: 12 Month Period

Enrollment Group	MEDai Forecast	Actual	Actual as Percent of Forecast
Tier 1			
Client Count	222	222	
Inpatient Admission Days (per 1,000 members)	10,246	3,392	33.1%
Emergency Department Visits (per 1,000 members)	4,616	4,544	98.4%
Total PMPM Expenditures	$2,788	$2,507	89.9%
Tier 2			
Client Count	1,479	1,479	
Inpatient Admission Days (per 1,000 members)	2,122	826	38.9%
Emergency Department Visits (per 1,000 members)	2,467	2,102	85.2%
Total PMPM Expenditures	$926	$827	89.2%
Tiers 1 & 2			
Client Count	1,701	1,701	
Inpatient Admission Days (per 1,000 members)	3,184	1,148	36.1%
Emergency Department Visits (per 1,000 members)	2,748	2,408	87.6%
Total PMPM Expenditures	$1,159	$1,036	89.4%

Paid Claims Analysis: Pre & Post Engagement

Enrollment Group	Pre-Engagement: 1 to 12 months	Engaged Period	Percent Change
Tier 1			
Client Count	222	222	
Inpatient Admission Days (per 1,000 members)	5,674	3,390	-40.3%
Emergency Department Visits (per 1,000 members)	4,920	5,497	11.7%
Total PMPM Expenditures	$3,298	$2,578	-21.8%
Tier 2			
Client Count	1,479	1,479	
Inpatient Admission Days (per 1,000 members)	1,193	890	-25.4%
Emergency Department Visits (per 1,000 members)	2,513	2,050	-18.4%
Total PMPM Expenditures	$938	$962	2.6%
Tiers 1 & 2			
Client Count	1,701	1,701	
Inpatient Admission Days (per 1,000 members)	1,774	1,231	-30.6%
Emergency Department Visits (per 1,000 members)	2,825	2,520	-10.8%
Total PMPM Expenditures	$1,243	$1,182	-5.0%

Notes

- *Includes only those engaged at least two months as of June 30, 2013, and had MEDai forecast data available at the time of engagement.*

Exhibit C-21 – Utilization and Expenditure Profile: Participants with COPD

Forecast versus Actual: 12 Month Period

Enrollment Group	MEDai Forecast	Actual	Actual as Percent of Forecast
Tier 1			
Client Count	366	366	
Inpatient Admission Days (per 1,000 members)	16,141	5,005	31.0%
Emergency Department Visits (per 1,000 members)	3,528	2,745	77.8%
Total PMPM Expenditures	$2,671	$2,457	92.0%
Tier 2			
Client Count	1,243	1,243	
Inpatient Admission Days (per 1,000 members)	4,024	1,988	49.4%
Emergency Department Visits (per 1,000 members)	1,737	1,526	87.8%
Total PMPM Expenditures	$1,217	$1,172	96.3%
Tiers 1 & 2			
Client Count	1,609	1,609	
Inpatient Admission Days (per 1,000 members)	6,787	2,661	39.2%
Emergency Department Visits (per 1,000 members)	2,145	1,798	83.8%
Total PMPM Expenditures	$1,541	$1,458	94.7%

Paid Claims Analysis: Pre & Post Engagement

Enrollment Group	Pre-Engagement: 1 to 12 months	Engaged Period	Percent Change
Tier 1			
Client Count	366	366	
Inpatient Admission Days (per 1,000 members)	7,045	5,833	-17.2%
Emergency Department Visits (per 1,000 members)	3,058	2,662	-13.0%
Total PMPM Expenditures	$2,924	$2,541	-13.1%
Tier 2			
Client Count	1,243	1,243	
Inpatient Admission Days (per 1,000 members)	1,558	2,080	33.5%
Emergency Department Visits (per 1,000 members)	1,606	1,377	-14.2%
Total PMPM Expenditures	$982	$1,253	27.6%
Tiers 1 & 2			
Client Count	1,609	1,609	
Inpatient Admission Days (per 1,000 members)	2,826	2,912	3.0%
Emergency Department Visits (per 1,000 members)	1,941	1,662	-14.4%
Total PMPM Expenditures	$1,429	$1,538	7.6%

Notes

- *Includes only those engaged at least two months as of June 30, 2013, and had MEDai forecast data available at the time of engagement.*

Exhibit C-22 – Utilization and Expenditure Profile: Participants with Heart Failure

Forecast versus Actual: 12 Month Period

Enrollment Group	MEDai Forecast	Actual	Actual as Percent of Forecast
Tier 1			
Client Count	151	151	
Inpatient Admission Days (per 1,000 members)	18,778	6,712	35.7%
Emergency Department Visits (per 1,000 members)	3,268	2,989	91.5%
Total PMPM Expenditures	$2,845	$2,656	93.4%
Tier 2			
Client Count	312	312	
Inpatient Admission Days (per 1,000 members)	5,220	3,419	65.5%
Emergency Department Visits (per 1,000 members)	1,306	1,328	101.7%
Total PMPM Expenditures	$1,420	$1,391	97.9%
Tiers 1 & 2			
Client Count	463	463	
Inpatient Admission Days (per 1,000 members)	9,662	4,484	46.4%
Emergency Department Visits (per 1,000 members)	1,949	1,866	95.8%
Total PMPM Expenditures	$1,879	$1,798	95.7%

Paid Claims Analysis: Pre & Post Engagement

Enrollment Group	Pre-Engagement: 1 to 12 months	Engaged Period	Percent Change
Tier 1			
Client Count	151	151	
Inpatient Admission Days (per 1,000 members)	10,403	6,149	-40.9%
Emergency Department Visits (per 1,000 members)	3,073	3,042	-1.0%
Total PMPM Expenditures	$3,445	$2,777	-19.4%
Tier 2			
Client Count	312	312	
Inpatient Admission Days (per 1,000 members)	2,118	4,085	92.9%
Emergency Department Visits (per 1,000 members)	1,300	1,147	-11.8%
Total PMPM Expenditures	$1,191	$1,679	41.0%
Tiers 1 & 2			
Client Count	463	463	
Inpatient Admission Days (per 1,000 members)	4,861	4,712	-3.1%
Emergency Department Visits (per 1,000 members)	1,887	1,722	-8.7%
Total PMPM Expenditures	$1,933	$2,012	4.1%

Notes

- *Includes only those engaged at least two months as of June 30, 2013, and had MEDai forecast data available at the time of engagement.*

Exhibit C-23 – Utilization and Expenditure Profile: Participants with CAD

Forecast versus Actual: 12 Month Period

Enrollment Group	MEDai Forecast	Actual	Actual as Percent of Forecast
Tier 1			
Client Count	322	322	
Inpatient Admission Days (per 1,000 members)	14,630	4,709	32.2%
Emergency Department Visits (per 1,000 members)	3,426	4,048	118.2%
Total PMPM Expenditures	$2,392	$2,332	97.5%
Tier 2			
Client Count	912	912	
Inpatient Admission Days (per 1,000 members)	3,998	1,614	40.4%
Emergency Department Visits (per 1,000 members)	1,624	1,390	85.6%
Total PMPM Expenditures	$1,296	$1,230	94.9%
Tiers 1 & 2			
Client Count	1,234	1,234	
Inpatient Admission Days (per 1,000 members)	6,780	2,405	35.5%
Emergency Department Visits (per 1,000 members)	2,095	2,069	98.8%
Total PMPM Expenditures	$1,575	$1,511	95.9%

Paid Claims Analysis: Pre & Post Engagement

Enrollment Group	Pre-Engagement: 1 to 12 months	Engaged Period	Percent Change
Tier 1			
Client Count	322	322	
Inpatient Admission Days (per 1,000 members)	6,132	5,015	-18.2%
Emergency Department Visits (per 1,000 members)	3,860	4,137	7.2%
Total PMPM Expenditures	$2,715	$2,438	-10.2%
Tier 2			
Client Count	912	912	
Inpatient Admission Days (per 1,000 members)	1,466	1,651	12.7%
Emergency Department Visits (per 1,000 members)	1,501	1,237	-17.6%
Total PMPM Expenditures	$1,137	$1,274	12.0%
Tiers 1 & 2			
Client Count	1,234	1,234	
Inpatient Admission Days (per 1,000 members)	2,701	2,539	-6.0%
Emergency Department Visits (per 1,000 members)	2,126	2,002	-5.8%
Total PMPM Expenditures	$1,553	$1,581	1.8%

Notes

- *Includes only those engaged at least two months as of June 30, 2013, and had MEDai forecast data available at the time of engagement.*

Exhibit C-24 – Utilization and Expenditure Profile: Participants with Diabetes

Forecast versus Actual: 12 Month Period

Enrollment Group	MEDai Forecast	Actual	Actual as Percent of Forecast
Tier 1			
Client Count	657	657	
Inpatient Admission Days (per 1,000 members)	13,533	4,428	32.7%
Emergency Department Visits (per 1,000 members)	3,747	3,496	93.3%
Total PMPM Expenditures	$2,276	$2,103	92.4%
Tier 2			
Client Count	2,824	2,824	
Inpatient Admission Days (per 1,000 members)	3,257	991	30.4%
Emergency Department Visits (per 1,000 members)	1,698	1,494	88.0%
Total PMPM Expenditures	$1,110	$976	88.0%
Tiers 1 & 2			
Client Count	3,481	3,481	
Inpatient Admission Days (per 1,000 members)	5,207	1,621	31.1%
Emergency Department Visits (per 1,000 members)	2,087	1,861	89.2%
Total PMPM Expenditures	$1,322	$1,181	89.3%

