State Fiscal Year 2017



ANNUAL REPORT

SoonerCare Chronic Care Unit Evaluation

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State of Oklahoma Oklahoma Health Care Authority

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READER NOTE

The Pacific Health Policy Group (PHPG) has been retained to conduct a multi-year independent evaluation of the SoonerCare Health Management Program (HMP) and SoonerCare Chronic Care Unit (CCU). This report contains SFY 2017 evaluation findings for the SoonerCare CCU evaluation; HMP evaluation findings have been issued in a companion report.

PHPG wishes to acknowledge the cooperation of the Oklahoma Health Care Authority (OHCA) in providing the information necessary for the evaluation.

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EXECUTIVE SUMMARY

Introduction

Chronic diseases are the leading causes of death and disability in the United States. According to the Centers for Disease Control and Prevention, about half of all adults have one or more chronic health conditions such as diabetes or heart disease. More than one in four Americans has multiple chronic conditions, those that last a year or more and require ongoing medical attention or that limit activities of daily living.

The per capita impact of chronic disease is even greater in Oklahoma than for the nation as a whole. In 2015, 1,442 Oklahomans died due to complications from diabetes. This equated to a diabetes-related mortality rate of 32.4 persons per 100,000 residents, versus the national rate of 21.3. The mortality rate for other chronic conditions, such as heart disease and hypertension, is similarly higher in Oklahoma than in the nation overall.

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 and diabetes. The program would address the health needs of chronically ill SoonerCare members while reducing unnecessary medical expenditures at a time of significant fiscal constraints.

In response, the OHCA developed the SoonerCare Health Management Program (HMP), which offered nurse care management to qualifying members with one or more chronic conditions. The program also offered practice facilitation and education to primary care providers treating the chronically ill.

First Generation SoonerCare HMP

The OHCA contracted with a vendor through a competitive bid process to implement and operate the SoonerCare HMP. Telligen 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 provided 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 DXC, the OHCA's Medicaid fiscal agent, at the time of the SoonerCare HMP's development. The OHCA 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, as well as their potential for improvement through care management¹.

The first-generation model of the SoonerCare HMP operated from February 2008 through June 2013. PHPG conducted a five-year evaluation of the first-generation program, focusing on the program's impact on member behavior (e.g., self-management of chronic conditions), quality of care, service utilization and cost. PHPG documented significant positive outcomes attributable to both program components.

Second Generation SoonerCare HMP

As the contractual period for the first generation SoonerCare HMP was nearing its end, the OHCA began the process of examining how the program could be enhanced for the benefit of both members and providers. To improve member identification and participation, as well as coordination with primary care providers, the OHCA elected to replace centralized nurse care management services with health coaches embedded at primary care practice sites.

The health coaches would work closely with practice staff and provide coaching services to participating members. Practice facilitation would continue in the second generation HMP but would become more diverse, encompassing both traditional full practice facilitation and more targeted services such as academic detailing focused on specific topics and preparing practices for health coaches. In order to participate in the second SoonerCare HMP at its outset, members would have to be receiving primary care from a practice with an embedded health coach.

Transition from First Generation HMP

At the time of the transition from the first to second generation HMP, participants in nurse care management receiving care in a qualifying practice were offered the opportunity to transition to a health coach. Participants not aligned with a qualifying practice were given the opportunity to work with a new telephonic Chronic Care Unit (CCU) operated directly by the OHCA.

Post-Transition HMP and CCU Enrollment

Post-transition, Telligen continues to identify HMP candidates from the SoonerCare Choice population through analysis of MEDai data. Providers also refer patients to Telligen for review and possible enrollment into the SoonerCare HMP.

SoonerCare Choice and SoonerCare Traditional members both are eligible for participation in the SoonerCare CCU. The SoonerCare CCU works with members who self-refer or are referred by a provider or another area within the OHCA, such as care management, member services or provider services.

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¹ MEDai calculates "chronic impact" scores that quantify the likelihood that a member's projected utilization/expenditures can be influenced through care management, based on his/her profile.

The CCU also is responsible for:

- Members with hemophilia or sickle cell anemia, even if the member otherwise would be enrolled in the SoonerCare HMP.
- Members identified as high utilizers of the emergency department.
- Members undergoing bariatric surgery.
- Members with hepatitis-C receiving treatment and whose treating provider has referred them for case management.
- Members identified through a Health Risk Assessment (HRA), which SoonerCare
 applicants are given the option of completing as part of the online enrollment process.
 Based on responses to the HRA, members can be referred to different programs for
 assistance or case management, including the SoonerCare CCU.

The OHCA sends weekly updates of newly-opened CCU cases to Telligen. This ensures that there is no duplication in enrollment.

SoonerCare Chronic Care Unit

Under the SoonerCare CCU, OHCA registered nurses provide telephonic case management to participating members. CCU RNs use motivational interviewing with program participants to assess their needs and develop an action plan for improving self-management skills and health.

The RNs work to address the health status, health literacy, behavioral health and prescription drug utilization of participants through care coordination, self-management principles and behavior modification techniques. The ongoing case management typically includes one or two monthly telephone contacts, depending on the member's level of need.

The CCU consists of six full time employees. Four front-line nurses (Exceptional Needs Coordinators, or ENCs) provide telephonic case management. The unit also includes a supervisor and a senior ENC. The senior ENC is responsible for training new staff, assisting other ENCs with complex cases and managing a partial caseload. The unit manages 575 – 600 members at any given time.

SoonerCare CCU Independent Evaluation

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

- 1. Participant satisfaction and perceived health status;
- 2. Participant self-management of chronic conditions;
- Quality of care, as measured by participant utilization of preventive and chronic care management services and adherence to national, evidence-based disease management practice guidelines; and
- 4. Cost effectiveness, as measured by avoidance of unnecessary service utilization (e.g., inpatient days, emergency department visits) and associated expenditures, while taking into account program administrative costs.

PHPG is presenting evaluation findings in a series of annual reports issued over a five-year period. This is the fourth Annual Evaluation report addressing progress toward achievement of program objectives. (PHPG also is evaluating the second generation SoonerCare HMP; findings have been issued in a separate report².)

Evaluation Findings

Participant Satisfaction and Perceived Health Status

Member satisfaction is a key component of SoonerCare CCU performance. If members are satisfied with their experience and value its worth, they are likely to remain engaged and focused on improving their self-management skills and adopting a healthier lifestyle. Conversely, if members do not see a lasting value to the experience, they are likely to lose interest and lack the necessary motivation to follow their CCU nurse's recommendations.

PHPG completed 1,034 initial surveys with CCU participants, as well as 451 six-month follow-up surveys with participants who previously completed an initial survey. The purpose of the follow-up survey was to identify changes in attitudes and health status over time.

CCU nurses are expected to help participants build their self-management skills and improve their health through a variety of activities. Respondents were read a list of activities and asked, for each, whether it had occurred and, if so, how satisfied they were with the interaction or help they received.

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² See SoonerCare HMP SFY 2017 Evaluation Report, June 2018.

Nearly all of the initial survey respondents (99 percent) indicated that their nurse asked questions about health problems or concerns, and the great majority also stated their nurse also provided answers and instructions for taking care of their health problems or concerns (92 percent); answered questions about their health (88 percent); and reviewed and helped with management of medications (87 percent). Nearly 40 percent stated that their nurse helped to identify changes in health that might be an early sign of a problem and helped them to talk to and work with their regular provider and his/her staff.

Respondents were asked to rate their satisfaction with each "yes" activity. Except for one activity³, the overwhelming majority reported being very satisfied with the help they received, with the portion ranging from 91 to 97 percent, depending on the item. This attitude carried over to the members' overall satisfaction with their nurses; 92 percent reported being very satisfied. Results for the follow-up survey were closely aligned to the initial survey.

Members also were asked whether the CCU nurse had tried to help them improve their health by changing behaviors and, if so, whether they had in fact made a change. Respondents were asked whether their nurse discussed behavior changes with respect to: smoking, exercise, diet, medication management, water intake and alcohol/substance consumption. If yes, respondents were asked about the impact of the nurse's intervention on their behavior (no change, temporary change or continuing change).

A majority of respondents reported discussing each of the activities with their CCU nurse. A significant percentage also reported continuing to make changes with respect to exercise, diet, water intake and medication management. A smaller percentage reported working to reduce tobacco use.

Survey respondents reported very high levels of satisfaction with the SoonerCare CCU overall, consistent with their opinion of the CCU nurse. Ninety-two percent of initial survey respondents and 93 percent of follow-up survey respondents described themselves as very satisfied.

The ultimate objectives of the CCU are to assist members in adopting healthier lifestyles and improving their overall health. When asked to rate their current health status, the largest segment of initial survey respondents (49 percent) said "fair", while 32 percent said "good" and 18 percent said "poor".

When next asked if their health status had changed since enrolling in the SoonerCare CCU, 48 percent said it was "better" and 42 percent said it was "about the same"; only 10 percent said it was "worse". Among those members who reported a positive change, nearly all (94 percent) credited the SoonerCare CCU with contributing to their improved health.

³ The outlier activity was helping to make and keep health care appointments for mental health or substance abuse problems. Seventy-one percent of "yes" respondents reported they were very satisfied with the help they received; the other 29 percent reported they were somewhat satisfied.

The results were even more encouraging among follow-up survey respondents. Fifty-five percent of respondents reported that their health had improved, with 95 percent crediting this improvement to the program.

Quality of Care

SoonerCare CCU nurses devote much of their time to improving the quality of care for program participants. This includes educating participants about adherence to clinical guidelines for preventive care and for treatment of chronic conditions.

PHPG evaluated the impact of the SoonerCare CCU on quality of care through calculation of Healthcare Effectiveness Data and Information Set (HEDIS®) measures applicable to the SoonerCare CCU population. The evaluation included 19 diagnosis-specific measures and three population-wide preventive measures (22 in total). For example, the quality of care for participants with asthma was analyzed with respect to their use of appropriate medications and their overall medication management.

PHPG determined the total number of participants in each measurement category, the number meeting the clinical standard and the resultant "percent compliant". The findings were evaluated against two comparison data sets. The first data set contained compliance rates for the general SoonerCare population. The second data set contained national compliance rates for Medicaid MCOs. The national rates were used when data for the general SoonerCare population was not available but a national rate was.

The CCU participant compliance rate exceeded the comparison group rate on 10 of 17 measures for which there was a comparison group percentage. The difference was statistically significant for seven of the 10 measures, suggesting that the program is having a positive effect on quality of care, although there is room for continued improvement.

The most impressive results, relative to the comparison group, were observed for participants with diabetes and with respect to access to preventive care.

The SFY 2017 results were consistent with SFY 2015 and SFY 2016 findings, indicating that the SoonerCare CCU is having a positive, and sustained, impact on quality of care for health coaching participants.

The long-term benefits to participants will continue to be measured through the quality of care longitudinal analysis and through the utilization and expenditure analysis presented in the next chapter.

Utilization, Expenditures and Cost Effectiveness

CCU nurse care management, if effective, should have an observable impact on participant service utilization and expenditures. Improvement in quality of care should yield better

outcomes in the form of fewer emergency department visits and hospitalizations and lower acute care costs.

PHPG obtained MEDai data for SoonerCare CCU participants, excluding a small number of Medicare/Medicaid dual eligible members; the data includes a twelve-month forecast of emergency department visits, hospitalizations and total expenditures. MEDai's advanced predictive modeling, as opposed to extrapolating historical trends, accounts for participants' risk factors and recent clinical experience.

PHPG conducted the utilization and expenditure evaluation by comparing participants' actual claims experience to MEDai forecasts absent nurse care management. PHPG performed the analysis for selected chronic conditions⁴ and for the participant population as a whole.

MEDai forecasted that SoonerCare CCU participants, as a group, would incur 11,193 inpatient days per 1,000 participants in the first 12 months of engagement. The actual rate was 5,692, or 51 percent of forecast.

MEDai forecasted that SoonerCare CCU participants, as a group, would incur 5,460 emergency department visits per 1,000 participants in the first 12 months of engagement. The actual rate was 4,215, or 77 percent of forecast.

PHPG documented total per member per month (PMPM) medical expenditures for all SoonerCare CCU participants, as a group, and compared actual medical expenditures to forecast for the first 48 months of engagement. MEDai forecasts for the first 12 months were trended in months 13 to 48 based on the PMPM trend rate of a comparison group comprised of SoonerCare members found eligible for the SoonerCare HMP who declined to enroll ("eligible but not engaged population")⁵.

The trended MEDai forecast projected that the participant population would incur an average of \$1,801 in PMPM expenditures in the first 48 months of engagement. The actual amount was \$1,218, or 68 percent of forecast.

PHPG calculated an aggregate dollar impact for all SoonerCare CCU participants by multiplying total months of engagement through SFY 2016 by average PMPM savings. The resultant medical savings were approximately \$10.0 million.

PHPG then performed a net cost effectiveness test by comparing forecasted costs to actual costs through SFY 2017, inclusive of SoonerCare CCU administrative expenses. SoonerCare CCU administrative expenses include salary, benefit and overhead costs for persons working in the

⁴ The conditions evaluated were asthma, coronary artery disease, chronic obstructive pulmonary disease, diabetes, heart failure and hypertension. Condition-specific findings are presented in chapter four.

⁵ MEDai forecasts extend only 12 months. The SoonerCare HMP "eligible but not engaged" population served as a proxy for the SoonerCare CCU, which has no equivalent cohort. The methodology is described in more detail in chapter 4.

SoonerCare CCU unit. Aggregate administrative expenses for the SoonerCare CCU were approximately \$2.5 million.

The SoonerCare CCU registered net savings of approximately \$7.5 million through SFY 2017, up from \$4.3 million at the end of SFY 2017. The SoonerCare CCU achieved a positive ROI through SFY 2017 of 304.5 percent. Put another way, the SoonerCare CCU generated approximately \$3.05 in net medical savings for every dollar in administrative expenditures.

CHAPTER 1 – INTRODUCTION

Chronic diseases are the leading causes of death and disability in the United States. According to the Centers for Disease Control and Prevention, about half of all adults have one or more chronic health conditions such as diabetes or heart disease. More than one in four Americans has multiple chronic conditions, those that last a year or more and require ongoing medical attention or that limit activities of daily living⁶.

The per capita impact of chronic disease is even greater in Oklahoma than for the nation as a whole. In 2015, 1,442 Oklahomans died due to complications from diabetes. This equated to a diabetes-related mortality rate of 32.4 persons per 100,000 residents, versus the national rate of 21.3⁷.

The mortality rate for other chronic conditions, such as heart disease and hypertension, is similarly higher in Oklahoma than in the nation overall (Exhibit 1-1).

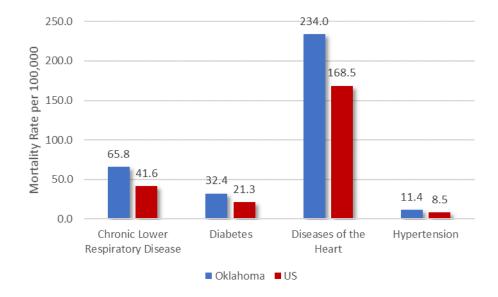


Exhibit 1-1 – Chronic Disease Mortality Rates, 2015 – OK and US (Selected Conditions)⁸

Chronic diseases also are among the costliest of all health problems. Persons with multiple chronic conditions account for over 70 percent of health spending nationally⁹. Providing care to

⁶ http://www.hhs.gov/ash/initiatives/mcc/mcc framework.pdf. Data is for 2012 (most recent year available).

⁷ https://www.cdc.gov/nchs/data/nvsr/nvsr66/nvsr66 06 tables.pdf. Age adjusted rates.

⁸ Ibid. Rate for chronic lower respiratory disease, also known as chronic obstructive pulmonary disease, includes asthma, chronic bronchitis and emphysema. Hypertension rate includes essential hypertension and hypertensive renal disease.

⁹ http://www.ahrq.gov/sites/default/files/wysiwyg/professionals/prevention-chronic-care/decision/mcc/mccchartbook.pdf

individuals with chronic diseases, many of whom meet the federal disability standard, has placed a significant burden on state Medicaid budgets.

In Oklahoma, the CDC estimates that total expenditures related to treating selected major chronic conditions will approach \$9.5 billion in 2018 and will reach nearly \$10.5 billion in 2020. The estimated portion attributable to SoonerCare members will exceed \$1.1 billion (state and federal) in 2018 and \$1.2 billion in 2020¹⁰ (Exhibit 1-2).

Exhibit 1-2 – Estimated/Projected Chronic Disease Expenditures (Millions)

	OK All F	Payers	SoonerCare	
Chronic Condition	2018	2020	2018	2020
Asthma	\$493	\$538	\$166	\$182
Cardiovascular Diseases (heart diseases, stroke and hypertension)	\$6,393	\$7,076	\$686	\$760
Diabetes	\$2,599	\$2,869	\$289	\$319
TOTAL FOR SELECTED CONDITIONS	\$9,485	\$10,483	\$1,141	\$1,260

The costs associated with chronic conditions are typically calculated by individual disease, as shown in the above exhibit. Traditional case and disease management programs similarly 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. ¹¹ 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

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¹⁰ Expenditure estimates developed using CDC Chronic Disease Cost Calculator.

¹¹ Wagner, E.H., "Chronic Disease Management: What Will It Take to Improve Care for Chronic Illness?," *Effective Clinical Practice*, 1:2-4 (1998).

care and the establishment of clinical information systems to track patient care are also components vital to improving chronic illness management.

Exhibit 1-3 illustrates the basic components and interrelationships of the Chronic Care Model.

The Chronic Care Model Community **Health Systems** Resources and Policies **Organization of Health Care** Self-Clinical Delivery Decision Management Information System Support Support Design Systems Informed, Prepared, Productive Proactive Activated Interactions Practice Team Patient

Exhibit 1-3 - The Chronic Care Model

Improved Outcomes

Developed by The MacColl Institute ® ACP-ASIM Journals and Books

Development of a Strategy for Holistic Chronic Care

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 and diabetes. The program would address the health needs of chronically ill SoonerCare members while reducing unnecessary medical expenditures at a time of significant fiscal constraints.

In response, the OHCA developed the SoonerCare Health Management Program, with the stated goals of:

- Evaluating and managing participants with chronic conditions;
- Improving participants' health status and medical adherence;
- Increasing participant disease literacy and self-management skills;
- Coordinating and reducing unnecessary or inappropriate medication usage by participants;
- Reducing hospital admissions and emergency department use by participants;
- Improving primary care provider adherence to evidence-based guidelines and best practices measures;
- Coordinating participant care, including the establishment of coordination between providers, participants and community resources;
- Regularly reporting clinical performance and outcome measures;
- Regularly reporting SoonerCare health care expenditures of participants; and
- Measuring provider and participant satisfaction with the program.

"First Generation" SoonerCare HMP

The OHCA moved from concept to reality by creating a program that offered nurse care management to qualifying members with one or more chronic conditions. The program also offered practice facilitation and education to primary care providers treating the chronically ill.

The OHCA contracted with a vendor through a competitive bid process to implement and operate the SoonerCare HMP. Telligen¹² 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 provided 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 DXC, the OHCA's Medicaid fiscal agent, at the time of the SoonerCare HMP's development. The OHCA 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, as well as their potential for improvement through care management.

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¹² Prior to August 2011, Telligen was known as the Iowa Foundation for Medical Care.

Nurse Care Management

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

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

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

Practice Facilitation and Provider Education

Selected participating providers received practice facilitation through the SoonerCare HMP. Practice facilitators collaborated 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 targeted primary care providers throughout the state who were treating patients with chronic illnesses. The program incorporated elements of the Chronic Care Model by inviting primary care practices to engage in collaboratives focused on health management and evidence-based guidelines.

Program Performance

The first-generation model of the SoonerCare HMP operated from February 2008 through June 2013. PHPG conducted a five-year evaluation of the first-generation program, focusing on the program's impact on member behavior (e.g., self-management of chronic conditions), quality of care, service utilization and cost. PHPG documented significant positive outcomes attributable to both program components.

In the final evaluation report issued in 2014, PHPG concluded that the program had achieved high levels of satisfaction among participants, both members and providers; had improved quality of care; reduced inpatient and emergency department utilization versus what would have occurred absent the program; and saved \$182 million over five years, even after accounting for program administrative costs. PHPG also concluded that, "the OHCA has laid a strong foundation for the program's second-generation model, which is designed to further enhance care for members with complex/chronic conditions and to generate additional savings in the form of avoided inpatient stays, emergency department visits and other chronic care service costs."

"Second Generation" SoonerCare HMP & OHCA Chronic Care Unit (CCU)

As the contractual period for the first generation SoonerCare HMP was nearing its end, the OHCA began the process of examining how the program could be enhanced for the benefit of both members and providers. The OHCA and Telligen observed that a significant amount of the nurse care managers' time was being spent on outreach and scheduling activities, particularly for Tier 1 participants. The OHCA also observed that nurse care managers tended to work in isolation from primary care providers, although coordination did improve somewhat in the program's later years, as documented in provider survey results.

Health Coaching Model

To enhance member identification and participation, as well as coordination with primary care providers, the OHCA elected to replace centralized nurse care management services with registered nurse health coaches embedded at primary care practice sites. The health coaches would work closely with practice staff and provide coaching services to participating members. Health coaches could either be dedicated to a single practice with one or more providers or shared between multiple practice sites within a geographic area¹³.

Health coaches would use evidence-based concepts such as motivational interviewing and member-driven action planning principles to impart changes in behaviors that impact chronic disease care.

Practice facilitation would continue in the second generation HMP but would become more diverse, encompassing both traditional full practice facilitation and more targeted services such as academic detailing focused on specific topics and preparing practices for health coaches.

Transition from First Generation HMP

At the time of the transition from the first to second generation HMP, participants in nurse care management receiving care in a qualifying practice were offered the opportunity to transition to a health coach. Participants not aligned with a qualifying practice were given the opportunity to work with a new telephonic Chronic Care Unit (CCU) operated directly by the OHCA.

Post-Transition HMP and CCU Enrollment

Post-transition, Telligen continues to identify HMP candidates from the SoonerCare Choice population through analysis of MEDai data. Providers also refer patients to Telligen for review and possible enrollment into the SoonerCare HMP.

¹³ The description of Health Coaching and second generation Practice Facilitation are taken from the OHCA's October 2012 RFP for a second generation Health Management Program contractor.

SoonerCare Choice and SoonerCare Traditional members both are eligible for participation in the SoonerCare CCU. The SoonerCare CCU works with members who self-refer or are referred by a provider or another area within the OHCA, such as care management, member services or provider services.

The CCU also is responsible for:

- Members with hemophilia or sickle cell anemia, even if the member otherwise would be enrolled in the SoonerCare HMP¹⁴.
- Members identified as high utilizers of the emergency department¹⁵.
- Members undergoing bariatric surgery¹⁶.
- Members with hepatitis-C receiving treatment and whose treating provider has referred them for case management.
- Members identified through a Health Risk Assessment (HRA), which SoonerCare
 applicants are given the option of completing as part of the online enrollment process.
 Based on responses to the HRA, members can be referred to different programs for
 assistance or case management, including the SoonerCare CCU.

The OHCA sends weekly updates of newly-opened CCU cases to Telligen. This ensures that there is no duplication in enrollment.

SoonerCare Chronic Care Unit

Under the SoonerCare CCU, OHCA registered nurses provide telephonic case management to participating members. Similar to the health coaching model, CCU RNs use motivational interviewing with program participants to assess their needs and develop an action plan for improving self-management skills and health.

The RNs work to address the health status, health literacy, behavioral health and prescription drug utilization of participants through care coordination, self-management principles and behavior modification techniques. The ongoing case management typically includes one or two monthly telephone contacts, depending on the member's level of need.

SoonerCare CCU Operations

The CCU in SFY 2017 consisted of six employees. Four front-line nurses (Exceptional Needs Coordinators, or ENCs) provide telephonic case management. The unit also includes a supervisor

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¹⁴ Although small in numbers, the health needs and costs of these populations are substantial. For example, in SFY 2014, CCU participants with hemophilia incurred average PMPM costs of \$16,700, primarily to cover the cost of anti-coagulant drugs.

¹⁵ The CCU evaluation includes ED visit rate data across all participants.

¹⁶ The average CCU caseload for this population is approximately 10 patients.

and a senior ENC responsible for training new staff, assisting other ENCs with complex cases and managing a partial caseload. The unit manages 575 - 600 members at any given time.

Characteristics of CCU Participants

During SFY 2017, a total of 1,832 members were enrolled in the SoonerCare CCU for at least part of one month, up from 1,274 in the prior year. PHPG, in consultation with the OHCA, removed certain groups from the utilization, expenditure and quality of care portions of the evaluation to improve the integrity of the results. Specifically:

- Members who were enrolled for fewer than three months in SFY 2017.
- Members who were enrolled for three months or longer, but who also were enrolled in the SoonerCare HMP for a portion of SFY 2017, if their HMP tenure exceeded their CCU tenure.
- Members receiving disease management through Oklahoma University's Harold Hamm Diabetes Center, to isolate the impact of the SoonerCare CCU from activities occurring at the center ¹⁷.
- Members enrolled in a Health Access Network for three months or longer, to isolate the impact of the SoonerCare CCU from HAN care management activities¹⁸.

The revised evaluation dataset included 330 SoonerCare CCU participants, down from 529 in the SFY 2016 evaluation and nearly equal to the 328 in the SFY 2015 evaluation. The decline in the CCU evaluation data set was driven by a commensurate increase in the number of members coenrolled in a Health Access Network.

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¹⁷ There were 10 members who received services from the center and who also were enrolled in either the SoonerCare HMP or CCU.

¹⁸ There were 506 members aligned with a HAN PCMH provider for three months or longer who also were enrolled in either the SoonerCare HMP or CCU at some point during the year. The corresponding figure in SFY 2016 was 439.

Participants by Gender and Age

Most CCU participants are women, with females outnumbering males by 24 percentage points (Exhibit 1-4).

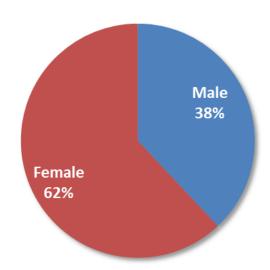


Exhibit 1-4 – Gender Mix for SoonerCare CCU Participants

Not surprisingly, SoonerCare CCU participants are older than the general Medicaid population. Only eight percent of SoonerCare CCU participants in SFY 2017 were under the age of 21, compared to approximately 65 percent of the general SoonerCare population (Exhibit 1-5 on the following page).¹⁹

The percentage of SoonerCare CCU participants ages 50 and older increased from 37 percent in SFY 2016 to 47 percent in SFY 2017, while the two youngest age cohorts decreased from a combined 33 percent to a combined 22 percent. The SFY 2017 age distribution more closely resembled the distribution found in SFY 2015, when 50 percent of participants were in the oldest age cohort and 22 percent in the youngest two cohorts.

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¹⁹ Source for total SoonerCare percentage: OHCA March 2018 Enrollment Report.

Under 21 8% 21 to 34 14% 50 and Older 47% 35 to 49 31%

Exhibit 1-5 – Age Distribution for SoonerCare CCU Participants

Participants by Place of Residence

Sixty percent of SoonerCare CCU participants resided in rural Oklahoma in SFY 2017, while 40 percent resided in urban counties comprising the greater Oklahoma City, Tulsa and Lawton metropolitan areas. The corresponding percentages in SFY 2016 were 52 percent rural and 48 percent urban (Exhibit 1-6). By contrast, 42 percent of the general SoonerCare population resides in rural counties and 58 percent in urban counties²⁰.

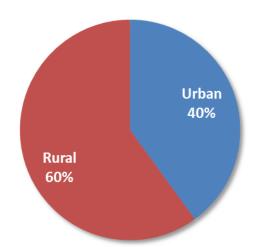


Exhibit 1-6 - SoonerCare CCU Participants by Location: Urban/Rural Mix

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²⁰ Source: SoonerCare Fast Facts. Urban counties include Canadian, Cleveland, Comanche, Creek, Logan, McClain, Oklahoma, Osage, Rogers, Tulsa and Wagoner.

Participants by Most Common Diagnostic Categories²¹

CCU participants are treated for numerous chronic and acute physical conditions. The most common diagnostic category among participants in SFY 2017 was disease of the musculoskeletal system, which includes osteoarthritis, other types of arthritis, backbone disease, rheumatism and other bone and cartilage diseases and deformities (Exhibit 1-7).

Two behavioral health categories also were included among the top five, along with diabetes and anemia. Coagulation defect was the sixth most common diagnostic category, reflecting the enrollment of members with hemophilia into the CCU. The remaining four categories included a mix of one acute and three chronic conditions. The top ten categories accounted for 91 percent of the SoonerCare CCU population.

The composition of the top 10 categories was unchanged from prior years. The percentages also were nearly identical, with conditions shifting in most cases by less than one percentage point.

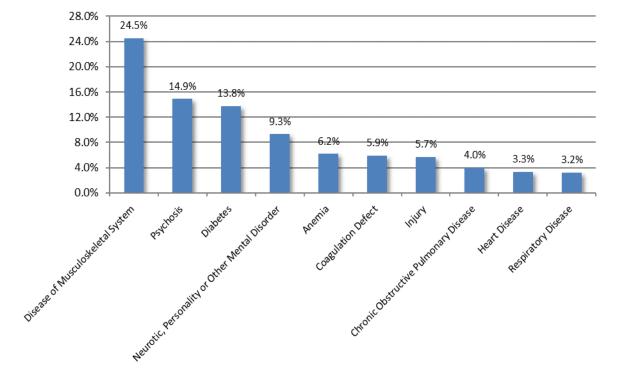


Exhibit 1-7 – Most Common Diagnostic Categories for CCU Participants

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²¹ Ranking of most common diagnoses calculated using primary diagnosis code from paid claims.

Participants by Most Expensive Diagnostic Categories²²

Disease of the musculoskeletal system also was the most expensive diagnostic category in SFY 2017 based on paid claim amounts, followed by the same remaining nine categories from the prior exhibit, although in slightly different order (Exhibit 1-8). The top ten most expensive disease categories accounted for 79 percent of the population. The ranking and percentages were again nearly identical to those reported in prior years.

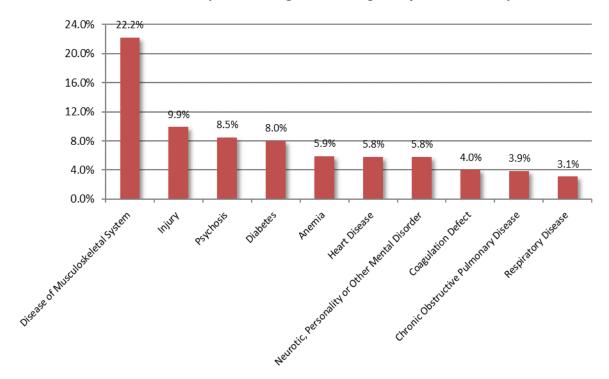


Exhibit 1-8 – Most Expensive Diagnostic Categories for CCU Participants

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²² Ranking of most costly diagnoses calculated using primary diagnosis code from paid claims.

Co-morbidities among Participants

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

PHPG examined the number of physical chronic conditions per participant and found that over 88 percent in SFY 2017 had at least two of six high priority chronic physical conditions²³ (asthma, COPD, coronary artery disease, diabetes, heart failure and hypertension) (Exhibit 1-9). The SFY 2017 distribution was very similar to the distribution in prior years.

Exhibit 1-9 – Number of Physical Health Chronic Conditions (Six Priority Conditions)



4 conditions, 22.5%

5 conditions, 13.6% 2 conditions,

3 conditions, 21.5%

20.1%

²³ These conditions are used by MEDai as part of its calculation of chronic impact scores.

Eighty percent of the participant population in SFY 2017 also had both a physical and behavioral health condition. Among the six priority physical health conditions, the co-morbidity prevalence ranged from approximately 88 percent in the case of persons with COPD to 67 percent among persons with coronary artery disease (Exhibit 1-10).²⁴ The percentages once again were almost unchanged from prior years.

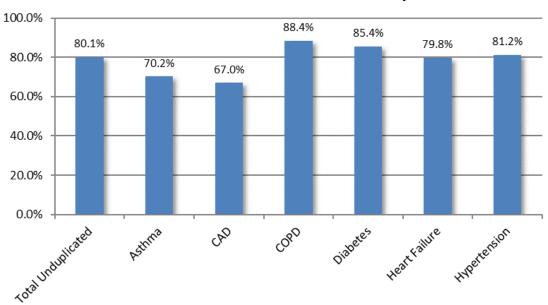


Exhibit 1-10 - Behavioral Health Co-morbidity Rate

Conclusion

Overall, CCU participants demonstrate the characteristics expected of a population that could benefit from care management. Most have two or more chronic physical health conditions, often coupled with serious acute conditions. The population also has significant behavioral health needs that can complicate adherence to guidelines for self-management of physical health conditions and maintaining a healthy lifestyle.

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²⁴ 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.

SoonerCare CCU Independent Evaluation

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

- 1. Participant satisfaction and perceived health status;
- 2. Participant self-management of chronic conditions;
- Quality of care, as measured by participant utilization of preventive and chronic care management services and adherence to national, evidence-based disease management practice guidelines; and
- 4. Cost effectiveness, as measured by avoidance of unnecessary service utilization (e.g., inpatient days, emergency department visits) and associated expenditures, while taking into account program administrative costs.

PHPG is presenting evaluation findings in a series of annual reports to be issued over a five-year period. This is the fourth Annual Evaluation report addressing progress toward achievement of program objectives.

The specific methodologies employed and time periods addressed are described within each chapter of the evaluation. In general, utilization and expenditure findings are for years one through four the program, covering July 2013 to June 2017 (SFY 2014, 2015, 2016 and 2017).

Member and provider survey data is being collected on a continuous basis. Findings in this report are for surveys conducted from February 2015 to February 2018.

CHAPTER 2 – SOONERCARE CCU PARTICIPANT SATISFACTION

Introduction

Participant satisfaction is a key component of SoonerCare CCU performance. If participants are satisfied with their experience and value its worth, they are likely to remain engaged and focused on improving their self-management skills and adopting a healthier lifestyle. Conversely, if participants do not see a lasting value to the experience, they are likely to lose interest and lack the necessary motivation to follow coaching recommendations.

Satisfaction is measured through participant telephone surveys. PHPG attempts to conduct an initial survey with all SoonerCare CCU participants and attempts to re-survey all participants who complete an initial survey after an additional six months in the program to identify any changes in perceptions over time.

Initial Survey

Initial survey data collection began in late February 2015. At that time, the OHCA provided a roster of all participants dating back to the start of the program in July 2013. The OHCA periodically updates the roster and, as of February 2018 has provided contact information for 3,876 individuals.

PHPG mails introductory letters to all CCU participants, informing them that they will be contacted by telephone to complete a survey asking their opinions of the CCU program. Surveyors make multiple call attempts at different times of the day and different days of the week before closing a case.

