State Fiscal Year 2019



ANNUAL REPORT

SoonerCare Chronic Care Unit Evaluation

Prepared for:

State of Oklahoma Oklahoma Health Care Authority

AUGUST 2020

THE PACIFIC HEALTH POLICY GROUP



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 2019 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.

Questions or comments about this report should be directed to:

Andrew Cohen, Principal Investigator The Pacific Health Policy Group 1550 South Coast Highway, Suite 204 Laguna Beach, CA 92651 949-494-5420 acohen@phpg.com

TABLE OF CONTENTS

Executive Summary	1
Chapter 1 – Introduction	9
Chapter 2 – SoonerCare CCU Participant Satisfaction	24
Chapter 3 – SoonerCare CCU Quality of Care Analysis	50
Chapter 4 – SoonerCare CCU Utilization, Expenditure & Cost Effectiveness Analysis	67
Chapter 5 – SoonerCare CCU Return on Investment1	11
Appendices1	12
Appendix A – Participant Survey Instrument1	12
Appendix B – Detailed Participant Survey Results1	24
Appendix C – Detailed Participant Expenditure Data	

Report Exhibits

Exhibit Description

Chapter 1 Introduction

1-1	Chronic Disease Mortality Rates, 2015 – OK and US (Selected Conditions)	9
1-2	Estimated/Projected Chronic Disease Expenditures (Millions)	10
1-3	The Chronic Care Model	11
1-4	Gender Mix for SoonerCare CCU Participants	17
1-5	Age Distribution for SoonerCare CCU Participants	18
1-6	SoonerCare CCU Participants by Location: Urban/Rural Mix	18
1-7	Most Common Diagnostic Categories for CCU Participants	19
1-8	Most Expensive Diagnostic Categories for CCU Participants	20
1-9	Number of Physical Health Chronic Conditions (Six Priority Conditions)	21
1-10	Behavioral Health Co-Morbidity Rate	22

Chapter 2 SoonerCare CCU Participant Satisfaction

2-1	Survey Sample Size and Margin of Error	26
2-2	Respondent Tenure in SoonerCare CCU – Initial Survey	27
2-3	Respondent Tenure in SoonerCare CCU – Follow-up Survey	27
2-4	Primary Reason for Enrolling in SoonerCare CCU – Initial Survey (Aggregate)	29
2-5	Primary Reason for Enrolling in SoonerCare CCU – Initial Survey (Longitudinal)	30
2-6	Most Recent Contact with CCU Nurse – Initial Survey (Aggregate)	31
2-7	Most Recent Contact with CCU Nurse – Initial Survey (Longitudinal) & Follow-up	32
2-8	Able to Name CCU Nurse – Initial Survey (Aggregate)	33
2-9	Able to Name CCU Nurse – Initial Survey (Longitudinal) & Follow-up	33
2-10	Tried to Call CCU Nurse – Initial Survey (Aggregate)	34
2-11	Tried to Call CCU Nurse – Initial Survey (Longitudinal) & Follow-up	34
2-12	Reason for Most Recent Call – Initial Survey (Aggregate)	35
2-13	Reason for Most Recent Call – Initial Survey (Longitudinal) & Follow-up	35
2-14	CCU Nurse Call-Back Time – Initial Survey (Aggregate)	36
2-15	CCU Nurse Call-Back Time – Initial Survey (Longitudinal) & Follow-up	36
2-16	CCU Nurse Activity – Initial Survey (Aggregate)	37
2-17	CCU Nurse Activity – Initial Survey (Longitudinal) & Follow-up	38
2-18	Satisfaction with CCU Nurse Activity (Very Satisfied) – Initial Survey (Longitudinal)	
	& Follow-up	39
2-19	Satisfaction with CCU Nurse – Initial Survey (Aggregate)	40
2-20	Satisfaction with CCU Nurse – Initial Survey (Longitudinal) & Follow-up	40
2-21	Current Health Status – Initial Survey (Aggregate)	41
2-22	Current Health Status – Initial Survey (Longitudinal) & Follow-up	41
2-23	Health Status as Compared to Pre-CCU Enrollment – Initial Survey (Aggregate)	42
2-24	Health Status as Compared to Pre-CCU Enrollment – Follow-up Survey	42
2-25	Changes in Behavior – Continuing Change – Initial Survey	43
2-26	Changes in Behavior – Initial Survey (Aggregate) & Follow-up	44
2-27	Overall Satisfaction with SoonerCare CCU – Initial Survey (Aggregate)	45

<u>Page</u>

<u>Exhibit</u>	Description	<u>Page</u>
2-28	Overall Satisfaction with SoonerCare CCU – Initial Survey (Longitudinal) & Follow- up	46
Chapter 3	SoonerCare CCU Quality of Care Analysis	
3-1	Asthma Clinical Measures – CCU Participants vs. Comparison Group	52
3-2	Asthma Clinical Measures - 2015 – 2019	53
3-3	Cardiovascular Disease Clinical Measures – CCU Participants vs. Comparison	
	Group	54
3-4	Cardiovascular Disease Clinical Measures - 2015 – 2019	55
3-5	COPD Clinical Measures – CCU Participants vs. Comparison Group	56
3-6	COPD Clinical Measures - 2015 – 2019	57
3-7	Diabetes Clinical Measures – CCU Participants vs. Comparison Group	58
3-8	Diabetes Clinical Measures - 2015 – 2019	59
3-9	Hypertension Clinical Measures – CCU Participants vs. Comparison Group	60
3-10	Hypertension Clinical Measures - 2015 – 2019	61
3-11	Mental Health Measures – CCU Participants vs. Comparison Group	62
3-12	Mental Health Clinical Measures - 2015 – 2019	63
3-13	Preventive Measures – CCU Participants vs. Comparison Group	64
3-14	Preventive Clinical Measures - 2015 – 2019	65

Chapter 4 SoonerCare CCU Utilization, Expenditure & Cost Effectiveness Analysis

4-1	Participants with Asthma as Most Expensive Diagnosis	70
4-2	Participants with Asthma – Co-morbidity with Chronic Impact Conditions	70
4-3	Participants with Asthma as Most Expense Diagnosis – Inpatient Utilization – First	
	12 Months Following Engagement, per 1,000 Participants	71
4-4	Participants with Asthma as Most Expensive Diagnosis – Emergency Department	
	Utilization – First 12 Months Following Engagement, per 1,000 Participants	72
4-5	Participants with Asthma as Most Expensive Diagnosis – Total PMPM	
	Expenditures	73
4-6	Participants with Asthma as Most Expensive Diagnosis – PMPM Expenditures by	
	COS	74
4-7	Participants with Asthma as Most Expensive Diagnosis – Aggregate Savings	74
4-8	Participants with CAD as Most Expensive Diagnosis	75
4-9	Participants with CAD – Co-morbidity with Chronic Impact Conditions	75
4-10	Participants with CAD as Most Expensive Diagnosis – Inpatient Utilization – First	
	12 Months Following Engagement, per 1,000 Participants	76
4-11	Participants with CAD as Most Expensive Diagnosis – Emergency Department	
	Utilization – First 12 Months Following Engagement, per 1,000 Participants	77
4-12	Participants with CAD as Most Expensive Diagnosis – Total PMPM Expenditures	78
4-13	Participants with CAD as Most Expensive Diagnosis – PMPM Expenditures by COS	79
4-14	Participants with CAD as Most Expensive Diagnosis – Aggregate Savings	79
4-15	Participants with COPD as Most Expensive Diagnosis	80
4-16	Participants with COPD – Co-morbidity with Chronic Impact Conditions	80

Exhibit Description

<u>Page</u>

4-17	Participants with COPD as Most Expensive Diagnosis – Inpatient Utilization – First	
	12 Months Following Engagement, per 1,000 Participants	81
4-18	Participants with COPD as Most Expensive Diagnosis – Emergency Department	
	Utilization – First 12 Months Following Engagement, per 1,000 Participants	82
4-19	Participants with COPD as Most Expensive Diagnosis – Total PMPM Expenditures	83
4-20	Participants with COPD as Most Expensive Diagnosis – PMPM Expenditures by	
	COS	84
4-21	Participants with COPD as Most Expensive Diagnosis – Aggregate Savings	84
4-22	Participants with Diabetes as Most Expensive Diagnosis	85
4-23	Participants with Diabetes – Co-morbidity with Chronic Impact Conditions	85
4-24	Participants with Diabetes as Most Expensive Diagnosis – Inpatient Utilization –	
	First 12 Months Following Engagement, per 1,000 Participants	86
4-25	Participants with Diabetes as Most Expensive Diagnosis – Emergency Department	
	Utilization – First 12 Months Following Engagement, per 1,000 Participants	87
4-26	Participants with Diabetes as Most Expensive Diagnosis – Total PMPM	
	Expenditures	88
4-27	Participants with Diabetes as Most Expensive Diagnosis – PMPM Expenditures by	
	COS	89
4-28	Participants with Diabetes as Most Expensive Diagnosis – Aggregate Deficit	89
4-29	Participants with Heart Failure as Most Expensive Diagnosis	90
4-30	Participants with Heart Failure – Co-morbidity with Chronic Impact Conditions	90
4-31	Participants with Heart Failure as Most Expensive Diagnosis – Inpatient Utilization	
	 First 12 Months Following Engagement, per 1,000 Participants 	91
4-32	Participants with Heart Failure as Most Expensive Diagnosis – Emergency	
	Department Utilization – First 12 Months Following Engagement, per 1,000	
	Participants	92
4-33	Participants with Heart Failure as Most Expensive Diagnosis – Total PMPM	
	Expenditures	93
4-34	Participants with Heart Failure as Most Expensive Diagnosis – PMPM Expenditures	
	by COS	94
4-35	Participants with Heart Failure as Most Expensive Diagnosis – Aggregate Savings	94
4-36	Participants with Hypertension as Most Expensive Diagnosis	95
4-37	Participants with Hypertension – Co-morbidity with Chronic Impact Conditions	95
4-38	Participants with Hypertension as Most Expensive Diagnosis – Inpatient Utilization	
	– First 12 Months Following Engagement, per 1,000 Participants	96
4-39	Participants with Hypertension as Most Expensive Diagnosis – Emergency	
	Department Utilization – First 12 Months Following Engagement, per 1,000	
	Participants	97
4-40	Participants with Hypertension as Most Expensive Diagnosis – Total PMPM	
	Expenditures	98
4-41	Participants with Hypertension as Most Expensive Diagnosis – PMPM	
	Expenditures by COS	99
4-42	Participants with Hypertension as Most Expensive Diagnosis – Aggregate Savings	99
4-43	Participants with Hepatitis-C – Inpatient Utilization – First 12 Months Following	100
	Engagement, per 1,000 Participants	100

<u>Exhibit</u>	Description	<u>Page</u>
4-44	Participants with Hepatitis-C as Most Expensive Diagnosis – Emergency	
	Department Utilization – First 12 Months Following Engagement, per 1,000	
	Participants	101
4-45	Participants with Hepatitis-C as Most Expensive Diagnosis – Total PMPM	
	Expenditures	102
4-46	Participants with Hepatitis-C as Most Expensive Diagnosis – PMPM Expenditures	
	by COS	103
4-47	Participants with Hepatitis-C as Most Expensive Diagnosis – Aggregate Savings	103
4-48	All SoonerCare CCU Participants – Inpatient Utilization – First 12 Months	
	Following Engagement, per 1,000 Participants	104
4-49	All SoonerCare CCU Participants – Emergency Department Utilization – First 12	
	Months Following Engagement, per 1,000 Participants	105
4-50	All SoonerCare CCU Participants – Total PMPM Expenditures	106
4-51	All SoonerCare CCU Participants – PMPM Expenditures by COS	107
4-52	All SoonerCare CCU Participants – Aggregate Savings	107
4-53	SoonerCare CCU Administrative Expense	109
4-54	SoonerCare CCU PMPM Savings	109
4-55	All SoonerCare CCU Participants – Aggregate Savings – Net of Administrative	
	Expenses	110
4-56	All SoonerCare CCU Participants – Growth in Cumulative Net Savings by	
	Evaluation Year	110

Chapter 5 Summary Findings and Return on Investment

5-1	SoonerCare CCU ROI (State and Federal Dollars)	111
-----	--	-----

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 have 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 2017, 1,398 Oklahomans died due to complications from diabetes. This equated to a diabetes-related mortality rate of 30.6 persons per 100,000 residents, versus the national rate of 21.5. 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.

Chronic Care Unit

The OHCA also recognized that there were SoonerCare members who would benefit from care management, but who did not have access to the SoonerCare HMP (including members previously enrolled in the Health Management Program whose provider did not have an embedded health coach), or had medical conditions that required highly-specialized interventions. The OHCA responded by establishing the Chronic Care Unit to expand access to telephonic care management.

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.

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.

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.

Seven OHCA employees worked part- or full-time on behalf of CCU beneficiaries during SFY 2019. This included four front-line nurses (known as Nurse Care Managers) who provided telephonic case management. It also included supervisory and training staff. The unit managed 575 - 600 members, on average, 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;
- 3. 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. This is the sixth 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 1,258 initial surveys with CCU participants, as well as 610 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.

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 "(My nurse) has helped me a lot. She got me a blood pressure cuff, nebulizer and a(n) exercise bike for me to strengthen my legs. She has given me a lot of help with resources." – SoonerCare CCU member

and instructions for taking care of their health problems or concerns (92 percent); reviewed and helped with management of medications (87 percent); and answered questions about their health (86 percent).

Smaller numbers of respondents said their nurse helped to identify changes in health that might be an early sign of a problem (36 percent); helped them to talk to and work with their regular provider and his/her staff (28 percent); helped to make physical health appointments (24 percent); and helped to make mental health appointments (four percent).

² See SoonerCare HMP SFY 2019 Evaluation Report, June 2020.

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 93 to 97 percent, depending on the item. This attitude carried over to the members' overall satisfaction with their nurses; 91 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

"My brother has Hep C and has had a stroke. I am his caregiver and (his nurse) has helped me so much with managing his health. I really need the support she gives and she arranged for transportation to the doctor when I cannot get him there." – SoonerCare CCU member relative

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 94 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

"My first nurse helped me get a wheelchair and a(n) adjustable bed. Both have been life changing. My wife and I did not go out much before getting the wheelchair in case my knees would give out. Now we go out with no worries. I am having an easier time getting out of bed with the new one. She has been very good to me." – SoonerCare CCU member

(51 percent) said "fair", while 31 percent said "good" and 16 percent said "poor"⁴.

When next asked if their health status had changed since enrolling in the SoonerCare CCU, 47 percent of initial survey respondents said it was "better" and 43 percent said it was "about the same"; only 10 percent said it was "worse". Among those members who reported a positive

³ The outlier activity was helping to make and keep health care appointments for mental health or substance abuse problems. Sixty-nine percent of "yes" respondents reported they were very satisfied with the help they received; the other 31 percent reported they were somewhat satisfied.

⁴ One percent said "excellent" and one percent did not answer.

change, nearly all (94 percent) credited the SoonerCare CCU with contributing to their improved health.

The results were even more encouraging among follow-up survey respondents. Fifty-six 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 12 of 17 measures for which there was a comparison group percentage. The difference was statistically significant for six of the 12 measures, suggesting that the program is having a positive effect on quality of care, although there is room for continued improvement.

"(My nurse) has helped me so much. She is so positive and easy to talk to. The biggest thing she helped me with is to get treatment for my alcohol problem. I have Hep C and finally decided to get help for my drinking. She helped to explain my Hep C treatment to me too. She is wonderful. I would not have quit drinking if it wasn't for her encouragement." – SoonerCare CCU member

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 2019 results were consistent with findings for earlier fiscal years, indicating that the SoonerCare CCU is having a positive, and sustained, impact on quality of care for health coaching participants.

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, fewer 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 12-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 conditions⁵ and for the participant population as a whole.

MEDai forecasted that SoonerCare CCU participants, as a group, would incur 9,788 inpatient days per 1,000 participants in the first 12 months of engagement. The actual rate was 4,835, or 49 percent of forecast.

MEDai forecasted that SoonerCare CCU participants, as a group, would incur 4,895 emergency department visits per 1,000 participants in the first 12 months of engagement. The actual rate was 3,632, or 74 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 up to 72 months of engagement. MEDai forecasts for the first 12 months were trended in months 13 to 72 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")⁶.

The trended MEDai forecast projected that the participant population would incur an average of \$1,866 in PMPM expenditures through 72 months of engagement. The actual amount was \$1,112, or 60 percent of forecast.

⁵ 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.

⁶ 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.

PHPG calculated an aggregate dollar impact for all SoonerCare CCU participants by multiplying total months of engagement through SFY 2019 by average PMPM savings. The resultant medical savings were approximately \$20.6 million.

PHPG then performed a net cost effectiveness test by comparing forecasted costs to actual costs through SFY 2019, inclusive of SoonerCare CCU administrative expenses. SoonerCare CCU administrative expenses include salary, benefit and overhead costs for persons working in the SoonerCare CCU unit. Aggregate administrative expenses for the SoonerCare CCU were approximately \$3.4 million.

The SoonerCare CCU registered net savings of approximately \$17.1 million through SFY 2019, up from \$11.8 million at the end of SFY 2018. The SoonerCare CCU achieved a positive ROI through SFY 2019 of 496.6 percent. Put another way, <u>the SoonerCare CCU generated nearly \$5.00 in net</u> medical savings for every dollar in administrative expenditures.

CHAPTER 1 – INTRODUCTION

Chronic Disease Management

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 have multiple chronic conditions, those that last a year or more and require ongoing medical attention or that limit activities of daily living⁷.

Ninety percent of the nation's \$3.5 trillion in annual health expenditures are for persons with chronic physical and mental health conditions⁸. The per capita impact of chronic disease is even greater in Oklahoma than for the nation as a whole. In 2017, 1,398 Oklahomans died due to complications from diabetes. This equated to a diabetes-related mortality rate of 30.6 persons per 100,000 residents, versus the national rate of 21.5⁹.

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).

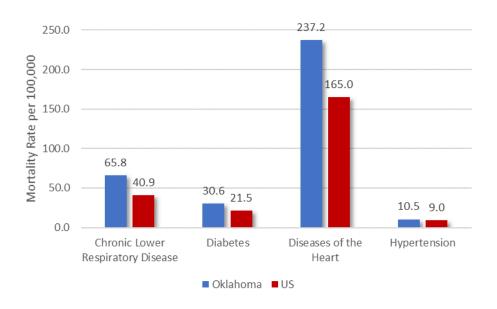


Exhibit 1-1 – Chronic Disease Mortality Rates, 2017 – OK and US (Selected Conditions)¹⁰

⁷ https://www.cdc.gov/chronicdisease/about/multiple-chronic.htm

⁸ https://www.cdc.gov/chronicdisease/about/costs/index.htm#ref1

⁹ <u>https://www.cdc.gov/nchs/data/nvsr/nvsr68/nvsr68_09_tables-508.pdf.</u> Age adjusted rates. 2017 is the most recent year available.

¹⁰ 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.

Chronic diseases also are among the costliest of all health problems. Persons with multiple chronic conditions account for over 70 percent of health spending nationally¹¹. Providing care to 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 exceed \$10 billion in 2020 and approach \$13 billion in 2025. The estimated portion attributable to SoonerCare members will exceed \$1.2 billion (state and federal) in 2020 and \$1.5 billion in 2025¹² (Exhibit 1-2).

Chronic Condition	OK All Payers		SoonerCare	
Chronic Condition	2020	2025	2020	2025
Asthma	\$538	\$641	\$182	\$216
Cardiovascular Diseases (heart diseases, stroke and hypertension)	\$7,076	\$8,599	\$760	\$923
Diabetes	\$2,869	\$3,477	\$319	\$387
TOTAL FOR SELECTED CONDITIONS	\$10,483	\$12,717	\$1,260	\$1,526

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

The costs associated with chronic conditions typically are 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.¹³ 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.

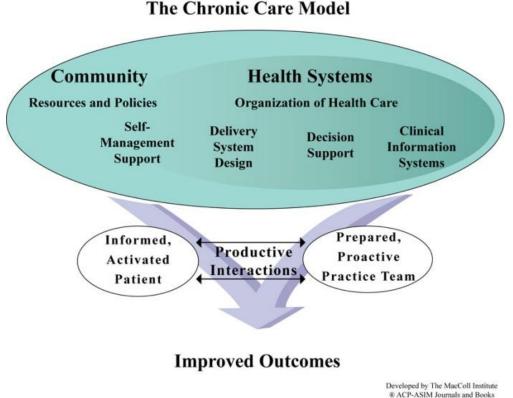
¹¹ <u>http://www.ahrq.gov/sites/default/files/wysiwyg/professionals/prevention-chronic-care/decision/mcc/mccchartbook.pdf</u>

¹² Expenditure estimates developed using CDC Chronic Disease Cost Calculator. SoonerCare estimate does not take into account the impact of any potential expansion in Medicaid eligibility in 2021 or beyond.

¹³ Wagner, E.H., "Chronic Disease Management: What Will It Take to Improve Care for Chronic Illness?," *Effective Clinical Practice*, 1:2-4 (1998).

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

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



The Chronic Care Model

Exhibit 1-3 – The Chronic Care Model

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: 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. The program's stated goals include:

- 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. Telligen¹⁴ 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.

¹⁴ 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.

In addition, the OHCA recognized that there were SoonerCare members who would benefit from care management, but who did not have access to the SoonerCare HMP, or had medical conditions that required highly-specialized interventions. The OHCA took a series of actions to enhance the SoonerCare HMP (in collaboration with Telligen), while establishing the Chronic Care Unit to expand access to care management.

SoonerCare HMP Second Generation 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 area¹⁵.

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.

¹⁵ 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.

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 Chronic Care Unit

Overview

The SoonerCare CCU was created to expand care management opportunities to members not served through 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.

The CCU also is responsible for¹⁶:

- Members with hemophilia or sickle cell anemia, even if the member otherwise would be enrolled in the SoonerCare HMP¹⁷.
- Members identified as high utilizers of the emergency department¹⁸.
- Members undergoing bariatric surgery¹⁹.
- 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.

Under the SoonerCare CCU, OHCA registered nurses provide telephonic case management to participating members. Similar to the health coaching model, CCU RNs use motivational

¹⁶ As part of a reorganization, the OHCA assigned nurse care managers responsible for hemophilia, bariatric surgery and Hepatitis-C cases to another unit within the agency in SFY 2019. However, the staff returned to the CCU in SFY 2020. PHPG treated these populations as part of the CCU for purposes of performing the longitudinal evaluation of CCU performance.

¹⁷ Although small in numbers, the health needs and costs of these populations are substantial. A targeted review of CCU participants with hemophilia found that they incurred average PMPM costs of \$16,700, primarily to cover the cost of anti-coagulant drugs.

¹⁸ The CCU evaluation includes ED visit rate data across all participants.

¹⁹ The average CCU caseload for this population is approximately 10 patients.

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

Seven OHCA employees worked part- or full-time on behalf of CCU beneficiaries during SFY 2019. This included four front-line nurses (known as Nurse Care Managers) who provided telephonic case management. It also included supervisory and training staff. The unit managed 575 - 600 members, on average, at any given time.

Characteristics of CCU Participants

During SFY 2019, a total of 958 members were enrolled in the SoonerCare CCU for at least part of one month, down from 1,114 in SFY 2018. 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 2019.
- Members who were enrolled for three months or longer, but who also were enrolled in the SoonerCare HMP for a portion of SFY 2019, 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 ²⁰.
- Members enrolled in a Health Access Network for three months or longer, to isolate the impact of the SoonerCare CCU from HAN care management activities²¹.

The revised evaluation dataset included 598 SoonerCare CCU participants, which actually was up from 523 in the SFY 2018 evaluation. The average tenure was 14.5 months, also up slightly from 14.1 months in the prior year's evaluation. Demographic and health data for CCU members is presented starting on the next page.

²⁰ There were 26 members who received services from the center and who also were enrolled in either the SoonerCare HMP or CCU.

²¹ There were 515 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 2018 was 482.

Participants by Gender and Age

Most CCU participants are women, with females outnumbering males by 16 percentage points (Exhibit 1-4).

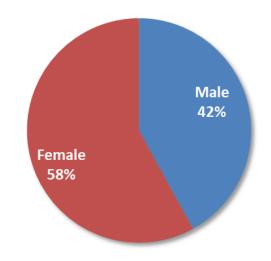


Exhibit 1-4 – Gender Mix for SoonerCare CCU Participants

Not surprisingly, SoonerCare CCU participants are older than the general Medicaid population. Only eight percent of SoonerCare CCU participants in SFY 2019 were under the age of 21, compared to approximately 66 percent of the general SoonerCare population (Exhibit 1-5 on the following page).²²

²² Source for total SoonerCare percentage: OHCA April 2020 Enrollment Report.

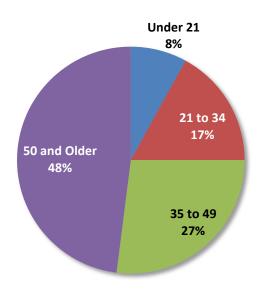
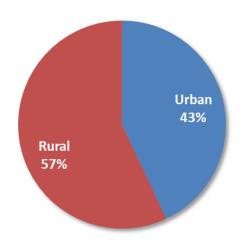


Exhibit 1-5 – Age Distribution for SoonerCare CCU Participants

Participants by Place of Residence

Fifty-seven percent of SoonerCare CCU participants resided in rural Oklahoma in SFY 2019, while 43 percent resided in urban counties comprising the greater Oklahoma City, Tulsa and Lawton metropolitan areas (Exhibit 1-6). By contrast, approximately 45 percent of the general SoonerCare population resides in rural counties and 55 percent in urban counties²³.





²³ Source: SoonerCare April 2020 Fast Facts. Urban counties include Canadian, Cleveland, Comanche, Creek, Logan, McClain, Oklahoma, Osage, Rogers, Tulsa and Wagoner.

Participants by Most Common Diagnostic Categories²⁴

CCU participants are treated for numerous chronic and acute physical conditions. The most common diagnostic category among participants in SFY 2019 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 seventh most common diagnostic category (after injury), reflecting the enrollment of members with hemophilia into the CCU. The remaining three categories included prevalent chronic conditions. The top 10 categories accounted for nearly 93 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.

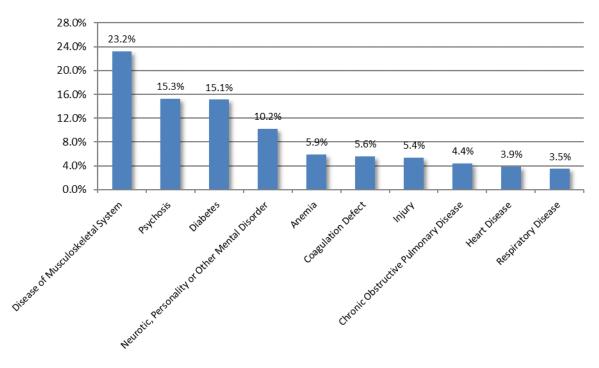


Exhibit 1-7 – Most Common Diagnostic Categories for CCU Participants

²⁴ Ranking of most common diagnoses calculated using primary diagnosis code from paid claims.

Participants by Most Expensive Diagnostic Categories²⁵

Disease of the musculoskeletal system also was the most expensive diagnostic category in SFY 2019 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 10 most expensive disease categories accounted for nearly 80 percent of the population. The ranking and percentages were again nearly identical to those reported in prior years.

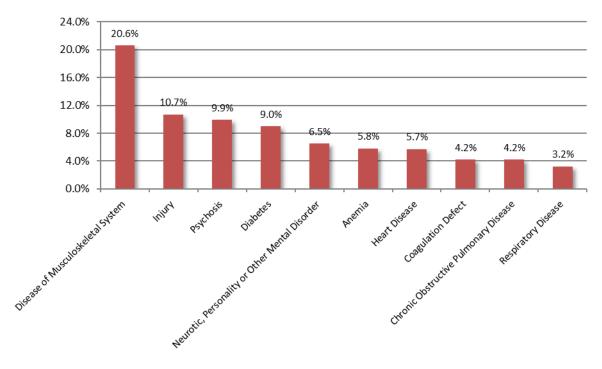


Exhibit 1-8 – Most Expensive Diagnostic Categories for CCU Participants

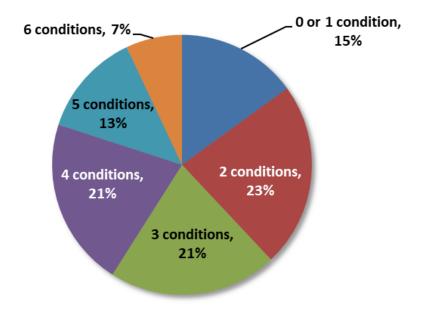
²⁵ Ranking of most costly diagnoses calculated using primary diagnosis code from paid claims.

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.

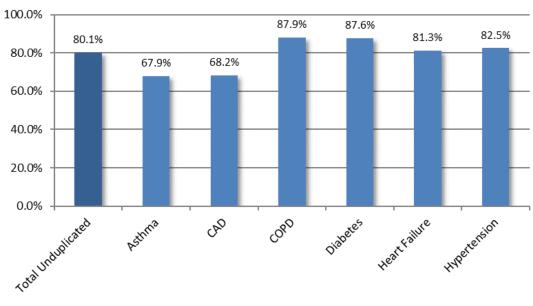
PHPG examined the number of physical chronic conditions per participant and found that 85 percent in SFY 2019 had at least two of six high priority chronic physical conditions²⁶ (asthma, COPD, coronary artery disease, diabetes, heart failure and hypertension) (Exhibit 1-9). The SFY 2019 distribution was very similar to the distribution in prior years.

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



²⁶ These conditions are used by MEDai as part of its calculation of chronic impact scores.

Eighty percent of the participant population in SFY 2019 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 or diabetes to 68 percent among persons with asthma or coronary artery disease (Exhibit 1-10).²⁷ The percentages once again were almost unchanged from prior years.





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.

²⁷ 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 six-year period²⁸. This is the sixth 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 program years one through five, covering July 2013 to June 2019 (SFY 2014 through 2019).

Member and provider survey data is being collected on a continuous basis. Findings in this report are for surveys conducted from March 2019 to February 2020.

²⁸ The HMP and CCU evaluations initially were for a five-year period, to align with Telligen's HMP contract. However, Telligen's contract was extended to six years and PHPG's evaluation of both programs likewise was extended.