Paid Claims Analysis: Pre & Post Engagement

Enrollment Group	Pre-Engagement: 1 to 12 months	Engaged Period	Percent Change
Tier 1			
Client Count	657	657	
Inpatient Admission Days (per 1,000 members)	6,431	3,553	-44.8%
Emergency Department Visits (per 1,000 members)	3,572	3,308	-7.4%
Total PMPM Expenditures	$2,365	$2,054	-13.2%
Tier 2			
Client Count	2,824	2,824	
Inpatient Admission Days (per 1,000 members)	972	1,002	3.1%
Emergency Department Visits (per 1,000 members)	1,623	1,303	-19.7%
Total PMPM Expenditures	$867	$1,034	19.2%
Tiers 1 & 2			
Client Count	3,481	3,481	
Inpatient Admission Days (per 1,000 members)	2,019	1,482	-26.6%
Emergency Department Visits (per 1,000 members)	1,997	1,680	-15.8%
Total PMPM Expenditures	$1,153	$1,224	6.2%

Notes

- *Includes only those engaged at least two months as of June 30, 2013, and had MEDai forecast data available at the time of engagement.*

Exhibit C-25 – Utilization and Expenditure Profile: Participants with Hypertension

Forecast versus Actual: 12 Month Period

Enrollment Group	MEDai Forecast	Actual	Actual as Percent of Forecast
Tier 1			
Client Count	509	509	
Inpatient Admission Days (per 1,000 members)	10,004	3,242	32.4%
Emergency Department Visits (per 1,000 members)	3,996	4,097	102.5%
Total PMPM Expenditures	$2,276	$1,823	80.1%
Tier 2			
Client Count	2,408	2,408	
Inpatient Admission Days (per 1,000 members)	2,621	1,139	43.4%
Emergency Department Visits (per 1,000 members)	2,003	1,725	86.1%
Total PMPM Expenditures	$1,108	$888	80.2%
Tiers 1 & 2			
Client Count	2,917	2,917	
Inpatient Admission Days (per 1,000 members)	3,906	1,490	38.2%
Emergency Department Visits (per 1,000 members)	2,350	2,122	90.3%
Total PMPM Expenditures	$1,303	$1,045	80.2%

Paid Claims Analysis: Pre & Post Engagement

Enrollment Group	Pre-Engagement: 1 to 12 months	Engaged Period	Percent Change
Tier 1			
Client Count	509	509	
Inpatient Admission Days (per 1,000 members)	5,701	3,673	-35.6%
Emergency Department Visits (per 1,000 members)	4,112	3,822	-7.0%
Total PMPM Expenditures	$2,573	$1,951	-24.2%
Tier 2			
Client Count	2,408	2,408	
Inpatient Admission Days (per 1,000 members)	1,263	1,015	-19.6%
Emergency Department Visits (per 1,000 members)	1,903	1,536	-19.3%
Total PMPM Expenditures	$917	$943	2.8%
Tiers 1 & 2			
Client Count	2,917	2,917	
Inpatient Admission Days (per 1,000 members)	2,043	1,472	-27.9%
Emergency Department Visits (per 1,000 members)	2,292	1,929	-15.8%
Total PMPM Expenditures	$1,209	$1,117	-7.6%

Notes

- *Includes only those engaged at least two months as of June 30, 2013, and had MEDai forecast data available at the time of engagement.*

Exhibit C-26 – Utilization and Expenditure Profile: Participants with CVA

Forecast versus Actual: 12 Month Period

Enrollment Group	MEDai Forecast	Actual	Actual as Percent of Forecast
Tier 1			
Client Count	28	28	
Inpatient Admission Days (per 1,000 members)	8,571	1,324	15.5%
Emergency Department Visits (per 1,000 members)	1,786	1,525	85.4%
Total PMPM Expenditures	$4,741	$2,396	50.5%
Tier 2			
Client Count	79	79	
Inpatient Admission Days (per 1,000 members)	3,342	2,227	66.7%
Emergency Department Visits (per 1,000 members)	1,722	1,671	97.0%
Total PMPM Expenditures	$1,219	$1,890	155.0%
Tiers 1 & 2			
Client Count	107	107	
Inpatient Admission Days (per 1,000 members)	4,710	1,995	42.4%
Emergency Department Visits (per 1,000 members)	1,738	1,633	93.9%
Total PMPM Expenditures	$2,126	$2,020	95.0%

Paid Claims Analysis: Pre & Post Engagement

Enrollment Group	Pre-Engagement: 1 to 12 months	Engaged Period	Percent Change
Tier 1			
Client Count	28	28	
Inpatient Admission Days (per 1,000 members)	10,364	1,091	-89.5%
Emergency Department Visits (per 1,000 members)	1,364	1,375	0.9%
Total PMPM Expenditures	$5,783	$1,454	-74.9%
Tier 2			
Client Count	79	79	
Inpatient Admission Days (per 1,000 members)	2,300	1,165	-49.3%
Emergency Department Visits (per 1,000 members)	1,705	1,340	-21.4%
Total PMPM Expenditures	$1,209	$1,479	22.3%
Tiers 1 & 2			
Client Count	107	107	
Inpatient Admission Days (per 1,000 members)	4,342	1,148	-73.6%
Emergency Department Visits (per 1,000 members)	1,618	1,348	-16.7%
Total PMPM Expenditures	$2,368	$1,473	-37.8%

Notes

- *Includes only those engaged at least two months as of June 30, 2013, and had MEDai forecast data available at the time of engagement.*

Exhibit C-27 – Utilization and Expenditure Profile: Participants with Depression

Forecast versus Actual: 12 Month Period

Enrollment Group	MEDai Forecast	Actual	Actual as Percent of Forecast
Tier 1			
Client Count	674	674	
Inpatient Admission Days (per 1,000 members)	8,584	3,292	38.3%
Emergency Department Visits (per 1,000 members)	4,772	4,134	86.6%
Total PMPM Expenditures	$1,938	$1,793	92.5%
Tier 2			
Client Count	3,008	3,008	
Inpatient Admission Days (per 1,000 members)	2,516	984	39.1%
Emergency Department Visits (per 1,000 members)	2,698	2,098	77.8%
Total PMPM Expenditures	$1,069	$917	85.7%
Tiers 1 & 2			
Client Count	3,682	3,682	
Inpatient Admission Days (per 1,000 members)	3,631	1,399	38.5%
Emergency Department Visits (per 1,000 members)	3,079	2,464	80.0%
Total PMPM Expenditures	$1,225	$1,073	87.6%

Paid Claims Analysis: Pre & Post Engagement

Enrollment Group	Pre-Engagement: 1 to 12 months	Engaged Period	Percent Change
Tier 1			
Client Count	674	674	
Inpatient Admission Days (per 1,000 members)	5,237	3,815	-27.2%
Emergency Department Visits (per 1,000 members)	4,452	4,178	-6.2%
Total PMPM Expenditures	$2,233	$1,887	-15.5%
Tier 2			
Client Count	3,008	3,008	
Inpatient Admission Days (per 1,000 members)	1,339	985	-26.5%
Emergency Department Visits (per 1,000 members)	2,449	1,900	-22.4%
Total PMPM Expenditures	$1,007	$1,011	0.4%
Tiers 1 & 2			
Client Count	3,682	3,682	
Inpatient Admission Days (per 1,000 members)	2,061	1,560	-24.3%
Emergency Department Visits (per 1,000 members)	2,819	2,363	-16.2%
Total PMPM Expenditures	$1,233	$1,189	-3.6%

Notes

- *Includes only those engaged at least two months as of June 30, 2013, and had MEDai forecast data available at the time of engagement.*

Exhibit C-28 – Utilization and Expenditure Profile: Participants with HIV

Forecast versus Actual: 12 Month Period

Enrollment Group	MEDai Forecast	Actual	Actual as Percent of Forecast
Tier 1			
Client Count	3	3	
Inpatient Admission Days (per 1,000 members)	2,333	0	0.0%
Emergency Department Visits (per 1,000 members)	667	353	52.9%
Total PMPM Expenditures	$2,300	$997	43.4%
Tier 2			
Client Count	15	15	
Inpatient Admission Days (per 1,000 members)	1,933	274	14.2%
Emergency Department Visits (per 1,000 members)	2,133	1,371	64.3%
Total PMPM Expenditures	$1,671	$1,360	81.4%
Tiers 1 & 2			
Client Count	18	18	
Inpatient Admission Days (per 1,000 members)	2,000	230	11.5%
Emergency Department Visits (per 1,000 members)	1,889	1,206	63.8%
Total PMPM Expenditures	$1,774	$1,301	73.4%

Paid Claims Analysis: Pre & Post Engagement

Enrollment Group	Pre-Engagement: 1 to 12 months	Engaged Period	Percent Change
Tier 1			
Client Count	3	3	
Inpatient Admission Days (per 1,000 members)	0	0	n/a
Emergency Department Visits (per 1,000 members)	400	429	7.1%
Total PMPM Expenditures	$2,819	$1,206	-57.2%
Tier 2			
Client Count	15	15	
Inpatient Admission Days (per 1,000 members)	145	384	164.0%
Emergency Department Visits (per 1,000 members)	1,818	1,632	-10.2%
Total PMPM Expenditures	$1,557	$1,483	-4.8%
Tiers 1 & 2			
Client Count	18	18	
Inpatient Admission Days (per 1,000 members)	123	314	154.9%
Emergency Department Visits (per 1,000 members)	1,600	1,412	-11.8%
Total PMPM Expenditures	$1,752	$1,432	-18.2%