The survey is written at a sixth-grade reading level and includes questions designed to garner meaningful information on member perceptions and satisfaction. The areas explored include:

- Program awareness and engagement status
- Decision to enroll in the SoonerCare CCU
- Experience with CCU nurse and satisfaction
- Overall satisfaction with the SoonerCare CCU
- Health status and lifestyle

Six-month Follow-up Survey

Six-month follow-up survey data collection activities began in early September 2015. The follow-up survey covers the same areas as the initial survey, to allow for comparison of participant responses across the two surveys.

The survey also includes questions for respondents who report having voluntarily disenrolled from the SoonerCare CCU since their initial survey. Respondents are asked to discuss the reason(s) for their decision to disenroll.

Survey Population Size, Margin of Error and Confidence Levels

The SFY 2014 evaluation report included data from 130 initial surveys conducted during a tenweek period, from late February 2015 through April 2015. The SFY 2015 evaluation included data from an additional 387 initial surveys conducted from May 2015 through April 2016, as well as data from 112 six-month follow-up surveys.

The SFY 2016 evaluation included data from 264 initial surveys conducted from May 2016 through April 2017. The SFY 2016 evaluation also included data from 181 six-month follow-up surveys.

The SFY 2017 evaluation includes data from 253 initial surveys conducted from May 2017 through February 2018. The SFY 2017 evaluation also includes data from 158 six-month follow-up surveys. (These survey counts are prior to the exclusions described below.)

The survey results are based on a subset of the total SoonerCare CCU 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., "+/- 10 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 the survey 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 2-1 on the following page presents the sample size and margin of error for each of the surveys. (Sample size represents all surveys conducted since the start of the evaluation in February 2015.) 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 2-1 – Survey Sample Size and Margin of Error

Survey	Sample Size	Confidence Level	Margin of Error
Initial	1,034	95%	+/- 2.61%
Six-month Follow-up	451	95%	+/- 4.34%

SoonerCare CCU Participant Survey Findings

Respondent Demographics

Initial Survey Respondents

The SoonerCare CCU initial survey respondents in aggregate included 643 females (62 percent) and 391 males (38 percent).

The majority of surveys (902 out of 1,034, or 87 percent) were conducted with the actual SoonerCare CCU participant. The remaining surveys were conducted with a relative of the participant, primarily parents/guardians of minors, but also a small number of spouses, siblings and adult children of members.

The initial survey targeted members who were still active participants in the SoonerCare CCU. After screening out persons no longer participating in the program (including deceased members), the initial survey respondent sample included 649 persons.

Respondent tenure in the program among the 902 active participants ranged from less than one month to more than six months (Exhibit 2-2 on the following page).

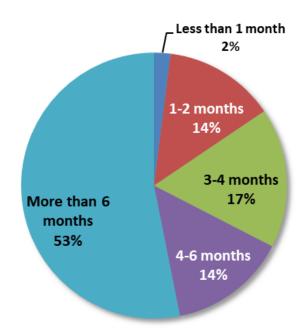


Exhibit 2-2 – Respondent Tenure in SoonerCare CCU – Initial Survey

Follow-up Survey Respondents

The demographics of the follow-up survey population were similar to the initial survey group. The SoonerCare CCU follow-up survey respondents included 266 females (55 percent) and 182 males (45 percent)²⁵.

The follow-up survey included both 409 active participants and 33 persons who reported having disenrolled and who were asked about their disenrollment decision. (The remainder either had lost SoonerCare eligibility or were uncertain of their current enrollment status and were not asked additional questions.)

Respondent tenure in the program among the 409 active participants was at least six months, with the largest segment reporting enrollment of more than twelve months in duration (Exhibit 2-3 on the following page).

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²⁵ Gender was not recorded for three respondents.

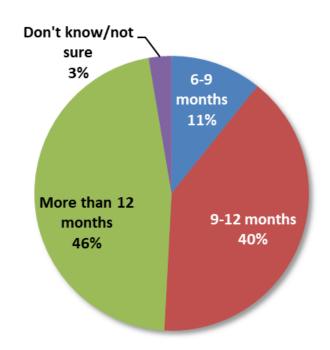


Exhibit 2-3 – Respondent Tenure in SoonerCare CCU – Follow-up Survey

Key findings for the initial and follow-up surveys are discussed below. Findings are presented in aggregate for all initial survey respondents interviewed since February 2015. The aggregate initial survey results also are broken-out into three subgroups: February 2015 – April 2015 respondents (data for which was originally included in the SFY 2014 evaluation report); May 2015 – April 2016 respondents (data for which was originally included in the SFY 2015 evaluation report); May 2016 – April 2017 respondents (data for which was originally included in the SFY 2016 evaluation report); and May 2017 – February 2018²⁶. This segmentation allows for identification of any emerging trends with respect to new participant perceptions.

Follow-up survey data is presented alongside initial survey data as applicable. This allows for comparison of program perceptions between participants based on their tenure.

Copies of the survey instruments are included in Appendix A. The full set of responses is presented in Appendix B.

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²⁶ PHPG concluded SFY 2017 evaluation survey activities in February, rather than April, as a sufficient number of surveys had been completed to allow work to begin on the SFY 2017 evaluation report. PHPG and the OHCA are committed to publishing findings at the earliest achievable date.

Primary Reason for Enrolling

The SoonerCare CCU seeks to teach participants how to better manage their chronic conditions and improve their health. These were two of the primary reasons cited by participants who had a goal in mind when enrolling; another reason was to have someone to call regarding health-related questions. However, 32 percent of the respondents enrolled simply because they were asked (Exhibit 2-4).

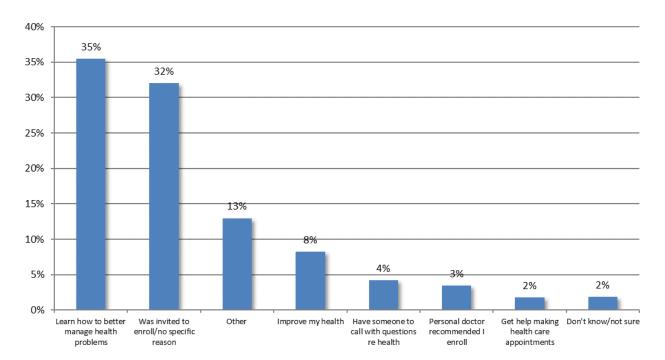


Exhibit 2-4 – Primary Reason for Enrolling in SoonerCare CCU – Initial Survey (Aggregate)²⁷

The top reasons cited shifted across survey time periods. The most significant change occurred within the "other" category, which accounted for fewer than one percent of responses in the first survey time period but rose to over 32 percent in the most recent period. Most of the increase was attributable to persons who stated they enrolled to get help managing hepatitis C medication; this function was added to the CCU subsequent to the program's implementation²⁸.

The frequency with which "improve my health" was cited also increased across survey groups, while "learning how to better manage health problems" and the ability to "have someone to call with questions regarding health" both decreased (Exhibit 2-5 on the following page).

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²⁷ This question was not asked on the follow-up survey.

²⁸ The "other" category also included persons preparing for gastric bypass surgery and persons getting assistance in managing mental health needs.

Exhibit 2-5 – Primary Reason for Enrolling in SoonerCare CCU – Initial Survey (Longitudinal)

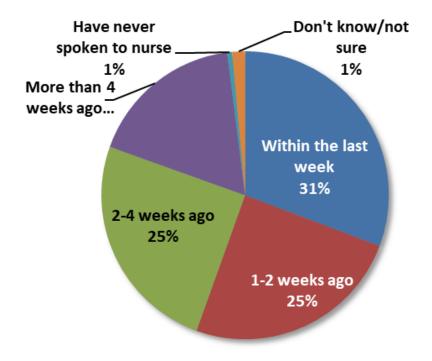
	F	Primary Reason	n for Enrolling	(Percent Namin	g)
Reason	Feb – Apr 2015	May 2015 – Apr 2016	May 2016 – Apr 2017	May 2017 – Feb 2018	Aggregate
Learn how to better manage health problems	34.9%	39.4%	41.3%	25.7%	35.5%
Was invited to enroll/no specific reason	34.9%	38.2%	28.9%	25.7%	32.0%
3. Other	0.9%	3.7%	10.1%	32.4%	13.0%
4. Improve my health	3.8%	5.8%	11.5%	10.3%	8.2%
5. Have someone to call with questions regarding health	9.4%	5.2%	2.3%	2.4%	4.2%
Personal doctor recommended I enroll	12.3%	2.2%	2.3%	2.4%	3.4%
7. Don't know/not sure	1.9%	3.7%	1.4%	0.0%	1.9%
8. Get help making personal health care appointments	1.9%	1.8%	2.3%	1.2%	1.9%

CCU Nurse Contact

The CCU nurse is synonymous with the SoonerCare CCU for most participants. Survey respondents were asked a series of questions about their interaction with the CCU nurse, starting with their most recent contact.

Fifty-six percent of initial survey respondents reported speaking to their CCU nurse within the previous two weeks (Exhibit 2-6).

Exhibit 2-6 – Most Recent Contact with CCU Nurse – Initial Survey (Aggregate)



The percentage reporting contact within the past two weeks was consistent across time periods for the initial survey. However, follow-up survey respondents were more likely to report that their most recent contact occurred more than four weeks ago. The longer interval may reflect a reduced need for very frequent contacts with participants who have been enrolled for a significant period of time (Exhibit 2-7).

Exhibit 2-7 – Most Recent Contact with CCU Nurse – Initial Survey (Longitudinal) & Follow-up

		Last Time Spoke with CCU Nurse											
			Initial Surve	еу				Follow-	up Survey				
Time Elapsed	Feb – Apr 2015	May 2015 – Apr 2016	May 2016 – Apr 2017	May 2017 – Feb 2018	Aggregate		May 2015 – Apr 2016	May 2016 – April 2017	May 2017 – Feb 2018	Aggregate			
Within last week	33.7%	31.5%	28.6%	30.4%	30.7%		29.1%	20.0%	17.3%	21.3%			
1 to 2 weeks ago	28.7%	28.5%	21.2%	21.3%	24.8%	-	8.7%	24.7%	10.9%	15.4%			
2 to 4 weeks ago	23.8%	20.9%	26.3%	29.6%	25.0%		18.4%	23.3%	28.2%	24.0%			
More than 4 weeks ago	12.9%	15.8%	23.0%	17.0%	17.5%		39.8%	31.3%	42.3%	37.7%			
Have never spoken to CCU nurse	0.0%	0.3%	0.5%	1.2%	0.6%		1.0%	0.0%	0.0%	0.2%			
Don't know/not sure/no response	1.0%	3.0%	0.5%	0.4%	1.4%		2.9%	0.7%	1.3%	1.5%			

Over 60 percent of respondents were able to name their CCU nurse, suggesting that participants have formed a strong connection with the program²⁹ (Exhibit 2-8).

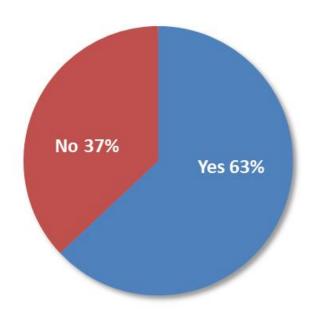


Exhibit 2-8 – Able to Name CCU Nurse – Initial Survey (Aggregate)

The portion able to name their CCU nurse increased among initial survey respondents in the most recent survey time period but declined among follow-up survey respondents (Exhibit 2-9).

Exhibit 2-9 – Able to Name CCU Nurse – Initial Survey (Longitudinal) & Follow-up

		Able to Name CCU Nurse									
			Initial Surve	≘y				up Survey			
Response	Feb – Apr 2015	May 2015 – Apr 2016	May 2016 – Apr 2017	May 2017 – Feb 2018	Aggregate		May 2015 – Apr 2016	May 2016 – April 2017	May 2017 – Feb 2018	Aggregate	
Yes	61.5%	62.4%	58.3%	68.4%	63.0%		67.0%	66.0%	59.0%	63.6%	
No	38.5%	37.6%	41.7%	31.6%	37.0%		33.0%	34.0%	41.0%	36.4%	

Note: Percentages on this and other tables may not total to 100 percent due to rounding.

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²⁹ Respondents were asked for a name but PHPG did not verify the accuracy of the information.

CCU nurses are required to provide a contact telephone number to their members. Approximately 95 percent of respondents, both initial and follow-up, confirmed that they were given a number.

Forty-one percent of the initial survey respondents who remembered being given a number stated they had tried to call their CCU nurse at least once (Exhibit 2-10). (One respondent was not sure.)

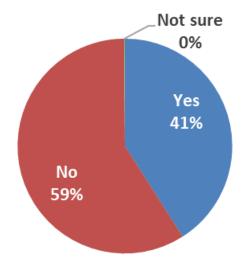


Exhibit 2-10 – Tried to Call CCU Nurse – Initial Survey (Aggregate)

The percentage has been relatively stable across survey time periods and between the initial and follow-up survey groups.

Exhibit 2-11 – Tried to Call CCU Nurse – Initial Survey (Longitudinal) & Follow-up

		Tried to Call CCU Nurse										
			Initial Surv	еу		Follow-up Survey						
Response	Feb – Apr 2015	May 2015 – Apr 2016	May 2016 – Apr 2017	May 2017 – Feb 2018	Aggregate		May 2015 – Apr 2016	May 2016 – April 2017	May 2017 – Feb 2018	Aggregate		
Yes	38.5%	43.9%	36.6%	41.7%	41.0%		41.2%	41.3%	41.1%	41.2%		
No	61.5%	56.1%	62.9%	58.3%	58.9%		58.8%	58.7%	57.5%	58.3%		
Don't know/not sure	0.0%	% 0.0% 0.5% 0.0% 0.1% 0.0% 0.0% 1.4% 0.5%										

Among those who had tried calling, a majority (73 percent of initial survey respondents) reported their most recent call concerned a routine health question (Exhibit 2-12).

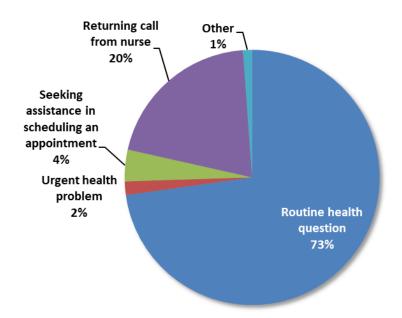


Exhibit 2-12 – Reason for Most Recent Call – Initial Survey (Aggregate)

A nearly identical percentage of follow-up survey respondents also called with a routine health question (Exhibit 2-13).

Exhibit 2-13 – Reason for Most Recent Call – Initial Survey (Longitudinal) & Follow-up

		Reason for Most Recent Call to CCU Nurse											
			Initial Surve	≘y			Follow-	up Survey					
Reason	Feb – Apr 2015	May 2015 – Apr 2016	May 2016 – Apr 2017	May 2017 – Feb 2018	Aggregate		May 2015 – Apr 2016	May 2016 – April 2017	May 2017 – Feb 2018	Aggregate			
Routine health question	73.0%	70.8%	64.9%	81.2%	72.8%		67.5%	76.3%	73.3%	73.0%			
Urgent health problem	2.7%	2.2%	2.7%	0.0	1.7%		2.5%	6.8%	6.7%	5.7%			
Seeking assistance in scheduling an appt.	5.4%	3.6%	6.8%	2.0%	4.0%		10.0%	5.1%	1.7%	5.0%			
Returning call from CCU nurse	16.2%	22.6%	23.0%	16.8%	20.3%		20.0%	10.2%	18.3%	15.7%			
Other	2.7%	0.7%	2.7%	0.0%	1.1%		0.0%	1.7%	0.0%	0.6%			

Eighty-four percent of initial survey respondents who called the number reached their coach immediately or heard back later the same day. Nearly all of those who could recall reported eventually getting a call back (Exhibit 2-14).

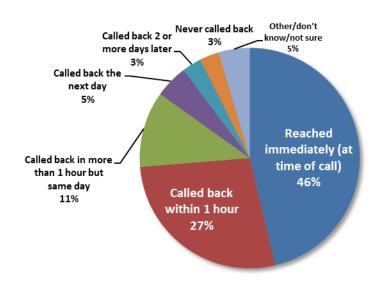


Exhibit 2-14 – CCU Nurse Call-Back Time – Initial Survey (Aggregate)

The same-day call back rate was consistent across surveys and survey time periods (Exhibit 2-15).

Exhibit 2-15 – CCU Nurse Call-Back Time – Initial Survey (Longitudinal) & Follow-up

		CCU Nurse Call-Back Time										
			Initial Surve	≘у				Follow-	up Survey			
Response	Feb – Apr 2015	May 2015 – Apr 2016	May 2016 – Apr 2017	May 2017 – Feb 2018	Aggregate		May 2015 – Apr 2016	May 2016 – April 2017	May 2017 – Feb 2018	Aggregate		
Reached immediately (at time of call)	45.9%	51.8%	42.7%	41.6%	46.3%		45.0%	47.5%	31.7%	40.9%		
Called back within 1 hour	35.1%	21.9%	25.3%	33.7%	27.4%		22.5%	22.0%	21.7%	22.0%		
Called back in more than 1 hour but same day	8.1%	9.5%	13.3%	12.9%	11.1%		7.5%	11.9%	26.7%	16.4%		
Called back the next day	0.0%	7.3%	5.3%	3.0%	4.9%		7.5%	1.7%	5.0%	4.4%		
Called back 2 or more days later	2.7%	3.6%	1.3%	3.0%	2.9%		0.0%	0.0%	1.7%	0.6%		
Never called back	2.7%	2.2%	5.3%	2.0%	2.9%		7.5%	6.8%	6.7%	6.9%		
Other/DK/not sure	5.4%	3.6%	6.7%	4.0%	4.6%		10.0%	10.2%	6.7%	8.2%		

CCU Nurse Activities

CCU nurses are expected to help participants build their self-management skills and improve their health through a variety of activities. Respondents were read a list of activities and asked, for each, whether it had occurred and, if so, how satisfied they were with the interaction or help they received.

Nearly all of the initial survey respondents stated that their CCU nurse asked questions about health problems or concerns, and the great majority stated their nurse also provided answers and instructions for taking care of their health problems or concerns. Large majorities also reported that their nurse answered questions about their health and assisted with medications (Exhibit 2-16). Respondents reported that other activities occurred with less frequency.

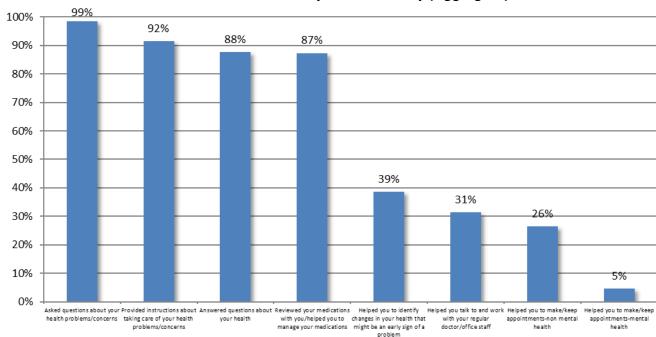


Exhibit 2-16 – CCU Nurse Activity – Initial Survey (Aggregate)

The rate at which activities occurred was generally consistent across initial survey time periods and between the initial and follow-up surveys (Exhibit 2-17 on the following page). However, there were several notable changes.

The portion of respondents in the initial survey group stating they received help talking to and working with their regular doctor and their regular doctor's staff decreased 21 percentage points from the first to fourth survey time periods. The portion of respondents stating they received help in making and keeping medical appointments declined by nearly 24 percentage points over the same period.

Conversely, the portion of respondents in the initial survey group stating that their nurse reviewed and helped to manage medications increased by over 16 percentage points from the first to fourth survey time periods.

Exhibit 2-17 – CCU Nurse Activity – Initial Survey (Longitudinal) & Follow-up

	CCU Nurse Activity Occurrence										
		Initia	al Survey (%	"yes")			Follow-up Su	rvey (% "ye:	5")		
Activity	Feb – Apr 2015	May 2015 – Apr 2016	May 2016 – Apr 2017	May 2017 – Feb 2018	Aggregate	May 2015 – Apr 2016	May 2016 – April 2017	May 2017 – Feb 2018	Aggregate		
Asked questions about your health problems or concerns	99.1%	99.1%	98.2%	98.0%	98.6%	98.0%	100.0%	99.4%	99.3%		
2. Provided instructions about taking care of your health problems or concerns	89.6%	91.4%	89.4%	94.5%	91.6%	93.1%	94.0%	97.4%	95.1%		
3. Helped you to identify changes in your health that might be an early sign of a problem	34.9%	42.5%	34.9%	38.3%	38.6%	42.2%	47.3%	39.7%	43.1%		
4. Answered questions about your health	88.7%	86.5%	85.5%	90.5%	87.7%	89.2%	93.3%	92.9%	92.2%		
5. Helped you talk to and work with your regular doctor and your regular doctor's staff	45.3%	39.1%	21.6%	24.1%	31.4%	26.5%	34.0%	20.6%	27.0%		
6. Helped you to make and keep health care appointments with other doctors, such as specialists, for medical problems	44.3%	31.1%	17.4%	20.6%	26.4%	25.5%	27.3%	19.4%	23.8%		

			CCU Nurse Activity Occurrence										
			Initia	al Survey (%	"yes")			Follow-up Su	rvey (% "ye	5")			
	Activity	Feb – Apr 2015	May 2015 – Apr 2016	May 2016 – Apr 2017	May 2017 – Feb 2018	Aggregate	May 2015 – Apr 2016	May 2016 – April 2017	May 2017 – Feb 2018	Aggregate			
7.	Helped you to make and keep health care appointments for mental health or substance abuse problems	7.5%	4.9%	4.6%	3.2%	4.7%	6.9%	5.3%	3.2%	4.9%			
8.	·	73.6%	88.6%	89.0%	90.1%	87.4%	90.2%	93.3%	89.7%	91.2%			

Respondents were asked to rate their satisfaction with each "yes" activity. The overwhelming majority across all survey groups reported being very satisfied with the help they received (Exhibit 2-18).

The only activity registering somewhat lower "very satisfied" ratings was assistance with mental health/substance abuse problems, particularly among initial and follow-up survey respondents in the second and third time periods. However, nearly all respondents rating this activity reported being either very or somewhat satisfied.

Exhibit 2-18 – Satisfaction with CCU Nurse Activity ("Very Satisfied")³⁰ – Initial Survey (Longitudinal) & Follow-up

		CCU Nurse Activity Satisfaction (Very Satisfied)										
		Initial Survey (% "very satisfied") Follow-up Survey (% "very satisfied")										
Activity	Feb – Apr 2015	May 2015 – Apr 2016	May 2016 – Apr 2017	May 2016 – April 2017	May 2015 - Apr 2016	May 2016 – April 2017	May 2017 – Feb 2018	Aggregate				
1. Asked questions about your health	91.4%	92.2%	92.5%	94.8%	92.9%	91.9%	95.3%	92.9%	93.5%			

³⁰ Satisfaction percentages shown in Appendix B for this and later tables are for all survey respondents, rather than the subset answering "yes" to an activity. The two data sets therefore do not match for these questions.

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		CCU Nurse Activity Satisfaction (Very Satisfied)										
			Initial Su	rvey (% "ve	ry satisfied")		Follow-up Survey (% "very satisfied")					
	Activity	Feb – Apr 2015	May 2015 – Apr 2016	May 2016 – Apr 2017	May 2016 – April 2017	Aggregate	May 2015 – Apr 2016	(% very May 2016 – April 2017	May 2017 – Feb 2018	Aggregate		
	problems or concerns											
2.	Provided instructions about taking care of your health problems or concerns	93.6%	97.0%	94.9%	96.6%	96.0%	93.6%	97.9%	94.6%	95.6%		
3.	Helped you to identify changes in your health that might be an early sign of a problem	97.4%	93.7%	97.5%	100.0%	96.7%	97.7%	97.1%	100.0%	98.3%		
4.	Answered questions about your health	97.9%	96.8%	95.7%	96.9%	96.7%	95.5%	97.8%	97.2%	97.0%		
5.	Helped you talk to and work with your regular doctor and your regular doctor's staff	97.8%	94.0%	88.0%	98.3%	94.4%	100.0%	96.0%	94.4%	96.5%		
6.	Helped you to make and keep health care appointments with other doctors, such as specialists, for medical problems	95.7%	94.3%	93.2%	96.1%	94.8%	92.6%	95.2%	93.8%	94.1%		
7.	Helped you to make and keep health care appointments for mental	90.9%	60.0%	62.5%	88.9%	70.5%	85.7%	63.6%	62.5%	69.2%		

			CCU Nurse Activity Satisfaction (Very Satisfied)										
			Initial Su	rvey (% "ve	ry satisfied")				up Survey satisfied")				
	Activity	Feb – Apr 2015	May 2015 – Apr 2016	May 2016 – Apr 2017	May 2016 – April 2017	Aggregate	May 2015 – Apr 2016	May 2016 – April 2017	May 2017 – Feb 2018	Aggregate			
	health or substance abuse problems												
8.	Reviewed your medications with you and helped you to manage your medications	96.2%	95.9%	94.3%	96.5%	90.7%	93.3%	97.1%	95.6%	95.6%			

This positive attitude carried over to the members' overall satisfaction with their CCU nurses. Over 90 percent of initial survey respondents stated they were "very satisfied" with their nurse (Exhibit 2-19).

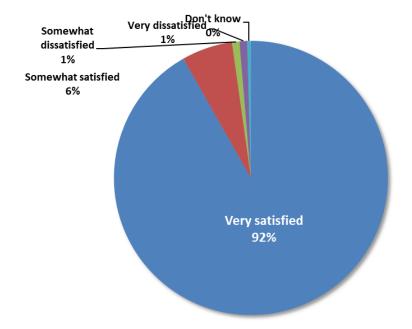


Exhibit 2-19 – Satisfaction with CCU Nurse – Initial Survey (Aggregate)

The high level of satisfaction was consistent across both surveys and all survey time periods. (Exhibit 2-20).

Exhibit 2-20- Satisfaction with CCU Nurse - Initial Survey (Longitudinal) & Follow-up

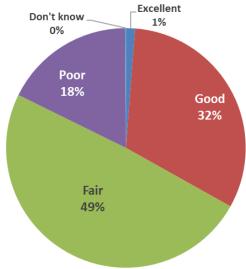
		Satisfaction with CCU Nurse										
			Initial Surve	≘y		Follow-up Survey						
Response	Feb – Apr 2015	May 2015 – Apr 2016	May 2016 – Apr 2017	May 2017 – April 2018	Aggregate		May 2015 – Apr 2016	May 2016 – April 2017	May 2017 – Feb 2018	Aggregate		
Very satisfied	91.5%	90.8%	91.7%	93.3%	91.8%		91.2%	94.6%	92.3%	92.8%		
Somewhat satisfied	6.6%	6.2%	6.0%	5.5%	6.0%		4.9%	3.4%	6.5%	4.9%		
Somewhat dissatisfied	0.9%	1.2%	1.4%	0.0%	0.9%		3.9%	0.7%	0.6%	1.5%		
Very dissatisfied	0.9%	1.5%	0.5%	0.4%	0.9%		0.0%	1.4%	0.6%	0.7%		
Don't know/not sure/no response	0.0%	0.3%	0.5%	0.8%	0.4%		0.0%	0.0%	0.0%	0.0%		

Note: Percentages on this and other tables may not total to 100 percent due to rounding.

Health Status and Lifestyle

The ultimate objectives of the CCU are to assist members in adopting healthier lifestyles and improving their overall health. When asked to rate their current health status, the largest segment of initial survey respondents said "fair" (Exhibit 2-21).

Exhibit 2-21 – Current Health Status – Initial Survey (Aggregate)³¹



21

³¹ One respondent reported not being sure about current health status (0.1 percent of total responses). In exhibit 2-21 this is rounded down to zero percent.

The self-reported health status profile was generally consistent across initial survey time periods and between the initial and follow-up surveys (Exhibit 2-22).

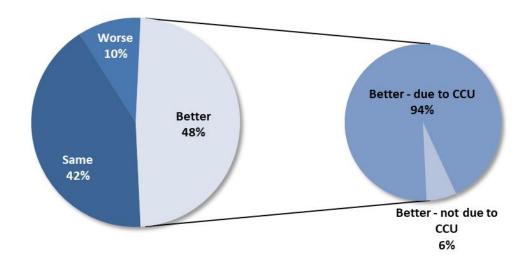
Exhibit 2-22 – Current Health Status – Initial Survey (Longitudinal) & Follow-up

		Health Status								
			Initial Surv	≘y				Follow-	up Survey	
Response	Feb – Apr 2015	May 2015 – Apr 2016	May 2016 – Apr 2017	May 2017 – Feb 2018	Aggregate		May 2015 – Apr 2016	May 2016 – April 2017	May 2017 – Feb 2018	Aggregate
Excellent	1.0%	1.8%	1.4%	0.4%	1.2%		1.0%	0.0%	0.0%	0.2%
Good	41.0%	31.3%	29.7%	30.8%	31.9%		40.2%	31.3%	28.4%	32.4%
Fair	39.0%	44.2%	54.3%	55.3%	49.2%		41.2%	53.3%	61.3%	53.3%
Poor	19.0%	22.4%	14.6%	13.4%	17.6%		17.6%	15.3%	10.3%	14.0%
Don't know/not sure/no response	0.0%	0.3%	0.0%	0.0%	0.1%		0.0%	0.0%	0.0%	0.0%

Note: Percentages on this and other tables may not total to 100 percent due to rounding.

When next asked if their health status had changed since enrolling in the SoonerCare CCU, the largest segment of initial survey respondents (48 percent) said it was "better" while only 10 percent said it was "worse". Among those respondents who reported a positive change, nearly all (94 percent) credited the SoonerCare CCU with contributing to their improved health (Exhibit 2-23).

Exhibit 2-23 – Health Status as Compared to Pre-CCU Enrollment – Initial Survey (Aggregate)



The results were even more encouraging among follow-up survey respondents. Fifty-five percent reported improved health, with 95 percent crediting this improvement to the program (Exhibit 2-24).

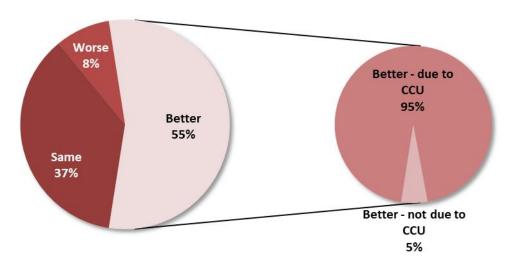


Exhibit 2-24 – Health Status as Compared to Pre-CCU Enrollment – Follow-up Survey

Respondents in the follow-up survey who stated that the SoonerCare CCU contributed to their improvement in health were asked to provide examples of the program's impact. The answers generally referred back to the activities shown in Exhibits 2-17 and 2-18. However, many respondents also simply were grateful to have someone to talk to who they viewed as compassionate and interested in their health.

Respondents also were asked whether their CCU nurse had tried to help them improve their health by changing behaviors and, if so, whether they had in fact made a change. Respondents were asked whether their nurse discussed behavior changes with respect to: smoking, exercise, diet, medication management, water intake and alcohol/substance consumption. If yes, respondents were asked about the impact of the nurse's intervention on their behavior (no change, temporary change or continuing change).

A majority of respondents in both the initial and follow-up survey groups reported discussing each of the activities with their CCU nurse. A significant percentage also reported continuing to make changes with respect to exercise, diet, water intake and medication management. Smaller percentages reported working to reduce tobacco, alcohol or other substance use.

The percentage that reported continuing change increased from the first to fourth initial survey groups for all activities except tobacco cessation. However, the year-over-year trend varied by activity (Exhibit 2-25).

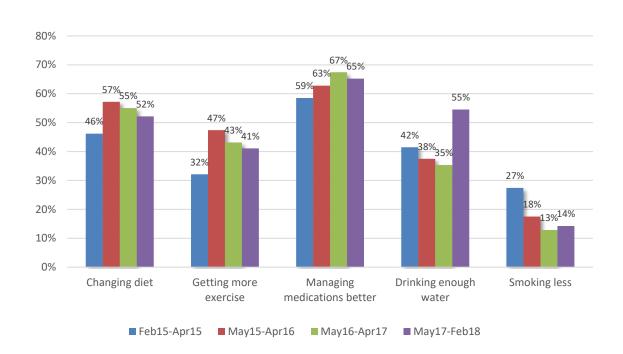


Exhibit 2-25 – Changes in Behavior – "Continuing Change" – Initial Survey³²

The results for the initial survey, in aggregate, and the follow-up survey were very similar across the six behaviors (Exhibit 2-26 on the following page).

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³² The sixth behavior, drinking or using other substances less, was identified as an area of continuing change by 1.7 percent of the initial survey group and 1.0 percent of the follow-up survey group. It is omitted from the exhibit due to the difference in scale versus the other behavior items.

Exhibit 2-26- Changes in Behavior - Initial Survey (Aggregate) & Follow-up

			Discuss	ion and Ch	ange in Be	havior	
Behavior	Survey	N/A – Not Discussed ³³	Discussed - No Change	Discussed - Temporary Change	Discussed - Continuing Change	Discussed – But Not Applicable	Unsure/ No Response
1. Smoking less or using	Initial	19.6%	5.2%	1.9%	16.6%	55.0%	1.7%
other tobacco products less	Follow- up	14.8%	4.4%	1.0%	13.8%	63.3%	2.7%
2. Moving around more or	Initial	20.8%	7.5%	1.6%	42.8%	24.5%	2.8%
getting more exercise	Follow- up	18.3%	5.9%	2.2%	47.4%	23.7%	2.5%
2. Changing your dist	Initial	18.6%	5.3%	1.6%	54.0%	18.0%	2.5%
3. Changing your diet	Follow- up	13.6%	8.1%	3.2%	57.8%	3.0%	14.3%
4. Managing and taking	Initial	11.9%	0.3%	0.7%	64.1%	20.8%	2.2%
your medications better	Follow- up	6.9%	0.5%	0.0%	62.7%	26.9%	3.0%
5. Making sure to drink	Initial	29.4%	6.4%	0.8%	42.2%	17.2%	4.0%
enough water throughout the day	Follow- up	23.0%	9.9%	1.7%	41.0%	19.5%	4.9%
6. Drinking or using other	Initial	29.2%	0.1%	0.0%	1.7%	66.3%	2.7%
substances less	Follow- up	32.4%	0.0%	0.2%	1.0%	63.1%	3.2%

Note: Percentages on this and other tables may not total to 100 percent due to rounding.

3

³³ "N/A – not discussed" includes members for whom no inquiry was made. "Discussed but not applicable" column refers to members for whom an inquiry was made but the category did not apply (e.g., non-tobacco users).

Overall Satisfaction

Survey respondents reported very high levels of satisfaction with the SoonerCare CCU overall, consistent with their opinion of the CCU nurse, who serves as their point of contact with the program (Exhibit 2-27). Ninety-two percent of initial survey respondents reported being "very satisfied". An even higher percentage (96 percent) of initial survey respondents said they would recommend the program to a friend with health care needs like theirs.