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 2020 has provided contact information for 4,505 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 followup 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 10week 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 included data from 253 initial surveys conducted from May 2017 through February 2018. The SFY 2017 evaluation also included data from 158 six-month follow-up surveys. (These survey counts are prior to the exclusions described below.)

The SFY 2018 evaluation included data from 137 initial surveys conducted from March 2018 through February 2019. The SFY 2018 evaluation also included data from 117 six-month follow-up surveys.

The SFY 2019 evaluation includes data from 81 initial surveys conducted from March 2019 through February 2020. The SFY 2019 evaluation also includes data from 38 follow-up surveys. (These survey counts, and counts for earlier years, 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 below 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	1,258	95%	+/- 2.8%
Six-month Follow-up	610	95%	+/- 4.0%

SoonerCare CCU Participant Survey Findings

Respondent Demographics

Initial Survey Respondents

The gender split among SoonerCare CCU initial survey respondents in aggregate was 61 percent female and 39 percent male. The great majority of surveys (84 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, the initial survey respondent sample included 1,118 persons (across all years).

Respondent tenure in the program among the 1,118 active participants ranged from less than one month to more than six months (Exhibit 2-2 on the following page).

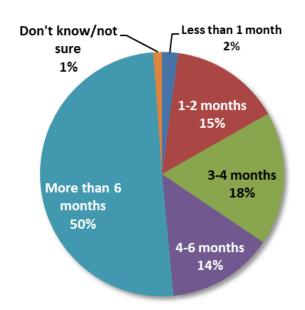


Exhibit 2-2 – Respondent Tenure in SoonerCare CCU – Initial Survey

Follow-up Survey Respondents

The gender split among follow-up survey respondents was very similar to the initial survey group; 60 percent were female and 40 percent were male. The average tenure of follow-up respondents was significantly greater, with the largest segment (45 percent) reporting tenure of more than 12 months (Exhibit 2-3).

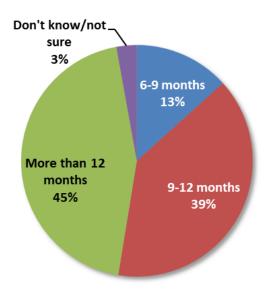


Exhibit 2-3 – Respondent Tenure in SoonerCare CCU – Follow-up Survey

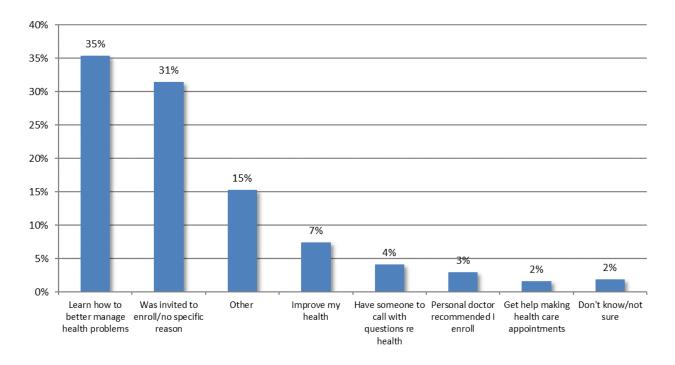
Key findings for the initial and follow-up surveys are discussed below. Findings are presented in aggregate for all initial survey respondents interviewed since February 2015. The aggregate initial survey results also are broken-out into annual report subgroups. This segmentation allows for identification 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.

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, 31 percent of the respondents enrolled simply because they were asked (Exhibit 2-4).





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 nearly 38 percent in 2018 – 2019 before declining again 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 implementation³⁰ (Exhibit 2-5 on the following page).

²⁹ This question was not asked on the follow-up survey.

³⁰ The "other" category also included persons preparing for gastric bypass surgery and persons getting assistance in managing mental health needs.

		Prim		or Enrolling (2015 – Febru	-	ning)	
Reason	Feb – Apr 2015	May 2015 – Apr 2016	May 2016 – Apr 2017	May 2017 _ Feb 2018	Mar 2018 – Feb 2019	Mar 2019 - Feb 2020	Aggregate
1. Learn how to better manage health problems	34.9%	39.4%	41.3%	25.7%	28.1%	45.7%	35.3%
2. Was invited to enroll/no specific reason	34.9%	38.2%	28.9%	25.7%	24.4%	35.8%	31.4%
3. Other	0.9%	3.7%	10.1%	32.4%	37.8%	3.7%	15.3%
4. Improve my health	3.8%	5.8%	11.5%	10.3%	5.2%	2.5%	7.4%
5. Have someone to call with questions regarding health	9.4%	5.2%	2.3%	2.4%	2.2%	6.2%	4.1%
6. Personal doctor recommended I enroll	12.3%	2.2%	2.3%	2.4%	0.7%	1.2%	3.0%
7. Don't know/not sure	1.9%	3.7%	1.4%	0.0%	1.5%	2.5%	1.9%
8. Get help making personal health care appointments	1.9%	1.8%	2.3%	1.2%	0.0%	2.5%	1.6%

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

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

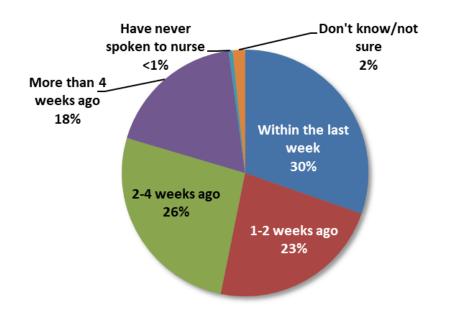


Exhibit 2-6 – Most Recent Contact with CCU Nurse – Initial Survey (Aggregate)

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).

					Last Tin	ne Spoke	e with C	cu	Nurse					
			In	itial Surve	у						Follow-u	ip Survey	,	
Time Elapsed	Feb – Apr 2015	May 2015 – Apr 2016	May 2016 – Apr 2017	May 2017 – Feb 2018	Mar 2018 – Feb 2019	Mar 2019 – Feb 2020	Aggre -gate		May 2015 – Apr 2016	May 2016 – Apr 2017	May 2017 – Feb 2018	Mar 2018 – Feb 2019	Mar 2019 – Feb 2020	Aggre -gate
Within last week	33.7%	31.5%	28.6%	30.4%	29.6%	27.2%	30.3%		29.1%	20.0%	17.3%	17.1%	10.5%	19.7%
1 to 2 weeks ago	28.7%	28.5%	21.2%	21.3%	13.3%	17.3%	22.8%	-	8.7%	24.7%	10.9%	14.5%	13.2%	15.1%
2 to 4 weeks ago	23.8%	20.9%	26.3%	29.6%	34.1%	29.6%	26.4%		18.4%	23.3%	28.2%	30.8%	23.7%	25.4%
More than 4 weeks ago	12.9%	15.8%	23.0%	17.0%	19.3	24.7%	18.3%		39.8%	31.3%	42.3%	37.6%	52.6%	38.7%
Have never spoken to health coach	0.0%	0.3%	0.5%	1.2%	0.7%	0.0%	0.5%		1.0%	0.0%	0.0%	0.0%	0.0%	0.2%
Don't know/not sure/no response	1.0%	3.0%	0.5%	0.4%	3.0%	1.2%	1.6%		2.9%	0.7%	1.3%	0.0%	0.0%	1.1%

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

Over 60 percent of respondents were able to name their CCU nurse, suggesting that participants have formed a strong connection with the program³¹ (Exhibit 2-8).

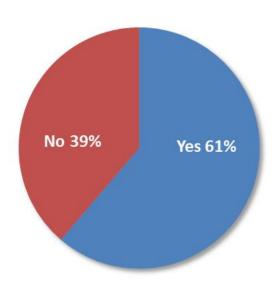


Exhibit 2-8 – Able to Name CCU Nurse – Initial Survey (Aggregate)

The portion able to name their CCU has declined among follow-up survey respondents for several time periods (Exhibit 2-9). This may be related to the less frequent contact reported by follow-up respondents.

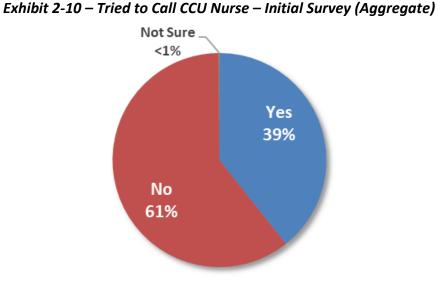
					Able	e to Nam	ne CCU I	Nu	rse					
			In	itial Surve	y						Follow-u	ıp Survey	,	
Response	Feb – Apr 2015	May 2015 – Apr 2016	May 2016 – Apr 2017	May 2017 – Feb 2018	Mar 2018 – Feb 2019	Mar 2019 – Feb 2020	Aggre -gate		May 2015 – Apr 2016	May 2016 – Apr 2017	May 2017 – Feb 2018	Mar 2018 – Feb 2019	Mar 2019 – Feb 2020	Aggre -gate
Yes	61.5%	62.4%	58.3%	68.4%	53.3%	55.6%	61.3%		67.0%	66.0%	59.0%	53.0%	36.8%	59.6%
No	38.5%	37.6%	41.7%	31.6%	46.7%	44.4%	38.7%		33.0%	34.0%	41.0%	47.0%	63.2%	40.4%

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

³¹ 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 confirmed that they were given a number.

Thirty-nine 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). (Three respondents were not sure.)



The percentage declined among initial survey respondents in the most recent survey time period but increased among follow-up survey respondents (Exhibit 2-11).

					Trie	ed to Ca	II CCU N	lur	se					
			In	itial Surve	у						Follow-ı	up Survey	,	
Response	Feb – Apr 2015	May 2015 – Apr 2016	May 2016 – Apr 2017	May 2017 – Feb 2018	Mar 2018 – Feb 2019	Mar 2019 – Feb 2020	Aggre -gate		May 2015 – Apr 2016	May 2016 – Apr 2017	May 2017 – Feb 2018	Mar 2018 – Feb 2019	Mar 2019 – Feb 2020	Aggre -gate
Yes	38.5%	43.9%	36.6%	41.7%	27.6%	34.7%	38.9%		41.2%	41.3%	41.1%	50.5%	33.3%	42.6%
No	61.5%	56.1%	62.9%	58.3%	70.9%	65.3%	60.8%		58.8%	58.7%	57.5%	48.6%	63.6%	56.6%
Don't know/not sure	0.0%	0.0%	0.5%	0.0%	1.6%	0.0%	0.3%		0.0%	0.0%	1.4%	0.9%	3.0%	0.8%

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

Among those who had tried calling, a majority (74 percent of initial survey respondents) reported their most recent call concerned a routine health question (Exhibit 2-12).

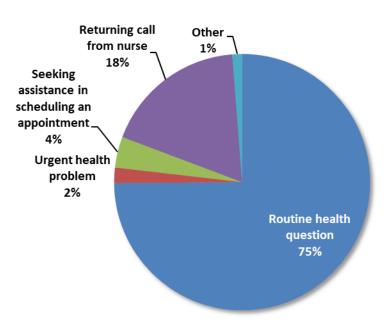


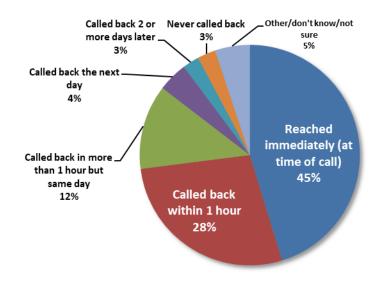
Exhibit 2-12 – Reason for Most Recent Call – Initial Survey (Aggregate)

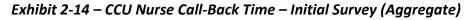
A nearly identical percentage of follow-up survey respondents also called with a routine health question (Exhibit 2-13).

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

					Reaso	on for M	ost Rec	en	t Call					
			Ini	itial Surve	y						Follow-u	ıp Survey	,	
Response	Feb – Apr 2015	May 2015 – Apr 2016	May 2016 – Apr 2017	May 2017 – Feb 2018	Mar 2018 – Feb 2019	Mar 2019 – Feb 2020	Aggre -gate		May 2015 – Apr 2016	May 2016 – Apr 2017	May 2017 – Feb 2018	Mar 2018 – Feb 2019	Mar 2019 – Feb 2020	Aggre -gate
Routine question	73.0%	70.8%	64.9%	81.2%	85.7%	88.5%	74.9%		67.5%	76.3%	73.3%	80.4%	54.5%	73.9%
Urgent problem	2.7%	2.2%	2.7%	0.0	2.9%	3.8%	2.0%		2.5%	6.8%	6.7%	1.8%	0.0%	4.4%
Assistance in scheduling appointment	5.4%	3.6%	6.8%	2.0%	2.9%	3.8%	3.9%		10.0%	5.1%	1.7%	3.6%	9.1%	4.9%
Returning call from nurse	16.2%	22.6%	23.0%	16.8%	8.6%	0.0%	18.0%		20.0%	10.2%	18.3%	14.3%	36.4%	16.4%
Other	2.7%	0.7%	2.7%	0.0%	0.0%	3.8%	1.2%		0.0%	1.7%	0.0%	0.0%	3.8%	1.2%

Eighty-five 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).





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

					CCU	Nurse C	all-Bac	k T	ime					
			In	itial Surve	у						Follow-ı	ıp Survey	,	
Response	Feb – Apr 2015	May 2015 – Apr 2016	May 2016 – Apr 2017	May 2017 – Feb 2018	Mar 2018 – Feb 2019	Mar 2019 – Feb 2020	Aggre -gate		May 2015 – Apr 2016	May 2016 – Apr 2017	May 2017 – Feb 2018	Mar 2018 – Feb 2019	Mar 2019 – Feb 2020	Aggre -gate
Reached immediately (time of call)	45.9%	51.8%	42.7%	41.6%	40.0%	38.5%	45.3%		45.0%	47.5%	31.7%	44.6%	54.5%	42.5%
Called back within 1 hour	35.1%	21.9%	25.3%	33.7%	31.4%	26.9%	27.7%		22.5%	22.0%	21.7%	30.4%	18.2%	15.0%
Called back > 1 hour	8.1%	9.5%	13.3%	12.9%	17.1%	23.1%	12.4%		7.5%	11.9%	26.7%	10.7%	9.1%	4.4%
Called back the next day	0.0%	7.3%	5.3%	3.0%	2.9%	0.0%	4.4%		7.5%	1.7%	5.0%	3.6%	9.1%	4.4%
Called back 2+ days later	2.7%	3.6%	1.3%	3.0%	0.0%	0.0%	2.4%		0.0%	0.0%	1.7%	0.0%	0.0%	0.4%
Never called back	2.7%	2.2%	5.3%	2.0%	2.9%	0.0%	2.7%		7.5%	6.8%	6.7%	1.8%	9.1%	5.8%
Other/DK/not sure	5.4%	3.6%	6.7%	4.0%	5.7%	11.5%	5.1%		10.0%	10.2%	6.7%	8.9%	9.1%	808%

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

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 assisted with medications and answered questions about their health (Exhibit 2-16). Respondents reported that other activities occurred with less frequency.

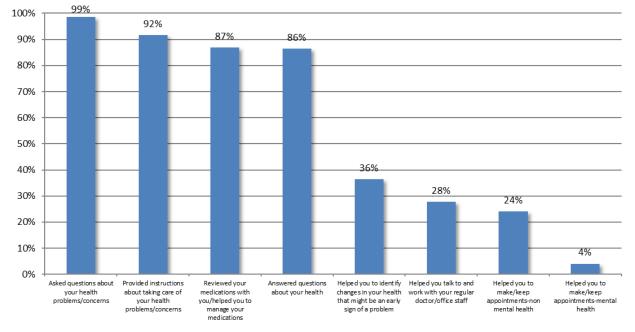


Exhibit 2-16 - CCU Nurse Activity - Initial Survey (Aggregate)

The rate at which activities occurred was generally consistent across initial survey time periods and between the initial and follow-up surveys. The two exceptions were "helped you talk to and work with your regular doctor/staff" and "helped you make/keep appointments with other doctors, such as specialists", both of which declined over time among initial survey respondents before rebounding somewhat in the most recent survey period (Exhibit 2-17 on the following page).

					c	CU Nur	e Activ	vity						
			Initial S	Survey (%	"yes")					Follo	w-up Su	rvey (% "	'yes")	
Response	Feb – Apr 2015	May 2015 – Apr 2016	May 2016 – Apr 2017	May 2017 – Feb 2018	Mar 2018 – Feb 2019	Mar 2019 – Feb 2020	Aggre -gate		May 2015 – Apr 2016	May 2016 – Apr 2017	May 2017 – Feb 2018	Mar 2018 – Feb 2019	Mar 2019 – Feb 2020	Aggre -gate
1. Asked questions about your health problems/ concerns	99.1%	99.1%	98.2%	98.0%	98.5%	100%	98.7%		98.0%	100%	99.4%	99.1%	100%	99.3%
2. Provided instructions about taking care of your health problems/ concerns	89.6%	91.4%	89.4%	94.5%	91.1%	92.6%	91.6%		93.1%	94.0%	97.4%	96.6%	97.4%	95.6%
3. Helped you to identify changes in health that might be an early sign of a problem	34.9%	42.5%	34.9%	38.3%	27.4%	27.2%	36.4%		42.2%	47.3%	39.7%	31.6%	21.1%	39.3%
4. Answered questions about your health	88.7%	86.5%	85.5%	90.5%	80.0%	84.0%	86.5%		89.2%	93.3%	92.9%	90.6%	81.6%	91.1%
5. Helped you talk to and work with your regular doctor/staff	45.3%	39.1%	21.6%	24.1%	7.4%	21.0%	27.7%		26.5%	34.0%	20.6%	29.1%	21.1%	27.0%
6. Helped you make/ keep appoint- ments with other doctors, such as specialists	44.3%	31.1%	17.4%	20.6%	11.9%	19.8%	24.2%		25.5%	27.3%	19.4%	22.2%	10.5%	22.6%
7. Helped you to make/ keep appoint- ments for MH/SA problems	7.5%	4.9%	4.6%	3.2%	0.7%	2.5%	4.0%		6.9%	5.3%	3.2%	1.7%	2.6%	4.1%
8. Reviewed your medi- cations and helped you manage	73.6%	88.6%	89.0%	90.1%	90.4%	76.5%	86.9%		90.2%	93.3%	89.7%	88.9%	65.8%	89.0%

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

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 on the following page).

The only activity registering somewhat lower "very satisfied" ratings was assistance with mental health/substance abuse problems. However, relatively few respondents reported receiving help with this activity and nearly all who did reported being either very or somewhat satisfied.

				Sa	atisfactio	on with	CCU Nu	irse	e Activi	ty				
		In	itial Surve	y (% "very	satisfied"	')			F	ollow-up	Survey	(% "very	satisfied	")
Response	Feb – Apr 2015	May 2015 – Apr 2016	May 2016 – Apr 2017	May 2017 – Feb 2018	Mar 2018 – Feb 2019	Mar 2019 – Feb 2020	Aggre -gate		May 2015 – Apr 2016	May 2016 – Apr 2017	May 2017 – Feb 2018	Mar 2018 – Feb 2019	Mar 2019 – Feb 2020	Aggre -gate
1. Asked questions about your health problems/ concerns	91.4%	92.2%	92.5%	94.8%	90.2%	93.8%	92.6%		91.9%	95.3%	92.9%	96.6%	86.8%	93.7%
2. Provided instructions about taking care of your health problems/ concerns	93.6%	97.0%	94.9%	96.6%	90.8%	94.7%	95.3%		93.6%	97.9%	94.6%	97.3%	89.2%	95.5%
3. Helped you to identify changes in health that might be an early sign of a problem	97.4%	93.7%	97.5%	100%	91.9%	100%	96.4%		97.7%	97.1%	100%	100%	100%	98.6%
4. Answered questions about your health	97.9%	96.8%	95.7%	96.9%	95.3%	97.1%	96.6%		95.5%	97.8%	97.2%	98.1%	96.9%	97.2%
5. Helped you talk to and work with your regular doctor/staff	97.8%	94.0%	88.0%	98.3%	100%	100%	94.9%		100%	96.0%	94.4%	97.1%	100%	96.8%
6. Helped you make/ keep appoint- ments with other doctors, such as specialists	95.7%	94.3%	93.2%	96.1%	81.3%	85.7%	93.5%		92.6%	95.2%	93.8%	100%	100%	95.5%
7. Helped you to make/ keep appoint- ments for MH/SA problems	90.9%	60.0%	62.5%	88.9%	0.0% ³³	50.0%	68.8%		85.7%	63.6%	62.5%	66.7%	100%	70.0%
8. Reviewed your medi- cations and helped you manage	96.2%	95.9%	94.3%	96.5%	96.1%	96.8%	95.3%		93.3%	97.1%	95.6%	95.9%	100%	96.4%

Exhibit 2-18 – Satisfaction with CCU Nurse Activity ("Very Satisfied")³² – Initial Survey (Longitudinal) & Follow-up

 ³² 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.
 ³³ Only one respondent reported this activity in 2018-2019. The respondent was "somewhat satisfied".

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

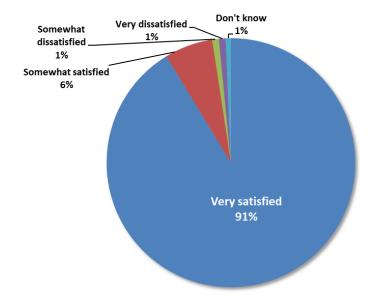


Exhibit 2-19 – Satisfaction with CCU Nurse – Initial Survey (Aggregate)

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

					Satisf	action w	vith CCl	N N	lurse					
			In	itial Surve	у						Follow-ι	ıp Survey	,	
Response	Feb – Apr 2015	May 2015 – Apr 2016	May 2016 – Apr 2017	May 2017 – Feb 2018	Mar 2018 – Feb 2019	Mar 2019 – Feb 2020	Aggre -gate		May 2015 – Apr 2016	May 2016 – Apr 2017	May 2017 – Feb 2018	Mar 2018 – Feb 2019	Mar 2019 – Feb 2020	Aggre -gate
Very satisfied	91.5%	90.8%	91.7%	93.3%	88.1%	92.6%	91.4%		91.2%	94.6%	92.3%	95.7%	86.8%	93.0%
Somewhat satisfied	6.6%	6.2%	6.0%	5.5%	8.1%	6.2%	6.3%		4.9%	3.4%	6.5%	1.7%	13.2%	4.8%
Somewhat dissatisfied	0.9%	1.2%	1.4%	0.0%	0.7%	0.0%	0.8%		3.9%	0.7%	0.6%	0.9%	0.0%	1.3%
Very dissatisfied	0.9%	1.5%	0.5%	0.4%	0.7%	1.2%	0.9%		0.0%	1.4%	0.6%	1.7%	0.0%	0.9%
Don't know/not sure/no response	0.0%	0.3%	0.5%	0.8%	2.2%	0.0%	0.6%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

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

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).

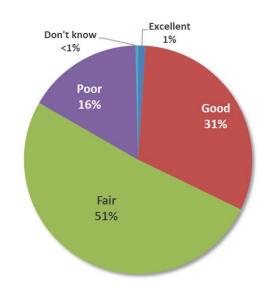


Exhibit 2-21 – Current Health Status – Initial Survey (Aggregate)

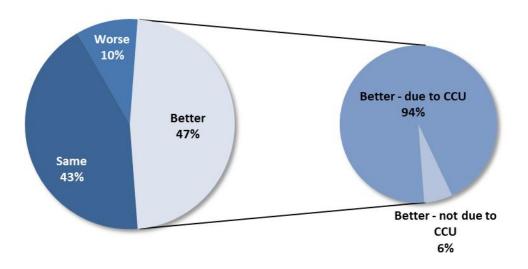
The self-reported health status profile was generally consistent across initial survey time periods. The percentage of follow-up respondents rating their health as "good" increased in the most recent survey time period, while the percentage rating their health as "fair" decreased (Exhibit 2-22).

					Cu	rrent He	ealth St	atı	us					
			In	itial Surve	у						Follow-u	ıp Survey	,	
Response	Feb – Apr 2015	May 2015 – Apr 2016	May 2016 – Apr 2017	May 2017 – Feb 2018	Mar 2018 – Feb 2019	Mar 2019 – Feb 2020	Aggre -gate		May 2015 – Apr 2016	May 2016 – Apr 2017	May 2017 – Feb 2018	Mar 2018 – Feb 2019	Mar 2019 – Feb 2020	Aggre -gate
Excellent	1.0%	1.8%	1.4%	0.4%	0.7%	0.0%	1.1%		1.0%	0.0%	0.0%	0.0%	0.0%	0.2%
Good	41.0%	31.3%	29.7%	30.8%	32.6%	19.8%	31.1%		40.2%	31.3%	28.4%	46.2%	36.8%	35.6%
Fair	39.0%	44.2%	54.3%	55.3%	55.6%	65.4%	51.1%		41.2%	53.3%	61.3%	45.3%	60.5%	52.1%
Poor	19.0%	22.4%	14.6%	13.4%	9.6%	13.6%	16.4%		17.6%	15.3%	10.3%	8.5%	2.6%	12.1%
Don't know/not sure/no response	0.0%	0.3%	0.0%	0.0%	1.5%	1.2%	0.4		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

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

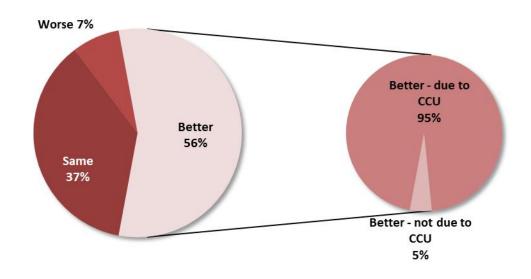
When next asked if their health status had changed since enrolling in the SoonerCare CCU, the largest segment of initial survey respondents (47 percent) said it was "better" while only 10 percent said it was "worse". Among those respondents who reported a positive change, nearly all (94 percent) credited 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-six percent reported improved health, with 95 percent³⁴ crediting this improvement to the program (Exhibit 2-24).

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



³⁴ Excludes four respondents who were "not sure".

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 has fluctuated by activity, although the rate improved from the fifth to sixth reporting periods for each of the activities (Exhibit 2 - 25).

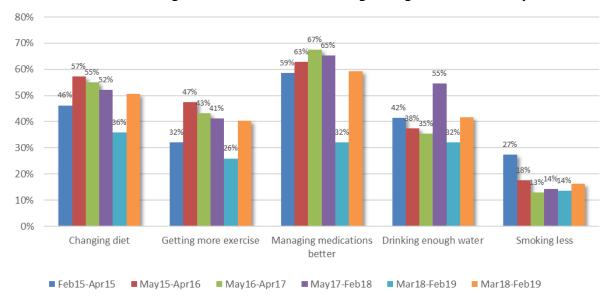


Exhibit 2-25 – Changes in Behavior – "Continuing Change" – Initial Survey³⁵

³⁵ The sixth behavior, drinking or using other substances less, was identified as an area of continuing change by 1.8 percent of the initial survey group and 1.6 percent of the follow-up survey group. It is omitted from the exhibit due to the difference in scale versus the other behavior items.

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).

			Discuss	ion and Ch	ange in Be	havior	
Behavior	Survey	N/A – Not Discussed ³⁶	Discussed – No Change	Discussed – Temporary Change	Discussed – Continuing Change	Discussed — But Not Applicable	Unsure/ No Response
1. Smoking less or using	Initial	21.1%	4.9%	1.5%	16.3%	53.1%	3.0%
other tobacco products less	Follow- up	17.8%	3.9%	0.7%	12.7%	61.1%	3.7%
2. Moving around more or	Initial	22.5%	7.2%	1.3%	40.3%	25.0%	3.7%
getting more exercise	Follow- up	22.3%	6.1%	2.0%	44.3%	22.1%	3.2%
	Initial	19.9%	6.4%	1.5%	50.5%	18.4%	3.2%
3. Changing your diet	Follow- up	15.4%	8.8%	2.9%	55.0%	15.2%	2.9%
4. Managing and taking	Initial	13.1%	0.7%	0.5%	59.3%	23.0%	3.4%
your medications better	Follow- up	8.2%	0.4%	0.2%	57.0%	29.3%	5.0%
5. Making sure to drink	Initial	26.8%	5.9%	0.7%	41.7%	19.5%	5.4%
enough water throughout the day	Follow- up	21.6%	8.4%	1.4%	41.6%	20.5%	6.4%
6. Drinking or using other	Initial	29.3%	0.1%	0.0%	1.8%	64.7%	4.1%
substances less	Follow- up	34.0%	0.0%	0.2%	1.6%	62.0%	4.7%

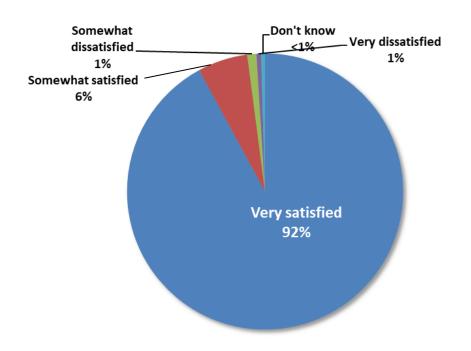
Exhibit 2-26– Changes in Behavior – Initial Survey (Aggregate) & Follow-up

³⁶ "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.





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

		Satisfaction with SoonerCare CCU												
		Initial Survey							Follow-up Survey					
Response	Feb – Apr 2015	May 2015 – Apr 2016	May 2016 – Apr 2017	May 2017 – Feb 2018	Mar 2018 – Feb 2019	Mar 2019 – Feb 2020	Aggre -gate		May 2015 – Apr 2016	May 2016 – Apr 2017	May 2017 – Feb 2018	Mar 2018 – Feb 2019	Mar 2019 – Feb 2020	Aggre -gate
Very satisfied	91.5%	92.0%	92.2%	93.3%	88.1%	90.1%	91.7%		91.2%	95.3%	92.9%	95.7%	86.8%	93.4%
Somewhat satisfied	6.6%	4.3%	5.5%	5.5%	8.1%	8.6%	5.8%		6.9%	2.7%	5.8%	1.7%	13.2%	4.8%
Somewhat dissatisfied	1.9%	1.8%	1.4%	0.0%	0.7%	0.0%	1.1%		2.0%	0.7%	0.6%	0.9%	0.0%	0.9%
Very dissatisfied	0.0%	1.2%	0.5%	0.4%	0.7%	1.2%	0.7%		0.0%	1.4%	0.6%	1.7%	0.0%	0.9%
Don't know/not sure/no response	0.0%	0.6%	0.5%	0.8%	2.2%	0.0%	0.7%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

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

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. example³⁷:

"(My nurse) has helped me so much. She is so positive and easy to talk to. The biggest thing she helped me with is to get treatment for my alcohol problem. I have Hep C and finally decided to get help for my drinking. She helped to explain my Hep C treatment to me too. She is wonderful. I would not have quit drinking if it wasn't for her encouragement."