Notes

- *Includes only those engaged at least two months as of June 30, 2013, and had MEDai forecast data available at the time of engagement.*

Exhibit C-29 – Utilization and Expenditure Profile: Participants with Hyperlipidemia

Forecast versus Actual: 12 Month Period

Enrollment Group	MEDai Forecast	Actual	Actual as Percent of Forecast
Tier 1			
Client Count	66	66	
Inpatient Admission Days (per 1,000 members)	8,939	2,917	32.6%
Emergency Department Visits (per 1,000 members)	2,576	2,320	90.1%
Total PMPM Expenditures	$2,454	$2,178	88.8%
Tier 2			
Client Count	338	338	
Inpatient Admission Days (per 1,000 members)	2,256	696	30.8%
Emergency Department Visits (per 1,000 members)	1,524	1,120	73.5%
Total PMPM Expenditures	$1,113	$807	72.5%
Tiers 1 & 2			
Client Count	404	404	
Inpatient Admission Days (per 1,000 members)	3,342	1,045	31.3%
Emergency Department Visits (per 1,000 members)	1,695	1,308	77.2%
Total PMPM Expenditures	$1,325	$1,023	77.3%

Paid Claims Analysis: Pre & Post Engagement

Enrollment Group	Pre-Engagement: 1 to 12 months	Engaged Period	Percent Change
Tier 1			
Client Count	66	66	
Inpatient Admission Days (per 1,000 members)	6,085	3,259	-46.4%
Emergency Department Visits (per 1,000 members)	2,298	2,254	-1.9%
Total PMPM Expenditures	$3,017	$1,898	-37.1%
Tier 2			
Client Count	338	338	
Inpatient Admission Days (per 1,000 members)	960	951	-0.9%
Emergency Department Visits (per 1,000 members)	1,393	997	-28.4%
Total PMPM Expenditures	$929	$1,009	8.6%
Tiers 1 & 2			
Client Count	404	404	
Inpatient Admission Days (per 1,000 members)	1,803	1,268	-29.7%
Emergency Department Visits (per 1,000 members)	1,542	1,170	-24.1%
Total PMPM Expenditures	$1,273	$1,132	-11.1%

Notes

- *Includes only those engaged at least two months as of June 30, 2013, and had MEDai forecast data available at the time of engagement.*

Exhibit C-30 – Utilization and Expenditure Profile: Participants with Lower Back Pain

Forecast versus Actual: 12 Month Period

Enrollment Group	MEDai Forecast	Actual	Actual as Percent of Forecast
Tier 1			
Client Count	98	98	
Inpatient Admission Days (per 1,000 members)	5,071	1,381	27.2%
Emergency Department Visits (per 1,000 members)	4,765	4,526	95.0%
Total PMPM Expenditures	$1,937	$1,556	80.4%
Tier 2			
Client Count	1,082	1,082	
Inpatient Admission Days (per 1,000 members)	2,027	491	24.2%
Emergency Department Visits (per 1,000 members)	2,806	2,268	80.8%
Total PMPM Expenditures	$963	$764	79.4%
Tiers 1 & 2			
Client Count	1,180	1,180	
Inpatient Admission Days (per 1,000 members)	2,279	561	24.6%
Emergency Department Visits (per 1,000 members)	2,969	2,446	82.4%
Total PMPM Expenditures	$1,040	$827	79.5%

Paid Claims Analysis: Pre & Post Engagement

Enrollment Group	Pre-Engagement: 1 to 12 months	Engaged Period	Percent Change
Tier 1			
Client Count	98	98	
Inpatient Admission Days (per 1,000 members)	4,247	1,076	-74.7%
Emergency Department Visits (per 1,000 members)	4,643	3,826	-17.6%
Total PMPM Expenditures	$2,122	$1,603	-24.5%
Tier 2			
Client Count	1,082	1,082	
Inpatient Admission Days (per 1,000 members)	843	587	-30.4%
Emergency Department Visits (per 1,000 members)	2,618	1,756	-32.9%
Total PMPM Expenditures	$819	$846	3.3%
Tiers 1 & 2			
Client Count	1,180	1,180	
Inpatient Admission Days (per 1,000 members)	1,130	629	-44.3%
Emergency Department Visits (per 1,000 members)	2,789	1,936	-30.6%
Total PMPM Expenditures	$929	$912	-1.8%

Notes

- *Includes only those engaged at least two months as of June 30, 2013, and had MEDai forecast data available at the time of engagement.*

Exhibit C-31 – Utilization and Expenditure Profile: Participants with Migraine Headaches

Forecast versus Actual: 12 Month Period

Enrollment Group	MEDai Forecast	Actual	Actual as Percent of Forecast
Tier 1			
Client Count	56	56	
Inpatient Admission Days (per 1,000 members)	11,500	3,173	27.6%
Emergency Department Visits (per 1,000 members)	8,018	11,064	138.0%
Total PMPM Expenditures	$2,476	$1,767	71.3%
Tier 2			
Client Count	396	396	
Inpatient Admission Days (per 1,000 members)	2,101	954	45.4%
Emergency Department Visits (per 1,000 members)	3,678	3,039	82.6%
Total PMPM Expenditures	$919	$790	86.0%
Tiers 1 & 2			
Client Count	452	452	
Inpatient Admission Days (per 1,000 members)	3,260	1,222	37.5%
Emergency Department Visits (per 1,000 members)	4,214	4,007	95.1%
Total PMPM Expenditures	$1,107	$908	82.0%

Paid Claims Analysis: Pre & Post Engagement

Enrollment Group	Pre-Engagement: 1 to 12 months	Engaged Period	Percent Change
Tier 1			
Client Count	56	56	
Inpatient Admission Days (per 1,000 members)	3,800	3,943	3.7%
Emergency Department Visits (per 1,000 members)	14,902	11,885	-20.2%
Total PMPM Expenditures	$2,538	$1,929	-24.0%
Tier 2			
Client Count	396	396	
Inpatient Admission Days (per 1,000 members)	963	970	0.7%
Emergency Department Visits (per 1,000 members)	3,465	2,676	-22.8%
Total PMPM Expenditures	$876	$913	4.3%
Tiers 1 & 2			
Client Count	452	452	
Inpatient Admission Days (per 1,000 members)	1,309	1,445	10.4%
Emergency Department Visits (per 1,000 members)	4,861	4,149	-14.6%
Total PMPM Expenditures	$1,080	$1,076	-0.3%

Notes

- *Includes only those engaged at least two months as of June 30, 2013, and had MEDai forecast data available at the time of engagement.*

Exhibit C-32 – Utilization and Expenditure Profile: Participants with Multiple Sclerosis

Forecast versus Actual: 12 Month Period

Enrollment Group	MEDai Forecast	Actual	Actual as Percent of Forecast
Tier 1			
Client Count	14	14	
Inpatient Admission Days (per 1,000 members)	7,929	3,345	42.2%
Emergency Department Visits (per 1,000 members)	3,857	4,800	124.4%
Total PMPM Expenditures	$2,399	$2,551	106.3%
Tier 2			
Client Count	66	66	
Inpatient Admission Days (per 1,000 members)	2,318	1,012	43.6%
Emergency Department Visits (per 1,000 members)	2,000	1,676	83.8%
Total PMPM Expenditures	$1,713	$1,953	114.0%
Tiers 1 & 2			
Client Count	80	80	
Inpatient Admission Days (per 1,000 members)	3,300	1,429	43.3%
Emergency Department Visits (per 1,000 members)	2,325	2,234	96.1%
Total PMPM Expenditures	$1,836	$2,059	112.2%

Paid Claims Analysis: Pre & Post Engagement

Enrollment Group	Pre-Engagement: 1 to 12 months	Engaged Period	Percent Change
Tier 1			
Client Count	14	14	
Inpatient Admission Days (per 1,000 members)	2,865	2,319	-19.0%
Emergency Department Visits (per 1,000 members)	4,413	3,529	-20.0%
Total PMPM Expenditures	$2,671	$2,413	-9.7%
Tier 2			
Client Count	66	66	
Inpatient Admission Days (per 1,000 members)	690	1,833	165.7%
Emergency Department Visits (per 1,000 members)	1,845	1,571	-14.8%
Total PMPM Expenditures	$1,548	$2,589	67.2%
Tiers 1 & 2			
Client Count	80	80	
Inpatient Admission Days (per 1,000 members)	1,063	1,898	78.5%
Emergency Department Visits (per 1,000 members)	2,286	1,831	-19.9%
Total PMPM Expenditures	$1,741	$2,566	47.4%

Notes

- *Includes only those engaged at least two months as of June 30, 2013, and had MEDai forecast data available at the time of engagement.*

Exhibit C-33 – Utilization and Expenditure Profile: Participants with Renal Failure