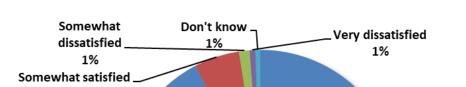


Exhibit 2-27 – Overall Satisfaction with SoonerCare CCU – Initial Survey (Aggregate)

Very satisfied 92%

The "very satisfied" percentage was consistent across both surveys and all survey time periods (Exhibit 2-28 on the following page).

Exhibit 2-28 – Overall Satisfaction with SoonerCare CCU –
Initial Survey (Longitudinal) & Follow-up

		Satisfaction with SoonerCare CCU								
			Initial Surve	≘y				Follow-	up Survey	
Response	Feb – Apr 2015	May 2015 – Apr 2016	May 2016 – Apr 2017	May 2017 – Feb 2018	Aggregate		May 2015 – Apr 2016	May 2016 – April 2017	May 2017 – Feb 2018	Aggregate
Very satisfied	91.5%	92.0%	92.2%	93.3%	92.3%		91.2%	95.3%	92.9%	93.3%
Somewhat satisfied	6.6%	4.3%	5.5%	5.5%	5.2%		6.9%	2.7%	5.8%	4.9%
Somewhat dissatisfied	1.9%	1.8%	1.4%	0.0%	1.2%		2.0%	0.7%	0.6%	1.0%
Very dissatisfied	0.0%	1.2%	0.5%	0.4%	0.7%		0.0%	1.4%	0.6%	0.7%
Don't know/not sure/no response	0.0%	0.6%	0.5%	0.8%	0.6%		0.0%	0.0%	0.0%	0.0%

Note: Percentages on this and other tables may not total to 100 percent due to rounding.

Participant appreciation of the CCU nurse and CCU program overall is further reflected in the types of comments made during the survey. While not all of the comments were positive, the great majority were. For example:

"(My nurse) is my lifeline. I don't know what I would do without her. She explains things in layman's terms so I can understand. She has sent me valuable information on how to manage my diabetes and is a shoulder to cry on too. I am bi-polar and sometimes when she calls, I am in a bad way. She listens to me and makes me feel so much better. I hope the program is not ending!"

"My SoonerCare nurse is the only medical person I trust anymore. I can never get into my doctor for an appointment and she can get me in the same day usually. She has helped me get into see a specialist for breast reduction. This program is the best thing SoonerCare ever did! I love my SoonerCare nurse."

Parent of four children: "(My nurse) has been a lifesaver! I do not have internet and she looks up information for me and does homework on any questions I have. She is very encouraging too. I get down over all the health problems my kids have but she encourages me. They all have a rare connective tissue disorder and sometimes I don't understand what the doctor tells me. I will ask her and she will look it up and call me back right away with the answers. I always have a lot of questions and she is very kind and patient with me."

"(My nurse) helped me quite a lot. Because of her I have been able to make all of my doctor appointments by giving me the information on getting rides. I used to have to ask friends for rides. I would miss a lot of appointments then. She also helped me get dentures which didn't cost me anything. She also called St. John's and got me set up for food and supplements to help me gain weight. She also helped me get treatment for the Hep. C which I didn't think there was anything that could be done. She is a God send!"

"(My nurse) has been very helpful. I am on Hep. C medicine and did not know what other medications I could take with it. He sent me information on my medicine and it had a list of over the counter pill that I could take for headaches. That was very helpful. I am ecstatic over him!"

"(My nurse) is a great help. She stays on top of everything and goes out of her way to make sure everything goes smoothly. She made sure that I got my Hep. C medication on time and helped me with the side effects. She calls and checks on me all the time. If I needed to take a medication I could call her to make sure it didn't interact with my Hep. C meds."

"(My nurse) is really nice. She does not rush through our phone calls. It's nice to have someone check up on you and help keep track of your meds and appointments."

"(My nurse) helped me get a MRI done on my shoulder. SoonerCare kept denying it until he called them. Then all of a sudden, they approved it!"

"(My nurse) is wonderful. She takes her time and makes sure that we understand everything she is telling us. She helps us with our doctor too, if we're having any problems."

"(My nurse) is excellent. I give him A+ in my book! He calls me every week to do a pill count on my Hep. C medications. He is very supportive and has a very positive outlook on life."

"I thank God every day for bringing (my nurse) into my life. She has helped by working with my primary care doctor to find a specialist that can help figure out what the tumors are that are growing on my spine. My family has had a lot of health problems and bad luck this year and (my nurse) has given me the support and help I have needed to go on each day. She has also helped me to lose 80 pounds which has taken some of the pressure off my back. She is very dependable; if she promises to do, or send, something, she does. If she says she is going to call on a certain day, she does. I just wish that I could meet her in person. I feel like she is a dear friend. I tell people how great the program is and how wonderful she is."

In the case of a rare negative comment registered in the most recent survey time period, the dissatisfaction appears related to the nurses' role performing utilization management activities, rather than care management:

"SoonerCare should do away with the program. I had two separate terrible experiences with two different nurses a year apart. My doctor put me in the program so that I could get gastric bypass surgery. Both nurses (names redacted) interfered with the process and I never did get approved for the surgery...SoonerCare should just let my doctor refer me for surgery and let that be it."

Voluntary Disenrollments

Thirty-three respondents in the follow-up survey stated that they had voluntarily disenrolled from the SoonerCare CCU. When asked why they disenrolled, they gave the following reasons:

- Did not wish to self-manage care/receive health education (two respondents)
- Satisfied with current doctor/health access without the program (two respondents)
- Disenrolled by nurse care manager (three respondents)
- Have no health needs (nine respondents)
- Don't know (three respondent)
- Nurse stopped calling (13 respondents)
- Enrolled in Advantage long term care waiver program (one respondent)

One of the reasons cited – nurse stopped calling – arguably was not a voluntary disenrollment, although it was considered such by the respondents.

Summary of Key Findings

SoonerCare CCU members report being very satisfied with their experience in the program and value highly their relationship with the CCU nurse. This was true both at the time of the initial survey and when participants were re-contacted six months later for the follow-up survey.

CHAPTER 3 – SOONERCARE CCU QUALITY OF CARE ANALYSIS

Introduction

SoonerCare CCU nurses devote much of their time to improving the quality of care for program participants. This includes educating participants about adherence to clinical guidelines for preventive care and for treatment of chronic conditions.

PHPG evaluated the impact of SoonerCare CCU on quality of care through calculation of Healthcare Effectiveness Data and Information Set (HEDIS®) measures applicable to the SoonerCare CCU population. The evaluation included 19 diagnosis-specific measures and three population-wide preventive measures:

Asthma measures

- Use of appropriate medications for people with asthma
- o Medication management for people with asthma 50 percent
- Medication management for people with asthma 75 percent

Cardiovascular (CAD and heart failure) measures

- o Persistence of beta-blocker treatment after a heart attack
- Cholesterol management for patients with cardiovascular conditions LDL-C screening

COPD measures

- Use of spirometry testing in the assessment and diagnosis of COPD
- Pharmacotherapy management of COPD exacerbation 14 days
- Pharmacotherapy management of COPD exacerbation 30 days

Diabetes measures

- Percentage of members who had LDL-C test
- Percentage of members who had retinal eye exam performed
- o Percentage of members who had Hemoglobin A1c (HbA1c) testing
- Percentage of members who received medical attention for nephropathy
- Percentage of members prescribed angiotensin converting enzyme inhibitors or angiotensin receptor blockers (ACE/ARB therapy)

Hypertension measures

- Percentage of members who had LDL-C test
- Percentage of members prescribed ACE/ARB therapy
- Percentage of members prescribed diuretics
- Percentage of members prescribed ACE/ARB therapy or diuretics with annual medication monitoring

- Mental Health measures
 - Follow-up after hospitalization for mental illness 7 days
 - Follow-up after hospitalization for mental illness 30 days
- Preventive health measures
 - Adult access to preventive/ambulatory health services
 - Children and adolescents' access to PCPs
 - o Adult body mass index (BMI) assessment

The specifications for each measure are presented in the applicable section.

Methodology

The quality of care analysis targeted SoonerCare CCU participants meeting the criteria outlined in chapter one. The analysis was performed in accordance with HEDIS specifications. PHPG used administrative (claims) data to develop findings for the measures.

PHPG determined the total number of members to be evaluated for each measure (denominator), the number meeting the clinical standard (numerator) and the resultant "percent compliant". The results were compared to compliance rates for the general SoonerCare population (SFY 2017 reporting year), where available, and to national Medicaid MCO benchmarks where SoonerCare data was not available. (SoonerCare rates are shown in black font; national rates, when used, are shown in blue font. In a few instances, neither source was available, as denoted by dash lines.)

Statistically significant differences between CCU participants and the comparison group at a 95 percent confidence level are noted in the exhibits through bold face type of the value shown in the "% point difference" column. However, all results should be interpreted with caution given the small size of the health coaching population.

The number of cases will increase in future years, which will enhance the reliability of the findings. PHPG started reporting compliance rate trends with the SFY 2015 report.

Asthma

The quality of care for CCU participants with asthma (ages 5 to 64) was evaluated through three clinical measures:

- Use of Appropriate Medications for People with Asthma: Percent with persistent asthma
 who had at least one dispensed prescription for inhaled corticosteroids, nedocromil,
 cromolun sodium, leukotriene modifiers or methylaxanthines.
- Medication Management for People with Asthma 50 Percent: Percentage of members
 receiving at least one asthma medication who had an active prescription for an asthma
 controller medication for at least 50 percent (50 percent compliance rate) of the year,
 starting with the first date of receiving such a prescription.
- Medication Management for People with Asthma 75 Percent: Percentage of members receiving at least one asthma medication who had an active prescription at least 75 percent (75 percent compliance rate) of the year, starting with the first date of receiving such a prescription.

The compliance rate for the CCU population exceeded the comparison group rate on two of three measures (Exhibit $3-1^{34}$). The difference was statistically significant for one measure, although this result should be viewed with caution given the small CCU population.

Exhibit 3-1- Asthma Clinical Measures - CCU Participants vs. Comparison Group

Measure		C	CU Participar	its	CCU Participants versus Comparison Group		
		Total Members	Members Compliant	Percent Compliant	Comparison Group - Compliance Rate	CCU - Comparison: % Point Difference	
1.	Use of Appropriate Medications for People with Asthma	10	10	100.0%	81.1%	18.9%	
2.	Medication Management for People with Asthma – 50 Percent	10	5	50.0%	58.4%	(8.4%)	
3.	Medication Management for People with Asthma – 75 Percent	10	4	40.0%	38.2%	1.8%	

³⁴ In the interest of space, the population size for the comparison group is not presented in the tables. However, in all instances, it was many multiples of the CCU population, as would be expected for a total program number. For example, the denominator for asthma measures was 15,674.

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There was improvement in two of the medication management measures from SFY 2015 to SFY 2017. There was 100 percent compliance in both SFY 2015 and SFY 2017 for individuals with asthma who were appropriately prescribed medications (Exhibit 3-2).

Exhibit 3-2 - Asthma Clinical Measures - 2015 - 2017

	١	Percent Complian	2015-2017	
Measure	June 2015 Findings	June 2016 Findings	June 2017 Findings	Comparison % Point Change
Use of Appropriate Medications for People with Asthma	100.0%	100.0%	100.0%	0.0%
Medication Management for People with Asthma – 50 Percent	42.9%	40.0%	50.0%	7.1%
Medication Management for People with Asthma – 75 Percent	28.6%	40.0%	40.0%	11.4%

Cardiovascular Disease

The quality of care for CCU with cardiovascular disease (coronary artery disease, heart failure) was evaluated through two clinical measures:

- Persistence of Beta Blocker Treatment after Heart Attack: Percentage of members 18 and older with prior MI prescribed beta-blocker therapy.
- LDL-C Screening: Percentage of members 18 to 75 who received at least one LDL-C screen.

The compliance rate for the comparison group exceeded the CCU population rate on the one measure (Exhibit 3-3). The difference could not be calculated for statistically significant.

Exhibit 3-3 – Cardiovascular Disease Clinical Measures – CCU Participants vs. Comparison Group

Measure		c	CU Participar	nts	CCU Participants versus Comparison Group		
		Total Members	Members Compliant	Percent Compliant	Comparison Group - Compliance Rate	CCU - Comparison: % Point Difference	
1.	Persistence of Beta Blocker Treatment after Heart Attack	1	0	0.0%	79.9%	(79.9%) ³⁵	
2.	LDL-C Screening	84	61	72.6%			

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³⁵ Statistical significance cannot be calculated on a sample of 1.

There was a small sample size (n=1) for beta blocker treatment after a heart attack in both SFY 2015 and SFY 2017. There was a modest increase in LDL-C screening from SFY 2015 to SFY 2017 (Exhibit 3-4).

Exhibit 3-4 - Cardiovascular Disease Clinical Measures - 2015 - 2017

	١	Percent Complian	2015-2017	
Measure	June 2015 Findings	June 2016 Findings	June 2017 Findings	Comparison % Point Change
Persistence of Beta Blocker Treatment after Heart Attack	0.0%	0.0%	0.0%	0.0%
2. LDL-C Screening	70.5%	72.9%	72.6%	2.1%

COPD

The quality of care for CCU participants with COPD (ages 40 and older) was evaluated through three clinical measures:

- Use of Spirometry Testing in the Assessment/Diagnosis of COPD: Percentage of members who received spirometry screening.
- Pharmacotherapy Management of COPD Exacerbation 14 Days: Percentage of COPD exacerbations for members who had an acute inpatient discharge or ED visit and who were dispensed systemic corticosteroid within 14 days.
- Pharmacotherapy Management of COPD Exacerbation 30 Days: Percentage of COPD exacerbations for members who had an acute inpatient discharge or ED visit and who were dispensed a bronchodilator within 30 days.

The compliance rate for the comparison group exceeded the CCU population rate on all three measures (Exhibit 3-5). The difference was statistically significant for two measures, although this result should be viewed with caution given the small CCU population.

Exhibit 3-5 – COPD Clinical Measures – CCU Participants vs. Comparison Group

Measure		C	CU Participan	its	CCU Participants versus Comparison Group		
		Total Members	Members Compliant	Percent Compliant	Comparison Group - Compliance Rate	CCU - Comparison: % Point Difference	
1.	Use of Spirometry Testing in the Assessment/Diagnosis of COPD	43	6	14.0%	31.6%	(17.6%)	
2.	Pharmacotherapy Management of COPD Exacerbation – 14 Days	45	17	37.8%	65.9%	(28.1%)	
3.	Pharmacotherapy Management of COPD Exacerbation – 30 Days	45	29	64.4%	80.6%	(16.2%)	

The compliance rate for the CCU population increased for all three COPD clinical measures from SFY 2015 to SFY 2017 (Exhibit 3-6).

Exhibit 3-6 - COPD Clinical Measures - 2015 - 2017

	١	Percent Complian	2015-2017	
Measure	June 2015 Findings	June 2016 Findings	June 2017 Findings	Comparison % Point Change
Use of Spirometry Testing in the Assessment/Diagnosis of COPD	12.9%	12.5%	14.0%	1.1%
Pharmacotherapy Management of COPD Exacerbation – 14 Days	35.3%	37.5%	37.8%	2.5%
Pharmacotherapy Management of COPD Exacerbation – 30 Days	61.8%	66.7%	64.4%	2.6%

Diabetes

The quality of care for CCU participants (ages 18 to 75) with diabetes was evaluated through five clinical measures:

- LDL-C Test: Percentage of members who received LDL-C in previous twelve months.
- Retinal Eye Exam: Percentage of members who received at least one dilated retinal eye exam in previous twelve months.
- *HbA1c Test*: Percentage of members who received at least one HbA1C test in previous twelve months.
- *Medical Attention for Nephropathy*: Percentage of members who received medical attention for nephropathy in previous twelve months.
- ACE/ARB Therapy: Percentage of members who received ACE/ARB therapy in previous twelve months.

The compliance rate for the CCU population exceeded the comparison group rate on the four measures having a comparison group percentage (Exhibit 3-7). The difference was statistically significant for three measures.

Exhibit 3-7 – Diabetes Clinical Measures – CCU Participants vs. Comparison Group

	c	CU Participar	nts	CCU Participants versus Comparison Group		
Measure	Total Members	Members Compliant	Percent Compliant	Comparison Group - Compliance Rate	CCU - Comparison: % Point Difference	
1. LDL-C Test	197	140	71.1%	64.6%	6.5%	
2. Retinal Eye Exam	197	76	38.6%	28.0%	10.6%	
3. HbA1c Test	197	161	81.7%	72.8%	8.9%	
4. Medical Attention for Nephropathy	197	158	80.2%	53.1%	27.1%	
5. ACE/ARB Therapy	197	131	67.0%			

The compliance rate for diabetes clinical measures increased slightly for four of the five measures from SFY 2015 to SFY 2017 (Exhibit 3-8).

Exhibit 3-8 - Diabetes Clinical Measures - 2015 - 2017

	ı	2015-2017			
Measure			June 2017 Findings	Comparison % Point Change	
1. LDL-C Screening	71.6%	70.9%	71.1%	(0.5%)	
2. Retinal Eye Exam	37.6%	38.1%	38.6%	1.0%	
3. HbA1c Test	80.9%	80.9%	81.7%	0.8%	
4. Medical Attention for Nephropathy	78.7%	80.0%	80.2%	1.5%	
5. ACE/ARB Therapy	66.0%	66.4%	67.0%	1.0%	

Hypertension

The quality of care for CCU participants with hypertension (ages 18 and older) was evaluated through four clinical measures:

- LDL-C Test: Percentage of members who received LDL-C in previous twelve months.
- ACE/ARB Therapy: Percentage of members who received ACE/ARB therapy in previous twelve months.
- Diuretics: Percentage of members who received diuretic in previous twelve months.
- Annual Monitoring for Patients Prescribed ACE/ARB or Diuretics: Percentage of members prescribed ACE/ARB therapy or diuretic who received annual medication monitoring.

The compliance rate for the comparison group exceeded the CCU population rate on one measure having a comparison group percentage (Exhibit 3-9). The difference was not statistically significant.

Exhibit 3-9 – Hypertension Clinical Measures – CCU Participants vs.

Comparison Group

			CU Participar	its	CCU Participants versus Comparison Group		
IV	easure	Total Members	Members Compliant	Percent Compliant	Comparison Group - Compliance Rate	CCU - Comparison: % Point Difference	
1.	LDL-C Test	321	214	66.7%			
2.	ACE/ARB Therapy	321	210	65.4%			
3.	Diuretics	321	154	48.0%			
4.	Annual Monitoring for Patients Prescribed ACE/ARB or Diuretics ³⁶	142	120	84.5%	87.7%	(3.2%)	

³⁶ Denominator for measure 4 is smaller than numerator for measure 2 because numerator for measure 2 is defined as having at least one prescription active during the year. Denominator 4 is defined as having a prescription active for at least 180 days during the year.

The compliance rate for all four hypertension clinical measures increased slightly from SFY 2015 to SFY 2017 (Exhibit 3-10).

Exhibit 3-10 – Hypertension Clinical Measures - 2015 - 2017

	١	2015-2017		
Measure	June 2015 Findings	June 2016 Findings	June 2017 Findings	Comparison % Point Change
LDL-C Screening	66.4%	66.3%	66.7%	0.3%
2. ACE/ARB Therapy	62.6%	65.0%	65.4%	2.8%
3. Diuretics	46.6%	47.5%	48.0%	1.4%
Annual Monitoring for Patients Prescribed ACE/ARB or Diuretics	83.8%	84.4%	84.5%	0.7%

Mental Health

The quality of care for CCU participants with mental illness (ages six and older) was evaluated through two clinical measures:

- Follow-up after Hospitalization for Mental Illness Seven Days: Percentage of members
 who were hospitalized during the measurement year for the treatment of selected mental
 health diagnoses who had a follow up visit with a mental health practitioner within either
 seven days.
- Follow-up after Hospitalization for Mental Illness 30 Days: Percentage of members who
 were hospitalized during the measurement year for the treatment of selected mental
 health diagnoses who had a follow up visit with a mental health practitioner within 30
 days.

The compliance rate for the CCU population exceeded the comparison group rate on one of two measures (Exhibit 3-11). The difference was not statistically significant for either measure.

Exhibit 3-11 – Mental Health Measures – CCU Participants vs. Comparison Group

Measure		c	CU Participar	CCU Participants versus Comparison Group		
		Total Members	Members Compliant	Percent Compliant	Comparison Group - Compliance Rate	CCU - Comparison: % Point Difference
1.	Follow-up after Hospitalization for Mental Illness – Seven Days	18	8	44.4%	22.6%	21.8%
2.	Follow-up after Hospitalization for Mental Illness – 30 Days	18	8	44.4%	45.2%	(0.8%)

The compliance rate increased moderately for one mental health measure and decreased slightly for the other from SFY 2015 to SFY 2017 (Exhibit 3-12).

Exhibit 3-12 - Mental Health Measures - 2015 - 2017

	١	2015-2017		
Measure	June 2015 Findings	June 2016 Findings	June 2017 Findings	Comparison % Point Change
Follow-up after Hospitalization for Mental Illness – Seven Days	38.5%	40.0%	44.4%	5.9%
Follow-up after Hospitalization for Mental Illness – 30 Days	46.2%	40.0%	44.4%	(1.8%)

Prevention

The quality of preventive care for CCU participants was evaluated through three clinical measures:

- Adult Access to Preventive/Ambulatory Care: Percentage of members 20 years and older who had an ambulatory or preventive care visit during the measurement year.
- Child Access to PCP: Percentage of children 12 months to 19 years old who visited a
 primary care practitioner (PCP) during the measurement year, or if seven years or older,
 in the measurement year or year prior.
- Adult BMI: Percentage of adults 18 to 75 years old who had an outpatient visit where his/her BMI was documented, either during the measurement year or year prior to the measurement year.

The compliance rate for the CCU population exceeded the comparison group rate on all three measures (Exhibit 3-13). The difference was statistically significant in all cases.

Exhibit 3-13 – Preventive Measures – CCU Participants vs. Comparison Group

	CCU Participants			CCU Participants versus Comparison Group	
Measure	Total Members	Members Compliant	Percent Compliant	Comparison Group - Compliance Rate	CCU - Comparison: % Point Difference
Adult Access to Preventive/Ambulatory Care	470	456	97.0%	84.0%	13.0%
2. Child Access to PCP	129	129	100.0%	91.9%	9.1%
3. Adult BMI	456	96	21.1%	10.4%	10.7%

There was 100 percent compliance in both SFY 2015 and SFY 2017 for the measure of child access to PCP (Exhibit 3-14). There was improvement in the compliance rate for adult BMI and no change in the compliance rate for adult access to preventive/ambulatory care from SFY 2015 to SFY 2017.

Exhibit 3-14 - Preventive Measures - 2015 - 2017

	١	2015-2017		
Measure	June 2015 Findings	June 2016 Findings	June 2017 Findings	Comparison % Point Change
Adult Access to Preventive/Ambulatory Care	97.7%	97.3%	97.0%	(0.7%)
2. Child Access to PCP	100.0%	100.0%	100.0%	0.0%
3. Adult BMI	14.2%	13.8%	21.1%	6.9%

Summary of Key Findings

The CCU participant compliance rate exceeded the comparison group rate on 10 of 17 measures for which there was a comparison group percentage. The difference was statistically significant for eight of the 10, suggesting that the program is having a positive effect on quality of care, although there is room for continued improvement.

The most impressive results, relative to the comparison group, were observed for participants with diabetes and with respect to access to preventive care.

The SFY 2017 results were consistent with SFY 2015 and SFY 2016 findings, indicating that the SoonerCare CCU is having a positive, and sustained, impact on quality of care for health coaching participants.

The long-term benefits to participants will continue to be measured through the quality of care longitudinal analysis and through the utilization and expenditure analysis presented in the next chapter.

CHAPTER 4 – SOONERCARE CCU UTILIZATION, EXPENDITURE & COST EFFECTIVENESS ANALYSIS

Introduction

CCU nurse care management, if effective, should have an observable impact on participant service utilization and expenditures. Improvement in quality of care should yield better outcomes in the form of fewer emergency department visits and hospitalizations and lower acute care costs.

PHPG obtained MEDai data for SoonerCare CCU participants, excluding a small number of Medicare/Medicaid dual eligible members; the data includes a twelve-month forecast of emergency department visits, hospitalizations and total expenditures. 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 the program. They serve as benchmarks against which each member's actual utilization and expenditures, post CCU enrollment, can be compared.

At the program level, the expenditure test also must take into account SoonerCare CCU administrative expenses. To be cost effective, actual expenditures must be sufficiently below forecast to cover administrative expenses and yield some level of net savings.

The CCU also is responsible for:

- Members with hemophilia or sickle cell anemia, even if the member otherwise would be enrolled in the SoonerCare HMP.
- Members identified as high utilizers of the emergency department.
- Members undergoing bariatric surgery.
- Members with hepatitis-C receiving treatment and whose treating provider has referred for case management.
- Members identified through a Health Risk Assessment (HRA), which SoonerCare
 applicants are given the option of completing as part of the online enrollment process.
 Based on responses to the HRA, members can be referred to different programs for
 assistance or case management, including the SoonerCare CCU.

These members are enrolled regardless of their MEDai score.

Methodology

PHPG conducted the utilization and expenditure evaluation by comparing participants' actual claims experience to MEDai forecasts for the period following the start date of engagement up to 48 months. Data includes both active participants and persons who have disenrolled from the program.

MEDai forecasts only extend to the first 12 months of engagement. For months 13 to 48, PHPG applied a trend rate to the MEDai data to calculate an estimated PMPM absent SoonerCare CCU enrollment. The trend rate was set equal to the actual PMPM trend for a comparison group comprised of SoonerCare members who were determined to be eligible for the SoonerCare HMP but who declined the opportunity to enroll ("eligible but not engaged")³⁷.

The trend rate was calculated using a roster of "eligible but not engaged" members dating back to the start of the second generation SoonerCare HMP in SFY 2014. Before calculating the trend, PHPG analyzed the roster data and removed members without at least one chronic condition, as well as members with no or very low claims activity. This was done to ensure the comparison group accurately reflected the engaged population.

The evaluation examined participants in six priority diagnostic categories used by MEDai as part of its calculation of the chronic impact score for potential SoonerCare CCU participants: asthma, coronary artery disease (CAD), chronic obstructive pulmonary disease (COPD), heart failure, diabetes mellitus and hypertension³⁸. The evaluation also examined members with hepatitis C and the CCU population as a whole, with one exception.

Participants with hemophilia were excluded based on their extraordinarily high PMPM costs, which averaged \$16,700³⁹. Although few in number, including these participants in the analysis would distort the findings by significantly raising average CCU participant costs. It also is unclear that CCU nurses have the ability to affect these costs, a good portion of which are pharmaceutical in nature, making for an unfair test of the program's effectiveness. (This does not argue against enrolling members with hemophilia in the CCU; these members benefit from assistance in obtaining needed drugs and services, and the OHCA benefits from maintaining current information on their service needs.)

Participants in each of the six diagnostic categories 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

³⁷ The SoonerCare HMP was used as a proxy for the SoonerCare CCU, as there is no equivalent "eligible but not engaged" CCU cohort. The HMP and CCU populations share similar profiles, in terms of chronic conditions. See chapter 1 of the SoonerCare HMP SFY 2015 Evaluation Report and chapter 1 of this report for diagnostic information on the two populations.

³⁸ MEDai examines diagnoses beyond the six listed, but these six are among the most common found among SoonerCare HMP and CCU participants and are significant contributors to member utilization and expenditures. ³⁹ SFY 2014 costs.

greatest medical expenditures during the pre-engaged (1-12 months) and engaged periods. As participants have significant rates of physical co-morbidities, categorizing them in this manner allows for a targeted analysis of both the absolute and relative impact of the CCU on the various chronic impact conditions driving participant utilization.

PHPG developed utilization/expenditure rates using claims with dates of service from SFY 2013 through SFY 2017. (The SFY 2103 data was used for calculation of pre-engagement activity.) The OHCA and HPE (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.

Participants were included in the analysis only if they had three months or more of engagement experience as of June 30, 2017 and had MEDai forecast data available at the time of engagement.⁴⁰

The following data is provided for each of the six diagnoses:

- 1. Number of participants having the diagnosis and portion for which the diagnosis is their most expensive condition;
- Comorbidity rates with other targeted conditions;
- 3. Inpatient days forecast versus actual;
- 4. Emergency department visits forecast versus actual;
- 5. PMPM medical expenditures forecast versus actual;
- 6. Medical expenditures by category of service pre- and post-engagement; and
- 7. Aggregate medical expenditure impact of SoonerCare CCU participation.

Items 3 through 7 also are presented for the SoonerCare CCU population as a whole. Appendix C contains detailed expenditure exhibits.

<u>CCU utilization and expenditure findings should be interpreted with caution, due to the small number of participants within the individual diagnosis categories.</u>

 $^{^{40}}$ See chapter one for information on other exclusions made prior to the utilization/expenditure analysis.

Asthma Population Utilization and Expenditure Evaluation

The SoonerCare CCU in SFY 2017 included 124 participants with an asthma diagnosis⁴¹. Asthma was the most expensive diagnosis at the time of engagement for 38 percent of participants with this diagnosis (Exhibit 4-1).

Exhibit 4-1 – Participants with Asthma as Most Expensive Diagnosis

Participants	Number Most	Percent Most
w/Asthma	Expensive	Expensive
124	47	38%

A significant portion of participants with asthma also were diagnosed with another chronic impact condition, the most common being hypertension and COPD (Exhibit 4-2).

Exhibit 4-2 – Participants with Asthma Co-morbidity with Chronic Impact Conditions

Condition	Percent w/Comorbidity
Asthma	
Coronary Artery Disease	30%
COPD	56%
Diabetes	51%
Heart Failure	20%
Hypertension	75%

⁴¹ All participation and expenditure data in the chapter is for the portion of the SoonerCare CCU population remaining after application of the exclusions described in chapter one.

Utilization

PHPG analyzed inpatient hospital and emergency department utilization rates by comparing MEDai forecasts to actual utilization. Hospital utilization was measured by number of inpatient days 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 the SoonerCare CCU 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. The SoonerCare CCU is intended to be holistic and not limited in its impact to a member's particular chronic condition.

MEDai forecasted that participants with asthma would incur 11,522 inpatient days per 1,000 participants in the first 12 months of engagement⁴². The actual rate was 5,312, or 46 percent of forecast (Exhibit 4-3). (As a point of comparison, the rate for all Oklahomans in 2016 was 562 days per 1,000.⁴³)

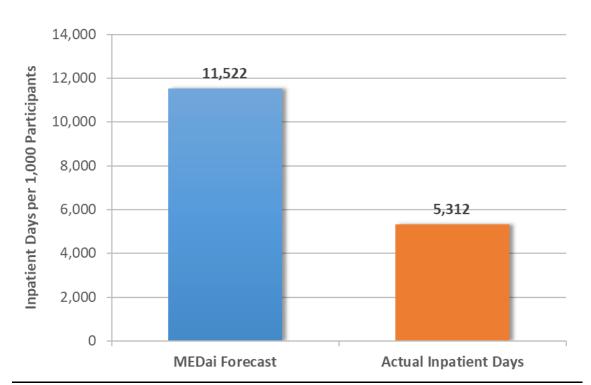


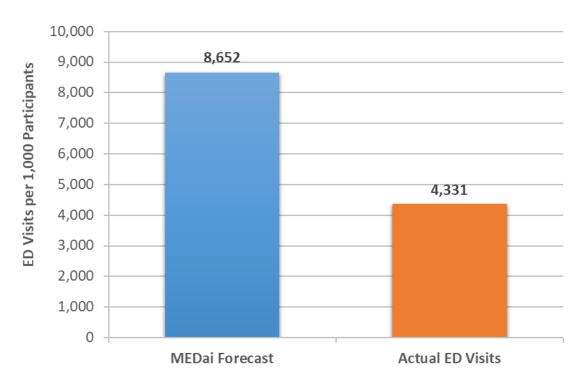
Exhibit 4-3 – Participants with Asthma as Most Expensive Diagnosis
Inpatient Utilization - First 12 Months Following Engagement, per 1,000 Participants

 $^{^{42}}$ All MEDai forecasts assume no intervention in terms of care management. Rate calculated for portion of year that each participant was engaged in program.

⁴³ Source: http://kff.org/other/state-indicator/inpatient-days-by-ownership/ 2016 is the most recent year available.

MEDai forecasted that participants with asthma would incur 8,652 emergency department visits per 1,000 participants in the first 12 months of engagement. The actual rate was 4,331, or 50 percent of forecast (Exhibit 4-4). (As a point of comparison, the rate for all Oklahomans in 2016 was 466 visits per 1,000.⁴⁴)





⁴⁴ Source: http://kff.org/other/state-indicator/emergency-room-visits-by-ownership/ 2016 is the most recent year available.

Medical Expenditures – Total and by Category of Service

PHPG documented total PMPM medical expenditures for participants with asthma during the twelve months prior to engagement and compared actual medical expenditures to forecast for the first twelve months of engagement⁴⁵. MEDai forecasted that participants with asthma would incur an average of \$1,880 in PMPM expenditures in the first 12 months of engagement. The actual amount was \$1,354, or 72% of forecast. For months 13 to 24, the MEDai forecast with trend applied was \$1912 in PMPMP expenditures. The actual amount was \$1,301, or 68% of forecast. For months 25 to 36, the MEDai forecast with trend applied was \$1,954 in PMPM expenditures. The actual amount was \$1,261, or 65% of forecast. For months 37 to 48, the MEDai forecast with trend applied was \$1,975 in PMPM expenditures. The actual amount was \$1,246, or 63% of forecast (Exhibit 4-5).

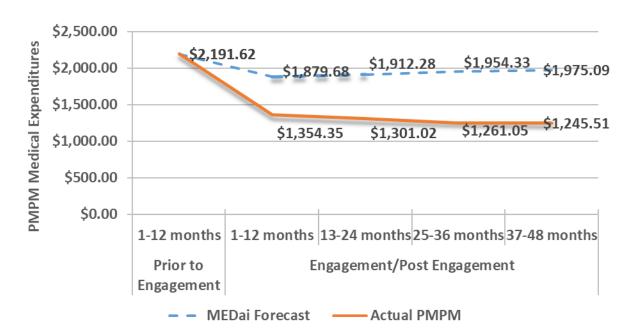


Exhibit 4-5 – Participants with Asthma as Most Expensive Diagnosis
Total PMPM Expenditures

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 $^{^{45}}$ PMPM rate calculated for portion of year that each participant was engaged in program.

At the category-of-service level in the first 12 months of engagement, all expenditures declined, with hospital costs experiencing the greatest drop (Exhibit 4-6).