"My nurse helps a lot. She's real nice to talk to and helps me not miss my doctor appointments. A few times I missed her reminder call and then missed my doctor appointment but it wasn't her fault."

"My brother has Hep C and has had a stroke. I am his caregiver and (his nurse) has helped me so much with managing his health. I really need the support she gives and she arranged for transportation to the doctor when I cannot get him there."

"My first nurse helped me get a wheelchair and a(n) adjustable bed. Both have been life changing. My wife and I did not go out much before getting the wheelchair

³⁷ First six comments are from most recent survey period. Subsequent comments are from earlier survey periods.

in case my knees would give out. Now we go out with no worries. I am having an easier time getting out of bed with the new one. She has been very good to me."

"The nurse has helped me get approved for gastric by-pass surgery. I have a great nurse so please don't take her from me."

"(My nurse) has helped me a lot. She got me a blood pressure cuff, nebulizer and a(n) exercise bike for me to strengthen my legs. She has given me a lot of help with resources."

------ (Earlier Survey Periods) ------

"(My nurse) has been wonderful. Since I've been talking to her, she has told me about a lot of resources for problems I've had."

"Please tell her boss that she is doing a great job. I give her an 11 out of 10. She always listens to me and waits for me to finish talking. I love having someone who I know is going to call me every month. I don't have that many people who check on me."

"My health has gotten better because my nurse explains everything to me. I don't speak English that good and she help(s) me to understand what is going on."

"I feel comfortable enough to talk to my SoonerCare nurse about anything. And, that is important to me."

"(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 an 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."

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
 - Medication management for people with asthma 50 percent³⁸
 - Medication management for people with asthma 75 percent
- Cardiovascular (CAD and heart failure) measures
 - 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 screening
 - Percentage of members who had retinal eye exam performed
 - 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 screening
 - Percentage of members prescribed ACE/ARB therapy
 - Percentage of members prescribed diuretics

³⁸ The 50 percent measure has been discontinued by NCQA/HEDIS but is being reported here as part of the longitudinal analysis of quality measures.

- 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
 - o Adult access to preventive/ambulatory health services
 - Children and adolescents' access to PCPs
 - 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 2019 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.)

PHPG also compared SFY 2019 SoonerCare CCU population compliance rates to SFY 2015 through SFY 2018 compliance rates to examine year-over-year trends.

For each measure, the first exhibit displayed presents SoonerCare CCU participants and a comparison group (general SoonerCare population or national Medicaid MCO benchmark). The second exhibit presents SoonerCare CCU participant year-over-year compliance percentages.

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 care managed population.

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 3-1³⁹). The difference was statistically significant for one measure, although this result should be viewed with caution given the small CCU population.

Measure		с	CU Participan	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	8	7	87.5%	80.4%	7.1%
2.	Medication Management for People with Asthma – 50 Percent	8	4	50%	55.1%	(5.1%)
3.	Medication Management for People with Asthma – 75 Percent	8	3	37.5%	28.8%	8.7%

³⁹ 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 11,634.

There was improvement in two of the three medication management measures from SFY 2015 to SFY 2019 (Exhibit 3-2).

Measure			Perc	2015-2019			
		June 2015 Findings	June 2016 Findings	June 2017 Findings	June 2018 Findings	June 2019 Findings	Comparison % Point Change
1.	Use of Appropriate Medications for People with Asthma	100.0%	100.0%	100.0%	100.0%	87.5%	(22.5%)
2.	Medication Management for People with Asthma – 50 Percent	42.9%	40.0%	50.0%	57.1%	50.0%	7.1%
3.	Medication Management for People with Asthma – 75 Percent	28.6%	40.0%	40.0%	42.9%	37.5%	8.9%

Exhibit 3-2 – Asthma Clinical Measures - 2015 – 2019

1. Persistence of Beta Blocker Treatment

after Heart Attack

2. LDL-C Screening

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). Despite the wide gap, the difference was not statistically significant due to the small CCU population.

	Comparison	Group			
	(CCU Participan	ıts		pants versus son Group
Measure	Total	Members	Percent	Comparison Group -	CCU - Comparison:

Members

2

69

Compliant

2

52

Compliant

100.0%

75.4%

Compliance

Rate

75.9%

--

% Point

Difference

24.1%

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

There was a small sample size for beta blocker treatment after a heart attack. There was a modest increase in LDL-C screening from SFY 2015 to SFY 2019 (Exhibit 3-4).

Measure			Perc	2015-2019			
		June 2015 Findings	June 2016 Findings	June 2017 Findings	June 2018 Findings	June 2019 Findings	Comparison % Point Change
1.	Persistence of Beta Blocker Treatment after Heart Attack	0.0%	0.0%	0.0%	100.0%	100.0%	100.0%
2.	LDL-C Screening	70.5%	72.9%	72.6%	73.8%	75.4%	4.9%

Exhibit 3-4 – Cardiovascular I	Disease Clinical	Measures -	2015 – 2019

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 one measure, although this result should be viewed with caution given the small CCU population.

Measure		с	CU Participar	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	35	10	28.6%	31.0%	(2.4%)
2.	Pharmacotherapy Management of COPD Exacerbation – 14 Days	35	17	48.6%	68.4%	(19.8%)
3.	Pharmacotherapy Management of COPD Exacerbation – 30 Days	35	24	68.6%	81.4%	(12.8%)

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

The compliance rate for the CCU population increased for all three COPD clinical measures from SFY 2015 to SFY 2019 (Exhibit 3-6).

Measure			Perc	2015-2019			
		June 2015 Findings	June 2016 Findings	June 2017 Findings	June 2018 Findings	June 2019 Findings	Comparison % Point Change
1.	Use of Spirometry Testing in the Assessment/Diagnosis of COPD	12.9%	12.5%	14.0%	20.0%	28.6%	15.7%
2.	Pharmacotherapy Management of COPD Exacerbation – 14 Days	35.3%	37.5%	37.8%	46.7%	48.6%	13.3%
3.	Pharmacotherapy Management of COPD Exacerbation – 30 Days	61.8%	66.7%	64.4%	70.0%	68.6%	6.8%

Exhibit 3-6 – COPD Clinical Measures - 2015 – 2019

Diabetes

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

- *LDL-C Screening*: Percentage of members who received LDL-C in previous 12 months.
- *Retinal Eye Exam*: Percentage of members who received at least one dilated retinal eye exam in previous 12 months.
- *HbA1c Test*: Percentage of members who received at least one HbA1C test in previous 12 months.
- *Medical Attention for Nephropathy*: Percentage of members who received medical attention for nephropathy in previous 12 months.
- *ACE/ARB Therapy*: Percentage of members who received ACE/ARB therapy in previous 12 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.

	с	CU Participan	CCU Participants versus Comparison Group		
Measure	Total Members	Members Compliant	Percent Compliant	Comparison Group - Compliance Rate	CCU - Comparison: % Point Difference
1. LDL-C Screening	171	118	69.0%	57.1%	11.9%
2. Retinal Eye Exam	171	65	38.0%	34.9%	3.1%
3. HbA1c Test	171	139	81.3%	71.6%	9.7%
4. Medical Attention for Nephropathy	171	133	77.7%	45.4%	32.3%
5. ACE/ARB Therapy	171	117	68.4%		

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

The compliance rate for diabetes clinical measures increased slightly for three measures from SFY 2015 to SFY 2019 and declined by a small amount for two measures (Exhibit 3-8).

			Perc	2015-2019			
M	Measure	June 2015 Findings	June 2016 Findings	June 2017 Findings	June 2018 Findings	June 2019 Findings	Comparison % Point Change
1.	LDL-C Screening	71.6%	70.9%	71.1%	73.4%	69.0%	(2.6%)
2.	Retinal Eye Exam	37.6%	38.1%	38.6%	39.2%	38.0%	0.4%
3.	HbA1c Test	80.9%	80.9%	81.7%	83.2%	81.3%	0.4%
4.	Medical Attention for Nephropathy	78.7%	80.0%	80.2%	79.7%	77.7%	(1.0%)
5.	ACE/ARB Therapy	66.0%	66.4%	67.0%	69.2%	68.4%	2.4%

Exhibit 3-8 – Diabetes Clinical Measures - 2015 – 2019

Hypertension

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

- *LDL-C Screening*: Percentage of members who received LDL-C in previous 12 months.
- *ACE/ARB Therapy*: Percentage of members who received ACE/ARB therapy in previous 12 months.
- *Diuretics*: Percentage of members who received diuretic in previous 12 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.

	С	CU Participar	CCU Participants versus Comparison Group		
Measure	Total Members	Members Compliant	Percent Compliant	Comparison Group - Compliance Rate	CCU - Comparison: % Point Difference
1. LDL-C Screening	270	182	67.4%		
2. ACE/ARB Therapy	270	182	67.4%		
3. Diuretics	270	136	50.4%		
 Annual Monitoring for Patients Prescribed ACE/ARB or Diuretics⁴⁰ 	116	98	84.5%	88.4%	(3.9%)

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

⁴⁰ 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 from SFY 2015 to SFY 2019 (Exhibit 3-10).

Measure			2015-2019				
		June 2015 Findings	June 2016 Findings	June 2017 Findings	June 2018 Findings	June 2019 Findings	Comparison % Point Change
1.	LDL-C Screening	66.4%	66.3%	66.7%	68.1%	67.4%	1.0%
2.	ACE/ARB Therapy	62.6%	65.0%	65.4%	66.8%	67.4%	4.8%
3.	Diuretics	46.6%	47.5%	48.0%	48.9%	50.4%	3.8%
4.	Annual Monitoring for Patients Prescribed ACE/ARB or Diuretics	83.8%	84.4%	84.5%	86.0%	84.5%	0.7%

Exhibit 3-10 – Hypertension Clinical Measures - 2015 – 2019

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 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 both mental health measures (Exhibit 3-11). The difference was not statistically significant for either measure.

Measure		с	CU Participan	CCU Participants versus Comparison Group		
		Total Members	Members Compliant	Percent Compliant	Comparison Group - Compliance Rate	CCU - Comparison: % Point Difference
1. Follow-up after Hos Illness – Seven Days	spitalization for Mental s	15	7	46.7%	30.5%	16.2%
2. Follow-up after Hos Illness – 30 Days	spitalization for Mental	15	8	53.3%	51.4%	1.9%

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

The compliance rate increased for both mental health measures from SFY 2015 to SFY 2019 (Exhibit 3-12).

Measure			2015-2019				
		June 2015 Findings	June 2016 Findings	June 2017 Findings	June 2018 Findings	June 2019 Findings	Comparison % Point Change
1.	Follow-up after Hospitalization for Mental Illness – Seven Days	38.5%	40.0%	44.4%	46.2%	46.7%	8.2%
2.	Follow-up after Hospitalization for Mental Illness – 30 Days	46.2%	40.0%	44.4%	46.2%	53.3%	7.1%

Exhibit 3-12 – Mental Health Measures - 2015 – 2019

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 by a statistically significant amount on all three measures (Exhibit 3-13).

	с	CU Participan	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 	375	360	96.0%	87.0%	9.0%
2. Child Access to PCP	105	100	95.2%	90.1%	5.1%
3. Adult BMI	379	126	33.2%	27.8%	5.4%

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

The compliance rates for the adult and child preventive care measures declined from SFY 2015 to SFY 2019 but the absolute percentages remained very high. The methodology for calculating the Adult BMI measure was modified in SFY 2019; no trend therefore is presented⁴¹.

Measure			2015-2019				
		June 2015 Findings	June 2016 Findings	June 2017 Findings	June 2018 Findings	June 2019 Findings	Comparison % Point Change
1.	Adult Access to Preventive/Ambulatory Care	97.7%	97.3%	97.0%	96.4%	96.0%	(1.7%)
2.	Child Access to PCP	100.0%	100.0%	100.0%	100.0%	95.2%	(4.8%)
3.	Adult BMI					33.2%	N/A

Exhibit 3-14 – Preventive Measures – 2015 – 2019

⁴¹ The change in methodology was related to inclusion of additional procedure codes, which increased the reported compliance rate by approximately 50 percent.

Summary of Key Findings

The CCU participant compliance rate exceeded the comparison group rate on 12 of 17 measures for which there was a comparison group percentage. The difference was statistically significant for six of the 12, 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 2019 results were consistent with findings for earlier fiscal years, indicating that the SoonerCare CCU is having a positive, and sustained, impact on quality of care for health coaching participants.

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, fewer 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 12-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 72 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 72, 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")⁴².

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 hypertension⁴³. 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 \$16,700⁴⁴. 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

⁴² 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.

 ⁴³ 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.
 ⁴⁴ 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 2019. (The SFY 2013 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, 2019 and had MEDai forecast data available at the time of engagement.⁴⁵

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;
- 2. 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</u> <u>number of participants within the individual diagnosis categories.</u>

⁴⁵ 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 2019 included 133 participants with an asthma diagnosis⁴⁶. Asthma was the most expensive diagnosis at the time of engagement for 39 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
133	52	39%

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).

Condition	Percent w/Comorbidity
Asthma	
Coronary Artery Disease	33%
COPD	57%
Diabetes	54%
Heart Failure	22%
Hypertension	74%

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

⁴⁶ 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.

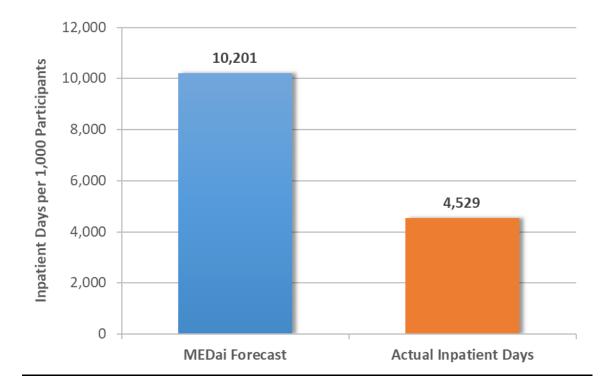
Utilization

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 10,201 inpatient days per 1,000 participants in the first 12 months of engagement⁴⁷. The actual rate was 4,529, or 44 percent of forecast (Exhibit 4-3). (As a point of comparison, the rate for all Oklahomans in 2018 was 583 days per 1,000.⁴⁸)

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

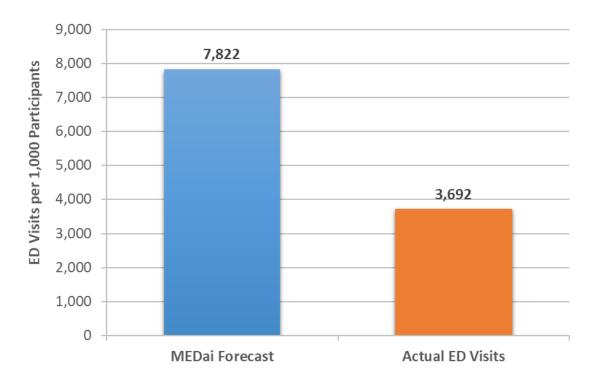


⁴⁷ All MEDai forecasts assume no intervention in terms of care management. Rate calculated for portion of year that each participant was engaged in program.

⁴⁸ Source: <u>http://kff.org/other/state-indicator/inpatient-days-by-ownership/</u> 2018 is the most recent year available.

MEDai forecasted that participants with asthma would incur 7,822 emergency department visits per 1,000 participants in the first 12 months of engagement. The actual rate was 3,692, or 47 percent of forecast (Exhibit 4-4). (As a point of comparison, the rate for all Oklahomans in 2018 was 463 visits per 1,000.⁴⁹)



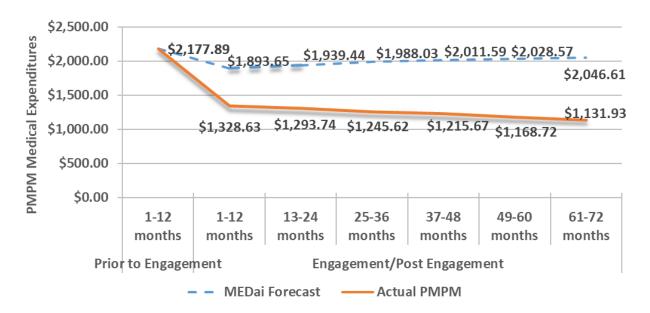


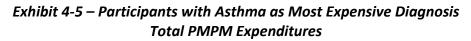
⁴⁹ Source: <u>http://kff.org/other/state-indicator/emergency-room-visits-by-ownership/</u> 2018 is the most recent year available.

Medical Expenditures – Total and by Category of Service

PHPG documented total PMPM medical expenditures for participants with asthma during the 12 months prior to engagement and compared actual medical expenditures to forecast for the first 12 months of engagement⁵⁰. MEDai forecasted that participants with asthma would incur an average of \$1,894 in PMPM expenditures in the first 12 months of engagement. The actual amount was \$1,329, or 70% of forecast.

For months 13 to 24, the MEDai forecast with trend applied was \$1939 in PMPMP expenditures. The actual amount was \$1,294, or 67% of forecast. For months 25 to 36, the MEDai forecast with trend applied was \$1,988 in PMPM expenditures. The actual amount was \$1,246, or 63% of forecast. For months 37 to 48, the MEDai forecast with trend applied was \$2,012 in PMPM expenditures. The actual amount was \$1,216, or 60% of forecast. For months 49 to 60, the MEDai forecast with trend applied was \$2,029 in PMPM expenditures. The actual amount was \$1,169, or 58% of forecast. For months 61 to 72, the MEDai forecast with trend applied was \$2,047 in PMPM expenditures. The actual amount was \$1,132, or 55% of forecast (Exhibit 4-5).





⁵⁰ 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).

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	\$656.14	\$340.01	(\$316.13)	-48%
Outpatient Hospital	\$464.77	\$241.79	(\$222.99)	-48%
Physician	\$417.87	\$295.77	(\$122.10)	-29%
Pharmacy	\$220.26	\$177.96	(\$42.30)	-19%
Behavioral Health	\$160.92	\$136.08	(\$24.84)	-15%
All Other	\$257.94	\$137.02	(\$120.92)	-47%
Total	\$2,177.89	\$1,328.63	(\$849.27)	-39%

Exhibit 4-6 – Participants with Asthma as Most Expensive Diagnosis PMPM Expenditures by Category of Service

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 \$1.5 million (Exhibit 4-7).

Engagement Period	Member Months	PMPM Savings (Forecast – Actual)	Aggregate Savings / (Deficit)
First 12 Months	1,642	\$565.02	\$927,769
Months 13 - 24	483	\$645.70	\$311,873
Months 25 - 36	226	\$742.41	\$167,784
Months 37 - 48	89	\$795.92	\$70,836
Months 49 -60	50	\$859.85	\$42,993
Months 61 -72	24	\$914.68	\$21,952
Total	2,514	\$613.85	\$1,543,208

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

Note: Aggregate savings value on this and subsequent savings tables may differ slightly from product of member months x PMPM due to rounding. Savings total on this and subsequent savings tables also may differ slightly from sum of segments due to rounding.

Coronary Artery Disease Population Utilization and Expenditure Evaluation

The SoonerCare CCU in SFY 2019 included 95 participants with a coronary artery disease diagnosis (CAD). Coronary artery disease was the most expensive diagnosis at the time of engagement for over 25 percent of participants with this diagnosis (Exhibit 4-8).

Participant	Number Most	Percent Most
w/CAD	Expensive	Expensive
95	24	25%

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).

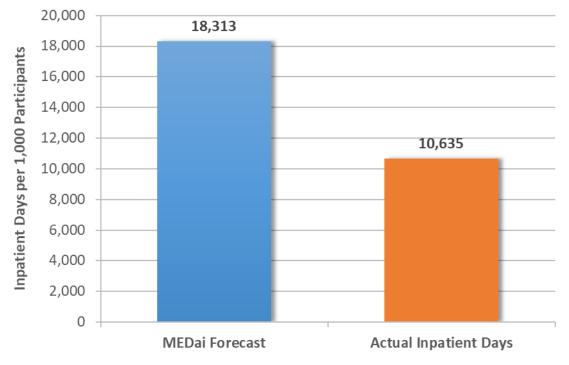
Condition	Percent w/Comorbidity
Asthma	37%
Coronary Artery Disease	
COPD	68%
Diabetes	78%
Heart Failure	38%
Hypertension	94%

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

Utilization

MEDai forecasted that participants with coronary artery disease would incur 18,313 inpatient days per 1,000 participants in the first 12 months of engagement. The actual rate was 10,635, or 58 percent of forecast (Exhibit 4-10).





MEDai forecasted that participants with coronary artery disease would incur 4,303 emergency department visits per 1,000 participants in the first 12 months of engagement. The actual rate was 3,927, or 91 percent of forecast (Exhibit 4-11).

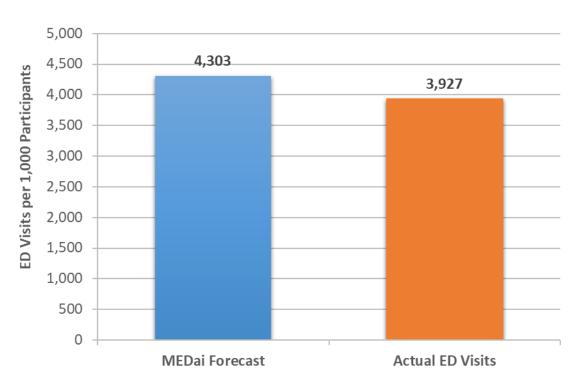


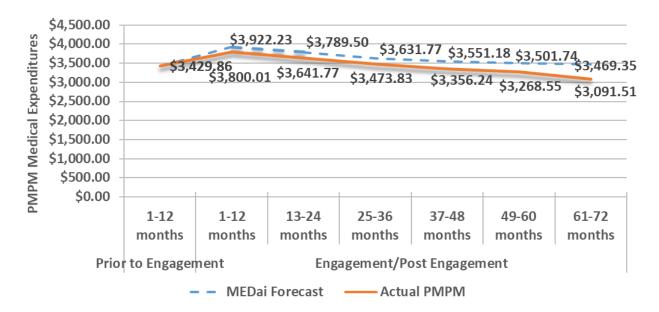
Exhibit 4-11 – Participants with CAD as Most Expensive Diagnosis Emergency Department Utilization - First 12 Months Following Engagement, per 1,000 Participants

Medical Expenditures – Total and by Category of Service

PHPG documented total PMPM medical expenditures for participants with coronary artery disease during the 12 months prior to engagement and compared actual medical expenditures to forecast for the first 12 months of engagement. MEDai forecasted that participants with coronary artery disease would incur an average of \$3,922 in PMPM expenditures in the first 12 months of engagement. The actual amount was \$3,800, or 97% of forecast.

For months 13 to 24, the MEDai forecast with trend applied was \$3,790 in PMPM expenditures. The actual amount was \$3,642, or 96% of forecast. For months 25 to 36, the MEDai forecast with trend applied was \$3,632 in PMPM expenditures. The actual amount was \$3,474, or 96% of forecast. For months 37 to 48, the MEDai forecast with trend applied was \$3,551 in PMPM expenditures. The actual amount was \$3,356, or 95% of forecast. For months 49 to 60, the MEDai forecast with trend applied was \$3,269, or 93% of forecast. For months 61 to 72, the MEDai forecast with trend applied was \$3,469 in PMPM expenditures. The actual amount was \$3,092, or 89% of forecast (Exhibit 4-12).





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).

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	\$1,502.85	\$1,722.22	\$219.37	15%
Outpatient Hospital	\$616.70	\$343.48	(\$273.23)	-44%
Physician	\$594.36	\$662.79	\$68.44	12%
Pharmacy	\$296.21	\$538.20	\$241.99	82%
Behavioral Health	\$111.61	\$136.93	\$25.32	23%
All Other	\$308.13	\$396.39	\$88.26	29%
Total	\$3,429.86	\$3,800.01	\$370.15	11%

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

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 \$173,000 (Exhibit 4-14).

Engagement Period	Member Months	PMPM Savings (Forecast – Actual)	Aggregate Savings / (Deficit)
First 12 Months	810	\$122.22	\$98,995
Months 13 - 24	240	\$147.73	\$35,454
Months 25 - 36	114	\$157.94	\$18,005
Months 37 - 48	41	\$194.94	\$7,992
Months 49 -60	26	\$233.19	\$6,063
Months 61 -72	18	\$377.84	\$6,801
Total	1,249	\$138.76	\$173,311

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

COPD Population Utilization and Expenditure Evaluation

The SoonerCare CCU in SFY 2019 included 156 participants with a chronic obstructive pulmonary disease (COPD) diagnosis. COPD was the most expensive diagnosis at the time of engagement for 27 percent of participants with this diagnosis (Exhibit 4-15).

Exhibit 4-15 – Participants with	COPD as Most Expensi	ve Diagnosis

Participants	Number Most	Percent Most
w/COPD	Expensive	Expensive
156	42	27%

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

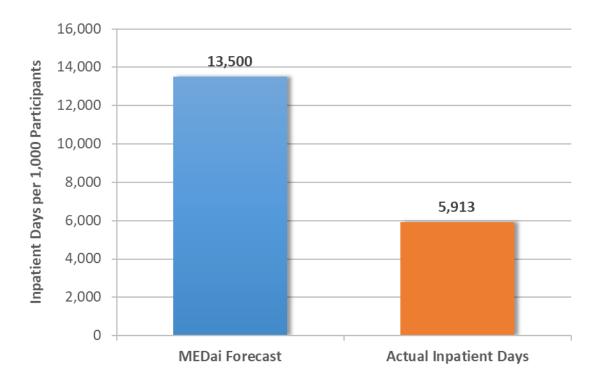
Exhibit 4-16 – Participants with COPD Co-morbidity with Chronic Impact Conditions

Condition	Percent w/Comorbidity
Asthma	39%
Coronary Artery Disease	42%
COPD	
Diabetes	58%
Heart Failure	30%
Hypertension	93%

Utilization

MEDai forecasted that participants with COPD would incur 13,500 inpatient days per 1,000 participants in the first 12 months of engagement. The actual rate was 5,913, or 44 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 6,389 emergency department visits per 1,000 participants in the first 12 months of engagement. The actual rate was 3,425, or 54 percent of forecast (Exhibit 4-18).

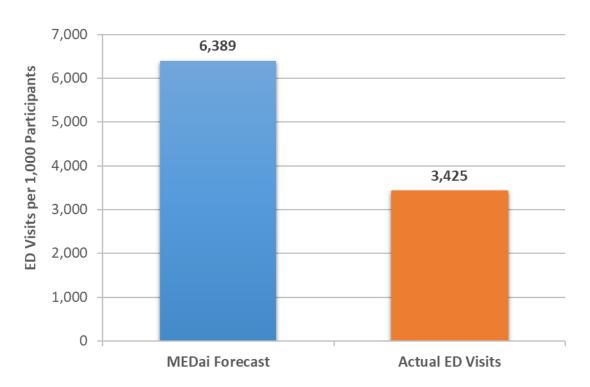


Exhibit 4-18 – Participants with COPD as Most Expensive Diagnosis Emergency Department Utilization - First 12 Months Following Engagement, per 1,000 Participants

Medical Expenditures – Total and by Category of Service

PHPG documented total PMPM medical expenditures for participants with COPD during the 12 months prior to engagement and compared actual medical expenditures to forecast for the first 12 months of engagement. MEDai forecasted that participants with COPD would incur an average of \$2,435 in PMPM expenditures in the first 12 months of engagement. The actual amount was \$1,931, or 79% of forecast.

For months 13 to 24, the MEDai forecast with trend applied was \$2,485 in PMPM expenditures. The actual amount was \$1,845, or 74% of forecast. For months 25 to 36, the MEDai forecast with trend applied was \$2,505 in PMPM expenditures. The actual amount was \$1,808, or 72% of forecast. For months 37 to 48, the MEDai forecast with trend applied was \$2,527 in PMPM expenditures. The actual amount was \$1,762, or 70% of forecast. For months 49 to 60, the MEDai forecast with trend applied was \$2,563 in PMPM expenditures. The actual amount was \$1,773, or 69% of forecast. For months 61 to 72, the MEDai forecast with trend applied was \$2,578 in PMPM expenditures. The actual amount was \$1,693, or 66% of forecast (Exhibit 4-19).

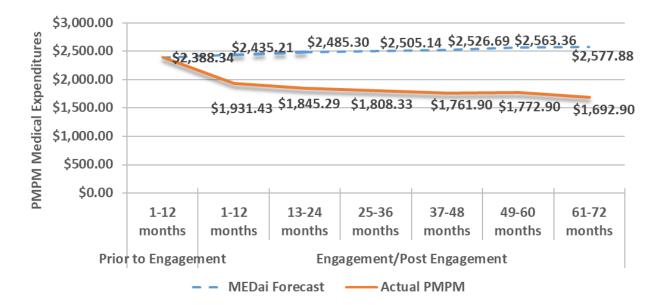


Exhibit 4-19 – Participants with COPD as Most Expensive Diagnosis Total PMPM Expenditures

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

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	\$938.49	\$783.08	(\$155.41)	-17%
Outpatient Hospital	\$274.29	\$186.64	(\$87.65)	-32%
Physician	\$443.83	\$361.48	(\$82.35)	-19%
Pharmacy	\$237.48	\$237.16	(\$0.31)	0%
Behavioral Health	\$86.26	\$70.73	(\$15.52)	-18%
All Other	\$408.00	\$292.34	(\$115.66)	-28%
Total	\$2,388.34	\$1,931.43	(\$456.91)	-19%

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

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 \$1.3 million (Exhibit 4-21).

Engagement Period	Member Months	PMPM Savings (Forecast – Actual)	Aggregate Savings / (Deficit)
First 12 Months	1,515	\$503.78	\$763,230
Months 13 - 24	450	\$640.01	\$288,006
Months 25 - 36	202	\$696.81	\$140,756
Months 37 - 48	69	\$764.79	\$52,771
Months 49 -60	29	\$790.46	\$22,923
Months 61 -72	21	\$884.98	\$18,585
Total	2,286	\$562.67	\$1,286,270

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

Diabetes Population Utilization and Expenditure Evaluation

The SoonerCare CCU in SFY 2019 included 171 participants with a diabetes diagnosis. Diabetes was the most expensive diagnosis at the time of engagement for 61 percent of participants with this diagnosis (Exhibit 4-22).