Forecast versus Actual: 12 Month Period

Enrollment Group	MEDai Forecast	Actual	Actual as Percent of Forecast
Tier 1			
Client Count	62	62	
Inpatient Admission Days (per 1,000 members)	13,371	8,157	61.0%
Emergency Department Visits (per 1,000 members)	2,258	1,310	58.0%
Total PMPM Expenditures	$3,265	$2,595	79.5%
Tier 2			
Client Count	91	91	
Inpatient Admission Days (per 1,000 members)	5,527	6,293	113.8%
Emergency Department Visits (per 1,000 members)	1,758	1,535	87.3%
Total PMPM Expenditures	$1,554	$2,885	185.6%
Tiers 1 & 2			
Client Count	153	153	
Inpatient Admission Days (per 1,000 members)	8,706	7,041	80.9%
Emergency Department Visits (per 1,000 members)	1,961	1,445	73.7%
Total PMPM Expenditures	$2,241	$2,769	123.5%

Paid Claims Analysis: Pre & Post Engagement

Enrollment Group	Pre-Engagement: 1 to 12 months	Engaged Period	Percent Change
Tier 1			
Client Count	62	62	
Inpatient Admission Days (per 1,000 members)	10,151	6,797	-33.0%
Emergency Department Visits (per 1,000 members)	2,000	1,787	-10.7%
Total PMPM Expenditures	$3,567	$2,291	-35.8%
Tier 2			
Client Count	91	91	
Inpatient Admission Days (per 1,000 members)	3,922	4,858	23.9%
Emergency Department Visits (per 1,000 members)	1,756	1,378	-21.6%
Total PMPM Expenditures	$1,336	$2,633	97.0%
Tiers 1 & 2			
Client Count	153	153	
Inpatient Admission Days (per 1,000 members)	6,480	5,650	-12.8%
Emergency Department Visits (per 1,000 members)	1,856	1,545	-16.8%
Total PMPM Expenditures	$2,252	$2,493	10.7%

Notes

- *Includes only those engaged at least two months as of June 30, 2013, and had MEDai forecast data available at the time of engagement.*

Exhibit C-34 – Utilization and Expenditure Profile: Participants with Rheumatoid Arthritis

Forecast versus Actual: 12 Month Period

Enrollment Group	MEDai Forecast	Actual	Actual as Percent of Forecast
Tier 1			
Client Count	29	29	
Inpatient Admission Days (per 1,000 members)	10,094	4,177	41.4%
Emergency Department Visits (per 1,000 members)	4,156	3,504	84.3%
Total PMPM Expenditures	$2,484	$2,385	96.0%
Tier 2			
Client Count	196	196	
Inpatient Admission Days (per 1,000 members)	2,260	955	42.3%
Emergency Department Visits (per 1,000 members)	1,587	1,438	90.6%
Total PMPM Expenditures	$1,251	$1,334	106.6%
Tiers 1 & 2			
Client Count	225	225	
Inpatient Admission Days (per 1,000 members)	3,360	1,379	41.1%
Emergency Department Visits (per 1,000 members)	1,947	1,710	87.8%
Total PMPM Expenditures	$1,402	$1,462	104.3%

Paid Claims Analysis: Pre & Post Engagement

Enrollment Group	Pre-Engagement: 1 to 12 months	Engaged Period	Percent Change
Tier 1			
Client Count	29	29	
Inpatient Admission Days (per 1,000 members)	4,464	5,025	12.6%
Emergency Department Visits (per 1,000 members)	4,011	3,008	-25.0%
Total PMPM Expenditures	$2,452	$2,790	13.8%
Tier 2			
Client Count	196	196	
Inpatient Admission Days (per 1,000 members)	730	1,161	59.1%
Emergency Department Visits (per 1,000 members)	1,411	1,223	-13.4%
Total PMPM Expenditures	$1,050	$1,433	36.5%
Tiers 1 & 2			
Client Count	225	225	
Inpatient Admission Days (per 1,000 members)	1,254	1,681	34.0%
Emergency Department Visits (per 1,000 members)	1,777	1,463	-17.7%
Total PMPM Expenditures	$1,232	$1,609	30.6%

Notes

- *Includes only those engaged at least two months as of June 30, 2013, and had MEDai forecast data available at the time of engagement.*

Exhibit C-35 – Utilization and Expenditure Profile: Participants with Schizophrenia

Forecast versus Actual: 12 Month Period

Enrollment Group	MEDai Forecast	Actual	Actual as Percent of Forecast
Tier 1			
Client Count	331	331	
Inpatient Admission Days (per 1,000 members)	7,571	3,402	44.9%
Emergency Department Visits (per 1,000 members)	3,348	2,479	74.0%
Total PMPM Expenditures	$2,102	$2,156	102.6%
Tier 2			
Client Count	626	626	
Inpatient Admission Days (per 1,000 members)	2,595	1,962	75.6%
Emergency Department Visits (per 1,000 members)	2,628	1,922	73.1%
Total PMPM Expenditures	$1,187	$1,107	93.2%
Tiers 1 & 2			
Client Count	957	957	
Inpatient Admission Days (per 1,000 members)	4,321	2,458	56.9%
Emergency Department Visits (per 1,000 members)	2,878	2,114	73.4%
Total PMPM Expenditures	$1,501	$1,467	97.7%

Paid Claims Analysis: Pre & Post Engagement

Enrollment Group	Pre-Engagement: 1 to 12 months	Engaged Period	Percent Change
Tier 1			
Client Count	331	331	
Inpatient Admission Days (per 1,000 members)	4,829	2,892	-40.1%
Emergency Department Visits (per 1,000 members)	3,000	2,261	-24.6%
Total PMPM Expenditures	$2,170	$2,129	-1.9%
Tier 2			
Client Count	626	626	
Inpatient Admission Days (per 1,000 members)	2,267	1,659	-26.8%
Emergency Department Visits (per 1,000 members)	2,299	1,897	-17.5%
Total PMPM Expenditures	$1,145	$1,246	8.8%
Tiers 1 & 2			
Client Count	957	957	
Inpatient Admission Days (per 1,000 members)	3,161	2,127	-32.7%
Emergency Department Visits (per 1,000 members)	2,544	2,035	-20.0%
Total PMPM Expenditures	$1,502	$1,581	5.2%

Notes

- *Includes only those engaged at least two months as of June 30, 2013, and had MEDai forecast data available at the time of engagement.*

Exhibit C-36 – Utilization and Expenditure Profile: All Participants

Forecast versus Actual: 12 Month Period

Enrollment Group	MEDai Forecast	Actual	Actual as Percent of Forecast
Tier 1			
Client Count	3,589	3,589	
Inpatient Admission Days (per 1,000 members)	11,497	3,969	34.5%
Emergency Department Visits (per 1,000 members)	3,954	3,677	93.0%
Total PMPM Expenditures	$2,337	$2,111	90.3%
Tier 2			
Client Count	15,084	15,084	
Inpatient Admission Days (per 1,000 members)	2,869	1,201	41.9%
Emergency Department Visits (per 1,000 members)	2,179	1,804	82.8%
Total PMPM Expenditures	$1,106	$983	88.9%
Tiers 1 & 2			
Client Count	18,673	18,673	
Inpatient Admission Days (per 1,000 members)	4,533	1,722	38.0%
Emergency Department Visits (per 1,000 members)	2,521	2,156	85.5%
Total PMPM Expenditures	$1,337	$1,195	89.3%

Paid Claims Analysis: Pre & Post Engagement

Enrollment Group	Pre-Engagement: 1 to 12 months	Engaged Period	Percent Change
Tier 1			
Client Count	3,589	3,589	
Inpatient Admission Days (per 1,000 members)	6,045	4,003	-33.8%
Emergency Department Visits (per 1,000 members)	3,927	3,614	-8.0%
Total PMPM Expenditures	$2,597	$2,151	-17.2%
Tier 2			
Client Count	15,084	15,084	
Inpatient Admission Days (per 1,000 members)	1,276	1,230	-3.6%
Emergency Department Visits (per 1,000 members)	2,045	1,576	-22.9%
Total PMPM Expenditures	$962	$1,077	11.9%
Tiers 1 & 2			
Client Count	18,673	18,673	
Inpatient Admission Days (per 1,000 members)	2,203	1,786	-18.9%
Emergency Department Visits (per 1,000 members)	2,411	1,984	-17.7%
Total PMPM Expenditures	$1,279	$1,292	1.0%

Notes

- *Includes only those engaged at least two months as of June 30, 2013, and had MEDai forecast data available at the time of engagement.*

APPENDIX D – NURSE CARE MANAGEMENT COST EFFECTIVENESS

Appendix D includes detailed exhibits documenting the cost effectiveness of nurse care management.