Exhibit 4-6 – Participants with Asthma as Most Expensive Diagnosis

PMPM Expenditures by Category of Service

Category of Service	PMPM 12 Months Prior to Engagement	PMPM First 12 Months of Engagement	Dollar Change (Engaged minus Prior to Engagement)	Percent Change (As Percent of PMPM Prior to Engagement)
Inpatient Hospital	\$653.25	\$346.38	(\$306.87)	-47%
Outpatient Hospital	\$463.74	\$246.65	(\$217.10)	-47%
Physician	\$416.60	\$301.72	(\$114.89)	-28%
Pharmacy	\$219.61	\$181.42	(\$38.19)	-17%
Behavioral Health	\$181.17	\$138.61	(\$42.56)	-23%
All Other	\$257.24	\$139.57	(\$117.67)	-46%
Total	\$2,191.62	\$1,354.35	(\$837.28)	-38%

Aggregate Dollar Impact

PHPG calculated an aggregate dollar impact for SoonerCare CCU participants with asthma as their most expensive diagnosis by multiplying total months of engagement by average PMPM savings. The resultant savings equaled approximately \$907,000 (Exhibit 4-7).

Exhibit 4-7 – Participants with Asthma as Most Expensive Diagnosis
Aggregate Savings

Engagement Period	Member Months	PMPM Savings (Forecast – Actual)	Aggregate Savings / (Deficit)
First 12 Months	1,078	\$525.33	\$566,310
Months 13 - 24	342	\$611.26	\$209,051
Months 25 - 36	142	\$693.28	\$98,446
Months 37 - 48	46	\$729.58	\$33,560
Total	1,608	\$564.28	\$907,368

Coronary Artery Disease Population Utilization and Expenditure Evaluation

The SoonerCare CCU in SFY 2017 included 84 participants with a coronary artery disease diagnosis (CAD). Coronary artery disease was the most expensive diagnosis at the time of engagement for over 24 percent of participants with this diagnosis (Exhibit 4-8).

Exhibit 4-8 – Participants with CAD as Most Expensive Diagnosis

Participant	Number Most	Percent Most
w/CAD	Expensive	Expensive
84	20	24%

The majority of participants with coronary artery disease also were diagnosed with another chronic impact condition, the most common being hypertension and diabetes (Exhibit 4-9).

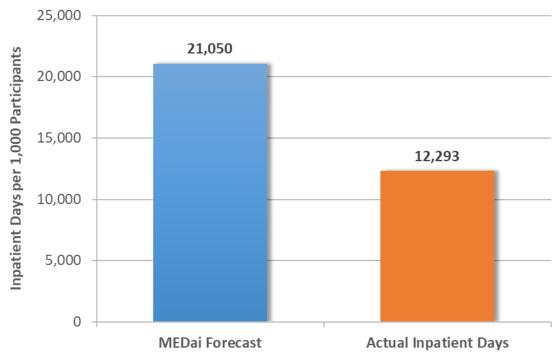
Exhibit 4-9 – Participants with CAD
Co-morbidity with Chronic Impact Conditions

Condition	Percent w/Comorbidity
Asthma	38%
Coronary Artery Disease	
COPD	69%
Diabetes	77%
Heart Failure	37%
Hypertension	95%

Utilization

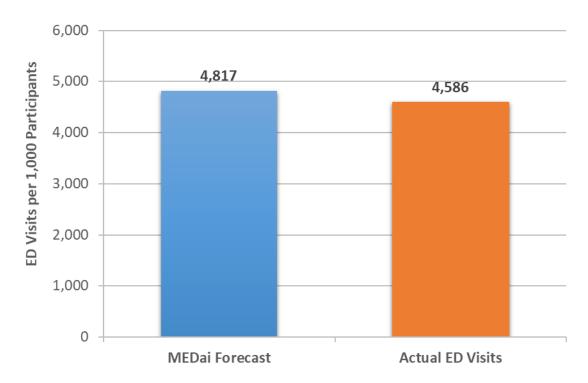
MEDai forecasted that participants with coronary artery disease would incur 21,050 inpatient days per 1,000 participants in the first 12 months of engagement. The actual rate was 12,293, or 58 percent of forecast (Exhibit 4-10).

Exhibit 4-10 – Participants with CAD as Most Expensive Diagnosis Inpatient Utilization - First 12 Months Following Engagement, per 1,000 Participants



MEDai forecasted that participants with coronary artery disease would incur 4,817 emergency department visits per 1,000 participants in the first 12 months of engagement. The actual rate was 4,586, or 95 percent of forecast (Exhibit 4-11).

Exhibit 4-11 — Participants with CAD as Most Expensive Diagnosis Emergency Department Utilization - First 12 Months Following Engagement, per 1,000 Participants



Medical Expenditures - Total and by Category of Service

PHPG documented total PMPM medical expenditures for participants with coronary artery disease during the twelve months prior to engagement and compared actual medical expenditures to forecast for the first twelve months of engagement. MEDai forecasted that participants with coronary artery disease would incur an average of \$3,891 in PMPM expenditures in the first 12 months of engagement. The actual amount was \$3,838, or 99% of forecast. For months 13 to 24, the MEDai forecast with trend applied was \$3,745 in PMPM expenditures. The actual amount was \$3,700, or 99% of forecast. For months 25 to 36, the MEDai forecast with trend applied was \$3,495, or 98% of forecast. For months 37 to 48, the MEDai forecast with trend applied was \$3,487 in PMPM expenditures. The actual amount was \$3,399, or 98% of forecast (Exhibit 4-12).

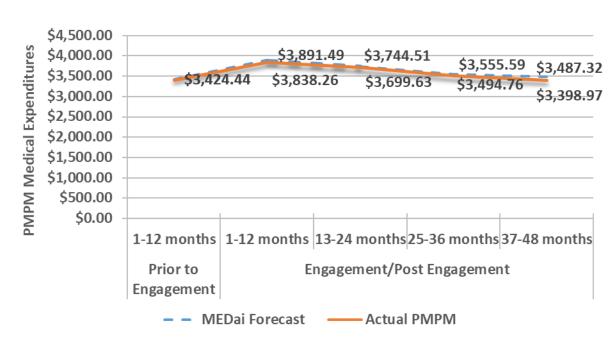


Exhibit 4-12 – Participants with CAD as Most Expensive Diagnosis
Total PMPM Expenditures

At the category-of-service level in the first 12 months of engagement, outpatient hospital expenditures declined, while all other service costs increased (Exhibit 4-13).

Exhibit 4-13 – Participants with CAD as Most Expensive Diagnosis PMPM Expenditures by Category of Service

Category of Service	PMPM 12 Months Prior to Engagement	PMPM First 12 Months of Engagement	Dollar Change (Engaged minus Prior to Engagement)	Percent Change (As Percent of PMPM Prior to Engagement)
Inpatient Hospital	\$1,496.59	\$1,738.45	\$241.86	16%
Outpatient Hospital	\$615.38	\$347.27	(\$268.11)	-44%
Physician	\$592.54	\$669.98	\$77.44	13%
Pharmacy	\$295.24	\$543.51	\$248.26	84%
Behavioral Health	\$117.44	\$138.21	\$20.77	18%
All Other	\$307.25	\$400.84	\$93.59	30%
Total	\$3,424.44	\$3,838.26	\$413.82	12%

Aggregate Dollar Impact

PHPG calculated an aggregate dollar impact for SoonerCare CCU participants with coronary artery disease as their most expensive diagnosis by multiplying total months of engagement by average PMPM savings. The resultant savings equaled approximately \$43,000 (Exhibit 4-14).

Exhibit 4-14 – Participants with CAD as Most Expensive Diagnosis
Aggregate Savings

Engagement Period	Member Months	PMPM Savings (Forecast – Actual)	Aggregate Savings / (Deficit)
First 12 Months	533	\$53.23	\$28,370
Months 13 - 24	169	\$44.88	\$7,584
Months 25 - 36	76	\$60.83	\$4,623
Months 37 - 48	23	\$88.35	\$2,032
Total	801	\$53.20	\$42,609

COPD Population Utilization and Expenditure Evaluation

The SoonerCare CCU in SFY 2017 included 148 participants with a chronic obstructive pulmonary disease (COPD) diagnosis. COPD was the most expensive diagnosis at the time of engagement for 26 percent of participants with this diagnosis (Exhibit 4-15).

Exhibit 4-15 – Participants with COPD as Most Expensive Diagnosis

Participants	Number Most	Percent Most
w/COPD	Expensive	Expensive
148	38	26%

The majority of participants with COPD also were diagnosed with another chronic impact condition, the most common being hypertension and diabetes (Exhibit 4-16).

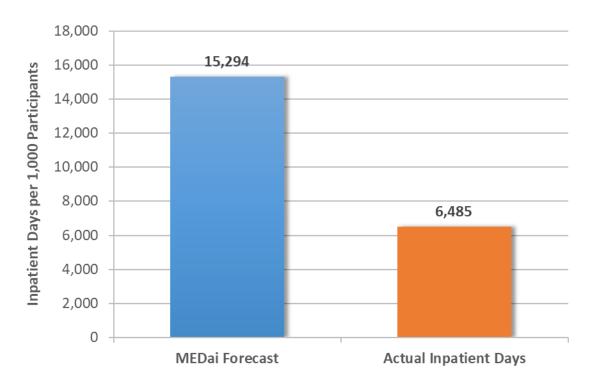
Exhibit 4-16 – Participants with COPD Co-morbidity with Chronic Impact Conditions

Condition	Percent w/Comorbidity
Asthma	43%
Coronary Artery Disease	42%
COPD	
Diabetes	57%
Heart Failure	28%
Hypertension	91%

Utilization

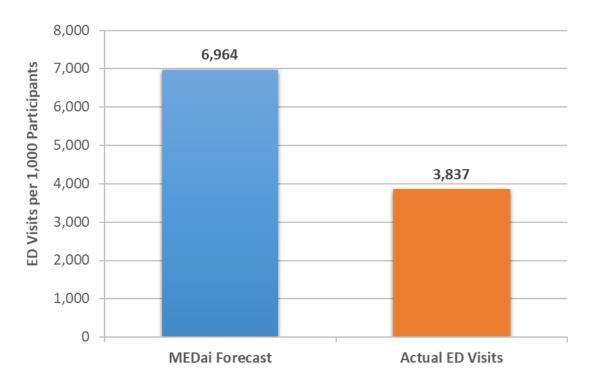
MEDai forecasted that participants with COPD would incur 15,294 inpatient days per 1,000 participants in the first 12 months of engagement. The actual rate was 6,485, or 42 percent of forecast (Exhibit 4-17).

Exhibit 4-17 – Participants with COPD as Most Expensive Diagnosis Inpatient Utilization - First 12 Months Following Engagement, per 1,000 Participants



MEDai forecasted that participants with COPD would incur 6,964 emergency department visits per 1,000 participants in the first 12 months of engagement. The actual rate was 3,837, or 55 percent of forecast (Exhibit 4-18).

Exhibit 4-18 – 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

PHPG documented total PMPM medical expenditures for participants with COPD during the twelve months prior to engagement and compared actual medical expenditures to forecast for the first twelve months of engagement. MEDai forecasted that participants with COPD would incur an average of \$2,401 in PMPM expenditures in the first 12 months of engagement. The actual amount was \$1,963, or 82% of forecast. For months 13 to 24, the MEDai forecast with trend applied was \$2,445 in PMPM expenditures. The actual amount was \$1,858, or 76% of forecast. For months 25 to 36, the MEDai forecast with trend applied was \$2,471 in PMPM expenditures. The actual amount was \$1,821, or 74% of forecast. For months 37 to 48, the MEDai forecast with trend applied was \$2,499 in PMPM expenditures. The actual amount was \$1,763, or 71% of forecast (Exhibit 4-19).

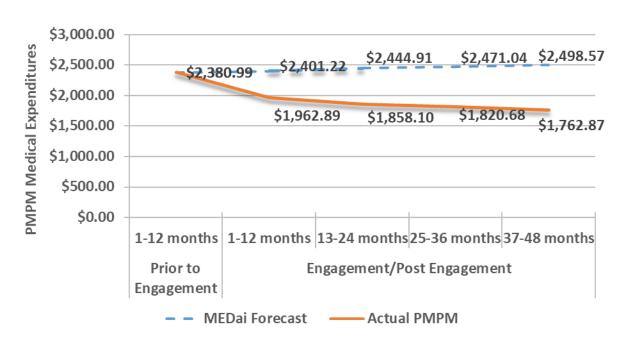


Exhibit 4-19 – Participants with COPD as Most Expensive Diagnosis
Total PMPM Expenditures

At the category-of-service level in the first 12 months of engagement, expenditures for all service types declined, with the exception of pharmacy (Exhibit 4-20).

Exhibit 4-20 – Participants with COPD as Most Expensive Diagnosis PMPM Expenditures by Category of Service

Category of Service	PMPM 12 Months Prior to Engagement	PMPM First 12 Months of Engagement	Dollar Change (Engaged minus Prior to Engagement)	Percent Change (As Percent of PMPM Prior to Engagement)
Inpatient Hospital	\$933.02	\$795.29	(\$137.73)	-15%
Outpatient Hospital	\$273.25	\$189.86	(\$83.39)	-31%
Physician	\$441.75	\$367.61	(\$74.14)	-17%
Pharmacy	\$236.31	\$240.98	\$4.67	2%
Behavioral Health	\$90.57	\$71.84	(\$18.74)	-21%
All Other	\$406.08	\$297.32	(\$108.76)	-27%
Total	\$2,380.99	\$1,962.89	(\$418.09)	-18%

Aggregate Dollar Impact

PHPG calculated an aggregate dollar impact for SoonerCare CCU participants with COPD as their most expensive diagnosis by multiplying total months of engagement by average PMPM savings. The resultant savings equaled approximately \$732,000 (Exhibit 4-21).

Exhibit 4-21 – Participants with COPD as Most Expensive Diagnosis
Aggregate Savings

Engagement Period	Member Months	PMPM Savings (Forecast – Actual)	Aggregate Savings / (Deficit)
First 12 Months	987	\$438.33	\$432,627
Months 13 - 24	310	\$586.81	\$181,910
Months 25 - 36	128	\$650.36	\$83,246
Months 37 - 48	47	\$735.70	\$34,578
Total	1,472	\$497.53	\$732,361

Diabetes Population Utilization and Expenditure Evaluation

The SoonerCare CCU in SFY 2017 included 175 participants with a diabetes diagnosis. Diabetes was the most expensive diagnosis at the time of engagement for 60 percent of participants with this diagnosis (Exhibit 4-22).

Exhibit 4-22 – Participants with Diabetes as Most Expensive Diagnosis

Participants w/Diabetes	Number Most Expensive	Percent Most Expensive
175	104	60%

The majority of participants with diabetes also were diagnosed with another chronic impact condition, the most common being hypertension and COPD (Exhibit 4-23).

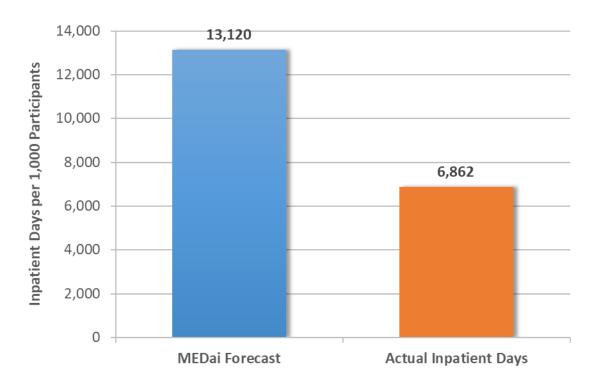
Exhibit 4-23 – Participants with Diabetes Co-morbidity with Chronic Impact Conditions

Condition	Percent w/Comorbidity
Asthma	35%
Coronary Artery Disease	39%
COPD	50%
Diabetes	
Heart Failure	23%
Hypertension	90%

Utilization

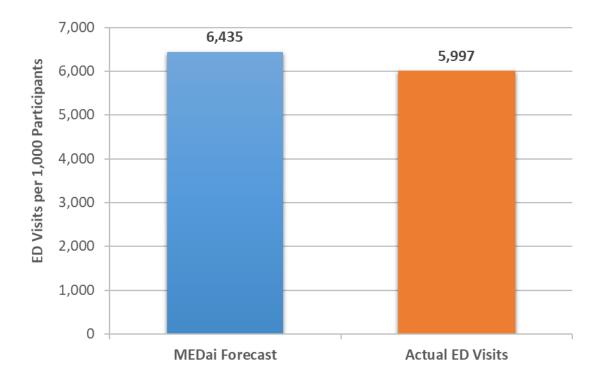
MEDai forecasted that participants with diabetes would incur 13,120 inpatient days per 1,000 participants in the first 12 months of engagement. The actual rate was 6,862, or 52 percent of forecast (Exhibit 4-24).

Exhibit 4-24 – Participants with Diabetes as Most Expensive Diagnosis Inpatient Utilization - First 12 Months Following Engagement, per 1,000 Participants



MEDai forecasted that participants with diabetes would incur 6,435 emergency department visits per 1,000 participants in the first 12 months of engagement. The actual rate was 5,997, or 93 percent of forecast (Exhibit 4-25).

Exhibit 4-25 – Participants with Diabetes as Most Expensive Diagnosis Emergency Department Utilization - First 12 Months Following Engagement, per 1,000 Participants



Medical Expenditures – Total and by Category of Service

PHPG documented total PMPM medical expenditures for participants with diabetes during the twelve months prior to engagement and compared actual medical expenditures to forecast for the first twelve months of engagement. MEDai forecasted that participants with diabetes would incur an average of \$1,889 in PMPM expenditures in the first 12 months of engagement. The actual amount was \$1,863, or 99% of forecast. For months 13 to 24, the MEDai forecast with trend applied was \$1,912 in PMPM expenditures. The actual amount was \$1,792, or 94% of forecast. For months 25 to 36, the MEDai forecast with trend applied was \$1,956 in PMPM expenditures. The actual amount was \$1,739, or 89% of forecast. For months 37 to 48, the MEDai forecast with trend applied was \$1,977 in PMPM expenditures. The actual amount was \$1,732, or 88% of forecast (Exhibit 4-26).

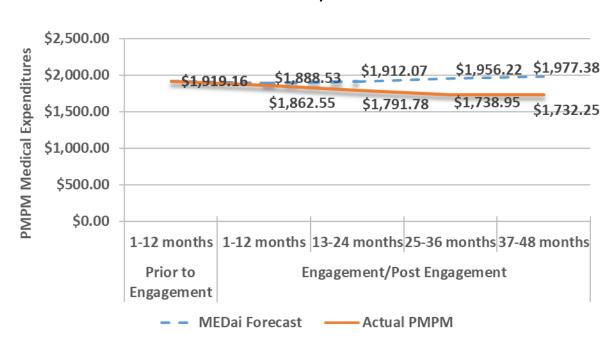


Exhibit 4-26 – Participants with Diabetes as Most Expensive Diagnosis
Total PMPM Expenditures

At the category-of-service level in the first 12 months of engagement, inpatient hospital, physician and behavioral health service expenditures declined, offsetting increases in other service categories (Exhibit 4-27).

Exhibit 4-27 – Participants with Diabetes as Most Expensive Diagnosis PMPM Expenditures by Category of Service

Category of Service	PMPM 12 Months Prior to Engagement	PMPM First 12 Months of Engagement	Dollar Change (Engaged minus Prior to Engagement)	Percent Change (As Percent of PMPM Prior to Engagement)
Inpatient Hospital	\$695.91	\$597.91	(\$98.00)	-14%
Outpatient Hospital	\$271.06	\$281.12	\$10.05	4%
Physician	\$349.02	\$310.09	(\$38.93)	-11%
Pharmacy	\$318.82	\$370.65	\$51.83	16%
Behavioral Health	\$79.33	\$53.94	(\$25.39)	-32%
All Other	\$205.01	\$248.84	\$43.83	21%
Total	\$1,919.16	\$1,862.55	(\$56.61)	-3%

Aggregate Dollar Impact

PHPG calculated an aggregate dollar impact for SoonerCare CCU participants with diabetes as their most expensive diagnosis by multiplying total months of engagement by average PMPM savings. The resultant savings equaled approximately \$245,000 (Exhibit 4-28).

Exhibit 4-28 – Participants with Diabetes as Most Expensive Diagnosis
Aggregate Deficit

Engagement Period	Member Months	PMPM Savings (Forecast – Actual)	Aggregate Savings / (Deficit)
First 12 Months	2,341	\$25.98	\$60,830
Months 13 - 24	736	\$120.29	\$88,533
Months 25 - 36	310	\$217.27	\$67,354
Months 37 - 48	117	\$245.13	\$28,681
Total	3,504	\$70.03	\$245,398

Heart Failure Population Utilization and Expenditure Evaluation

The SoonerCare CCU in SFY 2017 included 52 participants with a heart failure diagnosis. Heart failure was the most expensive diagnosis at the time of engagement for six percent of participants with this diagnosis (Exhibit 4-29). All results for this diagnosis should be treated as informational only and not assigned any statistical significance given the small size of the population.

Exhibit 4-29 – Participants with Heart Failure as Most Expensive Diagnosis

Participants	Number Most	Percent Most
w/Heart Failure	Expensive	Expensive
52	3	6%

The majority of participants with heart failure also were diagnosed with another chronic impact condition, the most common being hypertension and COPD (Exhibit 4-30).

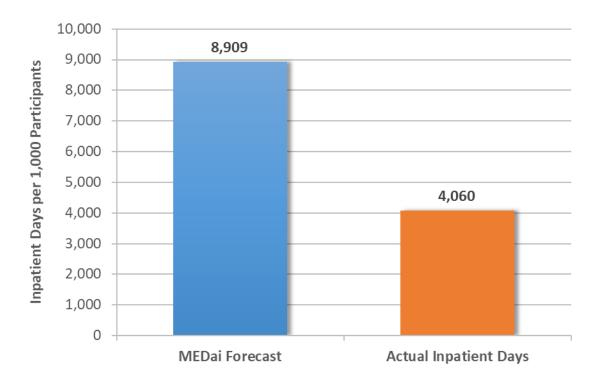
Exhibit 4-30 – Participants with Heart Failure Co-morbidity with Chronic Impact Conditions

Condition	Percent w/Comorbidity
Asthma	43%
Coronary Artery Disease	58%
COPD	80%
Diabetes	66%
Heart Failure	
Hypertension	93%

Utilization

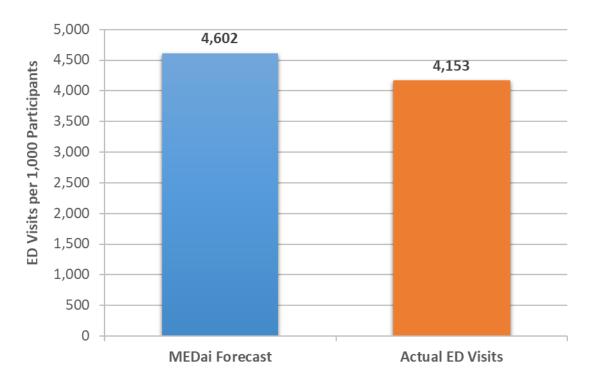
MEDai forecasted that participants with heart failure would incur 8,909 inpatient days per 1,000 participants in the first 12 months of engagement. The actual rate was 4,060, or 46 percent of forecast (Exhibit 4-31).

Exhibit 4-31 – Participants with Heart Failure as Most Expensive Diagnosis Inpatient Utilization - First 12 Months Following Engagement, per 1,000 Participants



MEDai forecasted that participants with heart failure would incur 4,602 emergency department visits per 1,000 participants in the first 12 months of engagement. The actual rate was 4,153, or 90 percent of forecast (Exhibit 4-32).

Exhibit 4-32 – Participants with 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

PHPG documented total PMPM medical expenditures for participants with heart failure during the twelve months prior to engagement and compared actual medical expenditures to forecast for the first twelve months of engagement. MEDai forecasted that participants with heart failure would incur an average of \$3,595 in PMPM expenditures in the first 12 months of engagement. The actual amount was \$2,170, or 60% of forecast. For months 13 to 24, the MEDai forecast with trend applied was \$3,624 in PMPM expenditures. The actual amount was \$1,756, or 49% of forecast. For months 25 to 36, the MEDai forecast with trend applied was \$3,666 in PMPM expenditures. The actual amount was \$1,750, or 48% of forecast. For months 37 to 48, the MEDai forecast with trend applied was \$3,680 in PMPM expenditures. The actual amount was \$1,217, or 33% of forecast (Exhibit 4-33). As noted, results for this diagnosis should be interpreted with caution given the small size of the population.

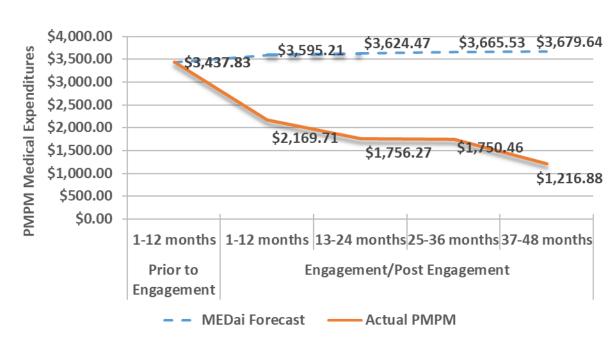


Exhibit 4-33 – Participants with Heart Failure as Most Expensive Diagnosis

Total PMPM Expenditures

At the category-of-service level in the first 12 months of engagement, expenditures declined substantially across most service types (Exhibit 4-34).

Exhibit 4-34 – Participants with Heart Failure as Most Expensive Diagnosis PMPM Expenditures by Category of Service

Category of Service	PMPM 12 Months Prior to Engagement	PMPM First 12 Months of Engagement	Dollar Change (Engaged minus Prior to Engagement)	Percent Change (As Percent of PMPM Prior to Engagement)
Inpatient Hospital	\$231.96	\$176.85	(\$55.11)	-24%
Outpatient Hospital	\$710.52	\$96.79	(\$613.74)	-86%
Physician	\$374.42	\$330.19	(\$44.23)	-12%
Pharmacy	\$1,775.34	\$1,056.95	(\$718.40)	-40%
Behavioral Health	\$37.50	\$39.85	\$2.35	6%
All Other	\$308.08	\$469.10	\$161.02	52%
Total	\$3,437.83	\$2,169.71	(\$1,268.11)	-37%

Aggregate Dollar Impact

PHPG calculated an aggregate dollar impact for SoonerCare CCU participants with heart failure as their most expensive diagnosis by multiplying total months of engagement by average PMPM savings. The resultant savings equaled approximately \$141,000 (Exhibit 4-35).

Exhibit 4-35 – Participants with Heart Failure as Most Expensive Diagnosis
Aggregate Savings

Engagement Period	Member Months	PMPM Savings (Forecast – Actual)	Aggregate Savings / (Deficit)
First 12 Months	44	\$1,425.50	\$62,722
Months 13 - 24	23	\$1,868.20	\$42,969
Months 25 - 36	7	\$1,915.07	\$13,405
Months 37 - 48	9	\$2,462.76	\$22,165
Total	83	\$1,701.94	\$141,261

Hypertension Population Utilization and Expenditure Evaluation

The SoonerCare CCU in SFY 2017 included 222 participants with a hypertension diagnosis. Hypertension was the most expensive diagnosis at the time of engagement for 41 percent of participants with this diagnosis (Exhibit 4-36).

Exhibit 4-36- Participants with Hypertension as Most Expensive Diagnosis

Participants w/Hypertension	Number Most Expensive	Percent Most Expensive
222	90	41%

A majority of participants with hypertension also were diagnosed with another chronic impact condition, although the comorbidity rate was lower than for other diagnosis groups (Exhibit 4-37).

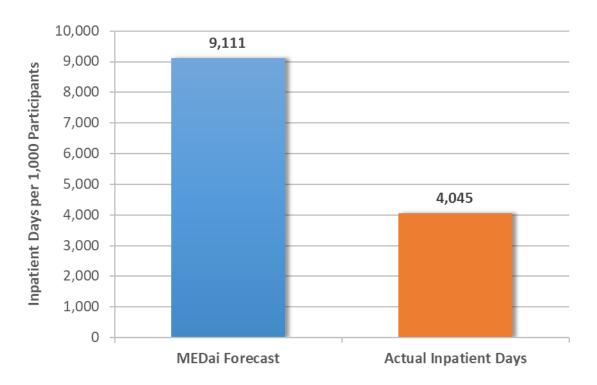
Exhibit 4-37 – Participants with Hypertension Co-morbidity with Chronic Impact Conditions

Condition	Percent w/Comorbidity
Asthma	39%
Coronary Artery Disease	40%
COPD	57%
Diabetes	67%
Heart Failure	22%
Hypertension	

Utilization

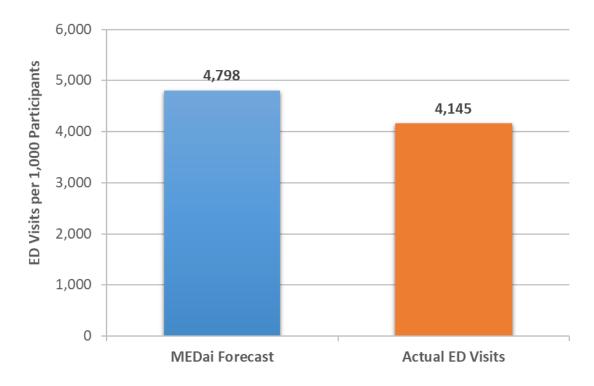
MEDai forecasted that participants with hypertension would incur 9,111 inpatient days per 1,000 participants in the first 12 months of engagement. The actual rate was 4,045, or 44 percent of forecast (Exhibit 4-38).

Exhibit 4-38 – Participants with Hypertension as Most Expensive Diagnosis Inpatient Utilization - First 12 Months Following Engagement, per 1,000 Participants



MEDai forecasted that participants with hypertension would incur 4,798 emergency department visits per 1,000 participants in the first 12 months of engagement. The actual rate was 4,145, or 86 percent of forecast (Exhibit 4-39).

Exhibit 4-39 – 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

PHPG documented total PMPM medical expenditures for participants with hypertension during the twelve months prior to engagement and compared actual medical expenditures to forecast for the first twelve months of engagement. MEDai forecasted that participants with hypertension would incur an average of \$2,002 in PMPM expenditures in the first 12 months of engagement. The actual amount was \$1,483, or 74% of forecast. For months 13 to 24, the MEDai forecast with trend applied was \$2,051 in PMPM expenditures. The actual amount was \$1,393, or 68% of forecast. For months 25 to 36, the MEDai forecast with trend applied was \$2,090 in PMPM expenditures. The actual amount was \$1,326, or 63% of forecast. For months 37 to 48, the MEDai forecast with trend applied was \$2,107 in PMPM expenditures. The actual amount was \$1,279, or 61% of forecast (Exhibit 4-40).

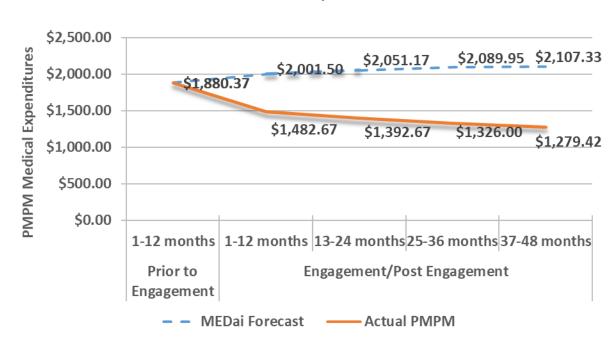


Exhibit 4-40 – Participants with Hypertension as Most Expensive Diagnosis
Total PMPM Expenditures

At the category-of-service level the first 12 months of engagement, inpatient hospital and pharmacy experienced the most significant declines (Exhibit 4-41).

Exhibit 4-41 – Participants with Hypertension as Most Expensive Diagnosis PMPM Expenditures by Category of Service

Category of Service	PMPM 12 Months Prior to Engagement	PMPM First 12 Months of Engagement	Dollar Change (Engaged minus Prior to Engagement)	Percent Change (As Percent of PMPM Prior to Engagement)
Inpatient Hospital	\$711.67	\$336.92	(\$374.75)	-53%
Outpatient Hospital	\$192.40	\$181.84	(\$10.56)	-5%
Physician	\$331.75	\$356.90	\$25.15	8%
Pharmacy	\$366.37	\$277.67	(\$88.70)	-24%
Behavioral Health	\$66.32	\$104.96	\$38.64	58%
All Other	\$211.86	\$224.38	\$12.52	6%
Total	\$1,880.37	\$1,482.67	(\$397.70)	-21%

Aggregate Dollar Impact

PHPG calculated an aggregate dollar impact for SoonerCare CCU participants with hypertension as their most expensive diagnosis by multiplying total months of engagement by average PMPM savings. The resultant savings equaled approximately \$2.1 million (Exhibit 4-42).

Exhibit 4-42 – Participants with Hypertension as Most Expensive Diagnosis
Aggregate Savings

Engagement Period	Member Months	PMPM Savings (Forecast – Actual)	Aggregate Savings / (Deficit)
First 12 Months	2,355	\$518.83	\$1,221,841
Months 13 - 24	755	\$658.50	\$497,169
Months 25 - 36	325	\$763.95	\$248,283
Months 37 - 48	105	\$827.91	\$86,930
Total	3,540	\$580.29	\$2,054,224

Hepatitis C Population Utilization and Expenditure Evaluation

Members with hepatitis C are enrolled in the SoonerCare CCU primarily so that they can be managed for adherence to the medication regimen that constitutes the basis for treating this disease. If a member misses even a single dose of medication, she or he can suffer a relapse.

As of April 2018, CCU nurses performed care management on 748 members with hepatitis-C. Within this group, 273 members successfully completed their medication regimen and had their cases closed, while 171 failed to complete their course of care⁴⁶ and the remaining 304 were still in active treatment at the end of SFY 2017. (Results presented below are for the subset of 431 members enrolled through the end of SFY 2017.)

Utilization

MEDai forecasted that participants with Hepatitis C would incur 9,745 inpatient days per 1,000 participants in the first 12 months of engagement. The actual rate was 4,619, or 47 percent of forecast (Exhibit 4-43).

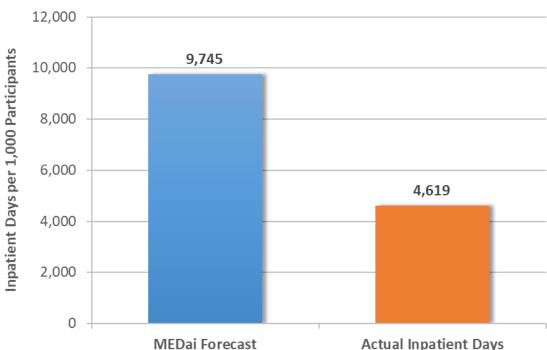


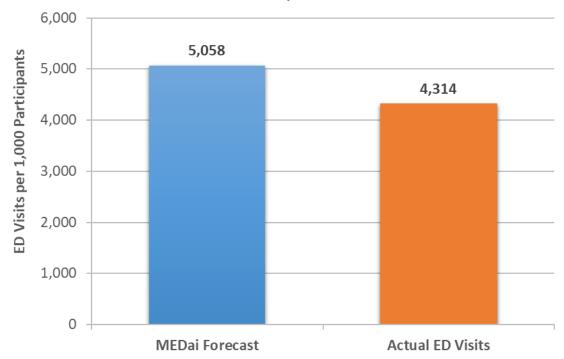
Exhibit 4-43 – Participants with Hepatitis C as Most Expensive Diagnosis Inpatient Utilization - First 12 Months Following Engagement, per 1,000 Participants

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⁴⁶ Major reasons for failure to complete a course of care include loss of eligibility, death or loss of contact with the CCU nurse (i.e., inability of the nurse to reach the member by telephone).