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

Participants	Number Most	Percent Most
w/Diabetes	Expensive	Expensive
171	104	61%

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

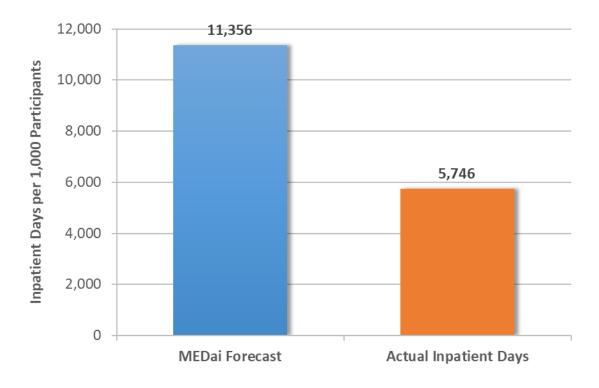
Condition	Percent w/Comorbidity
Asthma	30%
Coronary Artery Disease	42%
COPD	51%
Diabetes	
Heart Failure	26%
Hypertension	90%

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

Utilization

MEDai forecasted that participants with diabetes would incur 11,356 inpatient days per 1,000 participants in the first 12 months of engagement. The actual rate was 5,746, or 51 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 5,708 emergency department visits per 1,000 participants in the first 12 months of engagement. The actual rate was 5,046, or 88 percent of forecast (Exhibit 4-25).

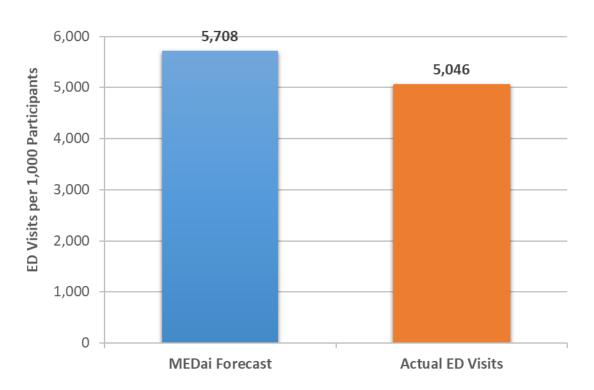


Exhibit 4-25 – Participants with Diabetes as Most Expensive Diagnosis Emergency Department Utilization - First 12 Months Following Engagement, per 1,000 Participants

Medical Expenditures – Total and by Category of Service

PHPG documented total PMPM medical expenditures for participants with diabetes during the 12 months prior to engagement and compared actual medical expenditures to forecast for the first 12 months of engagement. MEDai forecasted that participants with diabetes would incur an average of \$1,909 in PMPM expenditures in the first 12 months of engagement. The actual amount was \$1,832, or 96% of forecast.

For months 13 to 24, the MEDai forecast with trend applied was \$1,942 in PMPM expenditures. The actual amount was \$1,770, or 91% of forecast. For months 25 to 36, the MEDai forecast with trend applied was \$1,990 in PMPM expenditures. The actual amount was \$1,725, or 87% of forecast. For months 37 to 48, the MEDai forecast with trend applied was \$2,004 in PMPM expenditures. The actual amount was \$1,721, or 86% of forecast. For months 49 to 60, the MEDai forecast with trend applied was \$2,033 in PMPM expenditures. The actual amount was \$1,695, or 83% of forecast. For months 61 to 72, the MEDai forecast with trend applied was \$2,054 in PMPM expenditures. The actual amount was \$1,635, or 80% of forecast (Exhibit 4-26).

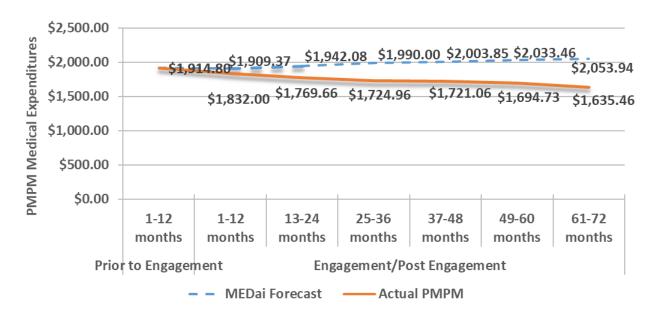


Exhibit 4-26 – Participants with Diabetes as Most Expensive Diagnosis Total PMPM Expenditures

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).

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	\$693.27	\$588.52	(\$104.74)	-15%
Outpatient Hospital	\$269.53	\$276.34	\$6.80	3%
Physician	\$347.32	\$304.83	(\$42.49)	-12%
Pharmacy	\$317.36	\$364.75	\$47.39	15%
Behavioral Health	\$71.14	\$53.10	(\$18.05)	-25%
All Other	\$216.17	\$244.47	\$28.29	13%
Total	\$1,914.80	\$1,832.00	(\$82.80)	-4%

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

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 \$677,000 (Exhibit 4-28).

Engagement Period	Member Months	PMPM Savings (Forecast – Actual)	Aggregate Savings / (Deficit)	
First 12 Months	3,546	\$77.37	\$274,361	
Months 13 - 24	1,062	\$172.42	\$183,106	
Months 25 - 36	481	\$265.04	\$127,483	
Months 37 - 48	168	\$282.79	\$47,508	
Months 49 -60	63	\$338.73	\$21,340	
Months 61 -72	55	\$418.48	\$23,016	
Total	5,375	\$125.92	\$676,816	

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

Heart Failure Population Utilization and Expenditure Evaluation

The SoonerCare CCU in SFY 2019 included 55 participants with a heart failure diagnosis. Heart failure was the most expensive diagnosis at the time of engagement for nine percent of participants with this diagnosis (Exhibit 4-29). Results for this diagnosis in particular should be interpreted with caution 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
55	5	9%

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).

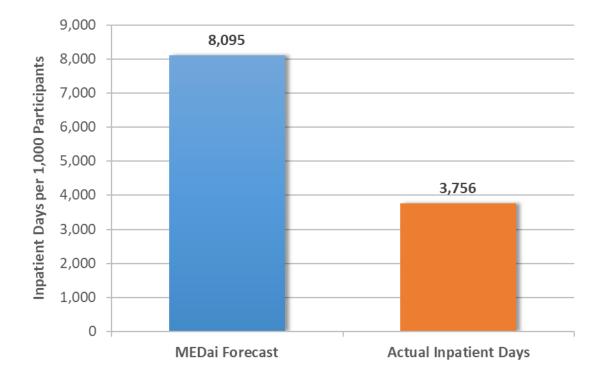
Condition	Percent w/Comorbidity
Asthma	43%
Coronary Artery Disease	58%
COPD	80%
Diabetes	70%
Heart Failure	
Hypertension	93%

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

Utilization

MEDai forecasted that participants with heart failure would incur 8,095 inpatient days per 1,000 participants in the first 12 months of engagement. The actual rate was 3,756, 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 4,330 emergency department visits per 1,000 participants in the first 12 months of engagement. The actual rate was 3,944, or 91 percent of forecast (Exhibit 4-32).

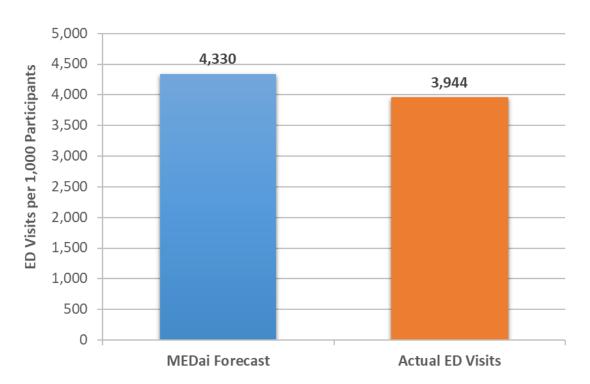


Exhibit 4-32 – Participants with Heart Failure as Most Expensive Diagnosis Emergency Department Utilization - First 12 Months Following Engagement, per 1,000 Participants

Medical Expenditures – Total and by Category of Service

PHPG documented total PMPM medical expenditures for participants with heart failure during the 12 months prior to engagement and compared actual medical expenditures to forecast for the first 12 months of engagement. MEDai forecasted that participants with heart failure would incur an average of \$3,620 in PMPM expenditures in the first 12 months of engagement. The actual amount was \$2,160, or 60% of forecast.

For months 13 to 24, the MEDai forecast with trend applied was \$3,660 in PMPM expenditures. The actual amount was \$1,659, or 45% of forecast. For months 25 to 36, the MEDai forecast with trend applied was \$3,699 in PMPM expenditures. The actual amount was \$1,627, or 44% of forecast. For months 37 to 48, the MEDai forecast with trend applied was \$3,718 in PMPM expenditures. The actual amount was \$1,305, or 35% of forecast. For months 49 to 60, the MEDai forecast with trend applied was \$3,737 in PMPM expenditures. The actual amount was \$1,066, or 29% of forecast. For months 61 to 72, the MEDai forecast with trend applied was \$3,760 in PMPM expenditures. The actual amount was \$1,009, or 27% of forecast (Exhibit 4-33). As noted, results for this diagnosis should be interpreted with caution given the small size of the population.

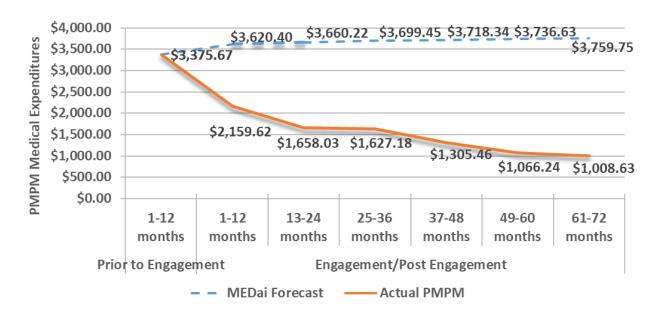


Exhibit 4-33 – Participants with Heart Failure as Most Expensive Diagnosis Total PMPM Expenditures

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

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	\$227.91	\$176.07	(\$51.84)	-23%
Outpatient Hospital	\$697.58	\$96.02	(\$601.56)	-86%
Physician	\$367.05	\$326.64	(\$40.41)	-11%
Pharmacy	\$1,744.65	\$1,053.74	(\$690.91)	-40%
Behavioral Health	\$36.79	\$39.89	\$3.10	8%
All Other	\$301.69	\$467.25	\$165.56	55%
Total	\$3,375.67	\$2,159.62	(\$1,216.05)	-36%

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

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 \$313,000 (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	61	\$1,460.78	\$89,107
Months 13 - 24	39	\$2,002.19	\$78,085
Months 25 - 36	23	\$2,072.27	\$47,662
Months 37 - 48	18	\$2,412.88	\$43,432
Months 49 -60	10	\$2,670.39	\$26,704
Months 61 -72	10	\$2,751.12	\$27,511
Total	161	\$1,941.01	\$312,502

Hypertension Population Utilization and Expenditure Evaluation

The SoonerCare CCU in SFY 2019 included 246 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	Number Most	Percent Most
w/Hypertension	Expensive	Expensive
246	102	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).

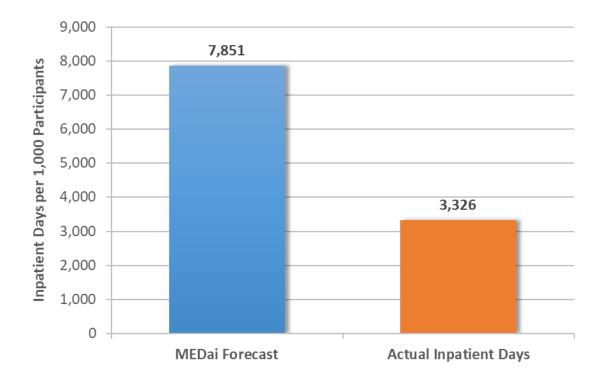
Exhibit 4-37 – Participants with Hypertension
Co-morbidity with Chronic Impact Conditions

Condition	Percent w/Comorbidity	
Asthma	36%	
Coronary Artery Disease	44%	
COPD	57%	
Diabetes	70%	
Heart Failure	25%	
Hypertension		

Utilization

MEDai forecasted that participants with hypertension would incur 7,851 inpatient days per 1,000 participants in the first 12 months of engagement. The actual rate was 3,326, or 42 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 4,237 emergency department visits per 1,000 participants in the first 12 months of engagement. The actual rate was 3,550, or 84 percent of forecast (Exhibit 4-39).

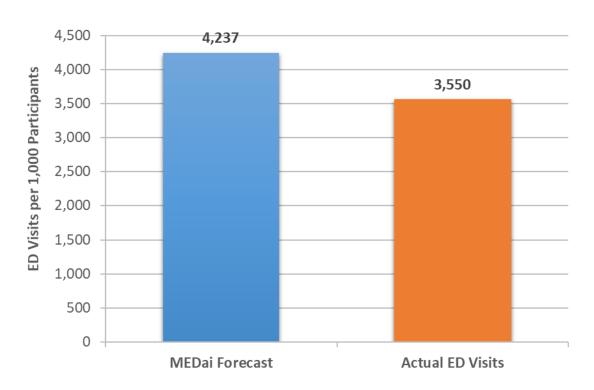


Exhibit 4-39 – Participants with Hypertension as Most Expensive Diagnosis Emergency Department Utilization - First 12 Months Following Engagement, per 1,000 Participants

Medical Expenditures – Total and by Category of Service

PHPG documented total PMPM medical expenditures for participants with hypertension during the 12 months prior to engagement and compared actual medical expenditures to forecast for the first 12 months of engagement. MEDai forecasted that participants with hypertension would incur an average of \$2,020 in PMPM expenditures in the first 12 months of engagement. The actual amount was \$1,462, or 72% of forecast.

For months 13 to 24, the MEDai forecast with trend applied was \$2,096 in PMPM expenditures. The actual amount was \$1,372, or 65% of forecast. For months 25 to 36, the MEDai forecast with trend applied was \$2,119 in PMPM expenditures. The actual amount was \$1,320, or 62% of forecast. For months 37 to 48, the MEDai forecast with trend applied was \$2,155 in PMPM expenditures. The actual amount was \$1,278, or 59% of forecast. For months 49 to 60, the MEDai forecast with trend applied was \$2,171 in PMPM expenditures. The actual amount was \$1,248, or 58% of forecast. For months 61 to 72, the MEDai forecast with trend applied was \$2,198 in PMPM expenditures. The actual amount was \$1,241, or 56% of forecast (Exhibit 4-40).

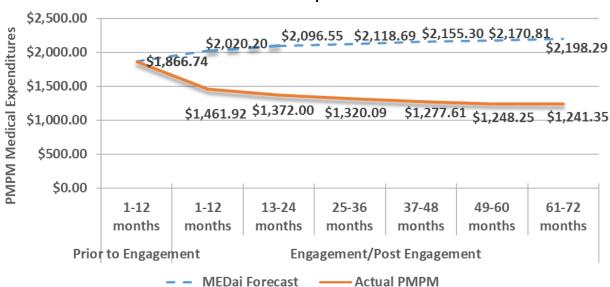


Exhibit 4-40 – Participants with Hypertension as Most Expensive Diagnosis Total PMPM Expenditures

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

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	\$708.20	\$332.37	(\$375.82)	-53%
Outpatient Hospital	\$191.15	\$179.28	(\$11.86)	-6%
Physician	\$329.93	\$351.79	\$21.86	7%
Pharmacy	\$364.52	\$274.02	(\$90.50)	-25%
Behavioral Health	\$62.58	\$103.50	\$40.92	65%
All Other	\$210.36	\$220.95	\$10.59	5%
Total	\$1,866.74	\$1,461.92	(\$404.82)	-22%

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

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 \$3.4 million (Exhibit 4-42).

Engagement Period	Member Months	PMPM Savings (Forecast – Actual)	Aggregate Savings / (Deficit)
First 12 Months	3,551	\$558.28	\$1,982,465
Months 13 - 24	1,077	\$724.55	\$780,344
Months 25 - 36	493	\$798.60	\$393,712
Months 37 - 48	156	\$877.69	\$136,920
Months 49 -60	52	\$922.56	\$47,973
Months 61 -72	53	\$956.94	\$50,718
Total	5,382	\$630.27	\$3,392,131

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

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.

Utilization

MEDai forecasted that participants with hepatitis C would incur 8,570 inpatient days per 1,000 participants in the first 12 months of engagement. The actual rate was 4,222, or 49 percent of forecast (Exhibit 4-43).

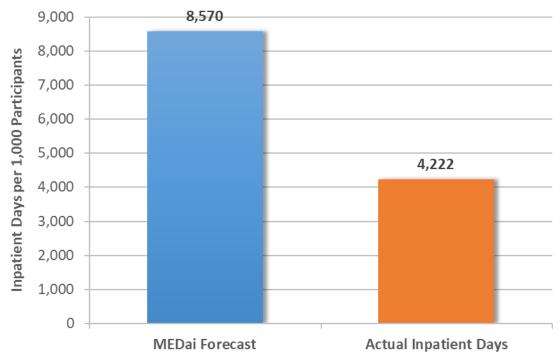
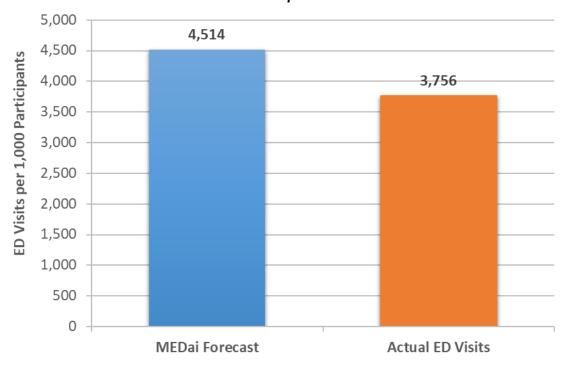


Exhibit 4-43 – Participants with Hepatitis C as Most Expensive Diagnosis Inpatient Utilization - First 12 Months Following Engagement, per 1,000 Participants

MEDai forecasted that participants with hepatitis C would incur 4,514 emergency department visits per 1,000 participants in the first 12 months of engagement. The actual rate was 3,756, or 83 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 12 months prior to engagement and compared actual medical expenditures to forecast for the first 12 months of engagement. MEDai forecasted that participants with hepatitis C would incur an average of \$2,010 in PMPM expenditures in the first 12 months of engagement. The actual amount was \$1,819, or 90% of forecast.

For months 13 to 24, the MEDai forecast with trend applied was \$2,064 in PMPM expenditures. The actual amount was \$1,736, or 84% of forecast. For months 25 to 36, the MEDai forecast with trend applied was \$2,116 in PMPM expenditures. The actual amount was \$1,635, or 77% of forecast. For months 37 to 48, the MEDai forecast with trend applied was \$2,157 in PMPM expenditures. The actual amount was \$1,606, or 74% of forecast. For months 49 to 60, the MEDai forecast with trend applied was \$2,179 in PMPM expenditures. The actual amount was \$1,580, or 72% of forecast. For months 61 to 72, the MEDai forecast with trend applied was \$2,200 in PMPM expenditures. The actual amount was \$1,567, or 71% of forecast (Exhibit 4-45).

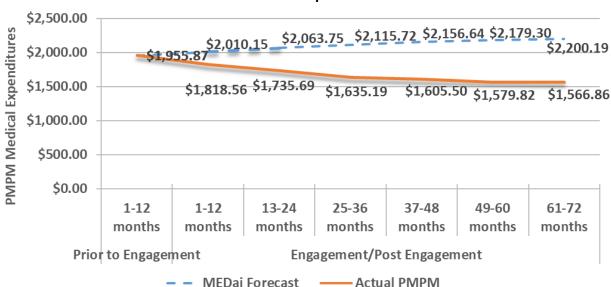


Exhibit 4-45 – Participants with Hepatitis C as Most Expensive Diagnosis Total PMPM Expenditures

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).

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	\$695.90	\$593.17	(\$102.73)	-15%
Outpatient Hospital	\$253.12	\$247.84	(\$5.29)	-2%
Physician	\$319.81	\$305.94	(\$13.87)	-4%
Pharmacy	\$420.28	\$406.25	(\$14.02)	-3%
Behavioral Health	\$56.72	\$54.72	(\$2.00)	-4%
All Other	\$210.04	\$210.64	\$0.61	0%
Total	\$1,955.87	\$1,818.56	(\$137.31)	-7%

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

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 \$507,000 (Exhibit 4-47).

Engagement Period	Member Months	PMPM Savings (Forecast – Actual)	Aggregate Savings / (Deficit)				
First 12 Months	1,215	\$191.59	\$232,787				
Months 13 - 24	388	\$328.06	\$127,288				
Months 25 - 36	176	\$480.53	\$84,574				
Months 37 - 48	66	\$551.14	\$36,375				
Months 49 - 60	35	\$599.48	\$20,982				
Months 61 - 72	8	\$633.33	\$5,067				
Total	1,888	\$268.58	\$507,073				

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

Utilization and Expenditure Evaluation – All Participants

This section presents consolidated trend data across all 598 SoonerCare CCU participants, regardless of diagnosis. For approximately 77 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 9,788 inpatient days per 1,000 participants in the first 12 months of engagement. The actual rate was 4,835, or 49 percent of forecast (Exhibit 4-48).

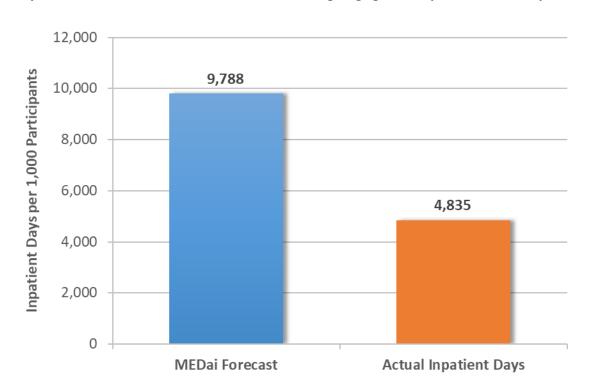


Exhibit 4-48 – All SoonerCare CCU Participants Inpatient Utilization - First 12 Months Following Engagement, per 1,000 Participants

MEDai forecasted that SoonerCare CCU participants as a group would incur 4,895 emergency department visits per 1,000 participants in the first 12 months of engagement. The actual rate was 3,632, or 74 percent of forecast (Exhibit 4-49).

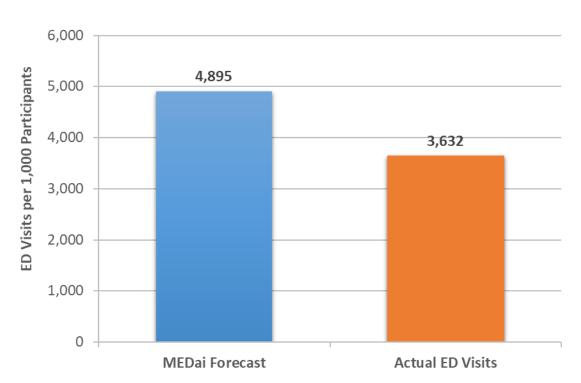


Exhibit 4-49 – All SoonerCare CCU Participants Emergency Department Utilization - First 12 Months Following Engagement, per 1,000 Participants

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 12 months of engagement. MEDai forecasted that the participant population would incur an average of \$1,805 in PMPM expenditures in the first 12 months of engagement. The actual amount was \$1,180, or 65% of forecast.

For months 13 to 24, the MEDai forecast with trend applied was \$1,901 in PMPM expenditures. The actual amount was \$1,019, or 54% of forecast. For months 25 to 36, the MEDai forecast with trend applied was \$1,939 in PMPM expenditures. The actual amount was \$907, or 47% of forecast. For months 37 to 48, the MEDai forecast with trend applied was \$1,960 in PMPM expenditures. The actual amount was \$1,960 in PMPM expenditures. The actual amount was \$1,960 in PMPM expenditures. The actual amount was \$1,980, or 41% of forecast. For months 49 to 60, the MEDai forecast with trend applied was \$1,989 in PMPM expenditures. The actual amount was \$737, or 37% of forecast. For months 61 to 72, the MEDai forecast with trend applied was \$2,006 in PMPM expenditures. The actual amount was \$710, or 35% of forecast (Exhibit 4-50).

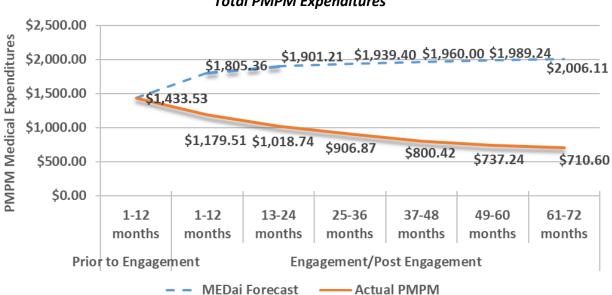


Exhibit 4-50 – All SoonerCare CCU Participants Total PMPM Expenditures

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

Category of Service	PMPM 12 Months Prior to Engagement	PMPMDollar ChangePMPM(Engaged minusFirst 12 Months ofPrior toEngagementEngagement)		Percent Change (As Percent of PMPM Prior to Engagement)
Inpatient Hospital	\$500.78	\$406.11	(\$94.66)	-19%
Outpatient Hospital	\$192.84	\$140.11	(\$52.73)	-27%
Physician	\$250.36	\$219.31	(\$31.05)	-12%
Pharmacy	\$246.17	\$207.27	(\$38.90)	-16%
Behavioral Health	\$71.42	\$53.90	(\$17.52)	-25%
All Other	\$171.95	\$152.81	(\$19.14)	-11%
Total	\$1,433.53	\$1,179.51	(\$254.01)	-18%

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

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 nearly \$21 million (Exhibit 4-52).

Engagement Period	Member Months PMPM Savings Aggr (Forecast – Actual)		Aggregate Savings / (Deficit)					
First 12 Months	18,013	\$625.85	\$11,273,348					
Months 13 - 24	5,512	\$882.47	\$4,864,176					
Months 25 - 36	2,306	\$1,032.53	\$2,381,026					
Months 37 - 48	1,055	\$1,159.58	\$1,223,355					
Months 49 -60	336	\$1,252.00	\$420,673					
Months 61 -72	300	\$1,295.51	\$388,653					
Total	27,522	\$746.72	\$20,551,230					

Exhibit 4-52 – All SoonerCare CCU Participants Aggregate Savings

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.⁵¹

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 2019 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 year⁵². No specific allocation was made for MEDai activities, as these are occurring under a pre-existing contract.

SFY 2014 through SFY 2019 aggregate administrative expenses for the SoonerCare CCU were approximately \$3.4 million (Exhibit 4-53 on the following page). This equated to \$126.55 on a PMPM basis. The PMPM calculation was performed using total member months (27,522) for CCU participants meeting the criteria outlined in chapter one (e.g., enrolled for at least three months)⁵³.

⁵¹ 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.

⁵² Allocated share of total was 1.5 percent in SFY 2014, 1.1 percent in SFY 2015, 1.1 percent in SFY 2016, 1.1 percent in SFY 2017, 1.2 percent in SFY 2018 and 1.2 percent in SFY 2019.

⁵³ 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.

Cost Component	SFY 2014 – 2019 Aggregate Dollars	РМРМ
OHCA SoonerCare CCU unit salaries and benefits	\$2,953,600	\$108.50
OHCA SoonerCare CCU overhead	\$491,299	\$18.05
Total Administrative Expense	\$3,444,899	\$126.55

Exhibit 4-53 – SoonerCare CCU Administrative Expense

Cost Effectiveness Calculation⁵⁴

PHPG performed a cost effectiveness test by comparing forecasted costs to actual costs during SFY 2014 through SFY 2019, inclusive of SoonerCare CCU administrative expenses.

SoonerCare CCU participants as a group were forecasted to incur average medical costs of \$1,846.15⁵⁵. Their actual average PMPM medical costs were \$1,099.43. With the addition of \$126.55 in average PMPM administrative expenses, total actual costs were \$1,225.97. Medical expenses accounted for 90 percent of the total and administrative expenses for the other 10 percent. Overall, net SoonerCare CCU participant PMPM expenses, inclusive of administrative costs, were 66.6 percent of forecast (Exhibit 4-54).

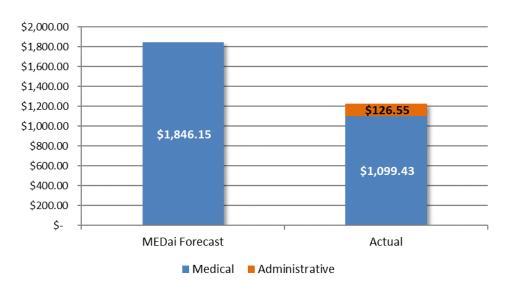


Exhibit 4-54 - SoonerCare CCU PMPM Savings

⁵⁴ PMPM and aggregate values differ slightly due to rounding.

 $^{^{55}}$ This represents a weighted average (by member months) of the forecasted PMPM values for the first 12 months, months 13 – 24, months 25 – 36, months 37 – 48, months 49 – 60 and months 61 – 72, as shown in exhibit 4-57.

On an aggregate basis, the SoonerCare CCU achieved cumulative net savings of approximately \$17.1million during the 72 months of operation (July 2013 through June 2019) covered in the evaluation (Exhibit 4-55).

This represented an increase of \$5.3 million over the cumulative net savings of \$11.8 million incurred through June 2018, 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
\$20,551,230	(\$3,444,899)	\$17,106,331

The program incurred a small deficit in its first year, as enrollment ramped-up, followed by a steady rise in cumulative savings, as documented across the six annual evaluations (Exhibit 4-56).

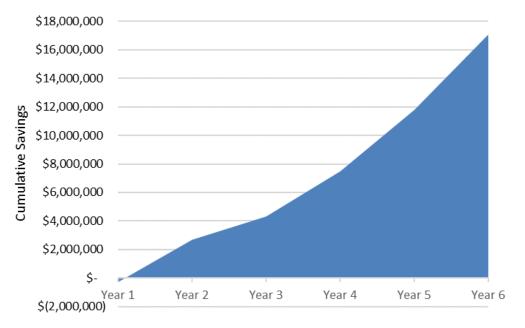


Exhibit 4-56 – All SoonerCare CCU Participants Growth in Cumulative Net Savings by Evaluation Year

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 2019, 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 496.6 percent, up from 387.5 percent in the prior year. Put another way, the *SoonerCare CCU generated nearly \$5.00 in net medical savings for every dollar in administrative expenditures.*

Medical Savings	Administrative Costs	Net Savings	Return on Investment
\$20,551,230	(\$3,444,899)	\$17,106,331	496.6%

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.