Exhibit	***Description***
D-1	SoonerCare HMP Administrative Expenses – Nurse Care Management
D-2	SoonerCare HMP Nurse Care Management PMPM Cost Effectiveness
D-3	SoonerCare HMP Nurse Care Management Cost Effectiveness – Aggregate Dollars

Exhibit D-1 – SoonerCare HMP Administrative Expenses – Nurse Care Management

Expense Category	Start-up Costs	Operational (No Start-up) Feb08-Jun13	Total Admin
Indirect Administrative			
SoonerCare Division			
Salary/Benefits	$ 230,789	$ 1,278,949	$ 1,509,738
Allocated Overhead	$ 31,707	$ 178,112	$ 209,819
Total SoonerCare Division	$ 262,496	$ 1,457,061	$ 1,719,557
Telligen Indirect Admin Payments [1]	$ 463,342	$ 887,252	$ 1,350,594
Total Administrative Dollars	**$ 725,838**	**$ 2,344,314**	**$ 3,070,152**
Tier 1 Total PMPM Admin			
Tier 1 Engaged Member Months	45,684	45,684	45,684
Tier 1 Indirect Admin Dollars [2]	$ 362,919	$ 1,172,157	$ 1,535,076
Tier 1 PMPM Indirect Admin	$ 7.94	$ 25.66	$ 33.60
PMPM Monthly Fee [3]		$ 186.80	$ 186.80
Total Tier 1 PMPM Admin	**$ 7.94**	**$ 212.46**	**$ 220.40**
Tier 2 Total PMPM Admin			
Tier 2 Engaged Member Months	182,236	182,236	182,236
Tier 2 Indirect Admin Dollars [2]	$ 362,919	$ 1,172,157	$ 1,535,076
Tier 2 PMPM Indirect Admin	$ 1.99	$ 6.43	$ 8.42
PMPM Monthly Fee [3]		$ 46.73	$ 46.73
Total Tier 2 PMPM Admin	**$ 1.99**	**$ 53.16**	**$ 55.15**

Notes

[1] *Telligen indirect start-up expenses include office setup, staff hiring and training, and staff salaries prior to February 2008. Indirect operational expenses include one-time enrollment fee for each participant and mailing costs.*

[2] *Administrative expenses allocated equally between Tiers 1 and 2 based on estimated level of effort.*

[3] *PMPM monthly fees are weighted averages of SFY 2008 – 2013.*

Exhibit D-2 – SoonerCare HMP Nurse Care Management PMPM Cost Effectiveness

Component	Engagement Dates: February 2008 - June 2013		
	Engaged Period	Post-Engagement	Total
Tier 1			
SoonerCare HMP Engaged - Actual PMPM			
PMPM Medical Costs	$ 2,141	$ 1,864	$ 1,976
SoonerCare HMP Admin			
Start-up	$ 8	$ -	$ 3
Operational	$ 212	$ -	$ 76
Total PMPM Costs (with start-up)	$ 2,361	$ 1,864	$ 2,055
Total PMPM Costs (without start-up)	$ 2,353	$ 1,864	$ 2,052
PMPM Forecasted Expenditures			
MEDai Forecast	$ 2,314	$ 2,283	$ 2,294
PMPM Comparison (Forecast vs. Actual)			
PMPM Costs - Medical Only	92.5%	81.6%	86.1%
PMPM Costs - Medical + Admin			
With Start-up Costs	102.0%	81.6%	89.6%
Without Start-up Costs	101.7%	81.6%	89.4%
Tier 2			
SoonerCare HMP Engaged - Actual PMPM			
PMPM Medical Costs	$ 1,074	$ 868	$ 943
SoonerCare HMP Admin			
Start-up	$ 2	$ -	$ 1
Operational	$ 53	$ -	$ 17
Total PMPM Costs (with start-up)	$ 1,130	$ 868	$ 961
Total PMPM Costs (without start-up)	$ 1,128	$ 868	$ 960
PMPM Forecasted Expenditures			
MEDai Forecast	$ 1,101	$ 1,194	$ 1,162
PMPM Comparison (Forecast vs. Actual)			
PMPM Costs - Medical Only	97.6%	72.7%	81.2%
PMPM Costs - Medical + Admin			
With Start-up Costs	102.6%	72.7%	82.7%
Without Start-up Costs	102.5%	72.7%	82.7%
Tier 1 & Tier 2			
SoonerCare HMP Engaged - Actual PMPM			
PMPM Medical Costs	$ 1,288	$ 1,042	$ 1,134
SoonerCare HMP Admin			
Start-up	$ 3	$ -	$ 1
Operational	$ 75	$ -	$ 32
Total PMPM Costs (with start-up)	$ 1,366	$ 1,042	$ 1,167
Total PMPM Costs (without start-up)	$ 1,363	$ 1,042	$ 1,166
PMPM Forecasted Expenditures			
MEDai Forecast	$ 1,329	$ 1,393	$ 1,371
PMPM Comparison (Forecast vs. Actual)			
PMPM Costs - Medical Only	96.9%	74.8%	82.7%
PMPM Costs - Medical + Admin			
With Start-up Costs	102.8%	74.8%	85.1%
Without Start-up Costs	102.6%	74.8%	85.0%

Exhibit D-2 – SoonerCare HMP Nurse Care Management PMPM Cost Effectiveness (cont'd)

Notes

- *Total NCM administrative PMPM expenses calculated by dividing total administrative expenses by the combined number of engaged and post-engagement member months.*
- *Includes all members selected through June 2013 MEDai extracts, and only those engaged at least two months as of June 30, 2013.*
- *Dates of service through June 30, 2013, paid through September 2013.*
- *MEDai forecasts are extracted from the month in which engagement started for each participant.*
- *For the purposes of the cost effectiveness analysis, members whose medical expenditures during the year prior to engagement exceeded $144,000 (i.e., MEDai forecast maximum), PHPG assumed forecasted expenditures equal to prior year expenditures.*

Exhibit D-3 – SoonerCare HMP Nurse Care Management Cost Effectiveness – Aggregate Dollars

Component	Engagement Dates: February 2008 - June 2013		
	Engaged Period	Post-Engagement	Total
Tier 1			
Medical Expenditures			
Forecasted Without NCM	$ 105,711,235	$ 153,085,621	$ 258,796,855
Actual	$ 97,795,113	$ 124,993,772	$ 222,788,885
Medical Savings			
Federal Share	$ 5,976,355	$ 21,208,222	$ 27,184,577
State Share	$ 1,939,766	$ 6,883,627	$ 8,823,393
Subtotal Medical Savings	$ 7,916,122	$ 28,091,849	$ 36,007,971
NCM Administrative Expenditures			
Federal Share	$ 5,076,652	$ -	$ 5,076,652
State Share	$ 4,992,075	$ -	$ 4,992,075
Subtotal Administrative Expenditures	$ 10,068,727	$ -	$ 10,068,727
PMPM Forecasted Expenditures			
Federal Share	$ 899,703	$ 21,208,222	$ 22,107,925
State Share	$ (3,052,308)	$ 6,883,627	$ 3,831,318
TOTAL	$ (2,152,605)	$ 28,091,849	$ 25,939,244
Tier 2			
Medical Expenditures			
Forecasted Without NCM	$ 200,565,487	$ 377,567,872	$ 578,133,359
Actual	$ 195,797,188	$ 274,337,153	$ 470,134,341
Medical Savings			
Federal Share	$ 3,599,875	$ 77,935,064	$ 81,534,938
State Share	$ 1,168,424	$ 25,295,655	$ 26,464,079
Subtotal Medical Savings	$ 4,768,299	$ 103,230,719	$ 107,999,018
NCM Administrative Expenditures			
Federal Share	$ 5,067,664	$ -	$ 5,067,664
State Share	$ 4,983,236	$ -	$ 4,983,236
Subtotal Administrative Expenditures	$ 10,050,900	$ -	$ 10,050,900
PMPM Forecasted Expenditures			
Federal Share	$ (1,467,789)	$ 77,935,064	$ 76,467,274
State Share	$ (3,814,812)	$ 25,295,655	$ 21,480,843
TOTAL	$ (5,282,602)	$ 103,230,719	$ 97,948,117
Tier 1 & Tier 2			
Medical Expenditures			
Forecasted Without NCM	$ 306,276,721	$ 530,653,493	$ 836,930,214
Actual	$ 293,592,301	$ 399,330,925	$ 692,923,226
Medical Savings			
Federal Share	$ 9,576,230	$ 99,143,286	$ 108,719,516
State Share	$ 3,108,190	$ 32,179,282	$ 35,287,472
Subtotal Medical Savings	$ 12,684,420	$ 131,322,568	$ 144,006,988
NCM Administrative Expenditures			
Federal Share	$ 10,144,316	$ -	$ 10,144,316
State Share	$ 9,975,311	$ -	$ 9,975,311
Subtotal Administrative Expenditures	$ 20,119,627	$ -	$ 20,119,627
PMPM Forecasted Expenditures			
Federal Share	$ (568,086)	$ 99,143,286	$ 98,575,200
State Share	$ (6,867,121)	$ 32,179,282	$ 25,312,161
TOTAL	$ (7,435,207)	$ 131,322,568	$ 123,887,361

Exhibit D-3 – SoonerCare HMP Nurse Care Management Cost Effectiveness – Aggregate Dollars (cont'd)

Notes

- *Federal and State share calculated using FMAP of 74.94 (SFY09), 76.51 (SFY10 and SFY11), 74.72 (SFY12) and 74.80 (SFY13).*
- *Federal and State share of administrative expenses calculated using FMAP of 50 percent except for skilled medical personnel (2.6 percent).*
- *Includes all members selected through June 2013 MEDai extracts, and only those engaged at least two months as of June 30, 2013.*
- *Dates of service through June 30, 2013, paid through September 2013.*
- *MEDai forecasts are extracted from the month in which engagement started for each participant.*
- *For the purposes of the cost effectiveness analysis, members whose medical expenditures during the year prior to engagement exceeded $144,000 (i.e., MEDai forecast maximum), PHPG assumed forecasted expenditures equal to prior year expenditures.*

Appendix E – CareMeasures™ Core Measurement Requirements (required core measures for improvement payments are in bold)