MEDai forecasted that participants with hepatitis C would incur 5,058 emergency department visits per 1,000 participants in the first 12 months of engagement. The actual rate was 4,314, or 85 percent of forecast (Exhibit 4-44).

Exhibit 4-44 – Participants with Hepatitis C as Most Expensive Diagnosis Emergency Department Utilization - First 12 Months Following Engagement, per 1,000 Participants



Medical Expenditures – Total and by Category of Service

PHPG documented total PMPM medical expenditures for participants with hepatitis C during the twelve months prior to engagement and compared actual medical expenditures to forecast for the first twelve months of engagement. MEDai forecasted that participants with hepatitis C would incur an average of \$1,991 in PMPM expenditures in the first 12 months of engagement. The actual amount was \$1,840, or 92% of forecast. For months 13 to 24, the MEDai forecast with trend applied was \$2,031 in PMPM expenditures. The actual amount was \$1,751, or 86% of forecast. For months 25 to 36, the MEDai forecast with trend applied was \$2,079 in PMPM expenditures. The actual amount was \$1,648, or 79% of forecast. For months 37 to 48, the MEDai forecast with trend applied was \$2,101 in PMPM expenditures. The actual amount was \$1,608, or 77% of forecast (Exhibit 4-45).

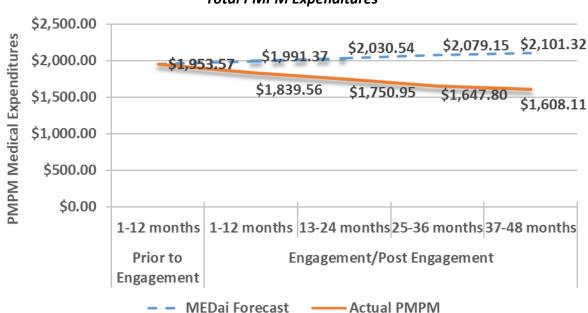


Exhibit 4-45 – Participants with Hepatitis C as Most Expensive Diagnosis
Total PMPM Expenditures

At the category-of-service level in the first 12 months of engagement, all expenditures declined, except for those within the "all other" category (Exhibit 4-46).

Exhibit 4-46 – Participants with Hepatitis C as Most Expensive Diagnosis PMPM Expenditures by Category of Service

Category of Service	PMPM 12 Months Prior to Engagement	PMPM First 12 Months of Engagement	Dollar Change (Engaged minus Prior to Engagement)	Percent Change (As Percent of PMPM Prior to Engagement)	
Inpatient Hospital	\$693.85	\$608.13	(\$85.72)	-12%	
Outpatient Hospital	Hospital \$253.43		(\$5.28)	-2% -4%	
Physician			(\$12.09)		
Pharmacy	\$419.62	\$409.09	(\$10.53)	-3%	
Behavioral Health	\$57.18	\$55.05	(\$2.13)	-4%	
All Other \$210.06		\$211.80	\$1.73	1%	
Total	\$1,953.57	\$1,839.56	(\$114.00)	-6%	

Aggregate Dollar Impact

PHPG calculated an aggregate dollar impact for SoonerCare CCU participants with hepatitis C as their most expensive diagnosis by multiplying total months of engagement by average PMPM savings. The resultant savings equaled approximately \$285,000 (Exhibit 4-47).

Exhibit 4-47 – Participants with Hepatitis C as Most Expensive Diagnosis
Aggregate Savings

Engagement Period	Member Months	PMPM Savings (Forecast – Actual)	Aggregate Savings / (Deficit)
First 12 Months	868	\$151.81	\$131,768
Months 13 - 24	284	\$279.59	\$79,403
Months 25 - 36	122	\$431.35	\$52,624
Months 37 - 48	42	\$493.21	\$20,715
Total	1,316	\$216.19	\$284,509

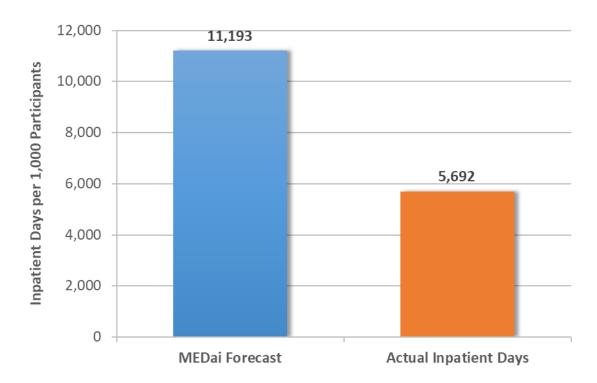
Utilization and Expenditure Evaluation – All Participants

This section presents consolidated trend data across all 728 SoonerCare CCU participants, regardless of diagnosis. For approximately 80 percent of participants, the most expensive diagnosis at the time of engagement was one of the six target chronic impact conditions.

Utilization

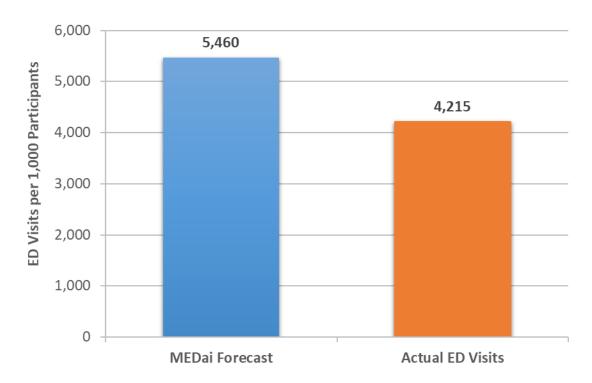
MEDai forecasted that SoonerCare CCU participants as a group would incur 11,193 inpatient days per 1,000 participants in the first 12 months of engagement. The actual rate was 5,692, or 51 percent of forecast (Exhibit 4-48).

Exhibit 4-48 – All SoonerCare CCU Participants
Inpatient Utilization - First 12 Months Following Engagement, per 1,000 Participants



MEDai forecasted that SoonerCare CCU participants as a group would incur 5,460 emergency department visits per 1,000 participants in the first 12 months of engagement. The actual rate was 4,215, or 77 percent of forecast (Exhibit 4-49).

Exhibit 4-49 — All SoonerCare CCU Participants
Emergency Department Utilization - First 12 Months Following Engagement, per 1,000 Participants



Medical Expenditures – Total and by Category of Service

PHPG documented total PMPM medical expenditures for all SoonerCare CCU participants as a group and compared actual medical expenditures to forecast for the first twelve months of engagement. MEDai forecasted that the participant population would incur an average of \$1,763 in PMPM expenditures in the first 12 months of engagement. The actual amount was \$1,312, or 74% of forecast. For months 13 to 24, the MEDai forecast with trend applied was \$1,860 in PMPM expenditures. The actual amount was \$1102, or 59% of forecast. For months 25 to 36, the MEDai forecast with trend applied was \$1,889 in PMPM expenditures. The actual amount was \$985, or 52% of forecast. For months 37 to 48, the MEDai forecast with trend applied was \$1,905 in PMPM expenditures. The actual amount was \$808, or 42% of forecast (Exhibit 4-50).

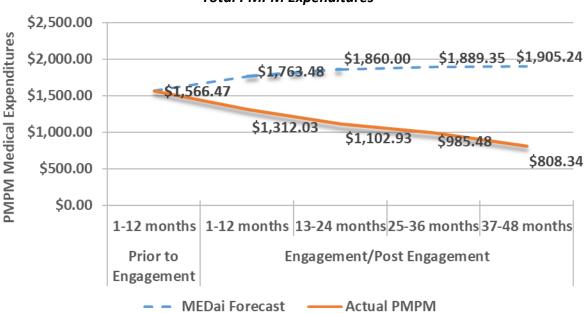


Exhibit 4-50 – All SoonerCare CCU Participants
Total PMPM Expenditures

At the category-of-service level in the first 12 months of engagement, all services types experienced declines, with hospital and behavioral health costs registering the greatest drop (Exhibit 4-51).

Exhibit 4-51 - All SoonerCare CCU Participants PMPM Expenditures by Category of Service

Category of Service	PMPM 12 Months Prior to Engagement	PMPM First 12 Months of Engagement	Dollar Change (Engaged minus Prior to Engagement)	Percent Change (As Percent of PMPM Prior to Engagement)
Inpatient Hospital	\$547.44	\$445.12	(\$102.32)	-19%
Outpatient Hospital	\$211.35	\$157.51	(\$53.84)	-25%
Physician	\$273.43	\$245.41	(\$28.02)	-10%
Pharmacy	\$268.20	\$232.46	(\$35.74)	-13%
Behavioral Health	\$78.16	\$60.59	(\$17.57)	-22%
All Other	\$187.89	\$170.94	(\$16.95)	-9%
Total	\$1,566.47	\$1,312.03	(\$254.43)	-16%

Aggregate Dollar Impact

PHPG calculated an aggregate dollar impact for all SoonerCare CCU participants by multiplying total months of engagement by average PMPM savings. The resultant savings equaled approximately \$10 million (Exhibit 4-52).

Exhibit 4-52 – All SoonerCare CCU Participants
Aggregate Savings

Engagement Period	Member Months	PMPM Savings (Forecast – Actual)	Aggregate Savings / (Deficit)
First 12 Months	11,284	\$451.45	\$5,094,111
Months 13 - 24	3,713	\$757.07	\$2,810,983
Months 25 - 36	1,363	\$903.87	\$1,231,970
Months 37 - 48	772	\$1,096.90	\$846,806
Total	17,132	\$582.76	\$9,983,872

SoonerCare CCU Cost Effectiveness Analysis

Over time, the SoonerCare CCU should demonstrate its efficacy through a reduction in the relative PMPM and aggregate costs of engaged members versus what would have occurred absent participation. PHPG performed a cost effectiveness analysis 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, the SoonerCare CCU must demonstrate lower expenditures even after factoring-in the program's administrative component.⁴⁷

Administrative Expenses

SoonerCare CCU administrative expenses include salary, benefits and overhead costs for persons working in the SoonerCare CCU unit. The OHCA provided PHPG with detailed information on administrative expenditures during SFY 2014 through SFY 2017 for use in performing the cost effectiveness test.

OHCA salary and benefit costs were included for staff assigned to the SoonerCare CCU unit. Costs were prorated for employees working less than full time on the SoonerCare CCU.

Overhead expenses (rent, travel, etc.) were allocated based on the unit's share of total OHCA salary/benefit expenses in each fiscal year⁴⁸. No specific allocation was made for MEDai activities, as these are occurring under a pre-existing contract.

SFY 2014 through SFY 2017 aggregate administrative expenses for the SoonerCare CCU were approximately \$2.5 million (Exhibit 4-53 on the following page). This equated to \$144.06 on a PMPM basis. The PMPM calculation was performed using total member months (17,132) for CCU participants meeting the criteria outlined in chapter one (e.g., enrolled for at least three months)⁴⁹.

⁴⁷ 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.

⁴⁸ Allocated share of total was 1.5 percent in SFY 2014, 1.1 percent in SFY 2015, 1.1 percent in SFY 2016 and 1.1 percent in SFY 2017.

⁴⁹ This methodology overstates the PMPM amount, in that it excludes member months for participants who did not meet the analysis criteria. However, it is the appropriate for determining cost effectiveness, as it accounts for all administrative expenses.

Exhibit 4-53 - SoonerCare CCU Administrative Expense

Cost Component	SFY 2014 - 2017 Aggregate Dollars	РМРМ
OHCA SoonerCare CCU unit salaries and benefits	\$2,062,005	\$120.36
OHCA SoonerCare CCU overhead	\$406,022	\$23.70
Total Administrative Expense	\$2,468,027	\$144.06

Cost Effectiveness Calculation⁵⁰

PHPG performed a cost effectiveness test by comparing forecasted costs to actual costs during SFY 2014 through SFY 2017, inclusive of SoonerCare CCU administrative expenses.

SoonerCare CCU participants as a group were forecasted to incur average medical costs of \$1,800.80⁵¹. Their actual average PMPM medical costs were \$1,218.03. With the addition of \$144.06 in average PMPM administrative expenses, total actual costs were \$1,362.09. Medical expenses accounted for 89 percent of the total and administrative expenses for the other 11 percent. Overall, net SoonerCare CCU participant PMPM expenses, inclusive of administrative costs, were 75.6 percent of forecast (Exhibit 4-54).

\$2,000.00 \$1,800.00 \$1,600.00 \$1,400.00 \$144.06 \$1,200.00 \$1,000.00 \$1,800.80 \$800.00 \$600.00 \$1,218.03 \$400.00 \$200.00 \$-MEDai Forecast Actual ■ Medical ■ Administrative

Exhibit 4-54 - SoonerCare CCU PMPM Savings

-

⁵⁰ PMPM and aggregate values differ slightly due to rounding.

 $^{^{51}}$ This represents a weighted average (by member months) of the forecasted PMPM values for the first 12 months, months 13 – 24, months 25 – 36 and months 37 – 48, as shown in exhibit 4-57.

On an aggregate basis, the SoonerCare CCU achieved net savings during its initial 48 months of operation (July 2013 through June 2017) of approximately \$4.3 million (Exhibit 4-55). This represented an increase of \$3.2 million over the net savings of \$4.3 million incurred through June 2016, as documented in the prior year's evaluation.

Exhibit 4-55 – All SoonerCare CCU Participants
Aggregate Savings – Net of Administrative Expenses

Medical Savings	Administrative Costs	Net Savings
\$9,983,872	(\$2,468,027)	\$7,515,845

CHAPTER 5 – SOONERCARE CCU RETURN ON INVESTMENT

Introduction

The value of the SoonerCare CCU is measurable on multiple axes, including participant satisfaction and change in behavior, quality of care, 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.

ROI Results

PHPG examined the program's return on investment (ROI) through SFY 2017, by comparing administrative expenditures to medical savings. The results are presented in Exhibit 5-1 below.

As the exhibit illustrates, the SoonerCare CCU achieved a positive ROI, with the program as a whole generating a return on investment of 304.5 percent. Put another way, the **SoonerCare CCU** generated approximately \$3.05 in net medical savings for every dollar in administrative expenditures.

Exhibit 5-1 - SoonerCare CCU ROI (State and Federal Dollars)

Medical Savings	Administrative Costs	Net Savings	Return on Investment
\$9,983,872	(\$2,468,027)	\$7,515,845	304.5%

APPENDIX A – PARTICIPANT SURVEY INSTRUMENT

Appendix A includes the advance letter sent to SoonerCare CCU participants and survey instrument. The instrument is annotated to flag questions that have been discontinued or are asked of follow-up survey respondents only.



JOEL NICO GOMEZ CHIEF EXECUTIVE OFFICER MARY FALLIN GOVERNOR

STATE OF OKLAHOMA OKLAHOMA HEALTH CARE AUTHORITY

<First> <Last>
 <Street Address 1>
 <Street Address 2>
 <City>, <State> <Zip>

The Oklahoma Health Care Authority is conducting a survey of SoonerCare members. You were selected for the survey because you may have received help from one of our nurse case management programs. We are interested in learning about your experience and how we can make these services better.

The survey will be over the phone and should take about 15 minutes of your time. In the next few days, someone will be calling you to conduct the survey.

THE SURVEY IS VOLUNTARY. If you decide not to complete the survey, it will NOT affect your SoonerCare enrollment or the enrollment of anyone else in your family.

However, we want to hear from you and hope you will agree to help. The survey will be conducted by the Pacific Health Policy Group (PHPG), an outside company. All of your answers will be kept confidential.

If you have any questions about the survey, you can reach PHPG toll-free at <u>1-888-941-9358</u>. If you would like to take the survey right away, you may call the same number any time between the hours of 9 a.m. and 4 p.m. If you have any questions for the Oklahoma Health Care Authority, please call the toll-free number <u>1-877-252-6002</u>.

We look forward to speaking with you soon.



SOONERCARE CHRONIC CARE PROGRAM MEMBER 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}?

INTRO1. We are conducting a short survey to find out about where SoonerCare members get their health care. The survey takes about 10 minutes.

[ANSWER ANY QUESTIONS AND PROCEED TO QUESTION 1]

- INTRO2. [If need to leave a message] We are conducting a short survey to find out about where SoonerCare members get their health care. We can be reached toll-free at 1-888-941-9358.
- 1. The SoonerCare program is a health insurance program offered by the state. Are you currently participating in SoonerCare?⁵²
 - a. Yes
 - b. No \rightarrow [ASK IF ENROLLED IN MEDICAID. IF NO, END CALL]
 - c. Don't Know/Not Sure → [ASK IF ENROLLED IN MEDICAID. IF NO, END CALL]
- 2. Some SoonerCare members with health needs receive help from the Chronic Care Program. Have you heard of this? [IF RESPONDENT SAYS 'NO' OR 'NOT SURE'] The program includes nurses who call you to discuss your health care needs and partner with you and your doctor to help manage your needs. Does that sound familiar?
 - a. Yes
 - b. No
 - c. Don't Know/Not Sure
- 3. Were you contacted and offered a chance to participate in the Chronic Care Program?
 - a. Yes
 - b. No → [END CALL]
 - c. Don't Know/Not Sure → [END CALL]
- 4. Did you decide to participate?
 - a. Yes
 - b. No \rightarrow [GO TO Q34]
 - c. Not yet, but still considering → [INFORM THAT WE MAY CALL BACK AT A LATER DATE AND END CALL]
 - d. Don't Know/Not Sure → [END CALL]

⁵² All questions include a "don't know/not sure" or similar option which is unprompted by the surveyor; this response is listed on the instrument to allow surveyors to document such a response. Questions are reworded for parents/guardians completing the survey on behalf of program participants.

5.	Are yo	u still participating today in the Chronic Care Program?
	a.	Yes
	b.	No → [GO TO Q32]
	C.	Don't Know/Not Sure → [END CALL]
6.	How lo	ng have you been participating in the Chronic Care Program?
	a.	Less than 1 month
	b.	One to two months
	C.	Three to four months
	d.	Four to six months
	e.	More than six months
	f.	Don't Know/Not Sure
No	w I w	want to ask about your decision to participate and partner
	ith a	want to ask about your decision to participate and partner Nurse Care Manager. d you learn about the Chronic Care Program?
W	ith a	Nurse Care Manager.
W	i th a How di	Nurse Care Manager. d you learn about the Chronic Care Program?
W	i th a l How di a.	Nurse Care Manager. d you learn about the Chronic Care Program? Received information in the mail
W	How di a. b. c.	Nurse Care Manager. d you learn about the Chronic Care Program? Received information in the mail Received a call from my Nurse Care Manager
W	How dia.b.c.	Nurse Care Manager. d you learn about the Chronic Care Program? Received information in the mail Received a call from my Nurse Care Manager Received a call from someone else SPECIFY
W	How dia.b.c.	Nurse Care Manager. d you learn about the Chronic Care Program? Received information in the mail Received a call from my Nurse Care Manager Received a call from someone else SPECIFY
w i	How dia. b. c. d. e. f.	Nurse Care Manager. d you learn about the Chronic Care Program? Received information in the mail Received a call from my Nurse Care Manager Received a call from someone else SPECIFY Doctor referred me while I was in his/her office Other. SPECIFY:
w i	How dia. b. c. d. e. f.	Nurse Care Manager. d you learn about the Chronic Care Program? Received information in the mail Received a call from my Nurse Care Manager Received a call from someone else SPECIFY Doctor referred me while I was in his/her office Other. SPECIFY: Don't Know/Not Sure vere your reasons for deciding to participate in the Chronic Care Program? [CHECK ALL
w i	How dia. b. c. d. e. f. What w	Nurse Care Manager. d you learn about the Chronic Care Program? Received information in the mail Received a call from my Nurse Care Manager Received a call from someone else SPECIFY Doctor referred me while I was in his/her office Other. SPECIFY: Don't Know/Not Sure vere your reasons for deciding to participate in the Chronic Care Program? [CHECK ALL APPLY]

h. Other. SPECIFY: __

f. Improve my health

d. Get help making health care appointmentse. Personal doctor recommended I enroll

g. Was invited to enroll/no specific reason

Among the reasons you gave, what was your most impo	portant reason for deciding to participate
---	--

- 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: _____
- i. Don't Know/Not Sure

Now I'm going to ask you a few questions about your experience in the Chronic Care Program, starting with your Nurse Care Manager.

CHRONIC CARE PROGRAM NURSE CARE MANAGER

- 10. How soon after you started participating in the Chronic Care Program were you contacted by your Nurse Care Manager?
 - a. Contacted at time of enrollment to participate
 - 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
 - h. Don't Know/Not Sure

11.	Can	you '	tell	me	the	name	of	your	Nurse	Care	Manage	er?
-----	-----	-------	------	----	-----	------	----	------	-------	------	--------	-----

- a. Yes. RECORD: _____
- b. No
- 12. 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 never spoken to Nurse Care Manager
 - f. Don't know/Not Sure

13.	Did you	r Nurse Care Manager give you a telephone number to call if you needed help with your care?
	a.	Yes
	b.	$No \rightarrow [GO TO Q17]$
	C.	Don't Know/Not Sure → [GO TO Q17]
14.	Have y	ou tried to call your Nurse Care Manager at the number you were given?
	a.	Yes
	b.	No → [GO TO Q17]
	C.	Don't Know/Not Sure → [GO TO Q17]
15.	Thinkin	g about the last time you called your Nurse Care Manager, what was the reason for your call?
	a.	Routine health question
	b.	Urgent health problem
	C.	Seeking assistance in scheduling appointment
	d.	Returning call from Nurse Care Manager
	e.	Other. SPECIFY:
	f.	Don't Know/Not Sure
16.	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: _____

h. Don't Know/Not Sure

17. [ASK QUESTION EVEN IF RESPONDENT STATES S/HE HAS NOT SPOKEN TO THE NURSE CARE MANAGER. IF RESPONDENT REPEATS S/HE IS UNABLE TO ANSWER DUE TO LACK OF CONTACT, GO TO Q20 (OVERALL SATISFACTION)] I am going to mention some things your Nurse Care Manager may have done for you. Has your Nurse Care Manager:

	Yes	No	DK
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 talk to and work with your regular doctor and your regular doctor's office staff			
f. Helped you to make and keep health care appointments with other doctors, such as specialists, for medical problems			
g. Helped you to make and keep health care appointments for mental health or substance abuse problems			
h. Reviewed your medications with you and helped you to manage your medications			

18. [ASK FOR EACH "YES" ACTIVITY IN Q17] 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.

	Very Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Very Dissatisfied	DK	N/A
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 to talk to and work with your regular doctor and your regular doctor's staff						
f. Helping you make and keep health care appointments with other doctors, such as specialists, for medical problems						
g. Helping you make and keep health care appointments for mental health or substance abuse problems						
h. Reviewing your medications and helping you to manage your medications						

19.		how satisfied are you with your Nurse Care Manager? Would you say you are very satisfied hat satisfied, somewhat dissatisfied or very dissatisfied?
	a.	Very satisfied
	b.	Somewhat satisfied
	C.	Somewhat dissatisfied
	d.	Very dissatisfied
	e.	Don't Know/Not Sure
<u>OV</u>	'ERALL	SATISFACTION
20.	Overall	how satisfied are you with your whole experience in the Chronic Care Program?
	a.	Very satisfied
	b.	Somewhat satisfied
	C.	Somewhat dissatisfied
	d.	Very dissatisfied
	e.	Don't Know/Not Sure
21.	Would	you recommend the Chronic Care Program to a friend who has health care needs like yours?
	a.	Yes
	b.	No
	C.	Don't Know/Not Sure
22.	Do you	have any suggestions for improving the Chronic Care Program?
HE	ALTH S	STATUS & LIFESTYLE
23.	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
- e. Don't Know/Not Sure

- 24. Compared to before you participated in the Chronic Care Program, how has your health changed? Would you say your health is better, worse or about the same?
 - a. Better
 - b. Worse → [GO TO Q27]
 - c. About the same → [GO TO Q27]
- 25. Do you think the Chronic Care Program has contributed to your improvement in health?
 - a. Yes
 - b. No
 - c. Don't know/not sure
- 26. I am going to mention a few areas where Nurse Care Managers sometimes try to help members to improve their health by changing behaviors. For each, please tell me if your Nurse Care Manager spoke to you, and if so, whether you changed your behavior as a result. [IF BEHAVIOR WAS CHANGED, ASK IF CHANGE WAS TEMPORARY OR IS CONTINUING]

	N/A - Not Discussed	Discussed - No Change	Discussed - Temporary Change	Discussed - Continuing Change	DK	Not Applicable
a. Smoking less or using other tobacco products less						
b. Moving around more or getting more exercise						
c. Changing your diet						
d. Managing and taking your medications better						
e. Making sure to drink enough water throughout the day						
f. Drinking or using other substances less						

Questions 27 to 31 have been discontinued

- 27. [IF RESPONDENT'S RECORD SHOWS ENROLLMENT DATE PRIOR TO JULY 2013, ASK THIS QUESTION] We're almost done. Before July 2013, the SoonerCare Health Management Program included Nurse Care Managers who visited members in their homes or called them each month on the phone. Did you have a Nurse Care Manager under this earlier program? [IF YES, ASK WHETHER NCM VISITED THEIR HOME OR CALLED ON PHONE. IF RESPONDENT SAYS "BOTH", RECORD AS VISITED IN THEIR HOME.]
 - a. Yes, visited in home
 - b. Yes, called on phone
 - c. No → [GO TO Q36]
 - d. Don't Know/Not Sure → [GO TO Q36]

28.	-	ou aware that the program c Yes	hanged in July 201	3?
	b.	- No		
	C.	Don't Know/Not Sure		

29. I am going to ask about different kinds of help that you may have received from your Nurse Care Manager under the previous program and that you may be receiving today from your current Nurse Care Manager. For each, please tell me who was more helpful, the Nurse Care Manager you had before July 2013 under the previous program or your current Nurse Care Manager [REVERSE ORDER FROM PREVIOUS SURVEY]. [RECORD "SAME" IF VOLUNTEERED BY RESPONDENT; DO NOT OFFER AS OPTION.]

	Telligen NCM More Helpful	CCP NCM More Helpful	About the Same Help	Don't Know/ Not Sure	N/A
a. Providing instructions about taking care of your health problems or concerns					
b. Helping you to identify changes in your health that might be an early sign of a problem					
c. Answering questions about your health					
d. Helping you talk to and work with your regular doctor and your regular doctor's office staff					
e. Helping you to make and keep health care appointments with other doctors, such as specialists, for medical problems					
f. Helping you to make and keep health care appointments for mental health or substance abuse problems					
g.Helping you manage your medications					

30	Overall, what do you prefer - the program as it was before July 2013 or the program as it is today?
	[REVERSE ORDER FROM PREVIOUS SURVEY.] [RECORD "NO PREFERENCE/SAME" IF
	VOLUNTEERED BY RESPONDENT; DO NOT OFFER AS OPTION.]

_	Drogram	hoforo	with Talligan	Niuroo (2010	Monagor
						

	b. Program today, with Chronic Care Program Nurse Care Manager
	c. No preference/programs are about the same → [GO TO Q36]
	d. Don't Know/Not Sure → [GO TO Q36]
31.	Why do you prefer [MEMBER'S CHOICE]? [RECORD ANSWER AND GO TO Q36]

Questions 32 and 33 are asked of follow-up	surve	v respondents o	onlv
--	-------	-----------------	------

Questic	ns 32	and 33 are asked of follow-up survey respondents only
32. [IF	RES	SPONDENT ANSWERED "NO" TO Q5] About when did you decide to no longer participate?
	a.	Month/Year [SPECIFY]
	b.	Don't Know/Not Sure
33. W	hy di	d you decide to no longer participate in the program [RECORD ANSWER & SKIP TO Q36]?
	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 not participate
	e.	Do not wish to self-manage care/receive health education/receive health coaching
	f.	Do not want to be evaluated by Nurse Care Manager/Health Coach
	g.	Dislike Nurse Care Manager/Health Coach
	h.	Have no health needs at this time
	i.	Nurse Care Manager/Health Coach stopped calling or visiting
	j.	Did not like change from Nurse Care Management to Health Coaching
	k.	Other. SPECIFY:
	l.	Not Sure/Don't Know
Questic	ons 34	and 35 have been discontinued
34. [II		SPONDENT ANSWERED "NO" TO Q4] About when did you decide to not participate?
	a.	Month/Year [SPECIFY]
	b.	-Don't Know/Not Sure
35. W	'hy di	d you decide not to participate in the program?
	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 not participate
	е.	Do not wish to self-manage care/receive health education/receive health coaching
	f	Do not want to be evaluated by Nurse Care Manager/Health Coach
	g.	Dislike Nurse Care Manager/Health Coach
	h.	Have no health needs at this time
	i. —	Nurse Care Manager/Health Coach stopped calling or visiting
	j	Did not like change from Nurse Care Management to Health Coaching
	k_	Other. SPECIFY:

I. Not Sure/Don't Know

DEMOGRAPHICS

- 36. I'm now going to ask about your race. I will read you a list of choices. You may choose 1 or more. This question is being used for demographic purposes only and you may also choose not to respond.
 - a. White or Caucasian
 - b. Black or African-American
 - c. Asian
 - d. Native Hawaiian or other Pacific Islander
 - e. American Indian
 - f. Hispanic or Latino
 - g. Other. SPECIFY:

Those are all the questions I have today. We may contact you again in the future to follow-up and learn if anything about your health care has changed. Thank you for your help.