Kevin S. Corbett CHIEF EXECUTIVE OFFICER J. KEVIN STITT GOVERNOR

STATE OF OKLAHOMA OKLAHOMA HEALTH CARE AUTHORITY

The Oklahoma Health Care Authority is conducting a survey of SoonerCare Choice members. You were selected for the survey because you may have received help from one of our nurse care management programs. We are interested in learning about your experience and how we can make this program 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 1-888-941-9358. 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 1-877-252-6002.

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 <u>1-888-941-9358</u>.
- 1. The SoonerCare program is a health insurance program offered by the state. Are you currently participating in SoonerCare?⁵⁶
 - a. Yes
 - b. No → [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 \rightarrow [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 \rightarrow [END CALL]

⁵⁶ 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 you still participating today in the Chronic Care Program?
 - a. Yes
 - b. No → [GO TO Q32]
 - c. Don't Know/Not Sure \rightarrow [END CALL]
- 6. How long 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

Now I want to ask about your decision to participate and partner with a Nurse Care Manager.

- 7. How did you learn about the Chronic Care Program?
 - a. Received information in the mail
 - b. Received a call from my Nurse Care Manager
 - c. Received a call from someone else SPECIFY _____
 - d. Doctor referred me while I was in his/her office
 - e. Other. SPECIFY: _____
 - f. Don't Know/Not Sure
- 8. What were your reasons for deciding to participate in the Chronic Care Program? [CHECK ALL THAT APPLY]
 - 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

- 9. Among the reasons you gave, what was your most important 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 Manager?
 - 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 your Nurse Care Manager give you a telephone number to call if you needed help with your care?
 - a. Yes
 - b. No → [GO TO Q17]
 - c. Don't Know/Not Sure → [GO TO Q17]
- 14. Have you 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. Thinking 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. Overall, how satisfied are you with your Nurse Care Manager? Would you say you are very satisfied, somewhat dissatisfied or very dissatisfied?
 - a. Very satisfied
 - b. Somewhat satisfied
 - c. Somewhat dissatisfied
 - d. Very dissatisfied
 - e. Don't Know/Not Sure

OVERALL 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?

HEALTH 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 \rightarrow [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. Were you aware that the program changed in July 2013?
 - a. Yes

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.]

- a. Program before, with Telligen Nurse Care Manager
- 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 survey respondents only

32. [IF RESPONDENT ANSWERED "NO" TO Q5] About when did you decide to no longer participate?

- a. Month/Year [SPECIFY] _____
- b. Don't Know/Not Sure
- 33. Why did 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: ____
 - I. Not Sure/Don't Know

Questions 34 and 35 have been discontinued

34. [IF RESPONDENT ANSWERED "NO" TO Q4] About when did you decide to not participate?

- a. Month/Year [SPECIFY] _____
- b. Don't Know/Not Sure

35. Why did 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
- 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: _____
- 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.

Survey Questions (numbering based on			In	itial Surv	еу				Six-M	onth Fol	low-up S	urvey	
initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 2/18	3/18 - 2/19	3/19 – 2/20	Aggre- gate	5/15- 4-16	5/16 - 4/17	5/17 - 2/18	3/18 – 2/19	3/19 - 2/20	Aggre- gate
1) Are you currently enrolled in SoonerCare?													
A. Yes	129	380	255	253	137	87	1241	109	176	157	117	42	601
	99.20%	98.20%	96.59%	100.00%	100.0%	100.0%	98.6%	97.30%	97.24%	99.37%	100.0%	100.0%	98.5%
B. No	1 0.80%	7 1.80%	9 3.41%	0 0.00%	0 0.0%	0 0.0%	17 1.4%	3 2.70%	5 2.76%	1 0.63%	0 0.0%	0 0.0%	9 1.5%
2) Have you heard of the Chronic Care Program (CCP)?													
A. Yes	111	343	237	253	137	81	1162						
	86.00%	90.30%	93.31%	100.00%	100.0%	93.1%	93.7%						
B. No	18 14.00%	36 9.50%	17 6.69%	0 0.00%	0 0.0%	6 6.9%	77 6.2%						
C. Don't know/not sure	0.00%	1 0.30%	0.09%	0.00%	0.0%	0. <i>3%</i> 0	1 0.1%	7 2% N/A - not asked L					
3) Were you contacted and offered a chance to participate in the CCP?													

Survey Questions (numbering based on			In	itial Surv	ey				Six-M	lonth Fol	low-up S	urvey	
initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 2/18	3/18 - 2/19	3/19 – 2/20	Aggre- gate	5/15- 4-16	5/16 - 4/17	5/17 - 2/18	3/18 – 2/19	3/19 - 2/20	Aggre- gate
A. Yes	111 <i>86.00%</i>	342 90.20%	235 92.52%	253 100.00%	137 <i>100.0%</i>	81 95.3%	1159 93.7%						
B. No	18 14.00%	37 9.80%	19 7.48%	0 0.00%	0 0.0%	4 4.7%	78 6.3%			N/A - no	ot asked		
C. Don't know/not sure	0	0	0	0	0	0	0			.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	er uskeu		
	0.00%	0.00%	0.00%	0.00%	0.0%	0.0%	0.0%						
4) Did you decide to participate?													
A. Yes	109 98.20%	342 100.00%	234 99.15%	253 100.00%	135 98.5%	81 100.0%	1154 99.5%						
B. No	2 1.80%	0 0.00%	2 0.85%	0 0.00%	2 1.5%	0 0.0%	6 0.5%			N/A - no	ot asked		
5) Are you still participating today in the CCP?													
A. Yes	106	325	218	253	135	81	1118	103	150	156	117	38	564
	95.50%	95.60%	92.77%	100.00 %	100.0%	100%	96.8%	94.50%	85.23%	99.36%	100.0%	90.5%	93.8%
B. No	5	15	16	0	0	0	36	6	26	1	0	4	37
	4.50%	4.40%	6.81%	0.00%	0.0%	0.0%	3.1%	5.50%	14.77%	0.64%	0.0%	9.5%	6.2%
C. Don't know/not sure	0	0	1	0	0	0	1	0	0	0	0	0	0

Survey Questions (numbering based on			Ini	itial Surv	ey				Six-M	lonth Fol	low-up S	urvey	
initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 2/18	3/18 - 2/19	3/19 – 2/20	Aggre- gate	5/15- 4-16	5/16 - 4/17	5/17 - 2/18	3/18 – 2/19	3/19 - 2/20	Aggre- gate
	0.00%	0.00%	0.43%	0.00%	0.0%	0.0%	0.1%	0.00%	0.00%	0.00%	0.0%	0.0%	0.0%
6) How long have you been participating in the CCP?													
A. Less than 1 month	2	6	8	2	4	6	28	0	0	0	0	0	0
	1.90%	1.80%	3.67%	0.79%	3.0%	7.4%	2.5%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
B. 1 to 2 months	16	32	30	43	31	15	167	0	0	0	0	0	0
	15.10%	9.80%	13.76%	17.00%	23.0%	18.5%	14.9%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
C. 3 to 4 months	18	32	34	68	31	16	199	0	0	0	0	0	0
	17.00%	9.80%	15.60%	26.88%	23.0%	19.8%	17.8%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
D. 5 to 6 months	9	40	32	47	18	11	157	0	0	0	1	1	0
	8.50%	12.30%	14.68%	18.58%	13.3%	13.6%	14.0%	0.00%	0.00%	0.00%	0.9%	0.9%	0.00%
E. More than 6 months	61	212	111	91	47	32	554	See below	See below	See below	See below	See below	See below
	57.50%	65.20%	50.92%	35.97%	34.8%	39.5%	49.6%						
F. 6 to 9 months								9	5	30	23	8	75
	For in	itial survey	, tenures g	reater than	n six month	is are not fi	urther	8.70%	3.33%	19.23%	19.7%	21.1%	13.3%
G. 9 to 12 months				stratified				68	37	59	44	13	221
								66.00%	24.67%	37.82%	37.6%	34.2%	39.3%

Survey Questions (numbering based on			In	itial Surv	еу				Six-M	lonth Fol	low-up S	urvey		
initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 2/18	3/18 - 2/19	3/19 – 2/20	Aggre- gate	5/15- 4-16	5/16 - 4/17	5/17 - 2/18	3/18 - 2/19	3/19 - 2/20	Aggre- gate	
H. More than 12 months								22	104	64	48	13	251	
F. Don't know/not sure	0	3	3	2	4	4	16	21.40% 4	69.33% 4	41.03% 3	41.0% 1	34.2% 4	44.6% 16	
7) How did you learn about the CCP?	0.00%	0.90%	1.38%	0.79%	3.0%	10.5%	2.8%	3.90%	2.67%	1.92%	0.9%	10.5%	2.8%	
A. Received information in the mail	19 17.90%	62 19.10%	42 19.27%	25 9.88%	17 12.6%	9 11.1%	174 15.6%							
B. Received a call from my Nurse Care Manager	35	186	128	161	100	64	674			N/A - not asked				
C. Received a call from someone else	33.00% 0	57.20% 1	58.72% 0	63.64% 0	74.1% 1	79.0% 0	60.3% 2							
	0.00%	0.30%	0.00%	0.00%	0.7%	0.0%	0.2%							

Survey Questions (numbering based on			In	itial Surv	еу				Six-N	lonth Fol	low-up S	urvey	
initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 2/18	3/18 - 2/19	3/19 – 2/20	Aggre- gate	5/15- 4-16	5/16 - 4/17	5/17 - 2/18	3/18 - 2/19	3/19 - 2/20	Aggre- gate
D. Doctor referred me while I was in his/her office	31	20	18	33	6	2	110						
	29.20%	6.20%	8.26%	13.04%	4.4%	2.5%	9.8%						
E. Other	2 1.90%	12 3.70%	9 4.13%	19 7.51%	5 3.7%	1 1.2%	48 4.3%						
F. Don't know/not sure	19	44	21	15	6	5	110						
8) What were your reasons for deciding to participate in the CCP? (Multiple answers allowed.)	17.90%	13.50%	9.63%	5.93%	4.4%	6.2%	9.8%						
A. Learn how to better manage health problems	37	128	91	64	38	37	395			N/A - no	ot asked		
	34.90%	39.00%	41.74%	25.30%	28.1%	45.7%	35.2%						

Survey Questions (numbering based on			In	itial Surv	ey				Six-M	lonth Fol	low-up S	urvey	
initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 2/18	3/18 - 2/19	3/19 – 2/20	Aggre- gate	5/15- 4-16	5/16 - 4/17	5/17 - 2/18	3/18 – 2/19	3/19 - 2/20	Aggre- gate
B. Learn how to identify changes in health	0	0	0	0	0	0	0						
C. Have someone to call with questions about health	0.00% 9 8.50%	0.00% 18 5.50%	0.00% 4 1.83%	0.00% 6 2.37%	0.0% 3 2.2%	0.0% 5 6.2%	0.0% 45 4.0%						
D. Get help making health care appointments	2 1.90%	7 2.10%	5 2.29%	3 1.19%	0	2 2.5%	19 1.7%						
E. Personal doctor recommende d I enroll	13 12.30%	7 2.10%	5 2.3%	7 2.8%	1 0.7%	1 1.2%	34 3.0%						
F. Improve my health	4 3.80%	19 5.80%	25 11.47%	26 10.28%	7 5.2%	2 2.5%	83 7.4%						
G. Was invited to enroll/no specific reason	37	124	62	66	33	29	351						

Survey Questions (numbering based on			In	itial Surv	еу				Six-N	lonth Fol	low-up S	urvey	
initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 2/18	3/18 - 2/19	3/19 – 2/20	Aggre- gate	5/15- 4-16	5/16 - 4/17	5/17 - 2/18	3/18 - 2/19	3/19 - 2/20	Aggre- gate
	34.90%	37.80%	28.44%	26.09%	24.4%	35.8%	31.3%		-				
H. Other	1 0.90%	12 3.70%	22 10.09%	81 32.02%	51 37.8%	3 3.7%	170 15.2%						
I. Don't know/not sure	3	13	4	0	2	2	24						
	2.80%	4.00%	1.83%	0.00%	1.5%	2.5%	2.1%						
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 34.90%	128 39.40%	90 41.28%	65 25.69%	38 28.1%	37 45.7%	395 35.3%			N/A - ni	ot asked		
B. Learn how to identify changes in health	0	0	0	0	0	0	0			.,			
	0.00%	0.00%	0.00%	0.00%	0.0%	0.0%	0.0%						

Survey Questions (numbering based on			In	itial Surv	еу				Six-M	lonth Fol	low-up S	urvey	
initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 2/18	3/18 - 2/19	3/19 – 2/20	Aggre- gate	5/15- 4-16	5/16 - 4/17	5/17 - 2/18	3/18 - 2/19	3/19 - 2/20	Aggre- gate
C. Have someone to call with questions about health	10	17	5	6	3	5	46						
	9.40%	5.20%	2.29%	2.37%	2.2%	6.2%	4.1%						
D. Get help making health care appointments	2	6	5	3	0	2	18						
appointments	1.90%	1.80%	2.29%	1.19%	0.0%	2.5%	1.6%						
E. Personal doctor recommende d I enroll	13	7	5	6	1	1	33						
	12.30%	2.20%	2.29%	2.37%	0.7%	1.2%	3.0%						
F. Improve my health	4	19	25	26	7	2	83						
incarcii	3.80%	5.80%	11.47%	10.28%	5.2%	2.5%	7.4%						
G. Was invited to enroll/no specific reason	37	124	63	65	33	29	351						
	34.90%	38.20%	28.90%	25.69%	24.4%	35.8%	31.4%						
H. Other	1 0.90%	12 3.70%	22 10.09%	82 32.41%	51 37.8%	3 3.7%	171 15.3%						

Survey Questions (numbering based on			In	itial Surv	ey				Six-N	lonth Fol	low-up S	urvey	
initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 2/18	3/18 - 2/19	3/19 – 2/20	Aggre- gate	5/15- 4-16	5/16 - 4/17	5/17 - 2/18	3/18 – 2/19	3/19 - 2/20	Aggre- gate
I. Don't know/not sure	2	12	3	0	2	2	21 1.9%						
10) How soon after you started participating in the CCP were you contacted by your Nurse Care Manager?	1.90%	3.70%	1.38%	0.00%	1.5%	2.5%	1.570						
A. Contacted at time of enrollment in the doctor's office	32 30.20%	196 60.30%	135 61.93%	1 72 67.98%	103 76.3%	69 85.2%	707 63.4%						
B. Less than 1 week	23	26	23	15	11	4	102			N/A - n	ot asked		
C. 1 to 2 weeks	21.70% 8 7.50%	8.00% 19 5.80%	10.55% 20 9.17%	5.93% 33 13.04%	8.1% 7 5.2%	4.9% 0 0.0%	9.1% 87 7.8%						
D. More than 2 weeks	0	4	1	2	0	0	7						

Survey Questions (numbering based on			In	itial Surv	еу				Six-N	lonth Fol	low-up S	Survey	
initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 2/18	3/18 - 2/19	3/19 – 2/20	Aggre- gate	5/15- 4-16	5/16 - 4/17	5/17 - 2/18	3/18 – 2/19	3/19 - 2/20	Aggre- gate
	0.00%	1.20%	0.46%	0.79%	0.0%	0.0%	0.6%			-	-		
E. Have not been contacted - enrolled 2 weeks ago or less	0	0	0	0	0	0	0						
	0.00%	0.00%	0.00%	0.00%	0.0%	0.0%	0.0%						
F. Have not been contacted - enrolled 2 to 4 weeks ago	0 0.00%	2 0.60%	0 0.00%	0 0.00%	1 0.7%	0 0.0%	2 0.2%						
G. Have not been contacted - enrolled more than 4 weeks ago	0 0.00%	2 0.60%	2 0.92%	0 0.00%	2 1.5%	0 0.0%	4 0.4%						
H. Don't know/not sure/other	43 40.60%	76 23.40%	37 16.97%	31 12.25%	11 8.1%	8 9.9%	206 18.5%						
11) Can you tell me the name of your													

Survey Questions (numbering based on			In	itial Surv	ey				Six-M	onth Fol	low-up S	urvey	
initial	2/15 -	5/15 -	5/16 -	5/17 -	3/18 -	3/19 –	Aggre-	5/15-	5/16 -	5/17 -	3/18 -	3/19 -	Aggre-
survey)	4/15	4/16	4/17	2/18	2/19	2/20	gate	4-16	4/17	2/18	2/19	2/20	gate
Nurse Care Manager?													
A. Yes	64	204	127	173	72	45	685	69	99	92	62	14	336
	61.50%	62.40%	58.26%	68.38%	53.3%	55.6%	61.3%	67.00%	66.00%	58.97%	53.0%	36.8%	59.6%
B. No	40	123	91	80	63	36	433	34	51	64	55	24	228
	38.50%	37.60%	<i>41.74%</i>	31.62%	46.7%	44.4%	38.7%	<i>33.00%</i>	<i>34.00%</i>	41.03%	47.0%	63.2%	40.4%
12) About when was the last time you spoke to your Nurse Care Manager?													
A. Within last	34	104	62	77	40	22	339	30	30	27	20	4	111
week	33.70%	<i>31.50%</i>	28.57%	30.43%	29.6%	27.2%	30.3%	29.10%	20.00%	17.31%	17.1%	10.5%	19.7%
B. 1 to 2	29	94	46	54	18	14	255	9	37	17	17	5	85
weeks ago	28.70%	28.50%	21.20%	21.34%	13.3%	17.3%	22.8%	8.70%	24.67%	10.90%	14.5%	13.2%	15.1%
C. 2 to 4	24	69	57	75	46	24	295	19	35	44	36	9	143
weeks ago	23.80%	20.90%	26.27%	29.64%	34.1%	29.6%	26.4%	18.40%	23.33%	28.21%	30.8%	23.7%	25.4%
D. More than 4 weeks ago	13	52	50	43	26	20	204	41	47	66	44	20	218
E. Have never spoken to Nurse Care Manager	12.90% 0	15.80% 1	23.04% 1	17.00% 3	<u>19.3%</u> 1	24.7% 0	<u>18.3%</u> 6	39.80% 1	31.33% 0	42.31% 0	37.6% 0	52.6% 0	38.7% 1

Survey Questions (numbering based on			In	itial Surv	ey				Six-M	lonth Fol	low-up S	urvey	
initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 2/18	3/18 - 2/19	3/19 – 2/20	Aggre- gate	5/15- 4-16	5/16 - 4/17	5/17 - 2/18	3/18 – 2/19	3/19 - 2/20	Aggre- gate
	0.00%	0.30%	0.46%	1.19%	0.7%	0.0%	0.5%	1.00%	0.00%	0.00%	0.0%	0.0%	0.2%
F. Don't know/not sure	1 1.00%	10 3.00%	1 0.46%	1 0.40%	4 3.0%	1 1.2%	18 1.6%	3 2.90%	1 0.67%	2 1.28%	0 0.0%	0 0.0%	6 1.1%
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%	127 94.1%	75 92.6%	1054 94.7%	97 94.20%	143 95.33%	146 93.59%	111 94.9%	33 86.8%	530 94.0%
B. No	3 2.90%	5 1.50%	7 3.23%	3 1.19%	1 0.7%	1 1.2%	20 1.8%	3 2.90%	2 1.33%	3 1.92%	5 4.3%	1 2.6%	14 2.5%
C. Don't know/not sure	4 3.90%	7 2.20%	8 3.69%	8 3.16%	7 5.2%	5 6.2%	39 3.5%	3 2.90%	5 3.33%	7 4.49%	1 0.9%	4 10.5%	20 3.5%
14) Have you tried to call your Nurse Care Manager at the number													

Survey Questions (numbering based on initial survey)	Initial Survey							Six-Month Follow-up Survey					
	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 2/18	3/18 - 2/19	3/19 – 2/20	Aggre- gate	5/15- 4-16	5/16 - 4/17	5/17 - 2/18	3/18 – 2/19	3/19 - 2/20	Aggre- gate
you were given?													
A. Yes	37 38.50%	137 43.90%	74 36.63%	101 41.74%	35 27.6%	26 34.7%	410 38.9%	40 41.20%	59 41.26%	60 41.10%	56 50.5%	11 33.3%	226 42.6%
B. No	59 61.50%	175 56.10%	127 62.87%	141 58.26%	90 70.9%	49 65.3%	641 60.8%	57 58.80%	84 58.74%	84 57.53%	54 48.6%	21 63.6%	300 56.6%
C. Don't know/not sure	0 0.00%	0 0.00%	1 0.50%	0 0.00%	2 1.6%	0 0.0%	3 0.3%	0 0.00%	0 0.00%	2 1.37%	1 0.9%	1 3.0%	4 0.8%
15) Thinking about the last time you called your Nurse Care Manager, what was the reason for your call?													
A. Routine health question	27	97	48	82	30	23	307	27	45	44	45	6	167
	73.00%	70.80%	64.86%	81.19%	85.7%	88.5%	74.9%	67.50%	76.27%	73.33%	80.4%	54.5%	73.9%
B. Urgent health problem	1	3	2	0	1	1	8	1	4	4	1	0	10
	2.70%	2.20%	2.70%	0.00%	2.9%	3.8%	2.0%	2.50%	6.78%	6.67%	1.8%	0.0%	4.4%

Survey Questions (numbering based on			In	itial Surv	ey				Six-M	onth Fol	low-up S	urvey	
initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 2/18	3/18 - 2/19	3/19 – 2/20	Aggre- gate	5/15- 4-16	5/16 - 4/17	5/17 - 2/18	3/18 – 2/19	3/19 - 2/20	Aggre- gate
C. Seeking assistance in scheduling an appointment	2	5	5	2	1	1	16	4	3	1	2	1	11
	5.40%	3.60%	6.76%	1.98%	2.9%	3.8%	3.9%	10.00%	5.08%	1.67%	3.6%	9.1%	4.9%
D. Returning call from Nurse Care Manager	6	31	17	17	3	0	74	8	6	11	8	4	37
manager	16.20%	22.60%	22.97%	16.83%	8.6%	0.0%	18.0%	20.00%	10.17%	18.33%	14.3%	36.4%	16.4%
E. Other	1	1	2	0	0	1	5	0	1	0	0	0	1
	2.70%	0.70%	2.70%	0.00%	0.0%	3.8%	1.2%	0.00%	1.69%	0.00%	0.0%	0.0%	0.4%
F. Don't know/not sure	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.0%	0 0.0%	0 0.0%	0 0.00%	0 0.00%	0 0.00%	0 0.0%	0 0.0%	0 0.0%
16) Did you reach your Nurse Care Manager immediately? If no, how quickly did you get a call back?													
A. Reached immediately	17	71	32	42	14	10	186	18	28	19	25	6	96

Survey Questions (numbering based on			Ini	itial Surv	ey				Six-M	onth Fol	low-up S	urvey	
initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 2/18	3/18 - 2/19	3/19 – 2/20	Aggre- gate	5/15- 4-16	5/16 - 4/17	5/17 - 2/18	3/18 – 2/19	3/19 - 2/20	Aggre- gate
(at time of call)	45.90%	54.00%	42 670/	44 500/	40.0%	38.5%	45.3%	45.00%	47.400/	24 670/	44.5%		42 50/
B. Called back within 1 hour	45.90% 13	51.80% 30	42.67% 19	41.58% 34	40.0%	38.5% 7	45.3% 114	45.00% 9	47.46% 13	31.67% 13	44.6% 17	54.5% 0	42.5% 52
	35.10%	21.90%	25.33%	33.66%	31.4%	26.9%	27.7%	22.50%	22.03%	21.67%	30.4%	0.0%	23.0%
C. Called back in more than 1 hour but same day	3	13	10	13	6	6	51	3	7	16	6	2	34
	8.10%	9.50%	13.33%	12.87%	17.1%	23.1%	12.4%	7.50%	11.86%	26.67%	10.7%	18.2%	15.0%
D. Called back the next day	0	10	4	3	1	0	18	3	1	3	2	1	10
	0.00%	7.30%	5.33%	2.97%	2.9%	0.0%	4.4%	7.50%	1.69%	5.00%	3.6%	9.1%	4.4%
E. Called back 2 or more days later	1	5	1	3	0	0	10	0	0	1	0	0	1
	2.70%	3.60%	1.33%	2.97%	0.0%	0.0%	2.4%	0.00%	0.00%	1.67%	0.0%	0.0%	0.4%
F. Never called back	1	3	4	2	1	0	11	3	4	4	1	1	13
	2.70%	2.20%	5.33%	1.98%	2.9%	0.0%	2.7%	7.50%	6.78%	6.67%	1.8%	9.1%	5.8%
G. Other	0	0	0	0	0	1	1	1	0	0	0	0	1
	0.00%	0.00%	0.00%	0.00%	0.0%	3.8%	0.2%	2.50%	0.00%	0.00%	0.0%	0.0%	0.4%
H. Don't know/not sure	2	5	5	4	2	2	20	3	6	4	5	1	19
	5.40%	3.60%	6.67%	3.96%	5.7%	7.7%	4.9%	7.50%	10.17%	6.67%	8.9%	9.1%	8.4%

Survey Questions (numbering based on			In	itial Surv	ey				Six-N	lonth Fol	low-up S	urvey	
initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 2/18	3/18 - 2/19	3/19 – 2/20	Aggre- gate	5/15- 4-16	5/16 - 4/17	5/17 - 2/18	3/18 - 2/19	3/19 - 2/20	Aggre- gate
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	133	81	1104	100	149	155	116	38	558
	99.10%	99.10%	98.17%	98.02%	98.5%	100%	98.7%	98.00%	100.00 %	99.36%	99.1%	100%	99.3%
B. No	1 0.90%	2 0.60%	4 1.83%	4 1.58%	2 1.5%	0 0.0%	13 1.2%	2 2.00%	0 0.00%	1 0.64%	1 0.9%	0 0.0%	4 0.7%
C. Don't know/not sure	0	1	0	1	0	0	2	0	0	0	0	0	0
(b) Provided instructions about taking care of your	0.00%	0.30%	0.00%	0.40%	0.0%	0.0%	0.2%	0.00%	0.00%	0.00%	0.0%	0.0%	0.0%

Survey Questions (numbering based on			In	itial Surv	ey				Six-M	onth Fol	low-up S	urvey	
initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 2/18	3/18 - 2/19	3/19 – 2/20	Aggre- gate	5/15- 4-16	5/16 - 4/17	5/17 - 2/18	3/18 – 2/19	3/19 - 2/20	Aggre- gate
health problems or concerns													
A. Yes	95 89.60%	297 91.40%	195 89.45%	239 94.47%	123 91.1%	75 92.6%	1024 91.6%	95 93.10%	141 94.00%	152 97.44%	113 96.6%	37 97.4%	538 95.6%
B. No	8 7.50%	24 7.40%	23 10.55%	13 5.14%	9 6.7%	6 7.4%	83 7.4%	7 6.90%	9 6.00%	4 2.56%	4 3.4%	1 2.6%	25 4.4%
C. Don't know/not sure	3 2.80%	4 1.20%	0 0.00%	1 0.40%	3 2.2%	0 0.0%	11 1.0%	0 0.00%	0 0.00%	0 0.00%	0 0.0%	0 0.0%	0 0.0%
(c) Helped you to identify changes in your health that might be an early sign of a problem													
A. Yes	37 34.90%	138 42.50%	76 34.86%	97 38.34%	37 27.4%	22 27.2%	407 36.4%	43 42.20%	71 47.33%	62 39.74%	37 31.6%	8 21.1%	221 39.3%
B. No	67 63.20%	185 56.90%	138 63.3%	155 61.3%	97 71.9%	58 71.6%	700 62.6%	57 55.90%	76 50.7%	90 57.7%	77 65.8%	26 68.4%	326 57.9%
C. Don't know/not sure	2	2	4	1	1	1	11	2	3	4	3	4	16
(d) Answered questions	1.90%	0.60%	1.83%	0.40%	0.7%	1.2%	1.0%	2.00%	2.00%	2.56%	2.6%	10.5%	2.8%

Survey Questions (numbering based on			In	itial Surv	ey				Six-M	lonth Fol	low-up S	urvey	
initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 2/18	3/18 - 2/19	3/19 – 2/20	Aggre- gate	5/15- 4-16	5/16 - 4/17	5/17 - 2/18	3/18 – 2/19	3/19 - 2/20	Aggre- gate
about your													
health A. Yes	94	281	187	229	108	68	967	91	140	145	106	31	513
A. fes	94 88.70%	281 86.50%	85.78%	90.51%	108 80.0%	68 84.0%	86.5%	91 89.20%	93.33%	92.95%	90.6%	51 81.6%	91.1%
B. No	12	44	31	24	25	12	148	11	^{33.33} / ₀	92.95% 11	11	6 B1.0%	49
D. NO	11.30%	 13.50%	J1 14.22%	24 9.49%	25 18.5%	14.8%	13.2%	10.80%	6.67%	7.05%	9.4%	15.8%	4. 8.7%
C. Don't	11.50%	13.3070	14.2270	5.4570	10.570	14.070	13.270	10.0070	0.0770	7.0070	5.470	13.070	0.770
know/not	0	0	0	0	2	1	3	0	0	0	0	1	1
sure													
	0.00%	0.00%	0.00%	0.00%	1.5%	1.2%	0.3%	0.00%	0.00%	0.00%	0.0%	2.6%	0.2%
(e) Helped													
you talk to													
and work with your regular													
doctor and													
your regular													
doctor's office													
staff												_	
A. Yes	48	127	47	61	10	17	310	27	51	32	34	8	152
	45.30%	39.10%	21.56%	24.11%	7.4%	21.0%	27.7%	26.50%	34.00%	20.65%	29.1%	21.1%	27.0%
B. No	54	197	167	191	123	64	796	73	99	123	83	30	408
C. Dawk	50.90%	60.60%	76.61%	75.49%	91.1%	79.0%	71.2%	71.60%	66.00%	79.35%	70.9%	78.9%	72.6%
C. Don't know/not	4	1	4	1	2	0	12	2	0	0	0	0	2
sure	3.80%	0.30%	1.83%	0.40%	1.5%	0.0%	1.1%	2.00%	0.00%	0.00%	0.0%	0.0%	0.4%