ASTHMA	Asthma	Core Measurement Requirements for Payment
ASTHMA 1	**Asthma Assessment**	**% of patients 5 to 40 with a diagnosis of asthma who were evaluated during at least one office visit within 12 months for the frequency (numeric) of daytime and nocturnal asthma symptoms**
ASTHMA 4	**Pharmacologic Therapy**	**% of patients 5 to 40 with a diagnosis of mild, moderate or severe persistent asthma who were prescribed either the preferred long-term control medication (inhaled corticosteroid) or an acceptable alternative treatment**

CAD	Coronary Artery Disease (CAD)	Core Measurement Requirements for Payment
CAD 1	**Antiplatelet Therapy**	**% of patients 18 and older with diagnosis of CAD who were prescribed oral antiplatelet therapy**
CAD 2	**Drug Therapy for Lowering LDL Cholesterol**	**% of patients 18 and older with CAD who were prescribed a lipid-lowering therapy**
CAD 3	**Beta-Blocker Therapy-Prior Myocardial Infarction (MI)**	**% of patients 18 and older with a diagnosis of CAD and prior MI who were prescribed beta-blocker therapy**
CAD 4	**Blood Pressure < 140/90 mmHg**	**% of patients 18 years and older with CAD who had blood pressure < 140/90 mmHg**
CAD 5	Lipid Profile in Patients with CAD	Percentage of patients aged 18 years and older with a diagnosis of coronary artery disease (CAD) who received at least one lipid profile within 12 months
CAD 6	Optimally Managed Modifiable Risk	% of patients between 18 and 75 with CAD who have optimally managed modifiable risk factors (LDL, tobacco non-use, blood pressure control, aspirin usage)
CAD 7	**ACE/ARB Inhibitor Therapy**	**% of patients 18 and older with CAD who also have DM and/or LVSD who were prescribed ACE inhibitor or ARB therapy**
CAD 8	Symptom and Activity Assessment	% of patients 18 and older with CAD who were evaluated for both level of activity and angina symptoms during one or more office visits
CAD 9	Lipid Profile During Reporting Year and LDL-C < 100	% of patients 18 and older with CAD who received at least one lipid profile during last year and LDL-C < 100

COPD	Chronic Obstructive Pulmonary Disease (COPD)	Core Measurement Requirements for Payment
COPD 1	**Spirometry Evaluation**	Percentage of patients aged 18 years and older with a diagnosis of chronic obstructive pulmonary disease (COPD) who had spirometry evaluation results documented
COPD 2	**Bronchodilator Therapy**	Percentage of patients aged 18 years and older with a diagnosis of chronic obstructive pulmonary disease (COPD), who have an FEV1/FVC less than 70% and have symptoms, who were prescribed an inhaled bronchodilator

Appendix E – cont'd

DM	Diabetes Mellitus	Core Measurement Requirements for Payment
DM 1	HbA1c Management	% of patients 18 to 75 with DM receiving one or more A1c test(s) per year
DM 2	**HbA1c Management Control**	**% of patients 18 to 75 with DM who had most recent hemoglobin A1c less than 9%**
DM 3	**Blood Pressure Management**	**% of patients 18 to 75 with DM who had most recent blood pressure in control (< 140/80 mmHg)**
DM 4	Lipid Measurement	% of patients 18 to 75 with DM receiving at least one lipid profile (or ALL component tests)
DM 5	**LDL Cholesterol Level**	**% of patients 18 to 75 with DM with most recent LDL-C < 130 mg/dl**
DM 5W	LDL Result < 100 mg/dl	% of patients 18 to 75 with DM who had most recent LDL-C level in control (less than 100 mg/dl)
DM 6	Urine Protein Testing	% of patients 18 to 75 with DM who received urine protein screening or medical attention for nephropathy during at least one office visit within 12 months
DM 7	**Eye Exam**	**% of patients 18 to 75 years with diagnosis of DM who had dilated eye exam**
DM 8	Foot Exam	% of patients 18 to 75 with DM who had a foot exam

HF	Heart Failure	Core Measurement Requirements for Payment
HF 1	**Left Ventricular Function Assessment**	**% of patients with HF with quantitative or qualitative results of left ventricular function assessment recorded**
HF 2	**ACE Inhibitor Therapy**	**% of patients 18 and older with diagnosis of HF and LVSD who were prescribed ACE inhibitor or ARB therapy**
HF 3	Weight Measurement	% of patients 18 and older with diagnosis of HF who had weight measurement recorded
HF 5	Patient Education	% of patients with HF who were provided with patient education on disease management and health behavior changes during one or more visit(s)
HF 6	**Beta Blocker Therapy**	**% of patients 18 and older with diagnosis of HF who also have LVSD and who were prescribed beta-blocker therapy**

Appendix E – cont'd

HTN	Hypertension	Core Measurement Requirements for Payment
HTN 1	**Blood Pressure Screening**	**% of patient visits with blood pressure measurement recorded among all patient visits for patients 18 years with diagnosed HTN**
HTN 2	**Blood Pressure Control**	**% of patients 18 and older who had a diagnosis of HTN and whose blood pressure was adequately controlled (< 140/90 mmHg) during the measurement year**

PC	Preventive Care	Core Measurement Requirements for Payment
PC 1	Breast Cancer Screening	% of women 50 to 69 who had a mammogram to screen for breast cancer within 24 months
PC 2	**Colorectal Cancer Screening**	**% of patients 50 to 80 who received the appropriate colorectal cancer screening**
PC 3	**Influenza Vaccination**	**% of patients who received an influenza vaccination during the measurement period**
PC 4	**Pneumonia Vaccination**	**% of patients 65 years and older who have ever received a pneumococcal vaccine**
PC 5	Tobacco Cessation	% of patients identified as tobacco users who received cessation intervention during the measurement period
PC 6	BMI Screening and Follow-Up	% of patients aged 18 years and older with a calculated BMI and if the most recent BMI is outside of normal parameters, a follow-up plan is documented

TOB	Smoking Cessation (Tobacco)	Core Measurement Requirements for Payment
TOB 1	**Inquiry about Tobacco**	**% of patients 10 and older where inquiry about tobacco use was recorded**
TOB 2	**Readiness to Quit Assessment**	**% of patients 10 and older who use tobacco where act of assessing the patient's readiness to quit tobacco use was recorded**
TOB 3	**Received Motivational Intervention to Quit Tobacco Use**	**% of patients 10 and older who use tobacco who were provided motivational treatment to quit tobacco use**
TOB 4	**Received assistance with Developing a Behavioral Health Quit Plan**	**% of patients 10 and older who use tobacco where assistance with developing a behavioral quit plan was provided**

Appendix E – cont'd

TOB	Smoking Cessation (Tobacco)	Core Measurement Requirements for Payment
TOB 5	Recommended to Use Medication to Aid Their Quit Plan	% of patients 18 and older who use tobacco where medication use was recommended to aid their quit plan
TOB 6	Provided Relapse Assistance	% of patients 10 and older who were former tobacco users where assistance with relapse prevention was provided
TOB 7	Advised Patient to Quit Tobacco Use	% of patients 10 and older who use tobacco where the act of advising the patient to quit tobacco use was recorded
TOB 8	30 Day Follow Up	% of patients 10 and older who use tobacco, and who are ready to quit using tobacco, where a follow up was scheduled

APPENDIX F – PRACTICE FACILITATION SITE SURVEY MATERIALS

Appendix F includes the advance letter sent to practice facilitation sites and practice facilitation survey instrument.

The Oklahoma Health Care Authority would like to hear about your experiences with the SoonerCare Health Management Program Practice Facilitation initiative being carried-out by the Iowa Foundation for Medical Care. The purpose of the survey is to gather information on the program's value and how it can be improved from a provider's perspective.

The survey is voluntary and confidential. Your answers will be combined with those of other providers being surveyed and will not be reported separately.
Please return your completed survey to:

HMP Provider Survey
1725 McGovern
Highland Park, IL 60035

If you have any questions, you can reach us toll-free at 1-888-941-9358 during the hours of 9 a.m. and 5 p.m., Monday through Friday.
Thank you.

PRACTICE FACILITATION
PROVIDER SURVEY

The Oklahoma Health Care Authority would like to hear about your experiences with the SoonerCare Health Management Program Practice Facilitation initiative being carried-out by the Iowa Foundation for Medical Care. The purpose of the survey is to gather information on the program's value and how it can be improved, from a provider's perspective.

PRACTICE DEMOGRAPHICS

1. What is your medical practice specialty?
    a. General/Family Practice
    b. General Pediatrics
    c. General Internal Medicine
    d. OB/GYN
    e. Other. Please specify:

2. Approximately how long have you been a Medicaid provider in Oklahoma? Medicaid includes the SoonerCare program.
    a. Less than six months
    b. Six to twelve months
    c. More than one year but less than two years
    d. More than two years but less than five years
    e. Five years or longer

3. About what percentage of your patients have Medicaid as their primary coverage?
    a. Less than 10 percent
    b. 10 to 24 percent
    c. 25 to 49 percent
    d. 50 percent or more

DECISION TO PARTICIPATE IN PRACTICE FACILITATION

4. Were you the person who made the decision to participate in the Practice Facilitation initiative?
    a. Yes
    b. No. If your answer is "no," please proceed to Question 7.
5. What were your reasons for deciding to participate?
    a. Improve care management of patients with chronic conditions/improve outcomes
    b. Obtain information on patient utilization and costs
    c. Receive assistance in redesigning practice workflows
    d. Reduce costs
    e. Increase income
    f. Continuing education
    g. Other. Please specify:

    _____

6. Among the reasons you cited, what was the <u>most important</u> reason for deciding to participate? (If you require additional space to answer, please use additional paper and attach it to the survey.)