APPENDIX B – DETAILED PARTICIPANT SURVEY RESULTS

Appendix B includes active participant responses to all survey questions. Data is presented for both the initial and follow-up surveys.

			ey	Month Follow- up	Month Follow up	Month Follow up	Six Month Follow up	
2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 4/18	Aggregate				
129 99.20%	380 98.20%	255 96.59%	253 100.00%	1017 98.36%	109 <i>97.30%</i>	176 97.24%	157 99.37%	442 98.00%
1 0.80%	7 1.80%	9 3.41%	0 0.00%	17 1.64%	3 2.70%	5 2.76%	1 0.63%	9 2.00%
111	343	237	253	944	N/A - not asked	N/A - not asked	N/A - not asked	N/A - not asked
18 14.00%	36 9.50%	93.31% 17 6.69%	0.00%	71 6.99%				
0 0.00%	1 0.30%	0	0	1 0.10%				
111	342	235	253	941	N/A - not asked	N/A - not asked	N/A - not asked	N/A - not asked
86.00%	90.20%	92.52%	100.00%	92.71%				
1	129 99.20% 1 0.80% 111 86.00% 18 14.00% 0 0.00%	129 380 99.20% 98.20% 1 7 0.80% 1.80% 111 343 36.00% 90.30% 18 36 14.00% 9.50% 0 1 0.00% 0.30% 111 342 36.00% 90.20% 18 37	4/15 4/16 4/17 129 380 255 99.20% 98.20% 96.59% 1 7 9 0.80% 1.80% 3.41% 111 343 237 36.00% 90.30% 93.31% 18 36 17 14.00% 9.50% 6.69% 0 1 0 0.00% 0.30% 0.00% 111 342 235 36.00% 90.20% 92.52% 18 37 19	4/15 4/16 4/17 4/18 129 380 255 253 39.20% 98.20% 96.59% 100.00% 1 7 9 0 0.80% 1.80% 3.41% 0.00% 111 343 237 253 36.00% 90.30% 93.31% 100.00% 18 36 17 0 14.00% 9.50% 6.69% 0.00% 0 0 0.00% 0.00% 111 342 235 253 36.00% 90.20% 92.52% 100.00% 18 37 19 0	4/15 4/16 4/17 4/18 Aggregate 129 380 255 253 1017 99.20% 98.20% 96.59% 100.00% 98.36% 1 7 9 0 17 0.80% 1.80% 3.41% 0.00% 1.64% 111 343 237 253 944 36.00% 90.30% 93.31% 100.00% 92.91% 18 36 17 0 71 14.00% 9.50% 6.69% 0.00% 6.99% 0 1 0 0 1 0.00% 0.30% 0.00% 0.00% 0.10% 111 342 235 253 941 36.00% 90.20% 92.52% 100.00% 92.71% 18 37 19 0 74	4/15 4/16 4/17 4/18 Aggregate 129 380 255 253 1017 109 39.20% 98.20% 96.59% 100.00% 98.36% 97.30% 1 7 9 0 17 3 0.80% 1.80% 3.41% 0.00% 1.64% 2.70% 111 343 237 253 944 N/A - not asked 36.00% 90.30% 93.31% 100.00% 92.91% 1 18 36 17 0 71 0 0.00% 6.99% 0 0 0 0 0 0 0.00% 0.10% 111 342 235 253 941 N/A - not asked 36.00% 90.20% 92.52% 100.00% 92.71% 0 18 37 19 0 74 0 74	4/15 4/16 4/17 4/18 Aggregate 129 380 255 253 1017 109 176 39.20% 98.20% 96.59% 100.00% 98.36% 97.30% 97.24% 1 7 9 0 17 3 5 0.80% 1.80% 3.41% 0.00% 1.64% 2.70% 2.76% 111 343 237 253 944 N/A - not asked N/A - not asked 36.00% 90.30% 93.31% 100.00% 92.91% 100.00% 100.00% 0.99% 0 1 0 0 0 1 0.00% 0.10% 111 342 235 253 941 N/A - not asked 0.00% 0.10% 111 342 235 253 941 N/A - not asked 0.00% 0.00% 0.20% 0.20% 92.52% 100.00% 92.71% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00% </th <th>4/15 4/16 4/17 4/18 Aggregate 129 380 255 253 1017 109 176 157 39.20% 98.20% 96.59% 100.00% 98.36% 97.30% 97.24% 99.37% 1 7 9 0 17 3 5 1 0.63% 111 343 237 253 944 N/A - not asked N/A - not asked N/A - not asked 36.00% 90.30% 93.31% 100.00% 92.91% N/A - not asked N/A - not asked 14.00% 9.50% 6.69% 0.00% 6.99% 0.10% N/A - not asked N/A - not asked 111 342 235 253 941 N/A - not asked N/A - not asked 111 342 235 253 941 N/A - not asked N/A - not asked 18 37 19 0 74 74 74 74</th>	4/15 4/16 4/17 4/18 Aggregate 129 380 255 253 1017 109 176 157 39.20% 98.20% 96.59% 100.00% 98.36% 97.30% 97.24% 99.37% 1 7 9 0 17 3 5 1 0.63% 111 343 237 253 944 N/A - not asked N/A - not asked N/A - not asked 36.00% 90.30% 93.31% 100.00% 92.91% N/A - not asked N/A - not asked 14.00% 9.50% 6.69% 0.00% 6.99% 0.10% N/A - not asked N/A - not asked 111 342 235 253 941 N/A - not asked N/A - not asked 111 342 235 253 941 N/A - not asked N/A - not asked 18 37 19 0 74 74 74 74

			Initial Surv	ey	5/15 – 4/16 Six- Month Follow- up	5/16 – 4/17 Six Month Follow up	5/17 – 4/18 Six Month Follow up	Aggregate Six Month Follow up	
Survey Questions (numbering based on initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 4/18	Aggregate				
C. Don't know/not sure	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%				
4) Did you decide to participate?									
A. Yes	109 98.20%	342 100.00%	234 99.15%	253 100.00%	938 <i>99.58%</i>	N/A - not asked	N/A - not asked	N/A - not asked	N/A - not asked
B. No	2 1.80%	0	2 0.85%	0	4 0.42%				
5) Are you still participating today in the CCP?									
A. Yes	106 95.50%	325 95.60%	218 92.77%	253 100.00%	902 <i>96.06%</i>	103 94.50%	150 85.23%	156 99.36%	409 <i>92.53%</i>
B. No	5 4.50%	15 4.40%	16 6.81%	0 0.00%	36 3.83%	6 5.50%	26 14.77%	1 0.64%	33 7.47%
C. Don't know/not sure	0 0.00%	0 0.00%	1 0.43%	0 0.00%	1 0.11%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
6) How long have you been participating in the CCP?									
A. Less than 1 month	2 1.90%	6 1.80%	8 3.67%	2 0.79%	18 2.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
B. 1 to 2 months	16 15.10%	32 9.80%	30 13.76%	43 17.00%	121 13.41%	0 0.00%	0 0.00%	0 0.00%	0 0.00%

			5/17 – 4/18 Six Month Follow up	Aggregate Six Month Follow up							
Survey Questions (numbering based on initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 4/18	Aggregate						
C. 3 to 4 months	18 17.00%	32 9.80%	34 15.60%	68 26.88%	152 16.85%	0 0.00%	0 0.00%	0 0.00%	0 0.00%		
D. 5 to 6 months	9 8.50%	40 12.30%	32 14.68%	47 18.58%	128 14.19%	0 0.00%	0 0.00%	0 0.00%	0 0.00%		
E. More than 6 months	61 57.50%	212 65.20%	111 50.92%	91 35.97%	475 52.66%	See below	See below	See below	See below		
F. 6 to 9 months	37.3070	03.2070	30.3270	33.3770	32.0070	9	5	30	44		
						8.70%	3.33%	19.23%	10.76%		
G. 9 to 12 months			ial survey, te onths are not	_		68 66.00%	37 24.67%	59 <i>37.82%</i>	164 40.10%		
H. More than 12 months				.,		22	104	64	190		
						21.40%	69.33%	41.03%	46.45%		
F. Don't know/not sure	0	3	3	2	8	4	4	3	11		
	0.00%	0.90%	1.38%	0.79%	0.89%	3.90%	2.67%	1.92%	2.69%		
7) How did you learn about the CCP?											
A. Received information in the mail	19	62	42	25	148	N/A - not asked					
	17.90%	19.10%	19.27%	9.88%	16.41%						

			Initial Surv	ey	5/15 – 4/16 Six- Month Follow- up	5/16 – 4/17 Six Month Follow up	5/17 – 4/18 Six Month Follow up	Aggregate Six Month Follow up	
Survey Questions (numbering based on initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 4/18	Aggregate				
B. Received a call from my Nurse Care Manager	35	186	128	161	510				
	33.00%	57.20%	58.72%	63.64%	56.54%				
C. Received a call from someone else	0	1	0	0	1				
	0.00%	0.30%	0.00%	0.00%	0.11%				
D. Doctor referred me while I was in his/her office	31	20	18	33	102				
	29.20%	6.20%	8.26%	13.04%	11.31%				
E. Other	2 1.90%	12 3.70%	9 4.13%	19 7.51%	42 4.66%				
F. Don't know/not sure	19	44	21	15	99				
	17.90%	13.50%	9.63%	5.93%	10.98%				
8) What were your reasons for deciding to participate in the CCP? (Multiple answers allowed.)									
A. Learn how to better manage health problems	37	128	91	64	320		N/A - n	ot asked	
	34.90%	39.00%	41.74%	25.30%	35.36%				

			Initial Surv	ey	5/15 – 4/16 Six- Month Follow- up	5/16 – 4/17 Six Month Follow up	5/17 – 4/18 Six Month Follow up	Aggregate Six Month Follow up	
Survey Questions (numbering based on initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 4/18	Aggregate				
B. Learn how to identify changes in health	0	0	0	0	0				
3	0.00%	0.00%	0.00%	0.00%	0.00%				
C. Have someone to call with questions about health	9	18	4	6	37				
	8.50%	5.50%	1.83%	2.37%	4.09%				
D. Get help making health care appointments	2	7	5	3	17				
	1.90%	2.10%	2.29%	1.19%	1.88%				
E. Personal doctor recommended I enroll	13	7	5	7	32				
	12.30%	2.10%	2.3%	2.8%	3.5%				
F. Improve my health	4	19	25	26	74				
	3.80%	5.80%	11.47%	10.28%	8.18%				
G. Was invited to enroll/no specific reason	37	124	62	66	289				
	34.90%	37.80%	28.44%	26.09%	31.93%				
H. Other	1	12	22	81	116				
	0.90%	3.70%	10.09%	32.02%	12.82%				
I. Don't know/not sure	3	13	4	0	20				
	2.80%	4.00%	1.83%	0.00%	2.21%				

			Initial Surv	ey		5/15 – 4/16 Six- Month Follow- up	Aggregate Six Month Follow up		
Survey Questions (numbering based on initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 4/18	Aggregate				
9) Among the reasons you gave, what was your most important reason for deciding to participate?									
A. Learn how to better manage health problems	37	128	90	65	320				
	34.90%	39.40%	41.28%	25.69%	35.48%				
B. Learn how to identify changes in health	0	0	0	0	0				
	0.00%	0.00%	0.00%	0.00%	0.00%				
C. Have someone to call with questions about health	10	17	5	6	38				
	9.40%	5.20%	2.29%	2.37%	4.21%				
D. Get help making health care appointments	2	6	5	3	16		N/A - n	ot asked	
	1.90%	1.80%	2.29%	1.19%	1.77%				
E. Personal doctor recommended I enroll	13	7	5	6	31				
	12.30%	2.20%	2.29%	2.37%	3.44%				
F. Improve my health	4 3.80%	19 5.80%	25 11.47%	26 10.28%	74 8.20%				
G. Was invited to enroll/no specific reason	37	124	63	65	289				
•	34.90%	38.20%	28.90%	25.69%	32.04%				

			Initial Surv	rey		5/15 – 4/16 Six- Month Follow- up	Aggregate Six Month Follow up			
Survey Questions (numbering based on initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 4/18	Aggregate					
H. Other	1 0.90%	12 3.70%	22 10.09%	82 32.41%	117 12.97%					
I. Don't know/not sure	2 1.90%	12 3.70%	3 1.38%	0 0.00%	17 1.88%					
10) How soon after you started participating in the CCP were you contacted by your Nurse Care Manager?										
A. Contacted at time of enrollment in the doctor's office	32 30.20%	196 60.30%	135 61.93%	172 67.98%	535 <i>59.31%</i>					
B. Less than 1 week	23 21.70%	26 8.00%	23 10.55%	15 5.93%	87 9.65%					
C. 1 to 2 weeks	8 7.50%	19 5.80%	20 9.17%	33 13.04%	80 8.87%	N/A - not asked				
D. More than 2 weeks	0	4	1	2	7					
E. Have not been contacted - enrolled 2 weeks ago or less	0.00% 0	1.20% 0	0.46% 0	0.79% 0	0.78% 0					
	0.00%	0.00%	0.00%	0.00%	0.00%					

			Initial Surv	ey	5/15 – 4/16 Six- Month Follow- up	5/16 – 4/17 Six Month Follow up	5/17 – 4/18 Six Month Follow up	Aggregate Six Month Follow up	
Survey Questions (numbering based on initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 4/18	Aggregate				
F. Have not been contacted - enrolled 2 to 4 weeks ago	0	2	0	0	2				
	0.00%	0.60%	0.00%	0.00%	0.22%				
G. Have not been contacted - enrolled more than 4 weeks ago	0	2	2	0	4				
	0.00%	0.60%	0.92%	0.00%	0.44%				
H. Don't know/not sure/other	43 40.60%	76 23.40%	37 16.97%	31 12.25%	187 20.73%				
11) Can you tell me the name of your Nurse Care Manager?									
A. Yes	64 61.50%	204 62.40%	127 58.26%	173 68.38%	568 <i>62.97%</i>	69 <i>67.00%</i>	99 66.00%	92 58.97%	260 63.57%
B. No	40 38.50%	123 37.60%	91 <i>41.74%</i>	80 31.62%	334 <i>37.03%</i>	34 <i>33.00%</i>	51 34.00%	64 41.03%	149 <i>36.43%</i>
12) About when was the last time you spoke to your Nurse Care Manager?									
A. Within last week	34 <i>33.70%</i>	104 31.50%	62 28.57%	77 30.43%	277 30.74%	30 29.10%	30 20.00%	27 17.31%	87 21.27%
B. 1 to 2 weeks ago	29 28.70%	94 28.50%	46 21.20%	54 21.34%	223 24.75%	9 8.70%	37 24.67%	17 10.90%	63 15.40%
C. 2 to 4 weeks ago	24	69	57	75	225	19	35	44	98
	23.80%	20.90%	26.27%	29.64%	24.97%	18.40%	23.33%	28.21%	23.96%

			Initial Surv	ey	5/15 – 4/16 Six- Month Follow- up	5/16 – 4/17 Six Month Follow up	5/17 – 4/18 Six Month Follow up	Aggregate Six Month Follow up	
Survey Questions (numbering based on initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 4/18	Aggregate				
D. More than 4 weeks ago	13 12.90%	52 15.80%	50 23.04%	43 17.00%	158 17.54%	41 39.80%	47 31.33%	66 42.31%	154 37.65%
E. Have never spoken to Nurse Care Manager	0	1	1	3	5	1	0	0	1
J	0.00%	0.30%	0.46%	1.19%	0.55%	1.00%	0.00%	0.00%	0.24%
F. Don't know/not sure	1 1.00%	10 3.00%	1 0.46%	1 0.40%	13 1.44%	3 2.90%	1 0.67%	2 1.28%	6 1.47%
13) Did your Nurse Care Manager give you a telephone number to call if you needed help with your care?									
A. Yes	96 93.20%	312 96.30%	202 93.09%	242 95.65%	852 94.98%	97 94.20%	143 95.33%	146 93.59%	386 94.38%
B. No	3 2.90%	5 1.50%	7 3.23%	3 1.19%	18 2.01%	3 2.90%	2 1.33%	3 1.92%	8 1.96%
C. Don't know/not sure	4	7	8	8	27	3	5	7	15
14) Have you tried to call your Nurse Care Manager at the number you were given?	3.90%	2.20%	3.69%	3.16%	3.01%	2.90%	3.33%	4.49%	3.67%
A. Yes	37 38.50%	137 43.90%	74 36.63%	101 41.74%	349 40.96%	40 41.20%	59 41.26%	60 41.10%	159 41.19%

			Initial Surv	ey	5/15 – 4/16 Six- Month Follow- up	5/16 – 4/17 Six Month Follow up	5/17 – 4/18 Six Month Follow up	Aggregate Six Month Follow up	
Survey Questions (numbering based on initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 4/18	Aggregate				
B. No	59 61.50%	175 56.10%	127 62.87%	141 58.26%	502 58.92%	57 58.80%	84 58.74%	84 57.53%	225 58.29%
C. Don't know/not sure	О	0	1	0	1	0	0	2	2
	0.00%	0.00%	0.50%	0.00%	0.12%	0.00%	0.00%	1.37%	0.52%
15) Thinking about the last time you called your Nurse Care Manager, what was the reason for your call?									
A. Routine health question	27 73.00%	97 70.80%	48 64.86%	82 81.19%	254 72.78%	27 67.50%	45 76.27%	44 73.33%	116 72.96%
B. Urgent health problem	1 2.70%	3 2.20%	2 2.70%	0 0.00%	6 1.72%	1 2.50%	4 6.78%	4 6.67%	9 5.66%
C. Seeking assistance in scheduling an appointment	2	5	5	2	14	4	3	1	8
	5.40%	3.60%	6.76%	1.98%	4.01%	10.00%	5.08%	1.67%	5.03%
D. Returning call from Nurse Care Manager	6	31	17	17	71	8	6	11	25
	16.20%	22.60%	22.97%	16.83%	20.34%	20.00%	10.17%	18.33%	15.72%
E. Other	1 2.70%	1 0.70%	2 2.70%	0 0.00%	4 1.15%	0 0.00%	1 1.69%	0 0.00%	1 0.63%
F. Don't know/not sure	0	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%

			Initial Surv	ey	5/15 – 4/16 Six- Month Follow- up	5/16 – 4/17 Six Month Follow up	5/17 – 4/18 Six Month Follow up	Aggregate Six Month Follow up	
Survey Questions (numbering based on initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 4/18	Aggregate				
16) 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)	17	71	32	42	162	18	28	19	65
	45.90%	51.80%	42.67%	41.58%	46.29%	45.00%	47.46%	31.67%	40.88%
B. Called back within 1 hour	13	30	19	34	96	9	13	13	35
	35.10%	21.90%	25.33%	33.66%	27.43%	22.50%	22.03%	21.67%	22.01%
C. Called back in more than 1 hour but same day	3	13	10	13	39	3	7	16	26
	8.10%	9.50%	13.33%	12.87%	11.14%	7.50%	11.86%	26.67%	16.35%
D. Called back the next day	0 0.00%	10 7.30%	4 5.33%	3 2.97%	17 4.86%	3 7.50%	1 1.69%	3 5.00%	7 4.40%
E. Called back 2 or more days later	1	5	1	3	10	0	0	1	1
	2.70%	3.60%	1.33%	2.97%	2.86%	0.00%	0.00%	1.67%	0.63%
F. Never called back	1	3	4	2	10	3	4	4	11
	2.70%	2.20%	5.33%	1.98%	2.86%	7.50%	6.78%	6.67%	6.92%
G. Other	0	0	0	0	0	1	0	0	1
	0.00%	0.00%	0.00%	0.00%	0.00%	2.50%	0.00%	0.00%	0.63%
H. Don't know/not sure	2	5	5	4	16	3	6	4	13
	5.40%	3.60%	6.67%	3.96%	4.57%	7.50%	10.17%	6.67%	8.18%

			Initial Surv	ey	5/15 – 4/16 Six- Month Follow- up	5/16 – 4/17 Six Month Follow up	5/17 – 4/18 Six Month Follow up	Aggregate Six Month Follow up	
Survey Questions (numbering based on initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 4/18	Aggregate				
17) I'm going to mention some things your Nurse Care Manager may have done for you. Has your Nurse Care Manager:									
(a) Asked questions about your health problems or concerns									
A. Yes	105	322	215	248	890	100	149	155	404
	99.10%	99.10%	98.17%	98.02%	98.56%	98.00%	100.00%	99.36%	99.26%
B. No	1	2	4	4	11	2	0	1	3
	0.90%	0.60%	1.83%	1.58%	1.22%	2.00%	0.00%	0.64%	0.74%
C. Don't know/not sure	0	1	0	1	2	0	0	0	0
	0.00%	0.30%	0.00%	0.40%	0.22%	0.00%	0.00%	0.00%	0.00%
(b) Provided instructions about taking care of your health problems or concerns									
A. Yes	95	297	195	239	826	95	141	152	388
	89.60%	91.40%	89.45%	94.47%	91.57%	93.10%	94.00%	97.44%	95.10%
B. No	8	24	23	13	68	7	9	4	20
	7.50%	7.40%	10.55%	5.14%	7.54%	6.90%	6.00%	2.56%	4.90%
C. Don't know/not sure	3	4	0	1	8	0	0	0	0
	2.80%	1.20%	0.00%	0.40%	0.89%	0.00%	0.00%	0.00%	0.00%

			Initial Surv	ey	5/15 – 4/16 Six- Month Follow- up	5/16 – 4/17 Six Month Follow up	5/17 – 4/18 Six Month Follow up	Aggregate Six Month Follow up	
Survey Questions (numbering based on initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 4/18	Aggregate				
(c) Helped you to identify changes in your health that might be an early sign of a problem									
A. Yes	37	138	76	97	348	43	71	62	176
	34.90%	42.50%	34.86%	38.34%	38.58%	42.20%	47.33%	39.74%	43.14%
B. No	67	185	138	155	545	57	76	90	223
	63.20%	56.90%	63.3%	61.3%	60.4%	55.90%	50.7%	57.7%	54.7%
C. Don't know/not sure	2	2	4	1	9	2	3	4	9
	1.90%	0.60%	1.83%	0.40%	1.00%	2.00%	2.00%	2.56%	2.21%
(d) Answered questions about your health									
A. Yes	94	281	187	229	791	91	140	145	376
	88.70%	86.50%	85.78%	90.51%	87.69%	89.20%	93.33%	92.95%	92.16%
B. No	12	44	31	24	111	11	10	11	32
	11.30%	13.50%	14.22%	9.49%	12.31%	10.80%	6.67%	7.05%	7.84%
C. Don't know/not sure	0	0	0	0	0	0	0	0	0
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(e) Helped you talk to and work with your regular doctor and your regular doctor's office staff									
A. Yes	48	127	47	61	283	27	51	32	110
	45.30%	39.10%	21.56%	24.11%	31.37%	26.50%	34.00%	20.65%	27.03%

			Initial Surv	ey		5/15 – 4/16 Six- Month Follow- up	5/16 – 4/17 Six Month Follow up	5/17 – 4/18 Six Month Follow up	Aggregate Six Month Follow up
Survey Questions (numbering based on initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 4/18	Aggregate				
B. No	54	197	167	191	609	73	99	123	295
	50.90%	60.60%	76.61%	75.49%	67.52%	71.60%	66.00%	79.35%	72.48%
C. Don't know/not sure	4 3.80%	1 0.30%	4 1.83%	1 0.40%	10 1.11%	2 2.00%	0 0.00%	0 0.00%	2 0.49%
(f) Helped you to make and keep health care appointments with other doctors, such as specialists, for medical problems?									
A. Yes	47	101	38	52	238	26	41	30	97
B. No	44.30% 58 54.70%	31.10% 223 68.60%	17.43% 179 82.11%	20.55% 200 79.05%	26.39% 660 73.17%	25.50% 75 73.50%	27.33% 109 72.67%	19.35% 125 80.65%	23.83% 309 75.92%
C. Don't know/not sure	1	1	1	1	4	1	0	0	1
·	0.90%	0.30%	0.46%	0.40%	0.44%	1.00%	0.00%	0.00%	0.25%
(g) Helped you to make and keep health care appointments for mental health or substance abuse problems									
A. Yes	8	16	10	8	42	7	8	5	20
	7.50%	4.90%	4.59%	3.16%	4.66%	6.90%	5.33%	3.23%	4.91%
B. No	98 92.50%	309 95.10%	208 95.41%	245 96.84%	860 95.34%	94 92.20%	142 94.67%	150 96.77%	386 94.84%

			Initial Surv	ey	5/15 – 4/16 Six- Month Follow- up	5/16 – 4/17 Six Month Follow up	5/17 – 4/18 Six Month Follow up	Aggregate Six Month Follow up	
Survey Questions (numbering based on initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 4/18	Aggregate				
C. Don't know/not sure	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	1 1.00%	0 0.00%	0 0.00%	1 0.25%
(h) Reviewed your medications with you and helped you to manage your medications A. Yes	78	288	194	228	788	92	140	139	371
A. res	73.60%	88.60%	88.99%	90.12%	87.36%	90.20%	93.33%	89.68%	91.15%
B. No	26 24.50%	32 9.80%	19 8.72%	19 7.51%	96 10.64%	9 8.80%	7 4.67%	8 5.16%	24 5.90%
C. Don't know/not sure	2 1.90%	5 1.50%	5 2.29%	6 2.37%	18 2.00%	1 1.00%	3 2.00%	8 5.16%	12 2.95%
18) (For each activity performed) How satisfied are you with the help you received?									
(a) Asked questions about your health problems or concerns									
A. Very satisfied	96 90.60%	297 91.40%	197 <i>90.37%</i>	235 92.89%	825 91.46%	91 89.20%	142 94.67%	143 92.26%	376 92.38%
B. Somewhat satisfied	7 6.60%	19 5.80%	14 6.42%	12 4.74%	52 5.76%	4 3.90%	5 3.33%	9 5.81%	18 4.42%
C. Somewhat dissatisfied	1 0.90%	2 0.60%	2 0.92%	0	5 0.55%	3 2.90%	0	0	3 0.74%

			Initial Surv	ey	5/15 – 4/16 Six- Month Follow- up	5/16 – 4/17 Six Month Follow up	5/17 – 4/18 Six Month Follow up	Aggregate Six Month Follow up	
Survey Questions (numbering based on initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 4/18	Aggregate				
D. Very dissatisfied	1	4	0	1	6	1	2	2	5
	0.90%	1.20%	0.00%	0.40%	0.67%	1.00%	1.33%	1.29%	1.23%
E. Don't know/Not Applicable	1	3	5	5	14	3	1	1	5
	0.90%	0.90%	2.29%	1.98%	1.55%	2.90%	0.67%	0.65%	1.23%
(b) Provided instructions about taking care of your health problems or concerns									
A. Very satisfied	88	288	187	226	789	88	137	141	366
1.0., 0.0.00	83.00%	88.60%	85.78%	89.33%	87.47%	86.30%	91.33%	90.97%	89.93%
B. Somewhat satisfied	5 <i>4.70%</i>	8 2.50%	10 4.59%	7 2.77%	30 3.33%	3 2.90%	2 1.33%	7 4.52%	12 2.95%
C. Somewhat dissatisfied	1 0.90%	0 0.00%	0 0.00%	0 0.00%	1 0.11%	2 2.00%	0 0.00%	0 0.00%	2 0.49%
D. Very dissatisfied	0	1	0	1	2	1	1	1	3
	0.00%	0.30%	0.00%	0.40%	0.22%	1.00%	0.67%	0.65%	0.74%
E. Don't know/Not Applicable	12	28	21	19	80	8	10	6	24
	11.30%	8.60%	9.63%	7.51%	8.87%	7.80%	6.67%	3.87%	5.90%
(c) Helped you to identify changes in your health that might be an early sign of a problem									
A. Very satisfied	38	133	77	99	347	42	67	63	172
	35.80%	40.90%	35.32%	39.13%	38.47%	41.20%	44.67%	40.65%	42.26%

			Initial Surv	ey		5/15 – 4/16 Six- Month Follow- up	5/16 – 4/17 Six Month Follow up	5/17 – 4/18 Six Month Follow up	Aggregate Six Month Follow up
Survey Questions (numbering based on initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 4/18	Aggregate				
B. Somewhat satisfied	1	9	2	0	12	1	2	0	3
C. Somewhat dissatisfied	0.90% 0	2.80% 0	0.92% 0	0.00% 0	1.33% 0	1.00% 0	1.33% 0	0.00% 0	0.74% 0
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
D. Very dissatisfied	0	0	0	0	0	0	0	0	0
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
E. Don't know/Not Applicable	67 <i>63.20%</i>	183 56.30%	139 <i>63.76%</i>	154 60.87%	543 60.20%	59 57.80%	81 54.00%	92 59.35%	232 57.00%
(d) Answered questions about your health									
A. Very satisfied	93	272	180	222	767	84	136	137	357
	87.70%	83.70%	82.57%	87.75%	85.03%	82.40%	90.67%	88.39%	87.71%
B. Somewhat satisfied	2	8	8	6	24	3	3	4	10
	1.90%	2.50%	3.67%	2.37%	2.66%	2.90%	2.00%	2.58%	2.46%
C. Somewhat dissatisfied	0	1	0	0	1	1	0	0	1
	0.00%	0.30%	0.00%	0.00%	0.11%	1.00%	0.00%	0.00%	0.25%
D. Very dissatisfied	0	0	0	1	1	0	0	0	0
	0.00%	0.00%	0.00%	0.40%	0.11%	0.00%	0.00%	0.00%	0.00%
E. Don't know/Not Applicable	11	44	30	24	109	14	11	14	39
	10.40%	13.50%	13.76%	9.49%	12.08%	13.70%	7.33%	9.03%	9.58%

			Initial Surv	ey	5/15 – 4/16 Six- Month Follow- up	5/16 – 4/17 Six Month Follow up	5/17 – 4/18 Six Month Follow up	Aggregate Six Month Follow up	
Survey Questions (numbering based on initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 4/18	Aggregate				
(e) Helped you talk to and work with your regular doctor and your regular doctor's office staff									
A. Very satisfied	45	125	44	56	270	28	48	34	110
	42.50%	38.50%	20.18%	22.13%	29.93%	27.50%	32.00%	21.94%	27.03%
B. Somewhat satisfied	1	8	5	0	14	0	2	2	4
	0.90%	2.50%	2.29%	0.00%	1.55%	0.00%	1.33%	1.29%	0.98%
C. Somewhat dissatisfied	0	0	1	0	1	0	0	0	0
	0.00%	0.00%	0.46%	0.00%	0.11%	0.00%	0.00%	0.00%	0.00%
D. Very dissatisfied	0	0	0	1	1	0	0	0	0
	0.00%	0.00%	0.00%	0.40%	0.11%	0.00%	0.00%	0.00%	0.00%
E. Don't know/Not Applicable	60	192	168	196	616	74	100	119	293
	56.60%	59.10%	77.06%	77.47%	68.29%	72.50%	66.67%	76.77%	71.99%
(f) Helped you to make and keep health care appointments with other doctors, such as specialists, for medical problems?									
A. Very satisfied	45	100	41	49	235	25	40	30	95
	42.50%	30.80%	18.81%	19.37%	26.05%	24.50%	26.67%	19.35%	23.34%
B. Somewhat satisfied	1	6	3	1	11	2	2	2	6
	0.90%	1.80%	1.38%	0.40%	1.22%	2.00%	1.33%	1.29%	1.47%

			Initial Surv	ey		5/15 – 4/16 Six- Month Follow- up	5/16 – 4/17 Six Month Follow up	5/17 – 4/18 Six Month Follow up	Aggregate Six Month Follow up
Survey Questions (numbering based on initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 4/18	Aggregate				
C. Somewhat dissatisfied	1	0	0	0	1	0	0	0	0
	0.90%	0.00%	0.00%	0.00%	0.11%	0.00%	0.00%	0.00%	0.00%
D. Very dissatisfied	0	0	0	1	1	0	0	0	0
	0.00%	0.00%	0.00%	0.40%	0.11%	0.00%	0.00%	0.00%	0.00%
E. Don't know/Not Applicable	59	219	174	202	654	75	108	123	306
	55.70%	67.40%	79.82%	79.84%	72.51%	73.50%	72.00%	79.35%	75.18%
(g) Helped you to make and keep health care appointments for mental health or substance abuse problems									
A. Very satisfied	10	15	10	8	43	6	7	5	18
	9.40%	4.60%	4.59%	3.16%	4.77%	5.90%	4.67%	3.23%	4.42%
B. Somewhat satisfied	1	10	6	1	18	1	4	3	8
	0.90%	3.10%	2.75%	0.40%	2.00%	1.00%	2.67%	1.94%	1.97%
C. Somewhat dissatisfied	0	0	0	0	0	0	0	0	0
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
D. Very dissatisfied	0	0	0	0	0	0	0	0	0
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
E. Don't know/Not Applicable	95	300	202	244	841	95	139	147	381
	89.60%	92.30%	92.66%	96.44%	93.24%	93.10%	92.67%	94.84%	93.61%

			Initial Surv	ey	5/15 – 4/16 Six- Month Follow- up	5/16 – 4/17 Six Month Follow up	5/17 – 4/18 Six Month Follow up	Aggregate Six Month Follow up	
Survey Questions (numbering based on initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 4/18	Aggregate				
(h) Reviewed your medications with you and helped you to manage your medications									
A. Very satisfied	76	278	183	220	757	84	135	130	349
	71.70%	85.50%	<i>83.94%</i>	86.96%	83.92%	82.40%	90.00%	<i>83.87%</i>	<i>85.75%</i>
B. Somewhat satisfied	2	9	11	8	30	4	3	5	12
	1.90%	2.80%	5.05%	3.16%	3.33%	3.90%	2.00%	3.23%	2.95%
C. Somewhat dissatisfied	1	1	0	0	2	1	0	0	1
	0.90%	0.30%	0.00%	0.00%	0.22%	1.00%	0.00%	0.00%	0.25%
D. Very dissatisfied	0	2	0	0	2	1	1	1	3
	0.00%	0.60%	0.00%	0.00%	0.22%	1.00%	0.67%	0.65%	0.74%
E. Don't know/Not Applicable	27	35	24	25	111	12	11	19	42
	25.50%	10.80%	11.01%	9.88%	12.31%	11.80%	7.33%	12.26%	10.32%
19) Overall, how satisfied are you with your Nurse Care Manager?									
A. Very satisfied	97	295	200	236	828	93	140	143	376
	91.50%	90.80%	91.74%	93.28%	91.80%	91.20%	94.59%	92.26%	92.84%
B. Somewhat satisfied	7 6.60%	20 6.20%	13 5.96%	14 5.53%	54 5.99%	5 4.90%	5 3.38%	10 6.45%	20 4.94%
C. Somewhat dissatisfied	1 0.90%	4 1.20%	3 1.38%	0	8 0.89%	4 3.90%	1 0.68%	1 0.65%	6 1.48%

			Initial Surv	ey		5/15 – 4/16 Six- Month Follow- up	5/16 – 4/17 Six Month Follow up	5/17 – 4/18 Six Month Follow up	Aggregate Six Month Follow up
Survey Questions (numbering based on initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 4/18	Aggregate				
D. Very dissatisfied	1 0.90%	5 1.50%	1 0.46%	1 0.40%	8 0.89%	0 0.00%	2 1.35%	1 0.65%	3 0.74%
E. Don't know/not sure	0 0.00%	1 0.30%	1 0.46%	2 0.79%	4 0.44%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
20) Overall, how satisfied are you with your whole experience in the CCP?									
A. Very satisfied	97 91.50%	299 92.00%	200 92.17%	236 93.28%	832 92.34%	93 91.20%	141 95.27%	144 92.90%	378 <i>93.33%</i>
B. Somewhat satisfied	7 6.60%	14 4.30%	12 5.53%	14 5.53%	47 5.22%	7 6.90%	4 2.70%	9 5.81%	20 4.94%
C. Somewhat dissatisfied	2 1.90%	6 1.80%	3 1.38%	0	11 1.22%	2 2.00%	1 0.68%	1 0.65%	4 0.99%
D. Very dissatisfied	0 0.00%	4 1.20%	1 0.46%	1 0.40%	6 0.67%	0 0.00%	2 1.35%	1 0.65%	3 0.74%
E. Don't know/not sure	0 0.00%	2 0.60%	1 0.46%	2 0.79%	5 0.55%	0 0.00%	0	0 0.00%	0 0.00%
21) Would you recommend the CCP to a friend who has health care needs like yours?									
A. Yes	102 96.20%	309 <i>95.10%</i>	211 97.24%	245 96.84%	867 96.23%	99 97.10%	145 97.32%	149 <i>96.13%</i>	393 <i>96.80%</i>
B. No	2 1.90%	8 2.50%	2 0.92%	3 1.19%	15 1.66%	2 2.00%	2 1.34%	3 1.94%	7 1.72%

			Initial Surv	ey		5/15 – 4/16 Six- Month Follow- up	5/16 – 4/17 Six Month Follow up	5/17 – 4/18 Six Month Follow up	Aggregate Six Month Follow up
Survey Questions (numbering based on initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 4/18	Aggregate				
C. Don't know/not sure	2 1.90%	8 2.50%	4 1.84%	5 1.98%	19 2.11%	1 1.00%	2 1.34%	3 1.94%	6 1.48%
22) Do you have any suggestions for improving the CCP?									
A. Yes (member-specific responses documented)	9	25	23	13	70	7	14	11	32
	8.50%	7.70%	10.65%	5.14%	7.78%	6.90%	9.33%	7.10%	7.86%
B. No	97 91.50%	300 92.30%	192 88.89%	240 94.86%	829 92.11%	95 93.10%	136 90.67%	144 92.90%	375 92.14%
23) Overall, how would you rate your health today?									
A. Excellent	1 1.00%	6 1.80%	3 1.37%	1 0.40%	11 1.22%	1 1.00%	0 0.00%	0 0.00%	1 0.25%
B. Good	43 41.00%	102 31.30%	65 29.68%	78 30.83%	288 31.89%	41 40.20%	47 31.33%	44 28.39%	132 32.43%
C. Fair	41 39.00%	144 44.20%	119 54.34%	140 55.34%	444 49.17%	42 41.20%	80 53.33%	95 61.29%	217 53.32%
D. Poor	20 19.00%	73 22.40%	32 14.61%	34 13.44%	159 17.61%	18 17.60%	23 15.33%	16 10.32%	57 14.00%
E. Don't know/not sure/no response	0	1	0	0	1	0	0	0	0
	0.00%	0.30%	0.00%	0.00%	0.11%	0.00%	0.00%	0.00%	0.00%

			Initial Surv	ey		5/15 – 4/16 Six- Month Follow- up	5/16 – 4/17 Six Month Follow up	5/17 – 4/18 Six Month Follow up	Aggregate Six Month Follow up
Survey Questions (numbering based on initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 4/18					
24) Compared to before you participated in the CCP, how has your health changed?									
A. Better	51	143	107	136	437	55	79	90	224
	48.60%	43.90%	48.86%	53.75%	48.39%	53.90%	53.38%	58.06%	55.31%
B. Worse	4	41	22	21	88	9	16	9	34
	3.80%	12.60%	10.05%	8.30%	9.75%	8.80%	10.81%	5.81%	8.40%
C. About the same	50	140	90	96	376	38	53	56	147
	47.60%	42.90%	41.10%	37.94%	41.64%	37.30%	35.81%	36.13%	36.30%
D. No response	0	2	0	0	2	0	0	0	0
	0.00%	0.60%	0.00%	0.00%	0.22%	0.00%	0.00%	0.00%	0.00%
25) (If better) Do you think the CCP has contributed to your improvement in health?									
A. Yes	48	138	94	130	410	52	77	80	209
	104.30%	93.20%	87.85%	95.59%	93.82%	94.50%	97.47%	88.89%	93.30%
B. No	3	5	13	6	27	3	2	7	12
	6.50%	3.40%	12.15%	4.41%	6.18%	5.50%	2.53%	7.78%	5.36%
C. Don't know/not sure	0	0	0	0	0	0	0	3	3
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.33%	1.34%