Survey Questions (numbering based on			In	itial Surv	ey				Six-M	lonth Fol	low-up S	urvey	
initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 2/18	3/18 - 2/19	3/19 – 2/20	Aggre- gate	5/15- 4-16	5/16 - 4/17	5/17 - 2/18	3/18 – 2/19	3/19 - 2/20	Aggre- gate
(f) Helped you to make and keep health care appointments with other doctors, such as specialists, for medical problems? A. Yes B. No	47 44.30% 58	101 31.10% 223	38 17.43% 179	52 20.55% 200	16 11.9% 118	16 19.8% 65	270 24.2% 843	26 25.50% 75	41 27.33% 109	30 19.35% 125	26 22.2% 91	4 10.5% 34	127 22.6% 434
C. Don't	54.70%	68.60%	82.11%	79.05%	87.4%	80.2%	75.4%	73.50%	72.67%	80.65%	77.8%	89.5%	77.2%
know/not sure	1 0.90%	1 0.30%	1 0.46%	1 0.40%	1 0.7%	0 0.0%	5 0.4%	1 1.00%	0 0.00%	0 0.00%	0 0.0%	0 0.0%	1 0.2%
(g) Helped you to make and keep health care appointments for mental health or substance abuse problems A. Yes	8	16	10	8	1	2	45	7	8	5	2	1	23

Survey Questions (numbering based on			In	itial Surv	ey				Six-M	lonth Fol	low-up S	urvey	
initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 2/18	3/18 - 2/19	3/19 – 2/20	Aggre- gate	5/15- 4-16	5/16 - 4/17	5/17 - 2/18	3/18 – 2/19	3/19 - 2/20	Aggre- gate
B. No	7.50% 98 92.50%	4.90% 309 95.10%	4.59% 208 95.41%	3.16% 245 96.84%	0.7% 134 99.3%	2.5% 79 97.5%	4.0% 1073 96.0%	6.90% 94 92.20%	5.33% 142 94.67%	3.23% 150 96.77%	1.7% 115 98.3%	2.6% 37 97.4%	4.1% 538 95.7%
C. Don't know/not sure	o	0	0	0	0	0	0	1	0	0	0	0	1
(h) Reviewed your medications with you and helped you to manage your medications A. Yes	0.00%	0.00%	0.00%	0.00%	0.0% 122	<u>62</u>	<u>0.0%</u> 972	<u>1.00%</u> 92	0.00%	0.00%	0.0%	0.0% 25	0.2% 500
B. No	73.60% 26 24.50%	88.60% 32 9.80%	88.99% 19 8.72%	90.12% 19 7.51%	90.4% 11 8.1%	76.5% 11 13.6%	86.9% 118 10.6%	90.20% 9 8.80%	93.33% 7 4.67%	89.68% 8 5.16%	88.9% 8 6.8%	65.8% 5 13.2%	89.0% 37 6.6%
C. Don't know/not sure	2 1.90%	5 1.50%	5 2.29%	6 2.37%	2 1.5%	8 9.9%	28 2.5%	1 1.00%	3 2.00%	8 5.16%	5 4.3%	8 21.1%	25 4.4%
18) (For each activity performed) How satisfied are you with													

Survey Questions (numbering based on			In	itial Surv	еу				Six-M	onth Fol	low-up S	urvey	
initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 2/18	3/18 - 2/19	3/19 – 2/20	Aggre- gate	5/15- 4-16	5/16 - 4/17	5/17 - 2/18	3/18 – 2/19	3/19 - 2/20	Aggre- gate
the help you received?													
(a) Asked questions about your health problems or concerns A. Very													
satisfied	96	297	197	235	119	76	1020	91	142	143	112	33	521
B. Somewhat satisfied	90.60% 7 6.60%	91.40% 19 5.80%	90.37% 14 6.42%	92.89% 12 4.74%	88.1% 11 8.1%	93.8% 4 4.9%	91.2% 67 6.0%	89.20% 4 3.90%	94.67% 5 3.33%	92.26% 9 5.81%	95.7% 2 1.7%	86.8% 5 13.2%	92.7% 25 4.4%
C. Somewhat dissatisfied	0.90%	2 0.60%	0.42% 2 0.92%	4.74% 0 0.00%	0.1% 1 0.7%	4.9% 0 0.0%	6.0% 6 0.5%	3.90% 3 2.90%	0.00%	0.00%	1.7% 1 0.9%	0.0%	4.4% 4 0.7%
D. Very dissatisfied	1	4	0	1	1	1	8	1	2	2	1	0	6
E. Don't	0.90%	1.20%	0.00%	0.40%	0.7%	1.2%	0.7%	1.00%	1.33%	1.29%	0.9%	0.0%	1.1%
know/Not Applicable	1 0.90%	3 0.90%	5 2.29%	5 1.98%	3 2.2%	0 0.0%	17 1.5%	3 2.90%	1 0.67%	1 0.65%	1 0.9%	0 0.0%	6 1.1%
(b) Provided instructions about taking care of your health	0.3070	0.30%	2.23/0	1.30/0	2.2/0	0.0%	1.370	2.3070	0.07 //	0.03 //	0.370	0.0%	1.1/0

Survey Questions (numbering based on			In	itial Surv	ey				Six-M	onth Fol	low-up S	urvey	
initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 2/18	3/18 - 2/19	3/19 – 2/20	Aggre- gate	5/15- 4-16	5/16 - 4/17	5/17 - 2/18	3/18 - 2/19	3/19 - 2/20	Aggre- gate
problems or concerns													
A. Very satisfied	88	288	187	226	109	71	969	88	137	141	110	33	509
	83.00%	88.60%	85.78%	89.33%	80.7%	87.7%	86.7%	86.30%	91.33%	90.97%	94.0%	86.8%	90.6%
B. Somewhat satisfied	5	8	10	7	9	4	43	3	2	7	1	4	17
	4.70%	2.50%	4.59%	2.77%	6.7%	4.9%	3.8%	2.90%	1.33%	4.52%	0.9%	10.5%	3.0%
C. Somewhat dissatisfied	1	0	0	0	1	0	2	2	0	0	1	0	3
	0.90%	0.00%	0.00%	0.00%	0.7%	0.0%	0.2%	2.00%	0.00%	0.00%	0.9%	0.0%	0.5%
D. Very dissatisfied	0	1	0	1	1	0	3	1	1	1	1	0	4
	0.00%	0.30%	0.00%	0.40%	0.7%	0.0%	0.3%	1.00%	0.67%	0.65%	0.9%	0.0%	0.7%
E. Don't know/Not Applicable	12	28	21	19	15	6	101	8	10	6	4	1	29
	11.30%	8.60%	9.63%	7.51%	11.1%	7.4%	9.0%	7.80%	6.67%	3.87%	3.4%	2.6%	5.2%
(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	34	22	403	42	67	63	33	7	212
	35.80%	40.90%	35.32%	39.13%	25.2%	27.2%	36.0%	41.20%	44.67%	40.65%	28.2%	18.4%	37.7%

Survey Questions (numbering based on			In	itial Surv	ey				Six-M	onth Fol	low-up S	urvey	
initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 2/18	3/18 - 2/19	3/19 – 2/20	Aggre- gate	5/15- 4-16	5/16 - 4/17	5/17 - 2/18	3/18 – 2/19	3/19 - 2/20	Aggre- gate
B. Somewhat satisfied	1	9	2	0	2	0	14	1	2	0	0	0	3
	0.90%	2.80%	0.92%	0.00%	1.5%	0.0%	1.3%	1.00%	1.33%	0.00%	0.0%	0.0%	0.5%
C. Somewhat dissatisfied	0	0	0	0	1	0	1	0	0	0	0	0	0
	0.00%	0.00%	0.00%	0.00%	0.7%	0.0%	0.1%	0.00%	0.00%	0.00%	0.0%	0.0%	0.0%
D. Very dissatisfied	0	0	0	0	0	0	0	0	0	0	0	0	0
	0.00%	0.00%	0.00%	0.00%	0.0%	0.0%	0.0%	0.00%	0.00%	0.00%	0.0%	0.0%	0.0%
E. Don't know/Not Applicable	67	183	139	154	98	59	700	59	81	92	84	31	347
	63.20%	56.30%	63.76%	60.87%	72.6%	72.8%	62.6%	57.80%	54.00%	59.35%	71.8%	81.6%	61.7%
(d) Answered questions about your health A. Very satisfied	93	272	180	222	102	66	935	84	136	137	105	31	493
	87.70%	83.70%	82.57%	87.75%	75.6%	81.5%	83.6%	82.40%	90.67%	88.39%	89.7%	81.6%	87.7%
B. Somewhat satisfied	2	8	8	6	4	2	30	3	3	4	0	1	11
	1.90%	2.50%	3.67%	2.37%	3.0%	2.5%	2.7%	2.90%	2.00%	2.58%	0.0%	2.6%	2.0%
C. Somewhat dissatisfied	0	1	0	0	1	0	2	1	0	0	1	0	2
	0.00%	0.30%	0.00%	0.00%	0.7%	0.0%	0.2%	1.00%	0.00%	0.00%	0.9%	0.0%	0.4%
D. Very dissatisfied	0	0	0	1	0	0	1	0	0	0	1	0	1

Survey Questions (numbering based on			In	itial Surv	еу				Six-M	onth Fol	low-up S	urvey	
initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 2/18	3/18 - 2/19	3/19 – 2/20	Aggre- gate	5/15- 4-16	5/16 - 4/17	5/17 - 2/18	3/18 – 2/19	3/19 - 2/20	Aggre- gate
	0.00%	0.00%	0.00%	0.40%	0.0%	0.0%	0.1%	0.00%	0.00%	0.00%	0.9%	0.0%	0.2%
E. Don't know/Not Applicable	11	44	30	24	28	13	150	14	11	14	10	6	55
	10.40%	13.50%	13.76%	9.49%	20.7%	16.0%	13.4%	13.70%	7.33%	9.03%	8.5%	15.8%	9.8%
(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	8	17	295	28	48	34	33	7	150
Sutisficu	42.50%	38.50%	20.18%	22.13%	5.9%	21.0%	26.4%	27.50%	32.00%	21.94%	28.2%	18.4%	26.7%
B. Somewhat satisfied	1	8	5	0	0	0	14	0	2	2	0	0	4
	0.90%	2.50%	2.29%	0.00%	0.0%	0.0%	1.3%	0.00%	1.33%	1.29%	0.0%	0.0%	0.7%
C. Somewhat dissatisfied	0	0	1	0	0	0	1	0	0	0	0	0	0
	0.00%	0.00%	0.46%	0.00%	0.0%	0.0%	0.1%	0.00%	0.00%	0.00%	0.0%	0.0%	0.0%
D. Very dissatisfied	0	0	0	1	0	0	1	0	0	0	1	0	1
	0.00%	0.00%	0.00%	0.40%	0.0%	0.0%	0.1%	0.00%	0.00%	0.00%	0.9%	0.0%	0.2%
E. Don't know/Not Applicable	60	192	168	196	127	64	807	74	100	119	83	31	407
- ppiloone	56.60%	59.10%	77.06%	77.47%	94.1%	79.0%	72.2%	72.50%	66.67%	76.77%	70.9%	81.6%	72.4%

Survey Questions (numbering based on			In	itial Surv	еу				Six-M	onth Fol	low-up S	urvey	
initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 2/18	3/18 - 2/19	3/19 – 2/20	Aggre- gate	5/15- 4-16	5/16 - 4/17	5/17 - 2/18	3/18 – 2/19	3/19 - 2/20	Aggre- gate
(f) Helped you to make and keep health care appointments with other doctors, such as specialists, for medical problems? A. Very satisfied	45 42.50%	100 30.80%	41 18.81%	49 19.37%	13 9.6%	12 14.8%	260 23.3%	25 24.50%	40 26.67%	30 19.35%	27 23.1%	4 10.5%	126 22.4%
B. Somewhat satisfied	1	6	3	1	2	1	14	2	2	2	0	0	6
	0.90%	1.80%	1.38%	0.40%	1.5%	1.2%	1.3%	2.00%	1.33%	1.29%	0.0%	0.0%	1.1%
C. Somewhat dissatisfied	1	0	0	0	1	1	3	0	0	0	0	0	0
	0.90%	0.00%	0.00%	0.00%	0.7%	1.2%	0.3%	0.00%	0.00%	0.00%	0.0%	0.0%	0.0%
D. Very dissatisfied	0	0	0	1	0	0	1	0	0	0	0	0	0
E. Don't know/Not Applicable	0.00% 59 55.70%	0.00% 219 67.40%	0.00% 174 79.82%	0.40% 202 79.84%	0.0% 119 88.1%	0.0% 67 82.7%	0.1% 840 75.1%	0.00% 75 73.50%	0.00% 108 72.00%	0.00% 123 79.35%	0.0% 90 76.9%	0.0% 34 89.5%	0.0% 430 76.5%
(g) Helped you to make and keep						02.770	,,						, 0.070

Survey Questions (numbering based on			In	itial Surv	ey				Six-M	lonth Fol	low-up S	urvey	
initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 2/18	3/18 - 2/19	3/19 – 2/20	Aggre- gate	5/15- 4-16	5/16 - 4/17	5/17 - 2/18	3/18 – 2/19	3/19 - 2/20	Aggre- gate
health care appointments for mental health or substance abuse problems													
A. Very satisfied	10	15	10	8	0	1	44	6	7	5	2	1	21
	9.40%	4.60%	4.59%	3.16%	0.0%	1.2%	3.9%	5.90%	4.67%	3.23%	1.7%	2.6%	3.7%
B. Somewhat satisfied	1	10	6	1	1	1	20	1	4	3	1	0	9
	0.90%	3.10%	2.75%	0.40%	0.7%	1.2%	1.8%	1.00%	2.67%	1.94%	0.9%	0.0%	1.6%
C. Somewhat dissatisfied	0	0	0	0	0	0	0	0	0	0	0	0	0
	0.00%	0.00%	0.00%	0.00%	0.0%	0.0%	0.0%	0.00%	0.00%	0.00%	0.0%	0.0%	0.0%
D. Very dissatisfied	0	0	0	0	0	0	0	0	0	0	0	0	0
	0.00%	0.00%	0.00%	0.00%	0.0%	0.0%	0.0%	0.00%	0.00%	0.00%	0.0%	0.0%	0.0%
E. Don't know/Not Applicable	95	300	202	244	134	79	1054	95	139	147	114	37	532
	89.60%	92.30%	92.66%	96.44%	99.3%	97.5%	94.3%	93.10%	92.67%	94.84%	97.4%	97.4%	94.7%
(h) Reviewed your medications with you and helped you to													

Survey Questions (numbering based on			In	itial Surv	ey				Six-M	onth Fol	low-up S	urvey	
initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 2/18	3/18 - 2/19	3/19 – 2/20	Aggre- gate	5/15- 4-16	5/16 - 4/17	5/17 - 2/18	3/18 – 2/19	3/19 - 2/20	Aggre- gate
manage your medications													
A. Very satisfied	76	278	183	220	114	61	932	84	135	130	104	26	479
	71.70%	85.50%	83.94%	86.96%	84.4%	75.3%	83.4%	82.40%	90.00%	83.87%	88.9%	76.5%	85.8%
B. Somewhat satisfied	2	9	11	8	8	2	40	4	3	5	0	0	12
	1.90%	2.80%	5.05%	3.16%	5.9%	2.5%	3.6%	3.90%	2.00%	3.23%	0.0%	0.0%	2.2%
C. Somewhat dissatisfied	1	1	0	0	1	0	3	1	0	0	1	0	2
	0.90%	0.30%	0.00%	0.00%	0.7%	0.0%	0.3%	1.00%	0.00%	0.00%	0.9%	0.0%	0.4%
D. Very dissatisfied	0	2	0	0	1	0	3	1	1	1	1	0	4
	0.00%	0.60%	0.00%	0.00%	0.7%	0.0%	0.3%	1.00%	0.67%	0.65%	0.9%	0.0%	0.7%
E. Don't know/Not Applicable	27	35	24	25	11	18	140	12	11	19	11	8	61
	25.50%	10.80%	11.01%	9.88%	8.1%	22.2%	12.5%	11.80%	7.33%	12.26%	9.4%	23.5%	10.9%
19) Overall, how satisfied are you with your Nurse Care Manager?													
A. Very satisfied	97	295	200	236	119	75	1022	93	140	143	112	33	521
Satisfica	91.50%	90.80%	91.74%	93.28%	88.1%	92.6%	91.4%	91.20%	94.59%	92.26%	95.7%	86.8%	93.0%

Survey Questions (numbering based on			Ini	itial Surv	еу				Six-M	lonth Fol	low-up S	urvey	
initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 2/18	3/18 - 2/19	3/19 – 2/20	Aggre- gate	5/15- 4-16	5/16 - 4/17	5/17 - 2/18	3/18 – 2/19	3/19 - 2/20	Aggre- gate
B. Somewhat satisfied	7 6.60%	20 6.20%	13 5.96%	14 5.53%	11 8.1%	5 6.2%	70 6.3%	5 4.90%	5 3.38%	10 6.45%	2 1.7%	5 13.2%	27 4.8%
C. Somewhat dissatisfied	1 1	6.20%	3.96% 3	0 0	8.1% 1	0.2% 0	9.3%	4.90% 4	3.38% 1	0.45%	1.7%	0	4.8% 7
	0.90%	1.20%	1.38%	0.00%	0.7%	0.0%	0.8%	3.90%	0.68%	0.65%	0.9%	0.0%	1.3%
D. Very dissatisfied	1	5	1	1	1	1	10	0	2	1	2	0	5
	0.90%	1.50%	0.46%	0.40%	0.7%	1.2%	0.9%	0.00%	1.35%	0.65%	1.7%	0.0%	0.9%
E. Don't know/not sure	0	1	1	2	3	0	7	0	0	0	0	0	0
	0.00%	0.30%	0.46%	0.79%	2.2%	0.0%	0.6%	0.00%	0.00%	0.00%	0.0%	0.0%	0.0%
20) Overall, how satisfied are you with your whole experience in the CCP?													
A. Very satisfied	97	299	200	236	119	73	1024	93	141	144	112	33	523
B. Somewhat	91.50%	92.00%	92.17%	93.28%	88.1%	90.1%	91.7%	91.20%	95.27%	92.90%	95.7%	86.8%	93.4%
B. Somewhat satisfied	7 6.60%	14 4.30%	12 5.53%	14 5.53%	11 8.1%	7 8.6%	65 5.8%	7 6.90%	4 2.70%	9 5.81%	2 1.7%	5 13.2%	27 4.8%
C. Somewhat													
dissatisfied	2	6	3	0	1	0	12	2	1	1	1	0	5
	1.90%	1.80%	1.38%	0.00%	0.7%	0.0%	1.1%	2.00%	0.68%	0.65%	0.9%	0.0%	0.9%

Survey Questions (numbering based on			In	itial Surv	ey				Six-M	onth Fol	low-up S	urvey	
initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 2/18	3/18 - 2/19	3/19 – 2/20	Aggre- gate	5/15- 4-16	5/16 - 4/17	5/17 - 2/18	3/18 - 2/19	3/19 - 2/20	Aggre- gate
D. Very dissatisfied	0	4	1	1	1	1	8	0	2	1	2	0	5
	0.00%	1.20%	0.46%	0.40%	0.7%	1.2%	0.7%	0.00%	1.35%	0.65%	1.7%	0.0%	0.9%
E. Don't know/not sure	0	2	1	2	3	0	8	0	0	0	0	0	0
	0.00%	0.60%	0.46%	0.79%	2.2%	0.0%	0.7%	0.00%	0.00%	0.00%	0.0%	0.0%	0.0%
21) Would you recommend the CCP to a friend who has health care needs like yours?													
A. Yes	102	309	211	245	129	78	1074	99	145	149	111	38	542
	96.20%	95.10%	97.24%	96.84%	95.6%	96.3%	96.2%	97.10%	97.32%	96.13%	94.9%	100.0%	96.6%
B. No	2	8	2	3	2	2	19	2	2	3	5	0	12
	1.90%	2.50%	0.92%	1.19%	1.5%	2.5%	1.7%	2.00%	1.34%	1.94%	4.3%	0.0%	2.1%
C. Don't know/not sure	2 1.90%	8 2.50%	4 1.84%	5 1.98%	4 3.0%	1 1.2%	24 2.1%	1 1.00%	2 1.34%	3 1.94%	1 0.9%	0 0.0%	7 1.2%
22) Do you have any suggestions for improving the CCP?													

Survey Questions (numbering based on			In	itial Surv	еу				Six-M	onth Fol	low-up S	urvey	
initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 2/18	3/18 - 2/19	3/19 – 2/20	Aggre- gate	5/15- 4-16	5/16 - 4/17	5/17 - 2/18	3/18 – 2/19	3/19 - 2/20	Aggre- gate
A. Yes (member- specific responses documented)	9	25	23	13	9	11	90	7	14	11	6	0	38
	8.50%	7.70%	10.65%	5.14%	6.7%	13.6%	8.1%	6.90%	9.33%	7.10%	5.1%	0.0%	6.8%
B. No	97 91.50%	300 92.30%	192 88.89%	240 94.86%	126 93.3%	70 86.4%	1025 <i>91.8%</i>	95 93.10%	136 90.67%	144 92.90%	111 94.9%	38 100.0%	524 93.2%
23) Overall, how would you rate your health today?													
A. Excellent	1	6	3	1	1	0	12	1	0	0	0	0	1
	1.00%	1.80%	1.37%	0.40%	0.7%	0.0%	1.1%	1.00%	0.00%	0.00%	0.0%	0.0%	0.2%
B. Good	43	102	65	78	44	16	348	41	47	44	54	14	200
	41.00%	31.30%	29.68%	30.83%	32.6%	19.8%	31.1%	40.20%	31.33%	28.39%	46.2%	36.8%	35.6%
C. Fair	41	144	119	140	75	53	572	42	80	95	53	23	293
	39.00%	44.20%	54.34%	55.34%	55.6%	65.4%	51.1%	41.20%	53.33%	61.29%	45.3%	60.5%	52.1%
D. Poor	20	73	32	34	13	11	183	18	23	16	10	1	68
	19.00%	22.40%	14.61%	13.44%	9.6%	13.6%	16.4%	17.60%	15.33%	10.32%	8.5%	2.6%	12.1%
E. Don't know/not sure/no response	0 0.00%	1 0.30%	0 0.00%	0 0.00%	2 1.5%	1 1.2%	4 0.4%	0 0.00%	0 0.00%	0 0.00%	0 0.0%	0 0.0%	0 0.0%
24) Compared to before you	0.0070	0.5070	0.0070	0.0070	1.570	1.270	0.470	0.0070	0.0070	0.0070	0.070	0.070	0.070

Survey Questions (numbering based on			Ini	itial Surv	ey				Six-M	lonth Fol	low-up S	urvey	
initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 2/18	3/18 - 2/19	3/19 – 2/20	Aggre- gate	5/15- 4-16	5/16 - 4/17	5/17 - 2/18	3/18 – 2/19	3/19 - 2/20	Aggre- gate
participated in the CCP, how has your health changed?													
A. Better	51	143	107	136	61	32	530	55	79	90	71	19	314
	48.60%	43.90%	48.86%	53.75%	45.2%	39.5%	47.4%	53.90%	53.38%	58.06%	60.7%	50.0%	56.2%
B. Worse	4	41	22	21	12	6	106	9	16	9	6	1	41
	3.80%	12.60%	10.05%	8.30%	8.9%	7.4%	9.5%	8.80%	10.81%	5.81%	5.1%	2.6%	7.3%
C. About the same	50	140	90	96	60	41	477	38	53	56	40	17	204
	47.60%	42.90%	41.10%	37.94%	44.4%	50.6%	42.6%	37.30%	35.81%	36.13%	34.2%	44.7%	36.5%
D. No response	0	2	0	0	2	2	6	0	0	0	0	1	1
	0.00%	0.60%	0.00%	0.00%	1.5%	2.5%	0.5%	0.00%	0.00%	0.00%	0.0%	2.6%	0.2%
25) (If better) Do you think the CCP has contributed to your improvement in health?													
A. Yes	48	138	94	130	58	31	499	52	77	80	68	19	296
	94.12%	96.50%	87.85%	95.59%	95.1%	96.9%	94.2%	94.50%	97.47%	88.89%	95.8%	100.0%	94.3%
B. No	3 5.88%	5 3.50%	13 12.15%	6 4.41%	3 4.9%	1 3.1%	31 5.8%	3 5.50%	2 2.53%	7 7.78%	2 2.8%	0 0.0%	14 4.5%

Survey Questions (numbering based on			In	itial Surv	ey				Six-M	lonth Fol	low-up S	urvey	
initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 2/18	3/18 - 2/19	3/19 – 2/20	Aggre- gate	5/15- 4-16	5/16 - 4/17	5/17 - 2/18	3/18 – 2/19	3/19 - 2/20	Aggre- gate
C. Don't know/not sure	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.0%	0 0.0%	0 0.0%	0 0.00%	0 0.00%	3 3.33%	1 1.4%	0 0.0%	4 1.3%
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													

Survey Questions (numbering based on			In	itial Surv	ey				Six-M	onth Fol	low-up S	urvey	
initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 2/18	3/18 - 2/19	3/19 – 2/20	Aggre- gate	5/15- 4-16	5/16 - 4/17	5/17 - 2/18	3/18 – 2/19	3/19 - 2/20	Aggre- gate
other tobacco products less A. N/A - not	2	45	55	75	40	19	236	13	16	31	25	15	100
discussed	1.90%	13.80%	25.23%	29.64%	29.6%	23.5%	21.1%	12.70%	10.74%	20.00%	21.4%	39.5%	17.8%
B. Discussed - no change	5	22	10	10	5	3	55	1	6	11	1	3	22
	4.70%	6.80%	4.59%	3.95%	3.7%	3.7%	4.9%	1.00%	4.03%	7.10%	0.9%	7.9%	3.9%
C. Discussed - temporary change	4	7	2	4	0	0	17	0	1	3	0	0	4
	3.80%	2.20%	0.92%	1.58%	0.0%	0.0%	1.5%	0.00%	0.67%	1.94%	0.0%	0.0%	0.7%
D. Discussed - continuing change	29	57	28	36	21	11	182	16	26	14	13	2	71
	27.40%	17.50%	12.84%	14.23%	15.6%	13.6%	16.3%	15.70%	17.45%	9.03%	11.1%	5.3%	12.7%
E. Don't know/not sure/no response	2	9	3	1	7	12	34	7	3	1	3	7	21
response	1.90%	2.80%	1.38%	0.40%	5.2%	14.8%	3.0%	6.90%	2.01%	0.65%	2.6%	18.4%	3.7%
F. Not applicable	64	185	120	127	62	36	594	65	97	95	75	11	343
<i>(</i>) > = =	60.40%	56.90%	55.05%	50.20%	45.9%	44.4%	53.1%	63.70%	65.10%	61.29%	64.1%	28.9%	61.1%
(b) Moving around more or getting more exercise													

Survey Questions (numbering based on			In	itial Surv	еу				Six-M	onth Fol	low-up S	urvey	
initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 2/18	3/18 - 2/19	3/19 – 2/20	Aggre- gate	5/15- 4-16	5/16 - 4/17	5/17 - 2/18	3/18 – 2/19	3/19 - 2/20	Aggre- gate
A. N/A - not discussed	4	49	57	78	40	24	252	16	20	38	37	14	125
B. Discussed - no change	3.80% 8	15.10% 31	26.15% 10	30.83% 19	29.6% 9	29.6% 4	22.5% 81	15.70% 4	13.51% 11	24.52% 9	31.6% 8	36.8% 2	22.3% 34
C. Discussed -	7.50%	9.50%	4.59%	7.51%	6.7%	4.9%	7.2%	3.90%	7.43%	5.81%	6.8%	5.3%	6.1%
temporary change	2	6	4	2	0	0	14	1	4	4	1	1	11
D. Discussed -	1.90%	1.80%	1.83%	0.79%	0.0%	0.0%	1.3%	1.00%	2.70%	2.58%	0.9%	2.6%	2.0%
continuing	34	154	94	104	43	21	450	45	79	68	44	12	248
E. Don't	32.10%	47.40%	43.12%	41.11%	31.9%	25.9%	40.3%	44.10%	53.38%	43.87%	37.6%	31.6%	44.3%
know/not sure/no response	3	12	4	6	6	10	41	7	2	1	3	5	18
-	2.80%	3.70%	1.83%	2.37%	4.4%	12.3%	3.7%	6.90%	1.35%	0.65%	2.6%	13.2%	3.2%
F. Not applicable	55	73	49	44	37	22	280	29	32	35	24	4	124
	51.90%	22.50%	22.48%	17.39%	27.4%	27.2%	25.0%	28.40%	21.62%	22.58%	20.5%	10.5%	22.1%
(c) Changing your diet													
A. N/A - not discussed	5	51	47	65	39	15	222	14	17	24	20	11	86
	4.70%	15.70%	21.56%	25.69%	28.9%	18.5%	19.9%	13.70%	11.49%	15.48%	17.1%	28.9%	15.4%
B. Discussed - no change	4	20	6	18	15	9	72	6	12	15	10	6	49

Survey Questions (numbering based on			Ini	itial Surv	ey				Six-M	onth Fol	low-up S	urvey	
initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 2/18	3/18 - 2/19	3/19 – 2/20	Aggre- gate	5/15- 4-16	5/16 - 4/17	5/17 - 2/18	3/18 – 2/19	3/19 - 2/20	Aggre- gate
C. Discussed -	3.80%	6.20%	2.75%	7.11%	11.1%	11.1%	6.4%	5.90%	8.11%	9.68%	8.5%	15.8%	8.8%
temporary change	1	4	4	5	1	2	17	2	5	6	2	1	16
D. Discussed -	0.90%	1.20%	1.83%	1.98%	0.7%	2.5%	1.5%	2.00%	3.38%	3.87%	1.7%	2.6%	2.9%
D. Discussed - continuing change	49	186	120	132	49	29	565	52	91	91	61	13	308
E. Don't	46.20%	57.20%	55.05%	52.17%	36.3%	35.8%	50.5%	51.00%	61.49%	58.71%	52.1%	34.2%	55.0%
know/not sure/no response	3	10	6	4	6	7	36	8	2	2	0	4	16
-	2.80%	3.10%	2.75%	1.58%	4.4%	8.6%	3.2%	7.80%	1.35%	1.29%	0.0%	10.5%	2.9%
F. Not applicable	44	54	35	29	25	19	206	20	21	17	24	3	85
	41.50%	16.60%	16.06%	11.46%	18.5%	23.5%	18.4%	19.60%	14.19%	10.97%	20.5%	7.9%	15.2%
(d) Managing and taking your medications better													
A. N/A - not discussed	7	44	28	28	22	17	146	10	7	11	12	6	46
P. Dissues	6.60%	13.50%	12.84%	11.07%	16.3%	21.0%	13.1%	9.80%	4.73%	7.10%	10.3%	15.8%	8.2%
B. Discussed - no change	0	1	0	2	5	0	8	1	0	1	0	0	2
	0.00%	0.30%	0.00%	0.79%	3.7%	0.0%	0.7%	1.00%	0.00%	0.65%	0.0%	0.0%	0.4%