    _____

    _____

    _____

PRACTICE FACILITATION COMPONENTS

7. Regardless of your actual experience, please rate how important you think each one is in preparing a practice to better manage patients with chronic medical conditions.

	Very Important	Somewhat Important	Not Too Important	Not At All Important
a. Receiving information on the prevalence of chronic diseases among your patients				
b. Receiving a baseline assessment of how well you have been managing the care of your patients with chronic diseases				
c. Receiving focused training in evidence-based practice guidelines for chronic conditions				
d. Receiving assistance in redesigning office workflows and policies and procedures for management of patients with chronic diseases				
e. Identifying performance measures to track your improvement in managing the care of your patients with chronic diseases				
f. Having a Practice Facilitator on-site to work with you and your staff				
g. Receiving quarterly reports on your progress with respect to identified performance measures				
h. Receiving ongoing education and assistance after conclusion of the initial onsite activities				

PRACTICE FACILITATION COMPONENTS cont'd

8. The following is a list of activities that typically are part of Practice Facilitation. For each one, please rate how helpful it was to you in improving your management of patients with chronic medical conditions. If the activity did not occur at your practice, please note.

	Very Helpful	Somewhat Helpful	Not Too Helpful	Not At All Helpful
a. Receiving information on the prevalence of chronic diseases among your patients				
b. Receiving a baseline assessment of how well you have been managing the care of your patients with chronic diseases				
c. Receiving focused training in evidence-based practice guidelines for chronic conditions				
d. Receiving assistance in redesigning office workflows and policies and procedures for management of patients with chronic diseases				
e. Identifying performance measures to track your improvement in managing the care of your patients with chronic diseases				
f. Having a Practice Facilitator on-site to work with you and your staff				
g. Receiving quarterly reports on your progress with respect to identified performance measures				
h. Receiving ongoing education and assistance after conclusion of the initial onsite activities				

PRACTICE FACILITATION OUTCOMES

9. Have you made changes in the management of your patients with chronic conditions as the result of participating in the Practice Facilitation initiative?
    a. Yes
    b. No. If your answer is "no," please proceed to Question 12.

10. What are the changes you made?

_____

_____

11. What is the most important change you made?

_____

_____

_____

12. Are you using the Care Measures software to provide ongoing information to Telligen on your patients?
    a. Yes
    b. No

13. Are you using Care Measures to create flow sheets?
    a. Yes
    b. No

14. How else are you using Care Measures?

_____

15. Do you find Care Measures to be a useful tool?
    a. Yes
    b. No

16. The Practice Facilitation initiative currently includes incentive payments for accepting a practice facilitator and filing quarterly reports. In the future it also will include payments for improving performance. Were you aware of these incentive payments?
    a. Yes (all three)
    b. Yes (accepting facilitator and filing reports only)
    c. No

17. Do the incentive payments make it more likely you will continue to participate in the Practice Facilitation initiative?

_____

_____

18. Has your practice become more effective in managing patients with chronic conditions as a result of your participation in the Practice Facilitation initiative?
    a. Yes
    b. No

19. How satisfied are you with your experience in the Practice Facilitation initiative?
    a. Very satisfied
    b. Somewhat satisfied
    c. Somewhat dissatisfied
    d. Very dissatisfied

20. Would you recommend the Practice Facilitation initiative to other physicians caring for patients with chronic conditions?
    a. Yes
    b. No

21. Do you have any suggestions for improving the Practice Facilitation initiative?

_____

_____

NURSE CARE MANAGEMENT

22. Have any of your patients been assigned a Nurse Care Manager by the Health Care Authority?
    a. Yes. If your answer is "yes," please respond to Questions 23 through 26.
    b. No
23. Have the Nurse Care Managers consulted with you about the care of these patients?
    a. Yes
    b. No
24. Have you been receiving quarterly reports on your patients with Nurse Care Managers?
    a. Yes
    b. No
25. Have you found these reports to be useful in managing the care of these patients?
    a. Yes
    b. No
26. Do you believe the Nurse Care Managers are having a positive impact on your patients, in terms of their ability to better understand and self-manage their chronic conditions?
    a. Yes
    b. No

Please list the name and position of the individual completing the Provider Survey:

_____

Please list the name of the practice and address:

_____

Please return your completed survey to:
HMP Provider Survey
1725 North McGovern
Highland Park, IL 60035

Thank you for your help!

APPENDIX G – PRACTICE FACILITATION EXPENDITURE DATA

Appendix G includes a full set of practice facilitation expenditure exhibits for practice facilitation. The exhibits are listed below.

Exhibit	***Description***
G-1	Practice Facilitation Patient Costs – Forecast versus Actual: *First 12 Months Following First Contact with Provider After Initiation*
G-2	Practice Facilitation Patient Costs – Forecast versus Actual: *Months 13 to 24 Following First Contact with Provider After Initiation*
G-3	Practice Facilitation Patient Costs – Forecast versus Actual: *Months 25 to 36 Following First Contact with Provider After Initiation*
G-4	Practice Facilitation Patient Costs – Forecast versus Actual: *Months 37 to 48 Following First Contact with Provider After Initiation*

Exhibit G-1 – Practice Facilitation Patient Costs – Forecast versus Actual: First 12 Months Following First Contact with Provider After Initiation

Chronic Impact Condition	Months After First Contact with Provider: 1 to 12				
	Members	Eligibility Months	MEDai Forecast	Actual	Actual, % of Forecast
Asthma	3,244	31,972	$ 287.10	$ 251.61	87.6%
Coronary Artery Disease	673	6,931	$ 267.04	$ 235.78	88.3%
Hypertension	3,391	33,941	$ 341.09	$ 285.55	83.7%
Congestive Heart Failure	763	7,889	$ 308.72	$ 334.08	108.2%
COPD	1,768	17,821	$ 460.22	$ 410.88	89.3%
Cerebrovascular Accident	185	1,832	$ 730.59	$ 647.01	88.6%
Depression	7,558	76,197	$ 434.09	$ 418.80	96.5%
Diabetes	5,646	57,914	$ 583.19	$ 441.18	75.7%
HIV	65	634	$ 1,021.90	$ 1,218.03	119.2%
Hyperlipidemia	3,296	34,292	$ 701.63	$ 616.17	87.8%
Lower Back Pain	8,353	86,526	$ 572.33	$ 551.44	96.3%
Migraine Headaches	3,019	31,570	$ 542.61	$ 584.41	107.7%
Multiple Sclerosis	369	3,891	$ 807.33	$ 1,010.20	125.1%
Rheumatoid Arthritis	1,387	14,724	$ 766.73	$ 813.27	106.1%
Renal Failure	1,137	12,119	$ 1,598.96	$ 2,319.91	145.1%
Schizophrenia	7,255	78,858	$ 1,003.83	$ 1,117.03	111.3%
All Conditions	**48,109**	**497,111**	**$ 607.24**	**$ 609.49**	**100.4%**

Exhibit G-2 – Practice Facilitation Patient Costs – Forecast versus Actual: Month 13 to 24 Following First Contact with Provider After Initiation

Chronic Impact Condition	Months After First Contact with Provider: 13 to 24						
	Members	Eligibility Months	MEDai Forecast	Actual	Actual, % of Forecast		
					Months 1 to 12	Months 13 to 24	*Change*
Asthma	2,212	21,489	$ 281.30	$ 176.41	87.6%	62.7%	*-24.9%*
Coronary Artery Disease	506	5,058	$ 235.13	$ 170.83	88.3%	72.7%	*-15.6%*
Hypertension	2,371	23,194	$ 289.85	$ 168.19	83.7%	58.0%	*-25.7%*
Congestive Heart Failure	559	5,644	$ 273.01	$ 191.25	108.2%	70.0%	*-38.2%*
COPD	1,217	12,048	$ 399.46	$ 222.92	89.3%	55.8%	*-33.5%*
Cerebrovascular Accident	139	1,342	$ 570.49	$ 576.20	88.6%	101.0%	*12.4%*
Depression	5,442	54,476	$ 397.61	$ 305.25	96.5%	76.8%	*-19.7%*
Diabetes	4,169	41,947	$ 497.60	$ 330.51	75.7%	66.4%	*-9.2%*
HIV	44	400	$ 736.08	$ 553.01	119.2%	75.1%	*-44.1%*
Hyperlipidemia	2,472	25,113	$ 727.71	$ 494.61	87.8%	68.0%	*-19.9%*
Lower Back Pain	6,371	63,681	$ 591.52	$ 462.60	96.3%	78.2%	*-18.1%*
Migraine Headaches	2,376	23,962	$ 561.95	$ 525.39	107.7%	93.5%	*-14.2%*
Multiple Sclerosis	291	3,031	$ 815.37	$ 783.28	125.1%	96.1%	*-29.1%*
Rheumatoid Arthritis	1,127	11,468	$ 796.86	$ 725.04	106.1%	91.0%	*-15.1%*
Renal Failure	902	9,136	$ 1,516.45	$ 1,705.86	145.1%	112.5%	*-32.6%*
Schizophrenia	5,983	64,616	$ 1,046.50	$ 1,081.31	111.3%	103.3%	*-8.0%*
All Conditions	**36,181**	**366,605**	**$ 608.52**	**$ 519.84**	**100.4%**	**85.4%**	***-14.9%***