			Initial Surv	ey		5/15 – 4/16 Six- Month Follow- up	5/16 – 4/17 Six Month Follow up	5/17 – 4/18 Six Month Follow up	Aggregate Six Month Follow up
Survey Questions (numbering based on initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 4/18	Aggregate				
26) I'm going to mention a few areas where Nurse Care Managers sometimes try to help members improve their health by changing behaviors. For each, tell me if your Nurse Care Manager spoke to you, and if so, whether you changed your behavior as a result.									
(a) Smoking less or using other tobacco products less									
A. N/A - not discussed	2 1.90%	45 13.80%	55 25.23%	75 29.64%	177 19.62%	13 12.70%	16 10.74%	31 20.00%	60 14.78%
B. Discussed - no change	5 4.70%	22 6.80%	10 4.59%	10 3.95%	47 5.21%	1 1.00%	6 4.03%	11 7.10%	18 4.43%
C. Discussed - temporary change	4	7	2	4	17	0	1	3	4
D. Discussed - continuing change	3.80% 29	2.20% 57	0.92% 28	1.58% 36	1.88% 150	0.00% 16	0.67% 26	1.94% 14	0.99% 56
E. Don't know/not sure/no response	27.40% 2	17.50% 9	12.84% 3	14.23% 1	16.63% 15	15.70% 7	17.45% 3	9.03% 1	13.79% 11
	1.90%	2.80%	1.38%	0.40%	1.66%	6.90%	2.01%	0.65%	2.71%

			Initial Surv	ey	5/15 – 4/16 Six- Month Follow- up	5/16 – 4/17 Six Month Follow up	5/17 – 4/18 Six Month Follow up	Aggregate Six Month Follow up	
Survey Questions (numbering based on initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 4/18	Aggregate				
F. Not applicable	64 60.40%	185 56.90%	120 55.05%	127 50.20%	496 54.99%	65 <i>63.70%</i>	97 65.10%	95 61.29%	257 63.30%
(b) Moving around more or getting more exercise									
A. N/A - not discussed	4 3.80%	49 15.10%	57 26.15%	78 30.83%	188 20.84%	16 15.70%	20 13.51%	38 24.52%	74 18.27%
B. Discussed - no change	8 7.50%	31 9.50%	10 4.59%	19 7.51%	68 7.54%	4 3.90%	11 7.43%	9 5.81%	24 5.93%
C. Discussed - temporary change	2	6	4	2	14	1	4	4	9
D. Discussed - continuing	1.90% 34	1.80% 154	1.83% 94	0.79% 104	1.55% 386	1.00% 45	2.70% 79	2.58% 68	2.22% 192
change	32.10%	47.40%	43.12%	41.11%	42.79%	44.10%	53.38%	43.87%	47.41%
E. Don't know/not sure/no response	3	12	4	6	25	7	2	1	10
F. Not applicable	2.80% 55 51.90%	3.70% 73 22.50%	1.83% 49 22.48%	2.37% 44 17.39%	2.77% 221 24.50%	6.90% 29 28.40%	1.35% 32 21.62%	0.65% 35 22.58%	2.47% 96 23.70%
(c) Changing your diet	31.90%	22.30%	22.40/0	17.39/0	24.50%	20.40/0	21.02/0	22.36%	23.70%
A. N/A - not discussed	5	51	47	65	168	14	17	24	55
B. Discussed - no change	4.70% 4	15.70% 20	21.56% 6	25.69% 18	18.63% 48	13.70% 6	11.49% 12	15.48% 15	13.58% 33
	3.80%	6.20%	2.75%	7.11%	5.32%	5.90%	8.11%	9.68%	8.15%

			Initial Surv	ey		5/15 – 4/16 Six- Month Follow- up	5/16 – 4/17 Six Month Follow up	5/17 – 4/18 Six Month Follow up	Aggregate Six Month Follow up
Survey Questions (numbering based on initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 4/18	Aggregate				
C. Discussed - temporary change	1	4	4	5	14	2	5	6	13
	0.90%	1.20%	1.83%	1.98%	1.55%	2.00%	3.38%	3.87%	3.21%
D. Discussed - continuing change	49	186	120	132	487	52	91	91	234
	46.20%	57.20%	55.05%	52.17%	53.99%	51.00%	61.49%	58.71%	57.78%
E. Don't know/not sure/no response	3	10	6	4	23	8	2	2	12
	2.80%	3.10%	2.75%	1.58%	2.55%	7.80%	1.35%	1.29%	2.96%
F. Not applicable	44	54	35	29	162	20	21	17	58
	41.50%	16.60%	16.06%	11.46%	17.96%	19.60%	14.19%	10.97%	14.32%
(d) Managing and taking your medications better									
A. N/A - not discussed	7	44	28	28	107	10	7	11	28
,	6.60%	13.50%	12.84%	11.07%	11.86%	9.80%	4.73%	7.10%	6.91%
B. Discussed - no change	0	1	0	2	3	1	0	1	2
	0.00%	0.30%	0.00%	0.79%	0.33%	1.00%	0.00%	0.65%	0.49%
C. Discussed - temporary change	0	2	2	2	6	0	0	0	0
	0.00%	0.60%	0.92%	0.79%	0.67%	0.00%	0.00%	0.00%	0.00%
D. Discussed - continuing change	62	204	147	165	578	62	97	95	254
	58.50%	62.80%	67.43%	65.22%	64.08%	60.80%	65.54%	61.29%	62.72%

			Initial Surv	ey	5/15 – 4/16 Six- Month Follow- up	5/16 – 4/17 Six Month Follow up	5/17 – 4/18 Six Month Follow up	Aggregate Six Month Follow up	
Survey Questions (numbering based on initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 4/18	Aggregate				
E. Don't know/not sure/no response	4	8	3	5	20	6	2	4	12
F. Not applicable	3.80% 33 31.10%	2.50% 66 20.30%	1.38% 38 17.43%	1.98% 51 20.16%	2.22% 188 20.84%	5.90% 23 22.50%	1.35% 42 28.38%	2.58% 44 28.39%	2.96% 109 26.91%
(e) Making sure to drink enough water throughout the day									
A. N/A - not discussed	27 25.50%	108 33.20%	73 33.49%	57 22.53%	265 29.38%	30 29.40%	29 19.59%	34 21.94%	93 22.96%
B. Discussed - no change	2 1.90%	18 5.50%	18 8.26%	20 7.91%	58 6.43%	5 4.90%	20 13.51%	15 9.68%	40 9.88%
C. Discussed - temporary change	0	2	3	2	7	1	1	5	7
D. Discussed - continuing change	0.00% 44	0.60% 122	1.38% 77	0.79% 138	0.78% 381	1.00% 41	0.68% 62	3.23% 63	1.73% 166
E. Don't know/not sure/no response	41.50% 3	37.50% 16	35.32% 8	54.55% 9	42.24% 36	40.20% 8	41.89% 3	40.65% 9	40.99% 20
F. Not applicable	2.80% 30 28.30%	4.90% 59 18.20%	3.67% 39 17.89%	3.56% 27 10.67%	3.99% 155 17.18%	7.80% 17 16.70%	2.03% 33 22.30%	5.81% 29 18.71%	4.94% 79 19.51%

			Initial Surv	ey		5/15 – 4/16 Six- Month Follow- up	5/16 – 4/17 Six Month Follow up	5/17 – 4/18 Six Month Follow up	Aggregate Six Month Follow up
Survey Questions (numbering based on initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 4/18	Aggregate				
(f) Drinking or using other									
substances less A. N/A - not discussed	2 1.90%	83 25.50%	79 36.57%	99 39.13%	263 29.22%	32 31.40%	37 25.17%	62 40.00%	131 32.43%
B. Discussed - no change	0 0.00%	0 0.00%	0 0.00%	1 0.40%	1 0.11%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
C. Discussed - temporary change	o	0	0	0	0	1	0	0	1
	0.00%	0.00%	0.00%	0.00%	0.00%	1.00%	0.00%	0.00%	0.25%
D. Discussed - continuing change	1	8	2	4	15	2	1	1	4
, , , , ,	0.90%	2.50%	0.93%	1.58%	1.67%	2.00%	0.68%	0.65%	0.99%
E. Don't know/not sure/no response	2	12	3	7	24	7	2	4	13
	1.90% 101	3.70% 222	1.39% 132	2.77% 142	2.67% 597	6.90% 60	1.36% 107	2.58% 88	3.22% 255
F. Not applicable	95.30%	68.30%	61.11%	56.13%	66.33%	58.80%	72.79%	56.77%	63.12%
27 - 31) Comparison to NCM program	(Insufficient data to report)	(Question discontinued)	(Question discontinued)	(Question discontinued)	(Question discontinued)	(Question discontinued)	(Question discontinued)	(Question discontinued)	(Question discontinued)

			Initial Surv	ey		5/15 – 4/16 Six- Month Follow- up	5/16 – 4/17 Six Month Follow up	5/17 – 4/18 Six Month Follow up	Aggregate Six Month Follow up
Survey Questions (numbering based on initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 4/18	Aggregate				
32 - 33) Dropouts	(Insufficient data to report)	(Question moved to follow-up survey)	(Question moved to follow-up survey)	(Question moved to follow-up survey)	(Question moved to follow-up survey)				
A. Not aware of program/did not know was enrolled						0	0	0	0
						0.00%	0.00%	0.00%	0.00%
B. Did not understand purpose of the program						0	0	0	0
						0.00%	0.00%	0.00%	0.00%
C. Did not wish to self-manage care/receive health education						0	2	0	2
,						0.00%	7.69%	0.00%	6.06%
D. Satisfied with doctor/current health care access without program			N/A - follow	-up survey o	nly	1	1	0	2
						16.70%	3.85%	0.00%	6.06%
E. Dislike health coach						0	0	0	0
						0.00%	0.00%	0.00%	0.00%
F Changed doctors						1	0	0	1
0.85						16.70%	0.00%	0.00%	3.03%
G. Disenrolled by doctor						0 0.00%	0 0.00%	0 0.00%	0.00%
						0.00%	0.00%	0.00%	0.00%

			Initial Surv	ey		5/15 – 4/16 Six- Month Follow- up	5/16 – 4/17 Six Month Follow up	5/17 – 4/18 Six Month Follow up	Aggregate Six Month Follow up
Survey Questions (numbering based on initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 4/18	Aggregate				
H. Disenrolled by health coach						0	3	0	3
						0.00%	11.54%	0.00%	9.09%
I. Disenrolled by other						0	0	0	0
						0.00%	0.00%	0.00%	0.00%
J. Have not health needs at this time						2	6	1	9
						33.30%	23.08%	100.00%	27.27%
K. Other						1	13	0	14
						16.70%	50.00%	0.00%	42.42%
L. Don't know/not sure						1	1	0	2
						16.70%	3.85%	0.00%	6.06%
34 - 35) Opt outs	(Insufficient data to report)	(Question discontinued)	(Question discontinued)	(Question discontinued)	(Question discontinued)	(Question discontinued)	(Question discontinued)	(Question discontinued)	(Question discontinued)

APPENDIX C – DETAILED PARTICIPANT EXPENDITURE DATA

Appendix C includes detailed expenditure data for SoonerCare CCU participants. The exhibits are listed below.

<u>Exhibit</u>	<u>Description</u>
C-1	All Participants
C-2	Participants with Asthma as most Expensive Diagnosis
C-3	Participants with CAD as most Expensive Diagnosis
C-4	Participants with COPD as most Expensive Diagnosis
C-5	Participants with Diabetes as most Expensive Diagnosis
C-6	Participants with Heart Failure as most Expensive Diagnosis
C-7	Participants with Hypertension as most Expensive Diagnosis
C-8	Participants with Hepatitis-C

Exhibit C-1 – Detailed Expenditure Data – All CCU Participants

	CCU Detail - All Participants																
Category of Service	Pre- Engagement: 1-12 Months (Accumulated Total)	Pre- Engagement: 1-12 Months (FY17 Total)	Engaged Period: 3 to 12 Months (Accumulated Total)	Engaged Period: 3 to 12 Months (FY17 Total)	Engaged Period: 13 to 24 Months (Accumulated Total)	Engaged Period: 13 to 24 Months (FY17 Total)	Engaged Period: 25 to 36 Months (Accumulated Total)	Engaged Period: 25 to 36 Months (FY17 Total)	Engaged Period: 37 to 48 Months (FY17 Total)	Percent Change (Engaged 3-12 Month Accumulated/ Pre Engaged Accumulated)	Percent Change (Engaged 13-24 Month Accumulated/ Engaged 3-12 Month Accumulated)	Percent Change (Engaged 25-36 Month Accumulated Engaged 13-24 Month Accumulated)	Percent Change (Engaged 37-48 Month FY16/ Engaged 25-36 Month Accumulated)	Percent Change (Engaged 3-12 Month FY16/ Pre- Engaged FY17)	Percent Change (Engaged 13-24 Month FY16/ Engaged 3-12 Month FY17)	Percent Change (Engaged 25-36 Month FY16/ Engaged 13-24 Month FY17)	Percent Change (Engaged 37-48 Month FY17/ Engaged 25-36 Month FY17)
Member Months	10,883	3,709	11,284	4,180	3,713	1,090	1,363	591	772								
Aggregrate Expenditures																	
Inpatient Services	\$5,957,741	\$1,539,982	\$5,022,712	\$1,434,359	\$1,342,836	\$328,011	\$473,681	\$175,067	\$222,735								
Outpatient Services	\$2,300,120	\$590,991	\$1,777,355	\$468,386	\$498,929	\$107,164	\$157,015	\$57,113	\$72,312								
Physician Services	\$2,975,716	\$774,900	\$2,769,161	\$741,994	\$777,236	\$169,846	\$245,031	\$90,565	\$114,444								
Prescribed Drugs	\$2,918,850	\$765,648	\$2,623,130	\$696,686	\$741,000	\$159,630	\$232,624	\$85,038	\$107,565								
Psychiatric Services	\$850,595	\$219,429	\$683,729	\$179,941	\$192,956	\$41,110	\$61,540	\$21,835	\$27,583								
Dental Services	\$71,816	\$18,452	\$69,319	\$18,181	\$19,576	\$4,148	\$6,207	\$2,207	\$2,789								
Lab and X-Ray	\$507,965	\$130,772	\$512,243	\$136,153	\$144,031	\$31,225	\$45,861	\$16,576	\$20,905								
Medical Supplies and Orthotics	\$523,075	\$136,542	\$371,239	\$100,027	\$104,582	\$22,863	\$33,199	\$12,178	\$15,366								
Home Health and Home Care	\$185,311	\$48,513	\$234,863	\$62,455	\$66,405	\$14,214	\$20,900		\$9,562								
Nursing Facility	\$97,177.50	\$25,120.16	\$22,446	\$5,998	\$6,308		\$1,974		\$918								
Targeted Case Management	\$58,226	\$16,448	\$88,864	\$25,840	\$23,700	\$5,880	\$8,339		\$3,958								
Transportation	\$483,104	\$125,465	\$499,255	\$134,240	\$140,833	\$30,711	\$45,056		\$20,559								
Other Practitioner	\$76,762	\$19,943	\$109,496	\$29,391	\$30,783	\$6,722	\$9,908	\$3,571	\$4,500								
Other Institutional	\$375	\$98	\$132	\$35	\$38	\$8	\$12	\$4	\$5								
Other	\$41,039	\$10,703	\$21,052	\$5,470	\$5,982	\$1,247	\$1,867	\$664	\$837								
Total	\$17,047,875	\$4,423,006	\$14,804,997	\$4,039,155	\$4,095,197	\$924,146	\$1,343,213		\$624,038								
PMPM Expenditures			, , , , ,		, , , , , ,			, , , ,									
Inpatient Services	\$547.44	\$415.20	\$445.12	\$343.15	\$361.66	\$300.93	\$347.53	\$296.22	\$288.52	-18.7%	-18.8%	-3.9%	-17.0%	-17.4%	-12.3%	-1.6%	-2.6%
Outpatient Services	\$211.35	\$159.34	\$157.51	\$112.05	\$134.37	\$98.32	\$115.20	\$96.64	\$93.67	-25.5%	-14.7%	-14.3%	-18.7%	-29.7%	-12.3%	-1.7%	-3.1%
Physician Services	\$273.43	\$208.92	\$245.41	\$177.51	\$209.33	\$155.82	\$179.77	\$153.24	\$148.24	-10.2%	-14.7%	-14.1%	-17.5%	-15.0%	-12.2%	-1.7%	-3.3%
Prescribed Drugs	\$268.20	\$206.43	\$232.46	\$166.67	\$199.57	\$146.45	\$170.67	\$143.89	\$139.33	-13.3%	-14.2%	-14.5%				-1.7%	
Psychiatric Services	\$78.16	\$59.16	\$60.59	\$43.05	\$51.97	\$37.72	\$45.15	\$36.95	\$35.73	-22.5%	-14.2%	-13.1%	-20.9%	-27.2%	-12.4%	-2.0%	-3.3%
Dental Services	\$6.60	\$4.97	\$6.14	\$4.35	\$5.27	\$3.81	\$4.55		\$3.61	-6.9%	-14.2%	-13.6%				-1.9%	-3.3%
Lab and X-Ray	\$46.68	\$35.26	\$45.40	\$32.57	\$38.79	\$28.65	\$33.65	\$28.05	\$27.08	-2.7%	-14.5%	-13.3%	-19.5%	-7.6%	-12.1%	-2.1%	-3.5%
Medical Supplies and Orthotics	\$48.06	\$36.81	\$32.90	\$23.93	\$28.17	\$20.98	\$24.36	\$20.61	\$19.90	-31.5%	-14.4%	-13.5%	-18.3%	-35.0%	-12.3%	-1.8%	-3.4%
Home Health and Home Care	\$17.03	\$13.08	\$20.81	\$14.94	\$17.88	\$13.04	\$15.33	\$12.81	\$12.39	22.2%	-14.1%	-14.3%	-19.2%	14.2%	-12.7%	-1.8%	-3.3%
Nursing Facility	\$8.93	\$6.77	\$1.99	\$1.44	\$1.70	\$1.25	\$1.45	\$1.23	\$1.19	-77.7%	-14.6%	-14.8%	-17.9%	-78.8%	-12.6%	-1.7%	-3.6%
Targeted Case Management	\$5.35	\$4.43	\$7.88	\$6.18	\$6.38	\$5.39	\$6.12	\$5.32	\$5.13	47.2%	-18.9%	-4.2%	-16.2%	39.4%	-12.7%	-1.5%	-3.6%
Transportation	\$44.39	\$33.83	\$44.24	\$32.11	\$37.93	\$28.18	\$33.06	\$27.71	\$26.63	-0.3%	-14.3%	-12.8%	-19.4%	-5.1%	-12.3%	-1.7%	-3.9%
Other Practitioner	\$7.05	\$5.38	\$9.70	\$7.03	\$8.29		\$7.27		\$5.83	37.6%	-14.6%	-12.3%	-19.8%	30.8%	-12.3%	-2.0%	-3.5%
Other Institutional	\$0.03	\$0.03	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01	-65.9%	-13.5%	-14.3%	-20.7%	-68.4%	-12.6%	-1.8%	-3.6%
Other	\$3.77	\$2.89	\$1.87	\$1.31	\$1.61	\$1.14	\$1.37	\$1.12	\$1.08	-50.5%	-13.6%	-15.0%	-20.9%	-54.7%	-12.6%	-1.9%	-3.5%
Total	\$1,566.47	\$1,192.51	\$1,312.03	\$966.31	\$1,102.93	\$847.84	\$985.48	\$833.56	\$808.34	-16.2%	-15.9%	-10.6%	-18.0%	-19.0%	-12.3%	-1.7%	-3.0%

	Forecasted (FC)	Actual % of FC
	Costs	Actual 70 Of FC
First 12 Months	\$1,763.48	74.4%
Months 13-24	\$1,860.00	59.3%
Months 25-36	\$1,889.35	
Months 37-48	\$1,905.24	42.4%

Exhibit C-2 – Detailed Expenditure Data – Participants w/Asthma as Most Expensive Diagnosis

	CCU Detail - Asthma																
Category of Service	Pre- Engagement: 1-12 Months (Accumulated Total)	Pre- Engagement: 1-12 Months (FY17 Total)	Engaged Period: 3 to 12 Months (Accumulated Total)	Engaged Period: 3 to 12 Months (FY17 Total)	Engaged Period: 13 to 24 Months (Accumulated Total)	Engaged Period: 13 to 24 Months (FY17 Total)	Engaged Period: 25 to 36 Months (Accumulated Total)	Engaged Period: 25 to 36 Months (FY17 Total)	Engaged Period: 37 to 48 Months (FY17 Total)	Percent Change (Engaged 3-12 Month Accumulated/ Pre Engaged Accumulated)	Percent Change (Engaged 13-24 Month Accumulated/ Engaged 3-12 Month Accumulated)	Percent Change (Engaged 25-36 Month Accumulated Engaged 13-24 Month Accumulated)	Percent Change (Engaged 37-48 Month FY16/ Engaged 25-36 Month Accumulated)	Percent Change (Engaged 3-12 Month FY16/ Pre- Engaged FY17)	Percent Change (Engaged 13-24 Month FY16/ Engaged 3-12 Month FY17)	Percent Change (Engaged 25-36 Month FY16/ Engaged 13-24 Month FY17)	Percent Change (Engaged 37-48 Month FY17/ Engaged 25-36 Month FY17)
Member Months	909	197	1,078	260	342	70	142	37	46								
Aggregrate Expenditures																	
Inpatient Services	\$593,807	\$132,713	\$373,399	\$88,528	\$113,838	\$23,057	\$45,529	\$12,030	\$14,686								
Outpatient Services	\$421,543	\$93,937	\$265,886	\$62,968	\$81,098	\$16,358	\$32,137	\$8,526	\$10,413								
Physician Services	\$378,693	\$84,670	\$325,252	\$77,097	\$99,221	\$20,134	\$39,957	\$10,454	\$12,762								
Prescribed Drugs	\$199,626	\$44,572	\$195,566	\$46,406	\$59,637	\$12,086	\$24,180	\$6,272	\$7,661								
Psychiatric Services	\$164,683	\$24,914			\$45,464	\$9,208		\$4,794									
Dental Services	\$12,928	\$2,887	\$5,482	\$1,299	\$1,668	\$337	\$675	\$175	\$214								
Lab and X-Ray	\$61,832	\$13,802	\$56,611	\$13,495	\$17,213	\$3,500	\$7,019	\$1,822	\$2,229								
Medical Supplies and Orthotics	\$67,770	\$15,196	\$23,442	\$5,583	\$7,123	\$1,444	\$2,923	\$754	\$921								
Home Health and Home Care	\$1,827	\$410	\$2,034	\$485	\$617	\$125	\$243	\$65	\$80								
Nursing Facility			-														
Targeted Case Management	4	_	\$622	\$149	\$189	\$39	\$74	\$20	\$24								
Transportation	\$82,383	\$18,426	\$41,352	\$9,871	\$12,537	\$2,550	\$5,040	\$1,333	\$1,618								
Other Practitioner	\$7,096	\$1,581	\$20,918	\$4,978	\$6,344	\$1,293	\$2,605	\$673	\$821								
Other Institutional			-				-										
Other	4	-	-	-	-	-	-	-	-								
Total	\$1,992,185	\$433,108	\$1,459,985	\$346,355	\$444,948	\$90,130	\$179,068	\$46,920	\$57,294								
PMPM Expenditures																	
Inpatient Services	\$653.25	\$673.67	\$346.38	\$340.49	\$332.86	\$329.39	\$320.63	\$325.13	\$319.27	-47.0%	-3.9%	-3.7%	-0.4%	-49.5%	-3.3%	-1.3%	-1.8%
Outpatient Services	\$463.74	\$476.84	\$246.65	\$242.18	\$237.13	\$233.68	\$226.32	\$230.43	\$226.38	-46.8%	-3.9%	-4.6%	0.0%	-49.2%	-3.5%	-1.4%	-1.8%
Physician Services	\$416.60	\$429.80	\$301.72	\$296.53	\$290.12	\$287.62	\$281.39	\$282.54	\$277.44	-27.6%	-3.8%	-3.0%	-1.4%	-31.0%	-3.0%	-1.8%	-1.8%
Prescribed Drugs	\$219.61	\$226.25	\$181.42	\$178.48	\$174.38	\$172.66	\$170.28	\$169.52	\$166.55	-17.4%	-3.9%	-2.3%	-2.2%	-21.1%	-3.3%	-1.8%	-1.8%
Psychiatric Services	\$181.17	\$126.47	\$138.61	\$136.53	\$132.93	\$131.54	\$131.60	\$129.56	\$127.45	-23.5%	-4.1%	-1.0%	-3.2%	8.0%	-3.7%	-1.5%	-1.6%
Dental Services	\$14.22	\$14.65	\$5.09	\$4.99	\$4.88	\$4.81	\$4.76	\$4.74	\$4.66	-64.2%	-4.1%	-2.5%	-2.0%	-65.9%	-3.7%	-1.4%	-1.7%
Lab and X-Ray	\$68.02	\$70.06	\$52.51	\$51.90	\$50.33	\$50.00	\$49.43	\$49.25	\$48.46	-22.8%	-4.2%	-1.8%	-2.0%	-25.9%	-3.7%	-1.5%	-1.6%
Medical Supplies and Orthotics	\$74.55	\$77.13	\$21.75	\$21.47	\$20.83	\$20.64	\$20.58	\$20.39	\$20.02	-70.8%	-4.2%	-1.2%	-2.7%	-72.2%	-3.9%	-1.2%	-1.8%
Home Health and Home Care	\$2.01	\$2.08	\$1.89	\$1.87	\$1.80	\$1.79	\$1.71	\$1.77	\$1.74	-6.1%	-4.3%	-5.3%	1.6%	-10.3%	-3.9%	-1.4%	-1.8%
Nursing Facility	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-
Targeted Case Management	4	-	\$0.58	\$0.57	\$0.55	\$0.55	\$0.52	\$0.54	\$0.53		-4.3%	-5.8%	2.2%	-	-3.8%	-1.5%	-2.0%
Transportation	\$90.63	\$93.53	\$38.36	\$37.96	\$36.66	\$36.42	\$35.49	\$36.02	\$35.18	-57.7%	-4.4%	-3.2%	-0.9%	-59.4%	-4.1%	-1.1%	-2.3%
Other Practitioner	\$7.81	\$8.03	\$19.40	\$19.15	\$18.55	\$18.47	\$18.34	\$18.20	\$17.84	148.6%	-4.4%	-1.1%	-2.7%	138.5%	-3.5%	-1.5%	-2.0%
Other Institutional	4	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-
Total	\$2,191.62	\$2,198.52	\$1,354.35	\$1,332.13	\$1,301.02	\$1,287.57	\$1,261.05	\$1,268.10	\$1,245.51	-38.2%	-3.9%	-3.1%	-1.2%	-39.4%	-3.3%	-1.5%	-1.8%

	Forecasted (FC)	A -+ 0/ f FC
	Costs	Actual % of FC
First 12 Months	\$1,879.68	
Months 13-24	\$1,912.28	
Months 25-36	\$1,954.33	
Months 37-48	\$1,975.09	

Exhibit C-3 – Detailed Expenditure Data – Participants w/CAD as Most Expensive Diagnosis

	CCU Detail - CAD																
Category of Service	Pre- Engagement: 1-12 Months (Accumulated Total)	Pre- Engagement: 1-12 Months (FY17 Total)		Engaged Period: 3 to 12 Months (FY17 Total)	Engaged Period: 13 to 24 Months (Accumulated Total)	Engaged Period: 13 to 24 Months (FY17 Total)	Engaged Period: 25 to 36 Months (Accumulated Total)	Engaged Period: 25 to 36 Months (FY17 Total)	Engaged Period: 37 to 48 Months (FY17 Total)	Percent Change (Engaged 3-12 Month Accumulated/ Pre Engaged Accumulated)	Percent Change (Engaged 13-24 Month Accumulated/ Engaged 3-12 Month Accumulated)	Percent Change (Engaged 25-36 Month Accumulated Engaged 13-24 Month Accumulated)	Percent Change (Engaged 37-48 Month FY16/ Engaged 25-36 Month Accumulated)	Percent Change (Engaged 3-12 Month FY16/ Pre- Engaged FY17)	Percent Change (Engaged 13-24 Month FY16/ Engaged 3-12 Month FY17)	Percent Change (Engaged 25-36 Month FY16/ Engaged 13-24 Month FY17)	Percent Change (Engaged 37-48 Month FY17/ Engaged 25-36 Month FY17)
Member Months	536	116	533	122	169	32	76	18	23								
Aggregrate Expenditures																	
Inpatient Services	\$802,172	\$177,245	\$926,596	\$211,218	\$282,351	\$54,358	\$120,533	\$29,133	\$35,489								
Outpatient Services	\$329,845	\$72,645	\$185,096	\$42,115	\$56,435	\$10,811	\$24,010	\$5,788	\$7,054								
Physician Services	\$317,599	\$70,225	\$357,099	\$81,381	\$108,980	\$21,000	\$46,410	\$11,201	\$13,644								
Prescribed Drugs	\$158,251	\$34,969	\$289,689	\$66,134	\$88,447	\$17,020	\$37,514	\$9,073	\$11,058								
Psychiatric Services	\$62,949	\$11,591	\$73,668	\$16,822	\$23,961	\$4,312	\$9,553	\$2,306	\$2,814								
Dental Services	\$468	\$103	\$15,334	\$3,493	\$4,671	\$895	\$1,987	\$479	\$584								
Lab and X-Ray	\$40,149	\$8,869	\$31,871	\$7,277	\$9,713	\$1,865	\$4,120	\$997	\$1,217								
Medical Supplies and Orthotics	\$27,425	\$6,064	\$55,684	\$12,685	\$16,956	\$3,243	\$7,188	\$1,740	\$2,119								
Home Health and Home Care	\$20,710	\$4,595	\$25,215	\$5,768	\$7,664	\$1,475	\$3,247	\$789	\$962								
Nursing Facility	4			-		-		-									
Targeted Case Management	\$4,131	\$915	\$10,004	\$2,278	\$3,048	\$583	\$1,288	\$312	\$379								
Transportation	\$50,319	\$11,136	\$67,778	\$15,420	\$20,646	\$3,936	\$8,750	\$2,113	\$2,560								
Other Practitioner	\$21,484	\$4,739	\$7,760	\$1,761	\$2,365	\$452	\$1,001	\$242	\$294								
Other Institutional	-		4	4		-		-									
Other	-4			-		-		-									
Total	\$1,835,501	\$403,095	\$2,045,794	\$466,352	\$625,238	\$119,949	\$265,602	\$64,174	\$78,176								
PMPM Expenditures																	
Inpatient Services	\$1,496.59	\$1,527.97	\$1,738.45	\$1,731.30	\$1,670.72	\$1,698.69	\$1,585.96	\$1,618.51	\$1,543.01	16.2%	-3.9%	-5.1%	-2.7%	13.3%	-1.9%	-4.7%	-4.7%
Outpatient Services	\$615.38	\$626.25	\$347.27	\$345.21	\$333.93	\$337.84	\$315.93	\$321.57	\$306.71	-43.6%	-3.8%	-5.4%	-2.9%	-44.9%	-2.1%	-4.8%	-4.6%
Physician Services	\$592.54	\$605.39	\$669.98	\$667.06	\$644.85	\$656.26	\$610.66	\$622.27	\$593.24	13.1%	-3.8%	-5.3%	-2.9%	10.2%	-1.6%	-5.2%	-4.7%
Prescribed Drugs	\$295.24	\$301.46		\$542.09	\$523.36	\$531.88	\$493.61	\$504.08	\$480.80	84.1%	-3.7%	-5.7%	-2.6%	79.8%	-1.9%	-5.2%	-4.6%
Psychiatric Services	\$117.44	\$99.92		\$137.88	\$141.78		\$125.70		\$122.35	17.7%	2.6%	-11.3%		38.0%		-4.9%	-4.5%
Dental Services	\$0.87	\$0.89	\$28.77	\$28.63	\$27.64	\$27.96	\$26.15	\$26.61	\$25.39	3197.9%	-3.9%	-5.4%	-2.9%	3115.7%		-4.8%	-4.6%
Lab and X-Ray	\$74.91	\$76.45	\$59.80	\$59.64	\$57.47	\$58.27	\$54.21	\$55.41	\$52.93	-20.2%	-3.9%	-5.7%	-2.4%	-22.0%	-2.3%	-4.9%	-4.5%
Medical Supplies and Orthotics	\$51.17	\$52.27	\$104.47	\$103.98	\$100.33	\$101.34	\$94.58	\$96.64	\$92.13	104.2%	-4.0%	-5.7%	-2.6%	98.9%	-2.5%	-4.6%	-4.7%
Home Health and Home Care	\$38.64	\$39.61	\$47.31	\$47.28	\$45.35	\$46.08	\$42.72	\$43.86	\$41.83	22.4%	-4.1%	-5.8%	-2.1%	19.4%	-2.5%	-4.8%	-4.6%
Nursing Facility	-		-	-	-	-	-	-	-	-	-	-	-	4	-	-	-
Targeted Case Management	\$7.71	\$7.89	\$18.77	\$18.67	\$18.04	\$18.23	\$16.95	\$17.33	\$16.49	143.5%	-3.9%	-6.0%	-2.7%	136.6%	-2.4%	-4.9%	-4.9%
Transportation	\$93.88	\$96.00		\$126.39	\$122.17	\$122.99	\$115.13		\$111.32	35.5%	-3.9%	-5.8%	-3.3%	31.7%	-2.7%	-4.5%	-5.2%
Other Practitioner	\$40.08	\$40.85	\$14.56	\$14.43	\$14.00	\$14.12	\$13.17	\$13.43	\$12.78	-63.7%	-3.9%	-5.9%	-3.0%	-64.7%	-2.1%	-4.9%	-4.8%
Other Institutional	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	\$3,424.44	\$3,474.96	\$3,838.26	\$3,822.56	\$3,699.63	\$3,748.40	\$3,494.76	\$3,565.24	\$3,398.97	12.1%	-3.6%	-5.5%	-2.7%	10.0%	-1.9%	-4.9%	-4.7%

	Forecasted (FC) Costs	Actual % of FC
First 12 Months	\$3,891.49	
Months 13-24	\$3,744.51	
Months 25-36	\$3,555.59	98.3%
Months 37-48	\$3,487.32	97.5%

Exhibit C-4 – Detailed Expenditure Data – Participants w/COPD as Most Expensive Diagnosis