Survey Questions (numbering based on			In	itial Surv	ey				Six-M	onth Fol	low-up S	urvey	
initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 2/18	3/18 - 2/19	3/19 – 2/20	Aggre- gate	5/15- 4-16	5/16 - 4/17	5/17 - 2/18	3/18 – 2/19	3/19 - 2/20	Aggre- gate
C. Discussed - temporary change	0	2	2	2	0	0	6	0	0	0	1	0	1
D. Discussed - continuing	0.00% 62	0.60% 204	0.92% 147	0.79% 165	0.0% 59	0.0% 26	0.5% 663	0.00% 62	0.00% 97	0.00% 95	0.9% 55	0.0% 10	0.2% 319
change	58.50%	62.80%	67.43%	65.22%	43.7%	32.1%	59.3%	60.80%	65.54%	61.29%	47.0%	26.3%	57.0%
E. Don't know/not sure/no response	4	8	3	5	10	8	38	6	2	4	3	13	28
-	3.80%	2.50%	1.38%	1.98%	7.4%	9.9%	3.4%	5.90%	1.35%	2.58%	2.6%	34.2%	5.0%
F. Not applicable	33	66	38	51	39	30	257	23	42	44	46	9	164
	31.10%	20.30%	17.43%	20.16%	28.9%	37.0%	23.0%	22.50%	28.38%	28.39%	39.3%	23.7%	29.3%
(e) Making sure to drink enough water throughout the day													
A. N/A - not discussed	27	108	73	57	22	13	300	30	29	34	20	8	121
B. Discussed -	25.50% 2	33.20% 18	33.49% 18	22.53% 20	16.3% 5	16.0% 3	26.8% 66	29.40% 5	19.59% 20	21.94% 15	17.1% 5	21.1% 2	21.6% 47
no change	1.90%	5.50%	8.26%	7.91%	3.7%	3.7%	5.9%	4.90%	13.51%	9.68%	4.3%	5.3%	8.4%

Survey Questions (numbering based on			In	itial Surv	ey				Six-M	onth Fol	low-up S	urvey	
initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 2/18	3/18 - 2/19	3/19 – 2/20	Aggre- gate	5/15- 4-16	5/16 - 4/17	5/17 - 2/18	3/18 – 2/19	3/19 - 2/20	Aggre- gate
C. Discussed - temporary change	0	2	3	2	0	1	8	1	1	5	1	0	8
D. Discussed -	0.00%	0.60%	1.38%	0.79%	0.0%	1.2%	0.7%	1.00%	0.68%	3.23%	0.9%	0.0%	1.4%
continuing change	44	122	77	138	59	26	466	41	62	63	56	11	233
	41.50%	37.50%	35.32%	54.55%	43.7%	32.1%	41.7%	40.20%	41.89%	40.65%	47.9%	28.9%	41.6%
E. Don't know/not sure/no response	3	16	8	9	10	14	60	8	3	9	6	10	36
-	2.80%	4.90%	3.67%	3.56%	7.4%	17.3%	5.4%	7.80%	2.03%	5.81%	5.1%	26.3%	6.4%
F. Not applicable	30	59	39	27	39	24	218	17	33	29	29	7	115
(f) Drinking or using other substances less A. N/A - not	28.30% 2	18.20% 83	17.89% 79	10.67% 99	28.9% 36	29.6% 28	<u>19.5%</u> 327	16.70% 32	22.30% 37	18.71% 62	24.8% 40	18.4%	20.5% 190
discussed			-				_						
B. Discussed -	1.90%	25.50%	36.57%	39.13%	26.7%	34.6%	29.3%	31.40%	25.17%	40.00%	34.2%	50.0%	34.0%
no change	0 0.00%	0 0.00%	0 0.00%	1 0.40%	0 0.0%	0 0.0%	1 0.1%	0 0.00%	0 0.00%	0 0.00%	0 0.0%	0 0.0%	0 0.0%
C. Discussed - temporary change	0	0	0	0	0	0	0	1	0	0	0	0	1

Survey Questions (numbering based on			In	itial Surv	ey	Six-Month Follow-up Survey							
initial survey)	2/15 - 4/15	5/15 - 4/16	5/16 - 4/17	5/17 - 2/18	3/18 - 2/19	3/19 – 2/20	Aggre- gate	5/15- 4-16	5/16 - 4/17	5/17 - 2/18	3/18 - 2/19	3/19 - 2/20	Aggre- gate
	0.00%	0.00%	0.00%	0.00%	0.0%	0.0%	0.0%	1.00%	0.00%	0.00%	0.0%	0.0%	0.2%
D. Discussed - continuing change	1	8	2	4	4	1	20	2	1	1	5	0	9
	0.90%	2.50%	0.93%	1.58%	3.0%	1.2%	1.8%	2.00%	0.68%	0.65%	4.3%	0.0%	1.6%
E. Don't know/not sure/no response	2	12	3	7	6	16	46	7	2	4	4	9	26
F. Not applicable	1.90% 101 95.30%	3.70% 222 68.30%	1.39% 132 61.11%	2.77% 142 56.13%	4.4% 89 65.9%	19.8% 36 44.4%	4.1% 722 64.7%	6.90% 60 58.80%	1.36% 107 72.79%	2.58% 88 56.77%	3.4% 68 58.1%	23.7% 10 58.1%	4.7% 333 62.0%

APPENDIX C – DETAILED PARTICIPANT EXPENDITURE DATA

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

<u>Exhibit</u>	Description
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

							CCU Detail - All Pa	rticipants					
Category of Service	Pre-Engagement: 1-12 Months (Accumulated Total)	Pre- Engagement: 1-12 Months (Total)	Engaged Period: 3 to 12 Months (Accumulated Total)	Engaged Period: 3 to 12 Months (Total)	Engaged Period: 13 to 24 Months (Accumulated Total)	Engaged Period: 13 to 24 Months (Total)	Engaged Period: 25 to 36 Months (Accumulated Total)	Engaged Period: 25 to 36 Months (Total)	Engaged Period: 37 to 48 Months (Accumulated Total)	Engaged Period: 37 to 48 Months (Total)	Engaged Period: 49 to 60 Months (Accumulated Total)	Engaged Period: 49 to 60 Months (Total)	Engaged Period: 61 to 72 Months (Total)
Member Months	16,660	3,110	18,013	3,265	5,512	1,077	2,306	606	1,055	139	336	144	300
Aggregrate Expenditures													
Inpatient Services	\$8,342,969	\$1,288,206	\$7,315,341	\$1,110,509	\$1,883,822	\$323,798	\$740,283	\$170,633	\$301,195	\$38,466	\$88,062	\$37,126	\$75,817
Outpatient Services	\$3,212,675	\$492,397	\$2,523,791	\$361,188	\$674,863	\$105,218	\$243,852	\$55,539	\$97,886	\$12,525	\$28,720	\$12,087	\$24,684
Physician Services	\$4,171,018	\$644,764	\$3,950,457	\$571,413	\$1,057,158	\$167,363	\$382,353	\$87,806	\$154,927	\$19,820	\$45,494	\$19,145	\$39,193
Prescribed Drugs	\$4,101,268	\$638,037	\$3,733,548	\$537,339	\$1,003,154	\$156,788	\$361,414	\$82,374	\$145,572	\$18,615	\$42,714	\$17,974	\$36,792
Psychiatric Services	\$1,189,914	\$183,170	\$970,894	\$139,023	\$260,569	\$40,452	\$94,759	\$21,253	\$37,407	\$4,814	\$11,037	\$4,647	\$9,532
Dental Services	\$100,224	\$15,315	\$98,211	\$13,967	\$26,386	\$4,070	\$9,552	\$2,138	\$3,775	\$482	\$1,113	\$467	\$954
Lab and X-Ray	\$709,496	\$108,678	\$728,810	\$104,724	\$194,982	\$30,456	\$70,897	\$16,005	\$28,306	\$3,622	\$8,336	\$3,501	\$7,145
Medical Supplies and Orthotics	\$733,097	\$113,193	\$530,052	\$76,747	\$141,934	\$22,316	\$51,572	\$11,740	\$20,784	\$2,650	\$6,122	\$2,570	\$5,253
Home Health and Home Care	\$260,262	\$40,449	\$334,447	\$48,196	\$89,781	\$13,982	\$32,404	\$7,359	\$12,948	\$1,659	\$3,825	\$1,607	\$3,280
Nursing Facility	\$135,895.95	\$20,880.47	\$31,989	\$4,615	\$8,553	\$1,342	\$3,077	\$705	\$1,244	\$159	\$367	\$154	\$315
Targeted Case Management	\$83,568	\$13,665	\$129,956	\$19,869	\$33,360	\$5,774	\$13,089	\$3,036	\$5,357	\$685	\$1,580	\$663	\$1,353
Transportation	\$676,609	\$104,374	\$712,942	\$103,359	\$190,884	\$29,924	\$69,770	\$15,802	\$27,815	\$3,552	\$8,208	\$3,441	\$7,033
Other Practitioner	\$107,470	\$16,556	\$156,209	\$22,583	\$41,771	\$6,566	\$15,314	\$3,455	\$6,090	\$778	\$1,797	\$754	\$1,540
Other Institutional	\$525	\$81	\$188	\$27	\$51	\$8	\$18	\$4	\$7	\$1	\$2	\$1	\$2
Other	\$57,563	<u>\$8,915</u>	\$29,768	<u>\$4,217</u>	<u>\$8,027</u>	<u>\$1,222</u>	<u>\$2,876</u>	\$645	<u>\$1,133</u>	\$145		<u>\$141</u>	\$287
Total	\$23,882,553	\$3,688,682	\$21,246,601	\$3,117,774	\$5,615,294	\$909,278	\$2,091,231	\$478,495	\$844,445	\$107,973	\$247,712	\$104,277	\$213,180
PMPM Expenditures													
Inpatient Services	\$500.78	\$414.21	\$406.11	\$340.13	\$341.77		\$321.02	\$281.57	\$285.49	\$276.73	\$262.09	\$257.82	\$252.72
Outpatient Services	\$192.84	\$158.33	\$140.11	\$110.62	\$122.44	\$97.70	\$105.75	\$91.65	\$92.78	\$90.11	\$85.48	\$83.94	\$82.28
Physician Services	\$250.36	\$207.32	\$219.31	\$175.01	\$191.79		\$165.81	\$144.89	\$146.85	\$142.59	\$135.40	\$132.95	\$130.64
Prescribed Drugs	\$246.17	\$205.16	\$207.27	\$164.58	\$181.99		\$156.73	\$135.93	\$137.98	\$133.92	\$127.12	\$124.82	\$122.64
Psychiatric Services	\$71.42	\$58.90	\$53.90	\$42.58	\$47.27	\$37.56	\$41.09	\$35.07	\$35.46	\$34.63	\$32.85	\$32.27	\$31.77
Dental Services	\$6.02	\$4.92	\$5.45	\$4.28	\$4.79		\$4.14	\$3.53	\$3.58	\$3.47	\$3.31	\$3.25	\$3.18
Lab and X-Ray	\$42.59	\$34.94	\$40.46	\$32.07	\$35.37		\$30.74	\$26.41	\$26.83	\$26.06	\$24.81	\$24.31	\$23.82
Medical Supplies and Orthotics	\$44.00	\$36.40	\$29.43	\$23.51	\$25.75		\$22.36	\$19.37	\$19.70	\$19.07	\$18.22	\$17.85	\$17.51
Home Health and Home Care	\$15.62	\$13.01	\$18.57	\$14.76			\$14.05	\$12.14	\$12.27	\$11.93	\$11.38	\$11.16	\$10.93
Nursing Facility	\$8.16	\$6.71	\$1.78	\$1.41	\$1.55		\$1.33	\$1.16	\$1.18	\$1.15	\$1.09	\$1.07	\$1.05
Targeted Case Management	\$5.02	\$4.39	\$7.21	\$6.09			\$5.68	\$5.01	\$5.08	\$4.93	\$4.70	\$4.60	\$4.51
Transportation	\$40.61	\$33.56	\$39.58	\$31.66			\$30.26	\$26.08	\$26.36	\$25.56	\$24.43	\$23.89	\$23.44
Other Practitioner	\$6.45	\$5.32	\$8.67	\$6.92			\$6.64	\$5.70	\$5.77	\$5.60	\$5.35	\$5.23	\$5.13
Other Institutional	\$0.03	\$0.03	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01
Other	\$3.46	\$2.87	\$1.65	\$1.29	\$1.46		\$1.25	\$1.07	\$1.07	\$1.05	\$1.00	\$0.98	\$0.96
Total	\$1,433.53	\$1,186.07	\$1,179.51	\$954.91	\$1,018.74	\$844.27	\$906.87	\$789.60	\$800.42	\$776.78	\$737.24	\$724.14	\$710.60

	Forecasted (FC) Costs	Actual % of FC
First 12 Months	\$1,805.36	65.3%
Months 13-24	\$1,901.21	53.6%
Months 25-36	\$1,939.40	46.8%
Months 37-48	\$1,960.00	40.8%
Months 49-60	\$1,989.24	37.1%
Months 61-72	\$2,006.11	35.4%

							CCU Detail - A	sthma					
Category of Service	Pre-Engagement: 1-12 Months (Accumulated Total)	Pre- Engagement: 1-12 Months (Total)	Engaged Period: 3 to 12 Months (Accumulated Total)	Engaged Period: 3 to 12 Months (Total)	Engaged Period: 13 to 24 Months (Accumulated Total)	Engaged Period: 13 to 24 Months (Total)	Engaged Period: 25 to 36 Months (Accumulated Total)	Engaged Period: 25 to 36 Months (Total)	Engaged Period: 37 to 48 Months (Accumulated Total)	Engaged Period: 37 to 48 Months (Total)	Engaged Period: 49 to 60 Months (Accumulated Total)	Engaged Period: 49 to 60 Months (Total)	Engaged Period: 61 to 72 Months (Total)
Member Months	1,407	300	1,642	264	483	87	226	49	89	11	50	13	24
Aggregrate Expenditures													
Inpatient Services	\$923,184	\$198,787	\$558,297	\$86,013	\$159,937	\$28,214	\$71,814	\$15,371	\$27,723	\$3,325	\$14,947	\$3,802	\$6,953
Outpatient Services	\$653,938	\$140,144	\$397,014	\$60,935	\$113,752		\$50,788	\$10,898		\$2,358		\$2,697	\$4,931
Physician Services	\$587,937	\$126,150	\$485,647	\$74,508	\$139,375	\$24,551	\$62,753	\$13,316		\$2,884		\$3,301	\$6,051
Prescribed Drugs	\$309,911	\$66,509	\$292,218	\$44,916			\$37,885	\$8,008		\$1,737		\$1,987	\$3,642
Psychiatric Services	\$226,412	\$37,240	\$223,444	\$34,416	\$63,878	\$11,266	\$29,156	\$6,119	\$11,081	\$1,330	\$5,990	\$1,521	\$2,794
Dental Services	\$20,048	\$4,290	\$8,179	\$1,252	\$2,339	\$410	\$1,057	\$223	\$404	\$48	\$219	\$55	\$101
Lab and X-Ray	\$95,908	\$20,539	\$84,660	\$13,026	\$24,185	\$4,262	\$10,983	\$2,315	\$4,205	\$503	\$2,274	\$576	\$1,052
Medical Supplies and Orthotics	\$105,211	\$22,556	\$35,026	\$5,376	\$10,001	\$1,759	\$4,561	\$956	\$1,736	\$207	\$941	\$238	\$436
Home Health and Home Care	\$2,841	\$611	\$3,044	\$470	\$868	\$153	\$386	\$83	\$151	\$18	\$82	\$21	\$38
Nursing Facility	-	-	-	-		-	-		-		-	-	
Targeted Case Management	-	-	\$931	\$143	\$266	\$47	\$118	\$26	\$46	\$6	\$25	\$6	\$12
Transportation	\$127,912	\$27,448	\$61,885	\$9,538	\$17,618	\$3,106	\$7,943	\$1,696	\$3,055	\$366	\$1,662	\$420	\$768
Other Practitioner	\$10,996	\$2,351	\$31,258	\$4,800	\$8,913	\$1,570	\$4,068	\$854	\$1,546	\$185	\$838	\$212	\$388
Other Institutional	-	-	-	-		-	-		-		-	-	
Other	-	-	-	-		-	-		-		-	-	
Total	\$3,064,298	\$646,626	\$2,181,604	\$335,393	\$624,876	\$110,052	\$281,511	\$59,867	\$108,195	\$12,966	\$58,436	\$14,835	\$27,166
PMPM Expenditures							j						
Inpatient Services	\$656.14	\$662.62	\$340.01	\$325.81	\$331.13	\$324.30	\$317.76	\$313.70	\$311.49	\$302.26	\$298.93	\$292.49	\$289.73
Outpatient Services	\$464.77	\$467.15	\$241.79	\$230.81	\$235.51	\$229.54	\$224.72	\$222.40	\$221.05	\$214.38	\$212.46	\$207.42	\$205.46
Physician Services	\$417.87	\$420.50	\$295.77	\$282.23	\$288.56	\$282.19	\$277.67	\$271.76	\$270.72	\$262.20	\$260.12	\$253.92	\$252.14
Prescribed Drugs	\$220.26	\$221.70	\$177.96	\$170.14	\$173.39	\$169.47	\$167.63	\$163.44	\$162.69	\$157.86	\$156.57	\$152.82	\$151.73
Psychiatric Services	\$160.92	\$124.13	\$136.08	\$130.36	\$132.25	\$129.49	\$129.01	\$124.88		\$120.90	\$119.79	\$117.01	\$116.42
Dental Services	\$14.25	\$14.30	\$4.98	\$4.74	\$4.84	\$4.72	\$4.68	\$4.55	\$4.54	\$4.39	\$4.38	\$4.26	\$4.22
Lab and X-Ray	\$68.16	\$68.46	\$51.56	\$49.34	\$50.07	\$48.98	\$48.60	\$47.25	\$47.25	\$45.71	\$45.49	\$44.29	\$43.85
Medical Supplies and Orthotics	\$74.78	\$75.19	\$21.33	\$20.36		\$20.21	\$20.18	\$19.52	\$19.50	\$18.83	\$18.82	\$18.31	\$18.15
Home Health and Home Care	\$2.02	\$2.04	\$1.85	\$1.78	\$1.80	\$1.76	\$1.71	\$1.70	\$1.69	\$1.64	\$1.64	\$1.59	\$1.58
Nursing Facility	-	-	-	-	-	-	-		-	-	-	-	
Targeted Case Management	-	-	\$0.57	\$0.54	\$0.55		\$0.52	\$0.52		\$0.50		\$0.49	\$0.48
Transportation	\$90.91	\$91.49	\$37.69	\$36.13	\$36.48		\$35.15	\$34.61	\$34.33	\$33.26		\$32.29	\$32.02
Other Practitioner	\$7.82	\$7.84	\$19.04	\$18.18	\$18.45	\$18.05	\$18.00	\$17.43	\$17.37	\$16.77	\$16.77	\$16.30	\$16.15
Other Institutional		-	-	-	-	-	-	-	-	-	-	-	-
Other		-	-	-	-	-	-	-	-	-	-	-	-
Total	\$2,177.89	\$2,155.42	\$1,328.63	\$1,270.43	\$1,293.74	\$1,264.97	\$1,245.62	\$1,221.78	\$1,215.67	\$1,178.70	\$1,168.72	\$1,141.19	\$1,131.93

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

	Forecasted (FC) Costs	Actual % of FC
First 12 Months	\$1,893.65	70.2%
Months 13-24	\$1,939.44	66.7%
Months 25-36	\$1,988.03	62.7%
Months 37-48	\$2,011.59	60.4%
Months 49-60	\$2,028.57	57.6%
Months 61-72	\$2,046.61	55.3%

							CCU Detail -	CAD					
								-					
Category of Service	Pre-Engagement: 1-12 Months (Accumulated Total)	Pre- Engagement: 1-12 Months (Total)	Engaged Period: 3 to 12 Months (Accumulated Total)	Engaged Period: 3 to 12 Months (Total)	Engaged Period: 13 to 24 Months (Accumulated Total)	Engaged Period: 13 to 24 Months (Total)	Engaged Period: 25 to 36 Months (Accumulated Total)	Engaged Period: 25 to 36 Months (Total)	Engaged Period: 37 to 48 Months (Accumulated Total)	Engaged Period: 37 to 48 Months (Total)	Engaged Period: 49 to 60 Months (Accumulated Total)	Engaged Period: 49 to 60 Months (Total)	Engaged Period: 61 to 72 Months (Total)
Member Months	784	137	810	133	240	44	114	25	41	8	26	9	18
Aggregrate Expenditures													
Inpatient Services	\$1,178,237	\$212,895	\$1,395,001	\$224,701	\$395,235	\$69,883	\$179,783	\$38,850	\$62,460	\$11,719	\$38,519	\$13,149	\$25,235
Outpatient Services	\$483,495	\$86,908	\$278,217	\$44,625	\$78,850		\$35,794		\$12,423	\$2,330	\$7,673	\$2,614	\$5,017
Physician Services	\$465,977	\$83,902	\$536,862	\$86,116	\$152,482		\$69,140		\$24,011	\$4,497	\$14,825	\$5,050	\$9,716
Prescribed Drugs	\$232,225		\$435,939	\$70,089	\$123,709		\$55,965		\$19,482	\$3,656	\$12,047	\$4,104	\$7,894
Psychiatric Services	\$87,501		\$110,915	\$17,858	\$32,917	\$5,542	\$14,240		\$4,958	\$931	\$3,065	\$1,045	\$2,014
Dental Services	\$685	\$123	\$23,035	\$3,687	\$6,525	\$1,146	\$2,957	\$635	\$1,026	\$192	\$635	\$216	\$414
Lab and X-Ray	\$58,870	\$10,583	\$47,930	\$7,691	\$13,571	\$2,386	\$6,139	\$1,323	\$2,141	\$401	\$1,324	\$450	\$863
Medical Supplies and Orthotics	\$40,201	\$7,218	\$83,628	\$13,374	\$23,668	\$4,148	\$10,704	\$2,302	\$3,723	\$695	\$2,308	\$784	\$1,506
Home Health and Home Care	\$30,433	\$5,501	\$37,975	\$6,116	\$10,723	\$1,893	\$4,850	\$1,051	\$1,692	\$317	\$1,050	\$357	\$685
Nursing Facility		-	-	-		-	-	-	-	-	-	-	
Targeted Case Management	\$6,063	\$1,092	\$15,031	\$2,407	\$4,255	\$746	\$1,920	\$414	\$667	\$125	\$414	\$140	\$270
Transportation	\$73,845	\$13,303	\$101,834	\$16,314	\$28,793	\$5,038	\$13,034	\$2,806	\$4,506	\$844	\$2,803	\$951	\$1,826
Other Practitioner	\$31,478	\$5,649	\$11,643	\$1,859	\$3,298	\$576	\$1,490	\$320	\$516	\$96	\$320	\$109	\$209
Other Institutional	-	-		-		-	-	-	-	-	-	-	
Other		-	-	-		-	-	-	-	-	-	-	
Total	\$2,689,010	\$482,910	\$3,078,011	\$494,836	\$874,026	\$153,940	\$396,017	\$85,474	\$137,606	\$25,803	\$84,982	\$28,968	\$55,647
PMPM Expenditures													
Inpatient Services	\$1,502.85	\$1,553.98	\$1,722.22	\$1,689.48	\$1,646.81	\$1,588.25	\$1,577.04	\$1,554.00	\$1,523.42	\$1,464.85	\$1,481.49	\$1,461.00	\$1,401.92
Outpatient Services	\$616.70	\$634.37	\$343.48	\$335.53	\$328.54	\$315.14	\$313.98	\$308.85	\$302.99	\$291.24	\$295.10	\$290.45	\$278.70
Physician Services	\$594.36	\$612.42	\$662.79	\$647.49	\$635.34	\$611.44	\$606.49	\$595.61	\$585.63	\$562.18	\$570.19	\$561.14	\$539.78
Prescribed Drugs	\$296.21	\$305.43	\$538.20	\$526.98	\$515.46	\$495.76	\$490.92	\$483.61	\$475.16	\$456.98	\$463.35	\$455.96	\$438.55
Psychiatric Services	\$111.61	\$101.41	\$136.93	\$134.27	\$137.15	\$125.96	\$124.91	\$122.88	\$120.93	\$116.37	\$117.89	\$116.09	\$111.90
Dental Services	\$0.87	\$0.90	\$28.44	\$27.72	\$27.19	\$26.04	\$25.94	\$25.40	\$25.03	\$23.97	\$24.44	\$23.99	\$23.02
Lab and X-Ray	\$75.09	\$77.25	\$59.17	\$57.82	\$56.55	\$54.22	\$53.85	\$52.90	\$52.22	\$50.06	\$50.92	\$50.00	\$47.95
Medical Supplies and Orthotics	\$51.28	\$52.69	\$103.25	\$100.56	\$98.62	\$94.27	\$93.90	\$92.08	\$90.81	\$86.92	\$88.76	\$87.11	\$83.65
Home Health and Home Care	\$38.82	\$40.15	\$46.88	\$45.99	\$44.68	\$43.01	\$42.55	\$42.03	\$41.27	\$39.61	\$40.37	\$39.66	\$38.03
Nursing Facility	- · · ·	-	-	- 1	-	-	-	-	-	-	-	- 1	- 1
Targeted Case Management	\$7.73	\$7.97	\$18.56	\$18.10	\$17.73	\$16.96	\$16.84	\$16.56	\$16.27	\$15.61	\$15.93	\$15.61	\$14.98
Transportation	\$94.19	\$97.10	\$125.72	\$122.66	\$119.97	\$114.50	\$114.34		\$109.91	\$105.52	\$107.79	\$105.61	\$101.44
Other Practitioner	\$40.15	\$41.23	\$14.37	\$13.98	\$13.74	\$13.10	\$13.07	\$12.80	\$12.59	\$12.05	\$12.31	\$12.07	\$11.58
Other Institutional	-		-	-	-	-	-	-	-	-	-	-	-
Other	-		-	- 1	-	-	-	-	-	-	-	-	-
Total	\$3,429.86	\$3,524.89	\$3,800.01	\$3,720.57	\$3,641.77	\$3,498.64	\$3,473.83	\$3,418.97	\$3,356.24	\$3,225.37	\$3,268.55	\$3,218.68	\$3,091.51

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

	Forecasted (FC) Costs	Actual % of FC
First 12 Months	\$3,922.23	96.9%
Months 13-24	\$3,789.50	96.1%
Months 25-36	\$3,631.77	95.7%
Months 37-48	\$3,551.18	94.5%
Months 49-60	\$3,501.74	93.3%
Months 61-72	\$3,469.35	89.1%