Exhibit G-3 – Practice Facilitation Patient Costs – Forecast versus Actual: Month 25 to 36 Following First Contact with Provider After Initiation

Chronic Impact Condition	Months After First Contact with Provider: 25 to 36						
	Members	Eligibility Months	MEDai Forecast	Actual	Actual, % of Forecast		
					Months 13 to 24	Months 25 to 36	*Change*
Asthma	1,558	13,824	$ 267.82	$ 162.03	62.7%	60.5%	*-2.2%*
Coronary Artery Disease	368	3,512	$ 188.64	$ 162.96	72.7%	86.4%	*13.7%*
Hypertension	1,662	15,113	$ 266.41	$ 190.65	58.0%	71.6%	*13.5%*
Congestive Heart Failure	423	3,931	$ 265.75	$ 211.34	70.0%	79.5%	*9.5%*
COPD	854	7,988	$ 395.92	$ 198.91	55.8%	50.2%	*-5.6%*
Cerebrovascular Accident	103	933	$ 475.86	$ 360.34	101.0%	75.7%	*-25.3%*
Depression	4,041	38,157	$ 410.27	$ 309.96	76.8%	75.6%	*-1.2%*
Diabetes	3,059	28,757	$ 479.26	$ 344.98	66.4%	72.0%	*5.6%*
HIV	29	254	$ 811.29	$ 607.62	75.1%	74.9%	*-0.2%*
Hyperlipidemia	1,839	17,652	$ 740.64	$ 518.19	68.0%	70.0%	*2.0%*
Lower Back Pain	4,564	42,924	$ 589.70	$ 454.46	78.2%	77.1%	*-1.1%*
Migraine Headaches	1,794	16,958	$ 562.94	$ 560.04	93.5%	99.5%	*6.0%*
Multiple Sclerosis	211	2,073	$ 797.40	$ 698.96	96.1%	87.7%	*-8.4%*
Rheumatoid Arthritis	851	8,187	$ 796.25	$ 699.88	91.0%	87.9%	*-3.1%*
Renal Failure	638	6,228	$ 1,573.45	$ 1,893.43	112.5%	120.3%	*7.8%*
Schizophrenia	4,977	51,239	$ 1,130.32	$ 1,149.07	103.3%	101.7%	*-1.7%*
All Conditions	**26,971**	**257,730**	**$ 635.42**	**$ 555.61**	**85.4%**	**87.4%**	***2.0%***

Exhibit G-4 – Practice Facilitation Patient Costs – Forecast versus Actual: Month 37 to 48 Following First Contact with Provider After Initiation

Chronic Impact Condition	Months After First Contact with Provider: 37 to 48						
	Members	Eligibility Months	MEDai Forecast	Actual	Actual, % of Forecast		
					Months 25 to 36	Months 37 to 48	*Change*
Asthma	938	7,505	$ 269.29	$ 194.25	60.5%	72.1%	*11.6%*
Coronary Artery Disease	228	1,867	$ 177.87	$ 179.72	86.4%	101.0%	*14.7%*
Hypertension	1,023	8,298	$ 276.74	$ 201.62	71.6%	72.9%	*1.3%*
Congestive Heart Failure	264	2,234	$ 272.56	$ 276.52	79.5%	101.5%	*21.9%*
COPD	551	4,499	$ 395.55	$ 245.60	50.2%	62.1%	*11.9%*
Cerebrovascular Accident	62	559	$ 476.50	$ 353.20	75.7%	74.1%	*-1.6%*
Depression	2,693	23,014	$ 416.22	$ 319.14	75.6%	76.7%	*1.1%*
Diabetes	1,969	16,861	$ 449.02	$ 354.38	72.0%	78.9%	*6.9%*
HIV	17	123	$ 1,002.73	$ 603.12	74.9%	60.1%	*-14.7%*
Hyperlipidemia	1,212	10,203	$ 700.02	$ 568.72	70.0%	81.2%	*11.3%*
Lower Back Pain	2,972	25,137	$ 623.85	$ 484.33	77.1%	77.6%	*0.6%*
Migraine Headaches	1,186	10,116	$ 599.99	$ 543.94	99.5%	90.7%	*-8.8%*
Multiple Sclerosis	140	1,206	$ 790.55	$ 811.76	87.7%	102.7%	*15.0%*
Rheumatoid Arthritis	554	4,923	$ 847.74	$ 850.22	87.9%	100.3%	*12.4%*
Renal Failure	421	3,650	$ 1,546.97	$ 2,023.84	120.3%	130.8%	*10.5%*
Schizophrenia	3,713	34,787	$ 1,221.03	$ 1,223.93	101.7%	100.2%	*-1.4%*
All Conditions	**17,943**	**154,982**	**$ 675.49**	**$ 613.45**	**87.4%**	**90.8%**	***3.4%***

APPENDIX H – PRACTICE FACILITATION COST EFFECTIVENESS

Appendix H includes detailed exhibits documenting the cost effectiveness of practice facilitation.

Exhibit	***Description***
H-1	SoonerCare HMP Administrative Expenses – Practice Facilitation
H-2	SoonerCare HMP Practice Facilitation PMPM Cost Effectiveness
H-3	SoonerCare HMP Practice Facilitation Cost Effectiveness – Aggregate Dollars

Exhibit H-1 – SoonerCare HMP Administrative Expenses – Practice Facilitation

Expense Category	Start-up Costs	Operational (No Start-up) Feb08 - Jun13	Total Admin
SoonerCare Division			
Salary & Benefits	$ 233,440	$ 1,334,965	$ 1,568,405
Allocated Overhead	$ 32,071	$ 180,532	$ 212,603
Total	$ 265,511	$ 1,515,496	$ 1,781,007
Telligen Vendor Payments			
Indirect[1]	$ 463,342	$ 10,006,733	$ 10,470,075
Total Administrative Dollars	**$ 728,853**	**$ 11,522,229**	**$ 12,251,082**
PMPM Admin			
PF Site Member Months[2]	1,327,216	1,327,216	1,327,216
PMPM Admin	**$ 0.55**	**$ 8.68**	**$ 9.23**

Notes

[1] *Telligen indirect start-up expenses include office setup, staff hiring and training, and staff salaries prior to February 2008. Operational expenses include monthly practice facilitator expenses.*

[2] *Unduplicated patient member months, including all months after which a patient first sees a provider participating in practice facilitation.*

Exhibit H-2 – SoonerCare HMP Practice Facilitation PMPM Cost Effectiveness

	Months After Patient First Contact with Provider					
	1 to 12	13 to 24	25 to 36	37 to 48	48 or more	Total
PMPM Actual Expenditures						
Medical Costs	$324,370,883	$205,704,799	$154,447,595	$104,500,583	$ 40,266,169	$829,290,028
Member Months	497,111	366,605	257,730	154,982	50,788	1,327,216
PMPM Medical Costs	$ 652.51	$ 561.11	$ 599.26	$ 674.28	$ 792.83	$ 624.83
SoonerCare HMP Admin						
Start-Up	$ 0.55	$ 0.55	$ 0.55	$ 0.55	$ 0.55	$ 0.55
Operational	$ 8.68	$ 8.68	$ 8.68	$ 8.68	$ 8.68	$ 8.68
Total PMPM Costs (with start-up)	$ 661.74	$ 570.34	$ 608.49	$ 683.51	$ 802.06	$ 634.06
Total PMPM Costs (without start-up)	$ 661.19	$ 569.79	$ 607.94	$ 682.96	$ 801.51	$ 633.52
PMPM Forecasted Expenditures						
MEDai Forecast	$ 650	$ 657	$ 685	$ 742	$ 864	$ 677.76
PMPM Comparison (forecast versus actual)						
PMPM Costs - Medical Only	100.4%	85.4%	87.4%	90.8%	91.8%	92.2%
PMPM Costs - Medical + Admin						
With Start-Up Costs	101.8%	86.8%	88.8%	92.1%	92.9%	93.6%
Without Start-up Costs	101.7%	86.7%	88.7%	92.0%	92.8%	93.5%

Notes

- *Medical costs for patient experience following the month in which the patient first sees a provider participating in practice facility.*
- *Includes medical costs for patients who received services from a practice facilitation provider any time after provider initiation.*

Exhibit H-3 – SoonerCare HMP Practice Facilitation Cost Effectiveness - Aggregate Dollars

Practice Faciliation Sites	February 2008 - June 2013
Practice Faciliation Sites - Medical Expenditures	
Forecasted without Practice Faciliation	$ 899,535,395
PMPM Actual versus Forecast - Medical Only	92.2%
Actual Expenditures	$ 829,290,028
Medical Savings/(Deficit)	
Federal Share	$ 53,032,442
State Share	$ 17,212,925
Sub-total Medical Savings	$ 70,245,367
Practice Faciliation Administrative Expenditures	
Federal Share	$ 6,176,996
State Share	$ 6,074,087
Sub-total Administrative	$ 12,251,082
Total Savings/(Deficit)	
Federal Share	$ 46,855,446
State Share	$ 11,138,838
TOTAL	$ 57,994,284

Notes

- *Federal and State share calculated using FMAP of 74.94 (SFY 2009), 76.51 (SFY 2010 and SFY 2011), 74.72 (SFY 2012) and 74.80 (SFY 2013) percent.*
- *Federal and State share of administrative expenses calculated using FMAP of 50 percent except for skilled medical personnel (2.6 percent).*