								(CCU Detail - COP)							
Category of Service	Pre- Engagement: 1-12 Months (Accumulated Total)		Engaged Period: 3 to 12 Months (Accumulated Total)	Engaged Period: 3 to 12 Months (FY17 Total)	Engaged Period: 13 to 24 Months (Accumulated Total)	Engaged Period: 13 to 24 Months (FY17 Total)	Engaged Period: 25 to 36 Months (Accumulated Total)	Engaged Period: 25 to 36 Months (FY17 Total)	Engaged Period: 37 to 48 Months (FY17 Total)	Percent Change (Engaged 3-12 Month Accumulated/ Pre Engaged Accumulated)	Percent Change (Engaged 13-24 Month Accumulated/ Engaged 3-12 Month Accumulated)	Percent Change (Engaged 25-36 Month Accumulated Engaged 13-24 Month Accumulated)	Percent Change (Engaged 37-48 Month FY16/ Engaged 25-36 Month Accumulated)	Percent Change (Engaged 3-12 Month FY16/ Pre- Engaged FY17)	Percent Change (Engaged 13-24 Month FY16/ Engaged 3-12 Month FY17)	Percent Change (Engaged 25-36 Month FY16/ Engaged 13-24 Month FY17)	Percent Change (Engaged 37-48 Month FY17/ Engaged 25-36 Month FY17)
Member Months	951	226	987	260	310	68	128	34	47								
Aggregrate Expenditures																	
Inpatient Services	\$887,305	\$210,640	\$784,955	\$201,812	\$233,102	\$50,865	\$94,519	\$25,019	\$33,664								
Outpatient Services	\$259,861	\$61,493	\$187,389	\$48,093	\$55,765	\$12,090	\$22,482	\$5,941	\$8,001								
Physician Services	\$420,104	\$99,789	\$362,832	\$93,285	\$107,985	\$23,575	\$43,550	\$11,540	\$15,497								
Prescribed Drugs	\$224,730	\$53,355	\$237,843	\$61,240	\$70,780	\$15,435	\$28,499	\$7,552	\$10,191								
Psychiatric Services	\$86,135	\$17,105	\$70,902	\$18,257	\$21,091	\$4,583	\$8,565	\$2,249	\$3,026								
Dental Services	\$2,754	\$654	\$11,208	\$2,881	\$3,332	\$723	\$1,355	\$355	\$477								
Lab and X-Ray	\$99,778	\$23,682	\$67,860	\$17,467	\$20,189	\$4,384	\$8,193	\$2,152	\$2,887								
Medical Supplies and Orthotics	\$84,163	\$19,993	\$67,255	\$17,293	\$19,993	\$4,330	\$8,123	\$2,131	\$2,871								
Home Health and Home Care	\$63,522	\$15,140	\$66,431	\$17,132	\$19,719	\$4,289	\$8,012	\$2,108	\$2,832								
Nursing Facility	\$27,743	\$6,608	\$5,140	\$1,325	\$1,527	\$333			\$219								
Targeted Case Management	\$3,274	\$780	\$3,604	\$925	\$1,071	\$232	\$435	\$114									
Transportation	\$68,046	\$16,181	\$65,296	\$16,746	\$19,476	\$4,186	\$7,888	\$2,063	\$2,755								
Other Practitioner	\$4,686	\$1,110	\$3,432	\$878	\$1,021	\$221	\$415										
Other Institutional	\$384	\$91															
Other	\$31,835	\$7,557	\$3,231	\$828	\$961	\$207	\$391	\$102	\$137								
Total	\$2,211,384	\$481,241	\$1,937,377	\$498.163	\$576.012	\$125,452	\$233,047	\$61,598	\$82.855								
PMPM Expenditures	7-,,	¥,	7-,00-,0	, ,	******	,,	+ 200,0	,,	70-,000								
Inpatient Services	\$933.02	\$932.04	\$795.29	\$776.20	\$751.94	\$748.02	\$738.43	\$735.86	\$716.26	-14.8%	-5.5%	-1.8%	-3.0%	-16.7%	-3.6%	-1.6%	-2.7%
Outpatient Services	\$273.25	\$272.09	\$189.86	\$184.97	\$179.89	\$177.80	\$175.64	\$174.73		-30.5%	-5.3%	-2.4%	-3.1%			-1.7%	
Physician Services	\$441.75	\$441.54	\$367.61	\$358,79	\$348.34	\$346.69	\$340.24		\$329.73	-16.8%	-5.2%	-2.3%	-3.1%			-2.1%	;
Prescribed Drugs	\$236.31	\$236.09	\$240.98	\$235.54	\$228.32	\$226.99	\$222.65	\$222.11	\$216.83	2.0%	-5.3%	-2.5%	-2.6%	-0.2%	-3.6%	-2.1%	
Psychiatric Services	\$90.57	\$75.68	\$71.84	\$70.22	\$68.03	\$67.40	\$66.91	\$66.16			-5.3%	-1.6%	-3.8%			-1.8%	3
Dental Services	\$2.90	\$2.89	\$11.36	\$11.08	\$10.75	\$10.63	\$10.59	\$10.45	\$10.16	3	-5.3%	-1.5%	-4.1%			-1.7%	1
Lab and X-Ray	\$104.92	\$104.79	\$68.75	\$67.18	\$65.13	\$64.47	\$64.01	\$63.29	\$61.43	-34.5%	-5.3%	-1.7%	-4.0%	-35.9%		-1.8%	
Medical Supplies and Orthotics	\$88.50	\$88.46	\$68.14	\$66.51	\$64.49	\$63.67	\$63.46				-5.4%	-1.6%	-3.8%			-1.5%	
Home Health and Home Care	\$66.79	\$66.99	\$67.31	\$65.89	\$63.61	\$63.08	\$62.60	\$61.99	\$60.25	3	-5.5%	-1.6%	-3.7%			-1.7%	1
Nursing Facility	\$29.17	\$29.24	\$5.21	\$5.10	\$4.93	\$4.89	\$4.84	\$4.80	\$4.65	-82.1%	-5.4%	-1.7%	-4.0%	-82.6%		-2.0%	
Targeted Case Management	\$3,44	\$3.45	\$3.65	\$3.56	\$3.45	\$3.41	\$3.40	\$3.35	\$3.25		-5.4%	-1.6%	-4.4%			-1.8%	
Transportation	\$71.55	\$71.60	\$66.16	\$64.41	\$62.83	\$61.56	\$61.63	\$60.68	\$58.62		-5.0%	-1.9%	-4.9%	-10.0%		-1.4%	
Other Practitioner	\$4.93	\$4.91	\$3,48	\$3,38	\$3.29	\$3.24	\$3.24	\$3.19			-5.3%	-1.6%	-4.7%	-31.3%		-1.8%	
Other Institutional	\$0.40	\$0.40	-	-		****		*****			-			-			
Other	\$33.48	\$33.44	\$3.27	\$3.18	\$3.10	\$3.05	\$3.05	\$3.00	\$2.91	-90.2%	-5.3%	-1.6%	-4.6%	-90.5%	-4.3%	-1.5%	-3.0%
Total	\$2,380,99	\$2,363.62	\$1,962.89	\$1,916.01	\$1,858.10	\$1,844.89	\$1,820.68	\$1,811.70	\$1,762.87	-17.6%	-5.3%	-2.0%	-3.2%	-18.9%	-3.7%	-1.8%	-2.7%

	Forecasted (FC)	Actual % of FC
	Costs	ACLUAI 76 OI FC
First 12 Months	\$2,401.22	81.7%
Months 13-24	\$2,444.91	76.0%
Months 25-36	\$2,471.04	73.7%
Months 37-48	\$2,498.57	70.6%

Exhibit C-5 – Detailed Expenditure Data – Participants w/Diabetes as Most Expensive Diagnosis

	CCU Detail - Diabetes																
Category of Service	Pre- Engagement: 1-12 Months (Accumulated Total)	Pre- Engagement: 1-12 Months (FY17 Total)	3 to 12 Months	Engaged Period: 3 to 12 Months (FY17 Total)	Engaged Period: 13 to 24 Months (Accumulated Total)	Engaged Period: 13 to 24 Months (FY17 Total)	Engaged Period: 25 to 36 Months (Accumulated Total)	Engaged Period: 25 to 36 Months (FY17 Total)	Engaged Period: 37 to 48 Months (FY17 Total)	Percent Change (Engaged 3-12 Month Accumulated/ Pre Engaged Accumulated)	Percent Change (Engaged 13-24 Month Accumulated/ Engaged 3-12 Month Accumulated)	Percent Change (Engaged 25-36 Month Accumulated Engaged 13-24 Month Accumulated)	Percent Change (Engaged 37-48 Month FY16/ Engaged 25-36 Month Accumulated)	Percent Change (Engaged 3-12 Month FY16/ Pre- Engaged FY17)	Percent Change (Engaged 13-24 Month FY16/ Engaged 3-12 Month FY17)	Percent Change (Engaged 25-36 Month FY16/ Engaged 13-24 Month FY17)	Percent Change (Engaged 37-48 Month FY17/ Engaged 25-36 Month FY17)
Member Months	2,514	603	2,341	638	736	167	310	90	117								
Aggregrate Expenditures																	
Inpatient Services	\$1,749,528	\$419,170	\$1,399,718	\$370,501	\$423,381	\$95,702	\$172,239	\$50,949	\$65,100								
Outpatient Services	\$681,449	\$162,806	\$658,093	\$174,014	\$199,181	\$45,092	\$80,434	\$23,983	\$30,615								
Physician Services	\$877,437	\$210,373	\$725,915	\$192,168	\$219,753	\$49,867	\$90,067	\$26,446	\$33,726								
Prescribed Drugs	\$801,504	\$192,117	\$867,683	\$230,178	\$262,637	\$59,742	\$108,560	\$31,714	\$40,449								
Psychiatric Services	\$199,437	\$32,564	\$126,265	\$33,486	\$38,153	\$8,640	\$15,925	\$4,586	\$5,852								
Dental Services	\$23,097	\$5,536	\$26,988	\$7,147	\$8,134	\$1,839	\$3,358	\$978	\$1,248								
Lab and X-Ray	\$104,414	\$25,020	\$148,730	\$39,477	\$44,921	\$10,178	\$18,551	\$5,400	\$6,880								
Medical Supplies and Orthotics	\$100,514	\$24,101	\$72,845	\$19,327	\$22,014	\$4,990	\$9,149	\$2,654	\$3,383								
Home Health and Home Care	\$66,388	\$15,980	\$63,654	\$16,911	\$19,175	\$4,339	\$7,660	\$2,310	\$2,947								
Nursing Facility	\$58,386	\$14,036	\$18,477	\$4,905	\$5,573	\$1,258	\$2,223	\$670	\$853								
Targeted Case Management	\$19,969	\$4,798	\$19,041	\$5,067	\$5,734	\$1,297	\$2,278	\$693	\$881								
Transportation	\$125,217	\$30,060	\$210,395	\$55,938	\$63,342	\$14,357	\$25,824	\$7,651	\$9,703								
Other Practitioner	\$16,167	\$3,868	\$18,270	\$4,841	\$5,506	\$1,250	\$2,288	\$663	\$845								
Other Institutional	4	-	4	4		-	-	-									
Other	\$1,254	\$301	\$4,144	\$1,101	\$1,247	\$283	\$519	\$151	\$192								
Total	\$4,824,761	\$1,140,731	\$4,360,218	\$1,155,059	\$1,318,750	\$298,834	\$539,075	\$158,848	\$202,673								
PMPM Expenditures	i																
Inpatient Services	\$695.91	\$695.14	\$597.91	\$580.72	\$575.25	\$573.06	\$555.61	\$566.09	\$556.41	-14.1%	-3.8%	-3.4%	0.1%	-16.5%	-1.3%	-1.2%	-1.7%
Outpatient Services	\$271.06	\$269.99	\$281.12	\$272.75	\$270.63	\$270.01	\$259.46	\$266.48	\$261.66	3.7%	-3.7%	-4.1%	0.8%	1.0%	-1.0%	-1.3%	-1.8%
Physician Services	\$349.02	\$348.88	\$310.09	\$301.20	\$298.58	\$298.60	\$290.54	\$293.85	\$288.25	-11.2%	-3.7%	-2.7%	-0.8%	-13.7%	-0.9%	-1.6%	-1.9%
Prescribed Drugs	\$318.82	\$318.60	\$370.65	\$360.78	\$356.84	\$357.74	\$350.19	\$352.38	\$345.72	16.3%	-3.7%	-1.9%	-1.3%	13.2%	-0.8%	-1.5%	-1.9%
Psychiatric Services	\$79.33	\$54.00	\$53.94	\$52.49	\$51.84	\$51.73	\$51.37	\$50.96	\$50.02	-32.0%	-3.9%	-0.9%	-2.6%	-2.8%	-1.4%	-1.5%	-1.8%
Dental Services	\$9.19	\$9.18	\$11.53	\$11.20	\$11.05	\$11.01	\$10.83	\$10.87	\$10.67	25.5%	-4.1%	-2.0%	-1.5%	22.0%	-1.7%	-1.3%	-1.8%
Lab and X-Ray	\$41.53	\$41.49	\$63.53	\$61.88	\$61.03	\$60.95	\$59.84	\$60.00	\$58.80	53.0%	-3.9%	-2.0%	-1.7%	49.1%	-1.5%	-1.6%	-2.0%
Medical Supplies and Orthotics	\$39.98	\$39.97	\$31.12	\$30.29	\$29.91	\$29.88	\$29.51	\$29.49	\$28.91	-22.2%	-3.9%	-1.3%	-2.0%	-24.2%	-1.4%	-1.3%	-2.0%
Home Health and Home Care	\$26.41	\$26.50	\$27.19	\$26.51	\$26.05	\$25.98	\$24.71	\$25.67	\$25.19	3.0%	-4.2%	-5.2%	1.9%	0.0%	-2.0%	-1.2%	-1.9%
Nursing Facility	\$23.22	\$23.28	\$7.89	\$7.69	\$7.57	\$7.54	\$7.17	\$7.45	\$7.29	-66.0%	-4.1%	-5.3%	1.7%	-67.0%	-2.0%	-1.2%	-2.1%
Targeted Case Management	\$7.94	\$7.96	\$8.13	\$7.94	\$7.79	\$7.77	\$7.35	\$7.69	\$7.53	2.4%	-4.2%	-5.7%	2.5%	-0.2%	-2.2%	-0.9%	-2.1%
Transportation	\$49.81	\$49.85	\$89.87	\$87.68	\$86.06	\$85.97	\$83.30	\$85.01	\$82.93	80.4%	-4.2%	-3.2%	-0.4%	75.9%	-1.9%	-1.1%	
Other Practitioner	\$6.43	\$6.42	\$7.80	\$7.59	\$7.48	\$7.48	\$7.38	\$7.37	\$7.22	21.4%	-4.1%	-1.3%	-2.2%	18.3%	-1.4%	-1.5%	-2.1%
Other Institutional	-	-		-	-	-	-	-	-		-	-	-	-		-	
Other	\$0.50	\$0.50	\$1.77	\$1.73	\$1.69	\$1.70	\$1.68	\$1.67	\$1.64	254.8%	-4.3%	-1.1%	-2.1%	245.6%	-1.7%	-1.3%	-2.1%
Total	\$1,919.16	\$1,891.76	\$1,862.55	\$1,810.44	\$1,791.78	\$1,789.42	\$1,738.95	\$1,764.98	\$1,732.25	-2.9%	-3.8%	-2.9%	-0.4%	-4.3%	-1.2%	-1.4%	-1.9%

	Forecasted (FC)	Actual % of FC
	Costs	ACLUAI % OI FC
First 12 Months	\$1,888.53	98.6%
Months 13-24	\$1,912.07	
Months 25-36	\$1,956.22	88.9%
Months 37-48	\$1,977,38	87.6%

Exhibit C-6 – Detailed Expenditure Data – Participants w/Heart Failure as Most Expensive Diagnosis

	CCU Detail - Heart Failure																
Category of Service	Pre- Engagement: 1-12 Months (Accumulated Total)	Pre- Engagement: 1-12 Months (FY17 Total)		Engaged Period: 3 to 12 Months (FY17 Total)	Engaged Period: 13 to 24 Months (Accumulated Total)	Engaged Period: 13 to 24 Months (FY17 Total)	Engaged Period: 25 to 36 Months (Accumulated Total)	Engaged Period: 25 to 36 Months (FY17 Total)	Engaged Period: 37 to 48 Months (FY17 Total)	Percent Change (Engaged 3-12 Month Accumulated/ Pre Engaged Accumulated)	Percent Change (Engaged 13-24 Month Accumulated/ Engaged 3-12 Month Accumulated)	Percent Change (Engaged 25-36 Month Accumulated Engaged 13-24 Month Accumulated)	Percent Change (Engaged 37-48 Month FY16/ Engaged 25-36 Month Accumulated)	Percent Change (Engaged 3-12 Month FY16/ Pre- Engaged FY17)	Percent Change (Engaged 13-24 Month FY16/ Engaged 3-12 Month FY17)	Percent Change (Engaged 25-36 Month FY16/ Engaged 13-24 Month FY17)	Percent Change (Engaged 37-48 Month FY17/ Engaged 25-36 Month FY17)
Member Months	114	27	44	8	23	7	7	0	9								
Aggregrate Expenditures																	
Inpatient Services	\$26,444	\$6,069	\$7,781	\$1,395	\$3,295	\$976	\$1,000	-	\$891								
Outpatient Services	\$81,000	\$18,598	\$4,259	\$756	\$1,803	\$528	\$549	-	\$481								
Physician Services	\$42,684	\$9,761	\$14,528	\$2,554	\$6,135	\$1,785	\$1,895	-	\$1,632								
Prescribed Drugs	\$202,389	\$46,614	\$46,506	\$8,401	\$19,704	\$5,892	\$5,956	-	\$5,373								
Psychiatric Services	\$4,275	\$978	\$1,753	\$321	\$739	\$224	\$222	-	\$204								
Dental Services		-	-	-	-	-		-	-								
Lab and X-Ray	\$1,293	\$296	\$1,895	\$345	\$797	\$240	\$240	-	\$218								
Medical Supplies and Orthotics	\$33,828	\$7,726	\$18,745	\$3,386	\$7,922	\$2,365	\$2,392	-	\$2,153								
Home Health and Home Care		-	-	4	-	-		-									
Nursing Facility		-	-	-	-	-		-	-								
Targeted Case Management	-	-	-	-	-	-		-									
Transportation		-	-	-	-	-		-	-								
Other Practitioner	-	-	-	4	-	-	-	-									
Other Institutional	-	-	-	4	-	-		-	-								
Other	-	-	-	-	-	-	-	-									
Total	\$391,912	\$90,042	\$95,467	\$17,157	\$40,394	\$12,011	\$12,253	\$0	\$10,952								
PMPM Expenditures																	
Inpatient Services	\$231.96	\$224.78	\$176.85	\$174.34	\$143.28	\$139.39	\$142.88		\$99.04	-23.8%	-19.0%		-30.7%	-22.4%	-20.0%	-	-
Outpatient Services	\$710.52	\$688.81	\$96.79	\$94.45	\$78.37	\$75.48	\$78.45	-	\$53.50	-86.4%	-19.0%	0.1%	-31.8%	-86.3%	-20.1%	-	-
Physician Services	\$374.42	\$361.50	\$330.19	\$319.28	\$266.72	\$254.94	\$270.66	-	\$181.31	-11.8%	-19.2%	1.5%	-33.0%	-11.7%	-20.2%	-	-
Prescribed Drugs	\$1,775.34	\$1,726.44	\$1,056.95	\$1,050.15	\$856.69	\$841.78	\$850.82	-	\$596.95	-40.5%	-18.9%	-0.7%	-29.8%	-39.2%	-19.8%	-	-
Psychiatric Services	\$37.50	\$36.22	\$39.85	\$40.14	\$32.12	\$32.04	\$31.67	-	\$22.65	6.3%	-19.4%	-1.4%	-28.5%	10.8%	-20.2%	-	-
Dental Services		-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Lab and X-Ray	\$11.34	\$10.96	\$43.07	\$43.07	\$34.66	\$34.33	\$34.33		\$24.21	279.8%	-19.5%	-0.9%	-29.5%	293.1%	-20.3%	-	-
Medical Supplies and Orthotics	\$296.74	\$286.16	\$426.02	\$423.25	\$344.43	\$337.89	\$341.65	-	\$239.23	43.6%	-19.2%	-0.8%	-30.0%	47.9%	-20.2%	-	-
Home Health and Home Care		-	-	4	-	-		-		-	-	-	-	-	-	-	-
Nursing Facility	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Targeted Case Management		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Transportation	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Practitioner	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-
Other Institutional		-	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	\$3,437.83	\$3,334.87	\$2,169.71	\$2,144.68	\$1,756.27	\$1,715.86	\$1,750.46	\$0.00	\$1,216.88	-36.9%	-19.1%	-0.3%	-30.5%	-35.7%	-20.0%	-	-

	Forecasted (FC)	Actual % of FC
	Costs	ACLUAI % OI FC
First 12 Months	\$3,595.21	60.4%
Months 13-24	\$3,624.47	
Months 25-36	\$3,665.53	47.8%
Months 37-48	\$3,679,64	33.1%

Exhibit C-7 – Detailed Expenditure Data – Participants w/Hypertension as Most Expensive Diagnosis

								ccu	Detail - Hyperter	nsion							
Category of Service	Pre- Engagement: 1-12 Months (Accumulated Total)		Engaged Period: 3 to 12 Months (Accumulated Total)	Engaged Period: 3 to 12 Months (FY17 Total)	Engaged Period: 13 to 24 Months (Accumulated Total)	Engaged Period: 13 to 24 Months (FY17 Total)	Engaged Period: 25 to 36 Months (Accumulated Total)	Engaged Period: 25 to 36 Months (FY17 Total)	Engaged Period: 37 to 48 Months (FY17 Total)	Percent Change (Engaged 3-12 Month Accumulated/ Pre Engaged Accumulated)	Percent Change (Engaged 13-24 Month Accumulated/ Engaged 3-12 Month Accumulated)	Percent Change (Engaged 25-36 Month Accumulated Engaged 13-24 Month Accumulated)	Percent Change (Engaged 37-48 Month FY16/ Engaged 25-36 Month Accumulated)	Percent Change (Engaged 3-12 Month FY16/ Pre- Engaged FY17)	Percent Change (Engaged 13-24 Month FY16/ Engaged 3-12 Month FY17)	Percent Change (Engaged 25-36 Month FY16/ Engaged 13-24 Month FY17)	Percent Change (Engaged 37-48 Month FY17/ Engaged 25-36 Month FY17)
Member Months	2,301	505	2,355	564	755	149	325	80	105								
Aggregrate Expenditures																	
Inpatient Services	\$1,637,561	\$354,158	\$793,458	\$185,319	\$238,926	\$47,065	\$98,240	\$23,870	\$30,614								
Outpatient Services	\$442,710	\$95,527	\$428,229	\$100,145	\$128,951	\$25,446	\$52,776	\$12,887	\$16,496								
Physician Services	\$763,366	\$165,446	\$840,502	\$196,600	\$253,058	\$49,979	\$103,725	\$25,324	\$32,353								
Prescribed Drugs	\$843,023	\$182,757	\$653,914	\$153,328	\$197,050	\$39,016	\$80,604	\$19,751	\$25,258								
Psychiatric Services	\$152,591	\$27,485	\$247,180	\$57,751	\$74,472	\$14,653	\$30,397	\$7,395	\$9,445								
Dental Services	\$22,961	\$4,963	\$4,213	\$982	\$1,288	\$249	\$525	\$126	\$161								
Lab and X-Ray	\$180,343	\$38,860	\$209,340	\$48,805	\$63,057	\$12,430	\$25,847	\$6,271	\$7,995								
Medical Supplies and Orthotics	\$71,974	\$15,551	\$51,969	\$12,141	\$15,649	\$3,082	\$6,410	\$1,560	\$1,990								
Home Health and Home Care	\$31,960	\$6,932	\$80,718	\$18,873	\$24,267	\$4,770	\$9,973		\$3,083								
Nursing Facility	\$13,436.86	\$2,909.55															
Targeted Case Management	\$5,208	\$1,124	\$32,332	\$7.560	\$9,709	\$1,911	\$4.007	\$970	\$1,235								
Transportation	\$141,279	\$30,473	\$109,336	\$25,486	\$32,851	\$6,475	\$13,446	\$3,281	\$4,164								
Other Practitioner	\$17,428	\$3,763	\$39,915	\$9,324	\$12,009	\$2,368	\$4,929		\$1,523								
Other Institutional			\$136	\$32	\$41	\$8	\$17		\$5								
Other	\$2,892	\$625	\$450	\$105	\$135	\$27	\$55		\$17								
Total	\$4,326,734	\$930,574		\$816,449	\$1,051,464	\$207,478	\$430,950		\$134,339								
PMPM Expenditures	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	7,	70,100,000	70-0,110	7-,,	,,	*,	7,	7-0-,								
Inpatient Services	\$711.67	\$701.30	\$336.92	\$328.58	\$316.46	\$315.87	\$302.28	\$298.38	\$291.56	-52.7%	-6.1%	-4.5%	-3.5%	-53.1%	-3.9%	-5.5%	-2.3%
Outpatient Services	\$192.40	\$189.16	\$181.84	\$177.56	\$170.80	\$170.78	\$162.39		\$157.10	-5.5%	-6.1%	-4.9%				-5.7%	
Physician Services	\$331.75	\$327.62	\$356.90	\$348.58	\$335.18	\$335.43	\$319.15		\$308.12	7.6%		-4.8%	1			-5.6%	
Prescribed Drugs	\$366.37	\$361.90	\$277.67	\$271.86	\$260.99	\$261.85	\$248.01	\$246.88	\$240.55	-24.2%		-5.0%		-24.9%		-5.7%	
Psychiatric Services	\$66.32	\$54.43	\$104.96	\$102.40	\$98.64	\$98.34	\$93.53		\$89.95			-5.2%					
Dental Services	\$9.98	\$9.83	\$1.79	\$1.74	\$1.71	\$1.67	\$1.61		\$1.53	3	1	-5.4%	1			-5.8%	1
Lab and X-Ray	\$78.38	\$76.95	\$88.89	\$86.53	\$83.52	\$83.42	\$79.53	\$78.38	\$76.14	13.4%		-4.8%		12.5%		-6.0%	
Medical Supplies and Orthotics	\$31.28	\$30.79	\$22.07	\$21.53	\$20.73	\$20.68	\$19.72		\$18.95			-4.8%				-5.7%	
Home Health and Home Care	\$13.89	\$13.73		\$33.46	\$32.14	\$32.01	\$30.69		\$29.36			-4.5%	1				
Nursing Facility	\$5.84	\$5.76	, J.	\$55.40	432.1 4	752.01	Ç50.05	,50.10 -	Ç23.30	1-10.070	0.2%	4.5%	4.5%	143.070	4.5%	3.770	
Targeted Case Management	\$2.26	\$2.23	\$13.73	\$13.40	\$12.86	\$12.82	\$12.33	\$12.13	\$11.77	506.6%	-6.3%	-4.1%	-4.6%	502.1%	-4.3%	-5.4%	-3.0%
Transportation	\$61.40	\$60.34	\$46.43	\$45.19	\$43.51	\$43.46	\$41.37		\$39.66			-4.9%				-5.6%	
Other Practitioner	\$7.57	\$7.45	\$16.95	\$16.53	\$15.91	\$15.89	\$15.17		\$14.51	123.8%		-4.7%	1			-6.0%	
Other Institutional	ŢJ	Ţ	\$0.06	\$0.06	\$0.05	\$0.05	\$0.05		\$0.05		-6.4%	-5.5%			-4.2%	-5.8%	
Other	\$1.26	\$1.24	\$0.19	\$0.19	\$0.18	\$0.18	\$0.17	\$0.17	\$0.16		1	-5.6%				-5.8%	
Total	\$1.880.37	\$1,842.72	\$1,482.67	\$1,447.60	\$1,392.67	\$1,392.47	\$1,326.00		\$1,279.42	-21.2%		-4.8%	1	3		1	

	Forecasted (FC)	Actual % of FC
	Costs	ACLUAI 76 OI FC
First 12 Months	\$2,001.50	74.1%
Months 13-24	\$2,051.17	67.9%
Months 25-36	\$2,089.95	63.4%
Months 37-48	\$2,107,33	60.7%

Exhibit C-8 – Detailed Expenditure Data – Participants w/Hepatitis-C

								ccı	J Detail - Hepatit	is C							
Category of Service	Pre- Engagement: 1-12 Months (Accumulated Total)	Pre- Engagement: 1-12 Months (FY17 Total)	Engaged Period: 3 to 12 Months (Accumulated Total)	Engaged Period: 3 to 12 Months (FY17 Total)	Engaged Period: 13 to 24 Months (Accumulated Total)	Engaged Period: 13 to 24 Months (FY17 Total)	Engaged Period: 25 to 36 Months (Accumulated Total)	Engaged Period: 25 to 36 Months (FY17 Total)	Engaged Period: 37 to 48 Months (FY17 Total)	Percent Change (Engaged 3-12 Month Accumulated/ Pre Engaged Accumulated)	Percent Change (Engaged 13-24 Month Accumulated/ Engaged 3-12 Month Accumulated)	Percent Change (Engaged 25-36 Month Accumulated Engaged 13-24 Month Accumulated)	Percent Change (Engaged 37-48 Month FY16/ Engaged 25-36 Month Accumulated)	Percent Change (Engaged 3-12 Month FY16/ Pre- Engaged FY17)	Percent Change (Engaged 13-24 Month FY16/ Engaged 3-12 Month FY17)	Percent Change (Engaged 25-36 Month FY16/ Engaged 13-24 Month FY17)	Percent Change (Engaged 37-48 Month FY17/ Engaged 25-36 Month FY17)
Member Months	1,034	224	868	224	284	59	122	32	42								
Aggregrate Expenditures																	
Inpatient Services	\$717,442	\$157,182	\$527,861	\$125,063	\$156,133	\$31,711	\$63,366	\$16,389	\$21,272								
Outpatient Services	\$262,049	\$56,710	\$215,400	\$55,755	\$69,531	\$14,144	\$28,086	\$7,299	\$9,456								
Physician Services	\$330,281	\$72,191	\$266,765	\$68,328	\$85,443	\$17,342	\$34,459	\$8,954	\$11,577								
Prescribed Drugs	\$433,890	\$94,847	\$355,093	\$90,075	\$112,377	\$22,884	\$45,266	\$11,805	\$15,277								
Psychiatric Services	\$59,121	\$12,455	\$47,783	\$12,145	\$15,050	\$3,076	\$6,110	\$1,582	\$2,045								
Dental Services	\$11,471	\$2,491	\$8,973	\$2,269	\$2,837	\$574	\$1,159	\$296	\$382								
Lab and X-Ray	\$76,684	\$16,471	\$67,861	\$17,384	\$21,799	\$4,420	\$8,799	\$2,272	\$2,932								
Medical Supplies and Orthotics	\$31,819	\$7,104	\$27,511	\$7,089	\$8,811	\$1,797	\$3,578	\$927	\$1,196								
Home Health and Home Care	\$22,775	\$4,998	\$18,732	\$4,829	\$6,013	\$1,219	\$2,439	\$629	\$812								
Nursing Facility	-	-	-	-		-	-	-									
Targeted Case Management	\$6,740	\$1,449	\$5,457	\$1,380	\$1,719	\$348	\$699	\$180	\$232								
Transportation	\$60,514	\$13,199	\$49,378	\$12,515	\$15,671	\$3,175	\$6,311	\$1,639	\$2,105								
Other Practitioner	\$7,203	\$1,567	\$5,927	\$1,507	\$1,887	\$382	\$762	\$197	\$254								
Other Institutional	-	-	-	-	-	-	-	-	-								
Other	-	-	-	-	-	-	-	-	-								
Total	\$2,019,988	\$440,664	\$1,596,742	\$398,338	\$497,270	\$101,072	\$201,032	\$52,169	\$67,541								
PMPM Expenditures																	
Inpatient Services	\$693.85	\$701.71	\$608.13	\$558.32	\$549.76	\$537.47	\$519.39	\$512.16	\$506.47	-12.4%	-9.6%	-5.5%				-4.7%	
Outpatient Services	\$253.43	\$253.17	\$248.16	\$248.91	\$244.83	\$239.73	\$230.21	\$228.11	\$225.14	-2.1%	-1.3%	-6.0%				-4.8%	-1.3%
Physician Services	\$319.42	\$322.28	\$307.33	\$305.03	\$300.86	\$293.93	\$282.45		\$275.64	-3.8%	-2.1%	-6.1%		-5.4%		-4.8%	-1.5%
Prescribed Drugs	\$419.62	\$423.42	\$409.09	\$402.12	\$395.69	\$387.86	\$371.03	\$368.90	\$363.74	-2.5%	-3.3%	-6.2%		-5.0%		-4.9%	-1.4%
Psychiatric Services	\$57.18	\$55.60	\$55.05	\$54.22	\$52.99	\$52.14	\$50.08	\$49.45	\$48.69	-3.7%	-3.7%	-5.5%		-2.5%		-5.2%	
Dental Services	\$11.09	\$11.12	\$10.34	\$10.13	\$9.99		\$9.50		\$9.10	-6.8%	-3.4%	-4.9%	-4.2%			-5.0%	
Lab and X-Ray	\$74.16	\$73.53		\$77.61	\$76.76		\$72.12	\$71.01	\$69.81	5.4%	-1.8%	-6.0%	-3.2%			-5.2%	-1.7%
Medical Supplies and Orthotics	\$30.77	\$31.72	\$31.70	\$31.65	\$31.02		\$29.32	\$28.96	\$28.48		-2.1%	-5.5%		-0.2%		-4.9%	-1.6%
Home Health and Home Care	\$22.03	\$22.31	\$21.58	\$21.56	\$21.17	\$20.66	\$19.99	\$19.64	\$19.34	-2.0%	-1.9%	-5.6%	-3.3%	-3.4%	-4.2%	-4.9%	-1.5%
Nursing Facility	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Targeted Case Management	\$6.52	\$6.47	\$6.29	\$6.16	\$6.05		\$5.73	\$5.63	\$5.53	-3.5%	-3.7%	-5.3%		-4.8%		-4.6%	-1.8%
Transportation	\$58.52	\$58.93	\$56.89	\$55.87	\$55.18		\$51.73	\$51.22	\$50.13	-2.8%	-3.0%	-6.2%				-4.8%	-2.1%
Other Practitioner	\$6.97	\$6.99	\$6.83	\$6.73	\$6.64	\$6.48	\$6.24	\$6.15	\$6.04	-2.0%	-2.7%	-6.1%	-3.3%	-3.8%	-3.7%	-5.1%	-1.8%
Other Institutional	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other	. 4			. 1				. 1		-	-	-	-	-	-	-	-
Total	\$1,953.57	\$1,967.25	\$1,839.56	\$1,778.30	\$1,750.95	\$1,713.09	\$1,647.80	\$1,630.28	\$1,608.11	-5.8%	-4.8%	-5.9%	-2.4%	-9.6%	-3.7%	-4.8%	-1.4%

	Forecasted (FC)	Actual % of FC
	Costs	ACTUAL 76 OF FC
First 12 Months	\$1,991.37	92.4%
Months 13-24	\$2,030.54	
Months 25-36	\$2,079.15	79.3%
Months 37-48	\$2,101.32	76.5%