							CCU Detail - C	OPD					
Category of Service	Pre-Engagement: 1-12 Months (Accumulated Total)	Pre- Engagement: 1-12 Months (Total)	Engaged Period: 3 to 12 Months (Accumulated Total)	Engaged Period: 3 to 12 Months (Total)	Engaged Period: 13 to 24 Months (Accumulated Total)	Engaged Period: 13 to 24 Months (Total)	Engaged Period: 25 to 36 Months (Accumulated Total)	Engaged Period: 25 to 36 Months (Total)	Engaged Period: 37 to 48 Months (Accumulated Total)	Engaged Period: 37 to 48 Months (Total)	Engaged Period: 49 to 60 Months (Accumulated Total)	Engaged Period: 49 to 60 Months (Total)	Engaged Period: 61 to 72 Months (Total)
Member Months	1,396	244	1,515	261	450	86	202	49	69	11	29	10	21
Aggregrate Expenditures													
Inpatient Services	\$1,310,132	\$235,839	\$1,186,359	\$196,273	\$336,373	\$63,212	\$148,279	\$35,467	\$49,387	\$7,787	\$20,511	\$7,021	\$14,425
Outpatient Services	\$382,915	\$68,575	\$282,762	\$46,587	\$80,274	\$14,990	\$35,261	\$8,424	\$11,741	\$1,850	\$4,883	\$1,668	\$3,427
Physician Services	\$619,584	\$111,133	\$547,640	\$90,242	\$155,730	\$29,195	\$68,292	\$16,308	\$22,746	\$3,585	\$9,471	\$3,235	\$6,663
Prescribed Drugs	\$331,516	\$59,511	\$359,305	\$59,333	\$102,045	\$19,123	\$44,724	\$10,697	\$14,949	\$2,354	\$6,217	\$2,123	\$4,373
Psychiatric Services	\$120,414	\$19,111	\$107,159	\$17,719	\$30,398	\$5,695	\$13,395	\$3,186	\$4,446	\$703	\$1,854	\$634	\$1,308
Dental Services	\$4,059		\$16,905	\$2,780	\$4,796	\$895	\$2,115	\$501	\$700	\$110	\$292	\$100	\$205
Lab and X-Ray	\$147,073	\$26,342	\$102,434	\$16,877	\$29,057	\$5,421	\$12,796	\$3,033	\$4,239	\$669	\$1,771	\$604	\$1,240
Medical Supplies and Orthotics	\$124,014	\$22,183	\$101,420	\$16,667	\$28,754	\$5,353	\$12,675	\$2,998	\$4,205	\$659	\$1,753	\$597	\$1,228
Home Health and Home Care	\$93,837	\$16,896	\$100,423	\$16,607	\$28,419	\$5,322	\$12,535	\$2,982	\$4,155	\$655	\$1,738	\$592	\$1,216
Nursing Facility	\$40,942.50	\$7,351.99	\$7,763	\$1,280	\$2,200	\$411	\$969	\$230	\$321	\$51	\$962	\$46	\$94
Targeted Case Management	\$4,831	\$867	\$5,435	\$894	\$1,540	\$287	\$679	\$161	\$224	\$35	\$94	\$32	\$66
Transportation	\$100,387	\$18,017	\$98,468	\$16,197	\$27,947	\$5,179	\$12,306	\$2,912	\$4,044	\$638	\$1,696	\$577	\$1,186
Other Practitioner	\$6,902	\$1,234	\$5,168	\$847	\$1,466	\$272	\$646	\$152	\$213	\$33	\$89	\$30	\$62
Other Institutional	\$565.00	\$100.95		-	-	-	-		-		-	-	
Other	\$46,955	\$8,426	\$4,873	\$802	\$1,381	\$257	\$610	\$144	\$201	\$32	\$84	\$29	\$59
Total	\$3,334,126	\$596,313	\$2,926,113	\$483,106	\$830,379	\$155,611	\$365,282	\$87,195	\$121,571	\$19,162		\$17,287	\$35,551
PMPM Expenditures													
Inpatient Services	\$938.49	\$966.56	\$783.08	\$752.00	\$747.50	\$735.02	\$734.06	\$723.81	\$715.76	\$707.94	\$707.26	\$702.06	\$686.88
Outpatient Services	\$274.29	\$281.05	\$186.64	\$178.49	\$178.39	\$174.30	\$174.56	\$171.93	\$170.16	\$168.22	\$168.37	\$166.81	\$163.20
Physician Services	\$443.83	\$455.46	\$361.48	\$345.75	\$346.07	\$339.47	\$338.08	\$332.81	\$329.65	\$325.95	\$326.57	\$323.50	\$317.28
Prescribed Drugs	\$237.48	\$243.90	\$237.16	\$227.33	\$226.77	\$222.36	\$221.41	\$218.30	\$216.65	\$214.04	\$214.38	\$212.35	\$208.24
Psychiatric Services	\$86.26	\$78.32	\$70.73	\$67.89	\$67.55	\$66.22	\$66.31	\$65.01	\$64.43	\$63.89	\$63.93	\$63.37	\$62.28
Dental Services	\$2.91	\$2.98	\$11.16	\$10.65	\$10.66	\$10.41	\$10.47	\$10.22	\$10.14	\$10.00	\$10.07	\$9.95	\$9.74
Lab and X-Ray	\$105.35	\$107.96	\$67.61	\$64.66	\$64.57	\$63.04	\$63.35	\$61.91	\$61.44	\$60.79	\$61.08	\$60.36	\$59.02
Medical Supplies and Orthotics	\$88.84	\$90.92	\$66.94	\$63.86	\$63.90	\$62.24	\$62.75	\$61.19	\$60.94	\$59.93	\$60.45	\$59.72	\$58.48
Home Health and Home Care	\$67.22	\$69.25	\$66.29	\$63.63	\$63.15	\$61.88	\$62.05	\$60.86	\$60.21	\$59.51	\$59.92	\$59.24	\$57.93
Nursing Facility	\$29.33	\$30.13	\$5.12	\$4.91	\$4.89	\$4.78	\$4.80	\$4.70	\$4.65	\$4.60	\$33.18	\$4.58	\$4.48
Targeted Case Management	\$3.46	\$3.55	\$3.59	\$3.42	\$3.42	\$3.34	\$3.36	\$3.28	\$3.25	\$3.21	\$3.23	\$3.19	\$3.12
Transportation	\$71.91		\$65.00	\$62.06	\$62.10	\$60.23	\$60.92	\$59.43	\$58.61	\$57.97	\$58.49	\$57.69	\$56.49
Other Practitioner	\$4.94	\$5.06	\$3.41	\$3.25	\$3.26	\$3.16	\$3.20	\$3.11	\$3.08	\$3.04	\$3.07	\$3.02	\$2.96
Other Institutional	\$0.40	\$0.41	-	-	-	-	-	-	-			-	-
Other	\$33.64	\$34.53	\$3.22	\$3.07	\$3.07	\$2.99	\$3.02	\$2.95	\$2.91	\$2.88	\$2.90	\$2.86	\$2.80
Total	\$2,388.34	\$2,443.91	\$1,931.43	\$1,850.98	\$1,845.29	\$1,809.43	\$1,808.33	\$1,779.49	\$1,761.90	\$1,741.96	\$1,772.90	\$1,728.69	\$1,692.90

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

	Forecasted (FC) Costs	Actual % of FC
First 12 Months	\$2,435.21	79.3%
Months 13-24	\$2,485.30	74.2%
Months 25-36	\$2,505.14	72.2%
Months 37-48	\$2,526.69	69.7%
Months 49-60	\$2,563.36	69.2%
Months 61-72	\$2,577.88	65.7%

							CCU Detail - Di	abetes					
Category of Service	Pre-Engagement: 1-12 Months (Accumulated Total)	Pre- Engagement: 1-12 Months (Total)	Engaged Period: 3 to 12 Months (Accumulated Total)	Engaged Period: 3 to 12 Months (Total)	Engaged Period: 13 to 24 Months (Accumulated Total)	Engaged Period: 13 to 24 Months (Total)	Engaged Period: 25 to 36 Months (Accumulated Total)	Engaged Period: 25 to 36 Months (Total)	Engaged Period: 37 to 48 Months (Accumulated Total)	Engaged Period: 37 to 48 Months (Total)	Engaged Period: 49 to 60 Months (Accumulated Total)	Engaged Period: 49 to 60 Months (Total)	Engaged Period: 61 to 72 Months (Total)
Member Months	3,669	624	3,546	598	1,062	198	481	111	168	25	63	29	55
Aggregrate Expenditures													
Inpatient Services	\$2,543,596	\$428,858	\$2,086,905	\$337,565	\$603,773	\$108,734	\$265,873	\$60,449	\$92,929	\$13,525	\$33,796	\$15,415	\$28,908
Outpatient Services	\$988,919	\$165,905	\$979,886	\$157,913	\$283,558	\$50,819	\$124,299	\$28,299	\$43,661	\$6,334	\$15,851	\$7,218	\$13,537
Physician Services	\$1,274,333	\$214,092	\$1,080,925	\$174,154	\$313,339	\$56,351	\$138,423	\$31,188	\$48,123	\$6,988	\$17,504	\$7,970	\$14,983
Prescribed Drugs	\$1,164,383	\$195,811	\$1,293,396	\$208,920	\$374,447	\$67,344	\$166,416	\$37,326	\$57,692	\$8,372	\$20,965	\$9,545	\$17,943
Psychiatric Services	\$261,026	\$33,247	\$188,277	\$30,446	\$54,396	\$9,787	\$24,331	\$5,424	\$8,363	\$1,219	\$3,051	\$1,390	\$2,618
Dental Services	\$33,521	\$5,620	\$40,167	\$6,461	\$11,590	\$2,080	\$5,146	\$1,153	\$1,781	\$258	\$650	\$295	\$554
Lab and X-Ray	\$151,573	\$25,431	\$221,594	\$35,733	\$63,992	\$11,480	\$28,421	\$6,365	\$9,826	\$1,430	\$3,590	\$1,631	\$3,058
Medical Supplies and Orthotics	\$145,854	\$24,436	\$108,452	\$17,451	\$31,330	\$5,606	\$13,975	\$3,111	\$4,820	\$697	\$1,757	\$798	\$1,498
Home Health and Home Care	\$96,583	\$16,296	\$94,943	\$15,357	\$27,346	\$4,922	\$11,895	\$2,733	\$4,206	\$611	\$1,538	\$699	\$1,311
Nursing Facility	\$84,846.66	\$14,270.16	\$27,530	\$4,440	\$7,942	\$1,426	\$3,450	\$791	\$1,218	\$177	\$1,994	\$203	\$380
Targeted Case Management	\$29,011	\$4,876	\$28,391	\$4,585	\$8,179	\$1,472	\$3,544	\$817	\$1,258	\$183	\$460	\$209	\$392
Transportation	\$181,921	\$30,585	\$313,719	\$50,685	\$90,265		\$39,826	\$9,031	\$13,855	\$2,015	\$5,080	\$2,304	\$4,326
Other Practitioner	\$23,452	\$3,928	\$27,199	\$4,377	\$7,843	\$1,406	\$3,499	\$781	\$1,204	\$174	\$440	\$200	\$374
Other Institutional	-	-		-	-	-	-	-	-	-	-	-	-
Other	\$46,374	<u>\$7,844</u>	\$4,880	<u>\$809</u>	<u>\$1,383</u>	\$259	\$610	\$144	<u>\$201</u>	\$32	<u>\$92</u>	<u>\$37</u>	\$69
Total	\$7,025,393	\$1,171,198	\$6,496,265	\$1,048,897	\$1,879,383	\$337,897	\$829,707	\$187,610	\$289,138	\$42,017	\$106,768	\$47,915	\$89,950
PMPM Expenditures													
Inpatient Services	\$693.27	\$687.27	\$588.52	\$564.49	\$568.52		\$552.75	\$544.58	\$553.15	\$541.02	\$536.44	\$531.54	\$525.59
Outpatient Services	\$269.53	\$265.87	\$276.34	\$264.07	\$267.00		\$258.42	\$254.94	\$259.89	\$253.37	\$251.61	\$248.91	\$246.12
Physician Services	\$347.32	\$343.10	\$304.83	\$291.23	\$295.05		\$287.78	\$280.98	\$286.45	\$279.51	\$277.84	\$274.83	\$272.42
Prescribed Drugs	\$317.36		\$364.75	\$349.36	\$352.59		\$345.98	\$336.27	\$343.40	\$334.88		\$329.15	\$326.23
Psychiatric Services	\$71.14	\$53.28	\$53.10	\$50.91	\$51.22		\$50.58	\$48.87	\$49.78	\$48.78	\$48.43	\$47.93	\$47.61
Dental Services	\$9.14	\$9.01	\$11.33	\$10.80	\$10.91	\$10.50	\$10.70	\$10.39	\$10.60	\$10.33	\$10.32	\$10.18	\$10.07
Lab and X-Ray	\$41.31	\$40.76	\$62.49	\$59.75	\$60.26		\$59.09	\$57.34	\$58.49	\$57.19		\$56.26	\$55.60
Medical Supplies and Orthotics	\$39.75	\$39.16	\$30.58	\$29.18	\$29.50		\$29.05	\$28.03	\$28.69	\$27.88	\$27.89	\$27.53	\$27.24
Home Health and Home Care	\$26.32	\$26.11	\$26.77	\$25.68	\$25.75		\$24.73	\$24.62	\$25.04	\$24.45		\$24.12	\$23.83
Nursing Facility	\$23.13	\$22.87	\$7.76	\$7.43	\$7.48		\$7.17	\$7.13	\$7.25	\$7.09	\$31.65	\$6.99	\$6.91
Targeted Case Management	\$7.91	\$7.81	\$8.01	\$7.67	\$7.70		\$7.37	\$7.36		\$7.31	\$7.30	\$7.20	\$7.12
Transportation	\$49.58	\$49.01	\$88.47	\$84.76			\$82.80	\$81.36		\$80.60		\$79.47	\$78.65
Other Practitioner	\$6.39	\$6.29	\$7.67	\$7.32	\$7.38	\$7.10	\$7.27	\$7.03	\$7.17	\$6.98	\$6.98	\$6.88	\$6.81
Other Institutional	· · .	-	÷				-	-	-	-	-	-	- ,
Other	\$12.64	\$12.57	\$1.38	\$1.35	\$1.30		\$1.27	\$1.30		\$1.29		\$1.27	\$1.26
Total	\$1,914.80	\$1,876.92	\$1,832.00	\$1,754.01	\$1,769.66	\$1,706.55	\$1,724.96	\$1,690.18	\$1,721.06	\$1,680.67	\$1,694.73	\$1,652.26	\$1,635.46

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

	Forecasted (FC) Costs	Actual % of FC
First 12 Months	\$1,909.37	95.9%
Months 13-24	\$1,942.08	91.1%
Months 25-36	\$1,990.00	86.7%
Months 37-48	\$2,003.85	85.9%
Months 49-60	\$2,033.46	83.3%
Months 61-72	\$2,053.94	79.6%

		CCU Detail - Heart Failure											
Category of Service	Pre-Engagement: 1-12 Months (Accumulated Total)	Pre- Engagement: 1-12 Months (Total)	Engaged Period: 3 to 12 Months (Accumulated Total)	Engaged Period: 3 to 12 Months (Total)	Engaged Period: 13 to 24 Months (Accumulated Total)	Engaged Period: 13 to 24 Months (Total)	Engaged Period: 25 to 36 Months (Accumulated Total)	Engaged Period: 25 to 36 Months (Total)	Engaged Period: 37 to 48 Months (Accumulated Total)	Engaged Period: 37 to 48 Months (Total)	Engaged Period: 49 to 60 Months (Accumulated Total)	Engaged Period: 49 to 60 Months (Total)	Engaged Period: 61 to 72 Months (Total)
Member Months	164	24	61	9	39	9	23	8	18	9	10	0	10
Aggregrate Expenditures	104		01		55		2.5	0	10		10	0	10
Inpatient Services	\$37,377	\$5.346	\$10,740	\$1,541	\$5,275	\$1,092	\$3,058	\$1,012	\$1,916	\$1,025	\$867	\$63	\$822
Outpatient Services	\$114,403		\$5,857	\$832	\$2,871		\$1,662			\$554		\$34	\$444
Physician Services	\$60,197	\$8,552	\$19,925	\$2,808	\$9,761		\$5,649	\$1,843	\$3,502	\$1.870		\$114	\$1,504
Prescribed Drugs	\$286,123		\$64,278	\$9,250	\$31,601		\$18,288	\$6,058		\$6,152		\$375	\$4,944
Psychiatric Services	\$6,034	\$860	\$2,434	\$354	\$1,193		\$692		\$439	\$235		\$14	\$190
Dental Services	50,034	2000	- -	-	-	, J230	5052		-	-	5200		- J150
Lab and X-Ray	\$1,823	\$259	\$2,623	\$378	\$1,282	\$267	\$744	\$247	\$469	\$251	\$214	\$15	\$202
Medical Supplies and Orthotics	\$47,653	\$6,745	\$25,880	\$3,709	\$12,681		\$7,332	\$2,424	\$4,612	\$2.459		\$151	\$1,982
Home Health and Home Care	547,055		-		- -	92,020	-	J2,424	, ,012) -	- -	J2,104	, JIJI	- J1,J02
Nursing Facility			-	-	-			-	-	-		-	-
Targeted Case Management													
Transportation			-	-	-	-		-	-	-		-	-
Other Practitioner													
Other Institutional			-	-	-	-		-	-	-		-	-
Other													
Total	\$571,560	\$96,930	\$129,623	\$16,758	\$56,687	\$5,400	\$28,057	\$2,994	\$11,623	\$671	\$11,428	\$766	\$1,439
PMPM Expenditures	\$371,300	\$50,550	\$125,025	\$10,756	\$30,087	\$3,400	\$20,057	<i>\$2,33</i> 4	\$11,025	3071	\$11,420	\$700	\$1,435
Inpatient Services	\$227.91	\$222.75	\$176.07	\$171.27	\$135.26	\$121.35	\$132.96	\$126.49	\$106.47	\$113.90	\$86.67	#DIV/0!	\$82.16
Outpatient Services	\$697.58		\$96.02	\$92.42	\$73.61		\$72.24	\$68.31	\$57.51	\$61.53		#DIV/0!	\$44.38
Physician Services	\$367.05		\$326.64	\$92.42	\$250.28		\$72.24 \$245.60	\$230.43	\$194.54	\$207.77		#DIV/01 #DIV/01	\$44.38
			\$326.64 \$1,053.74				\$795.15			\$683.58			\$150.36
Prescribed Drugs	\$1,744.65 \$36.79		\$1,053.74 \$39.89	\$1,027.73 \$39.35	\$810.27 \$30.58							#DIV/0!	\$494.44 \$18.96
Psychiatric Services Dental Services	\$36.79	\$35.82	\$39.89	\$39.35	\$30.58	\$27.8Z	\$30.10	\$28.91	\$24.40	\$26.16	\$19.96	#DIV/0!	\$18.96
Lab and X-Ray		- \$10.78	- \$42.99	-	-	-	-	- \$30.88	-	- \$27.92	- \$21.41		-
Lab and X-Ray Medical Supplies and Orthotics	\$11.12 \$290.57	\$10.78	\$42.99 \$424.26	\$42.03 \$412.06	\$32.88 \$325.15		\$32.33 \$318.79		\$26.07 \$256.21	\$27.92 \$273.18		#DIV/0! #DIV/0!	\$20.15 \$198.17
Home Health and Home Care	\$290.57	\$281.03	\$424.2b	\$412.0b	\$325.15	\$291.15	Ş318./9	\$302.97	\$256.21	\$2/3.18	\$210.42	#DIV/U!	\$198.17
Nursing Facility		-		-		-	-	-	-		-	-	
Targeted Case Management		-		- 1	-	-	-	-	-	-		-	-
Transportation		-		-	-	-	-	-	-	-			
Other Practitioner		-		-		-	-	-	-		-	-	-
		-				- 1	-	-	-		-	-	-
Other Institutional		- 1		-	-	-	-	-	-	-	-	-	-
Other		-	-	-	-	-	-	-	-	-	-	-	-
Total	\$3,375.67	\$3,290.84	\$2,159.62	\$2,096.84	\$1,658.03	\$1,486.19	\$1,627.18	\$1,545.27	\$1,305.46	\$1,394.04	\$1,066.24	#DIV/0!	\$1,008.63

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

	Forecasted (FC) Costs	Actual % of FC
First 12 Months	\$3,620.40	59.7%
Months 13-24	\$3,660.22	45.3%
Months 25-36	\$3,699.45	44.0%
Months 37-48	\$3,718.34	35.1%
Months 49-60	\$3,736.63	28.5%
Months 61-72	\$3,759.75	26.8%

	CCU Detail - Hypertension												
Category of Service	Pre-Engagement: 1-12 Months (Accumulated Total)	Pre- Engagement: 1-12 Months (Total)	Engaged Period: 3 to 12 Months (Accumulated Total)	Engaged Period: 3 to 12 Months (Total)	Engaged Period: 13 to 24 Months (Accumulated Total)	Engaged Period: 13 to 24 Months (Total)	Engaged Period: 25 to 36 Months (Accumulated Total)	Engaged Period: 25 to 36 Months (Total)	Engaged Period: 37 to 48 Months (Accumulated Total)	Engaged Period: 37 to 48 Months (Total)	Engaged Period: 49 to 60 Months (Accumulated Total)	Engaged Period: 49 to 60 Months (Total)	Engaged Period: 61 to 72 Months (Total)
Member Months	3,336	551	3,551	584	1,077	193	493	108	156	25	52	22	53
Aggregrate Expenditures			·										
Inpatient Services	\$2,362,543	\$388,856	\$1,180,254	\$188,248	\$335,901	\$58,067	\$148,363	\$32,124	\$45,402	\$7,236	\$14,752	\$6,236	\$14,959
Outpatient Services	\$637,660	\$104,468	\$636,632	\$101,323	\$181,141	\$31,226	\$79,793	\$17,303	\$24,472	\$3,899	\$7,962	\$3,360	\$8,060
Physician Services	\$1,100,659	\$180,689	\$1,249,223	\$198,646	\$355,961	\$61,552	\$156,671	\$33,901	\$48,001	\$7,646	\$15,629	\$6,594	\$15,858
Prescribed Drugs	\$1,216,045	\$199,901	\$973,035	\$155,159	\$277,098	\$47,895	\$121,850	\$26,416	\$37,460	\$5,965	\$12,189	\$5,142	\$12,365
Psychiatric Services	\$208,765	\$30,115	\$367,530	\$58,541	\$104,579	\$18,020	\$45,911	\$9,939	\$14,045	\$2,249	\$4,593	\$1,939	\$4,672
Dental Services	\$33,060	\$5,407	\$6,250	\$989	\$1,799	\$305	\$788	\$168	\$238	\$38	\$78	\$33	\$79
Lab and X-Ray	\$259,494	\$42,389	\$310,710	\$49,252	\$88,396	\$15,153	\$38,906	\$8,360	\$11,865	\$1,891	\$3,874	\$1,631	\$3,911
Medical Supplies and Orthotics	\$103,588	\$16,921	\$77,139	\$12,222	\$21,939	\$3,760	\$9,655	\$2,076	\$2,949	\$468	\$963	\$406	\$974
Home Health and Home Care	\$46,114	\$7,586	\$120,013	\$19,108	\$34,067	\$5,865	\$15,032	\$3,240	\$4,576	\$730	\$1,499	\$631	\$1,513
Nursing Facility	\$19,363.96	\$3,174.43		-		-	-		-	-	-	-	
Targeted Case Management	\$7,497	\$1,226	\$48,031	\$7,627	\$13,630	\$2,345	\$6,029	\$1,295	\$1,833	\$292	\$599	\$252	\$605
Transportation	\$203,395	\$33,274	\$162,312	\$25,746	\$46,035	\$7,886	\$20,273	\$4,371	\$6,174	\$982	\$2,020	\$849	\$2,039
Other Practitioner	\$25,085	\$4,100	\$59,265	\$9,399	\$16,845	\$2,891	\$7,424	\$1,597	\$2,259	\$359	\$739	\$311	\$746
Other Institutional	- 1	-	\$202.22	\$32.03	\$57.34	\$9.83	\$25.14	\$5.44	\$7.69	\$1.22	\$2.52	\$1.06	\$2.54
Other	\$4,166	\$683	\$668	\$106	\$190	\$33	\$83	<u>\$18</u>	\$25	\$4	<u>\$8</u>	\$4	<u>\$8</u>
Total	\$6,227,437	\$1,018,791	\$5,191,265	\$826,399	\$1,477,640	\$255,006	\$650,803	\$140,814	\$199,307	\$31,760	\$64,909	\$27,388	\$65,792
PMPM Expenditures							j						
Inpatient Services	\$708.20	\$705.73	\$332.37	\$322.34	\$311.89	\$300.87	\$300.94	\$297.44	\$291.04	\$289.44	\$283.70	\$283.44	\$282.24
Outpatient Services	\$191.15	\$189.60	\$179.28	\$173.50	\$168.19	\$161.79	\$161.85	\$160.21	\$156.87	\$155.96	\$153.11	\$152.72	\$152.07
Physician Services	\$329.93	\$327.93	\$351.79	\$340.15	\$330.51	\$318.92	\$317.79	\$313.90	\$307.70	\$305.85	\$300.56	\$299.75	\$299.22
Prescribed Drugs	\$364.52	\$362.80	\$274.02	\$265.68	\$257.29	\$248.16	\$247.16	\$244.60	\$240.13	\$238.60	\$234.40	\$233.75	\$233.31
Psychiatric Services	\$62.58	\$54.66	\$103.50	\$100.24	\$97.10	\$93.37	\$93.12	\$92.03	\$90.03	\$89.97	\$88.32	\$88.12	\$88.15
Dental Services	\$9.91	\$9.81	\$1.76	\$1.69	\$1.67	\$1.58	\$1.60	\$1.56	\$1.53	\$1.52	\$1.50	\$1.49	\$1.48
Lab and X-Ray	\$77.79	\$76.93	\$87.50	\$84.34	\$82.08	\$78.51	\$78.92	\$77.41	\$76.06	\$75.62	\$74.50	\$74.15	\$73.80
Medical Supplies and Orthotics	\$31.05	\$30.71	\$21.72	\$20.93	\$20.37	\$19.48	\$19.58	\$19.23	\$18.91	\$18.73	\$18.53	\$18.43	\$18.37
Home Health and Home Care	\$13.82	\$13.77	\$33.80	\$32.72	\$31.63	\$30.39	\$30.49	\$30.00	\$29.33	\$29.19	\$28.82	\$28.69	\$28.56
Nursing Facility	\$5.80	\$5.76		-	-	-	-	-	-	-	-	-	
Targeted Case Management	\$2.25	\$2.23	\$13.53	\$13.06	\$12.66			\$11.99		\$11.67	\$11.53	\$11.45	\$11.41
Transportation	\$60.97	\$60.39	\$45.71	\$44.09	\$42.74			\$40.48	\$39.58	\$39.28		\$38.60	\$38.47
Other Practitioner	\$7.52	\$7.44	\$16.69	\$16.09	\$15.64		\$15.06	\$14.79		\$14.37	\$14.22	\$14.13	\$14.08
Other Institutional	-	-	\$0.06	\$0.05	\$0.05		\$0.05	\$0.05		\$0.05	\$0.05	\$0.05	\$0.05
Other	\$1.25	\$1.24	\$0.19	\$0.18	\$0.18	\$0.17	\$0.17	\$0.17	\$0.16	\$0.16	\$0.16	\$0.16	\$0.16
Total	\$1,866.74	\$1,848.99	\$1,461.92	\$1,415.07	\$1,372.00	\$1,321.28	\$1,320.09	\$1,303.84	\$1,277.61	\$1,270.41	\$1,248.25	\$1,244.93	\$1,241.35

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

	Forecasted (FC) Costs	Actual % of FC
First 12 Months	\$2,020.20	72.4%
Months 13-24	\$2,096.55	65.4%
Months 25-36	\$2,118.69	62.3%
Months 37-48	\$2,155.30	59.3%
Months 49-60	\$2,170.81	57.5%
Months 61-72	\$2,198.29	56.5%

	CCU Detail - Hepatitis C												
Category of Service	Pre-Engagement: 1-12 Months (Accumulated Total)	Pre- Engagement: 1-12 Months (Total)	Engaged Period: 3 to 12 Months (Accumulated Total)	Engaged Period: 3 to 12 Months (Total)	Engaged Period: 13 to 24 Months (Accumulated Total)	Engaged Period: 13 to 24 Months (Total)	Engaged Period: 25 to 36 Months (Accumulated Total)	Engaged Period: 25 to 36 Months (Total)	Engaged Period: 37 to 48 Months (Accumulated Total)	Engaged Period: 37 to 48 Months (Total)	Engaged Period: 49 to 60 Months (Accumulated Total)	Engaged Period: 49 to 60 Months (Total)	Engaged Period: 61 to 72 Months (Total)
Member Months	1,420	196	1,215	160	388	53	176	30	66	7	35	8	8
Aggregrate Expenditures													
Inpatient Services	\$988,183	\$138,272	\$720,702	\$88,740	\$211,562	\$28,218	\$90,704	\$15,192	\$33,360	\$3,500	\$17,371	\$3,982	\$3,942
Outpatient Services	\$359,437	\$49,689	\$301,121	\$39,404	\$94,145	\$12,518	\$40,245	\$6,751	\$14,837	\$1,556	\$7,739	\$1,770	\$1,752
Physician Services	\$454,128	\$63,168	\$371,713	\$48,225	\$115,741	\$15,404	\$49,334	\$8,256	\$18,168	\$1,905	\$9,484	\$2,169	\$2,152
Prescribed Drugs	\$596,791	\$83,119	\$493,598	\$63,670	\$152,214	\$20,261	\$64,852	\$10,875	\$23,964	\$2,512	\$12,502	\$2,859	\$2,836
Psychiatric Services	\$80,540	\$10,934	\$66,481	\$8,599	\$20,413	\$2,729	\$8,747	\$1,465	\$3,217	\$339	\$1,686	\$386	\$384
Dental Services	\$15,737	\$2,174	\$12,452	\$1,597	\$3,836	\$508	\$1,650	\$272	\$600	\$63	\$315	\$72	\$71
Lab and X-Ray	\$104,914	\$14,394	\$94,538	\$12,254	\$29,446	\$3,887	\$12,560	\$2,087	\$4,603	\$483	\$2,411	\$550	\$544
Medical Supplies and Orthotics	\$43,973	\$6,194	\$38,371	\$4,985	\$11,923	\$1,581	\$5,109	\$850	\$1,875	\$196	\$983	\$224	\$222
Home Health and Home Care	\$31,362	\$4,382	\$26,161	\$3,416	\$8,138	\$1,081	\$3,485	\$581	\$1,275	\$134	\$670	\$153	\$151
Nursing Facility	-	-	-	-	-	-	-	-	-			-	
Targeted Case Management	\$9,223	\$1,266	\$7,574	\$972	\$2,325	\$308	\$997	\$166	\$364	\$38	\$191	\$44	\$43
Transportation	\$83,155	\$11,547	\$68,597	\$8,831	\$21,155	\$2,788	\$9,021	\$1,504	\$3,301	\$346	\$1,734	\$395	\$391
Other Practitioner	\$9,886	\$1,368	\$8,238	\$1,061	\$2,550	\$337	\$1,088	\$181	\$398	\$42	\$209	\$48	\$47
Other Institutional	-	-	-	-	-	-	-	-	-	-		-	-
Other	-	-	-	-		-	-	-	-	-	-	-	
Total	\$2,777,329	\$386,507	\$2,209,546	\$281,755	\$673,447	\$89,618	\$287,793	\$48,179	\$105,963	\$11,113	\$55,294	\$12,649	\$12,535
PMPM Expenditures													
Inpatient Services	\$695.90	\$705.47	\$593.17	\$554.62	\$545.26	\$532.41	\$515.36	\$506.39	\$505.46	\$500.04	\$496.31	\$497.75	\$492.71
Outpatient Services	\$253.12	\$253.51	\$247.84	\$246.27	\$242.64	\$236.19	\$228.66	\$225.02	\$224.81	\$222.29	\$221.11	\$221.25	\$219.00
Physician Services	\$319.81	\$322.29	\$305.94	\$301.40	\$298.30	\$290.64	\$280.31	\$275.21	\$275.27	\$272.12	\$270.96	\$271.09	\$269.00
Prescribed Drugs	\$420.28	\$424.08	\$406.25	\$397.94	\$392.30	\$382.28	\$368.48	\$362.49	\$363.08	\$358.83	\$357.19	\$357.33	\$354.54
Psychiatric Services	\$56.72	\$55.78	\$54.72	\$53.75	\$52.61	\$51.49	\$49.70	\$48.82	\$48.74	\$48.44	\$48.17	\$48.22	\$47.95
Dental Services	\$11.08	\$11.09	\$10.25	\$9.98	\$9.89	\$9.58	\$9.38	\$9.08	\$9.09	\$8.98	\$8.99	\$8.97	\$8.88
Lab and X-Ray	\$73.88	\$73.44	\$77.81	\$76.59	\$75.89	\$73.33	\$71.36	\$69.55	\$69.74	\$68.96	\$68.88	\$68.73	\$67.99
Medical Supplies and Orthotics	\$30.97	\$31.60	\$31.58	\$31.16	\$30.73	\$29.83	\$29.03	\$28.32	\$28.42	\$28.00	\$28.09	\$28.01	\$27.75
Home Health and Home Care	\$22.09	\$22.36	\$21.53	\$21.35	\$20.97	\$20.39	\$19.80	\$19.37	\$19.32	\$19.12	\$19.14	\$19.11	\$18.90
Nursing Facility	-	-	-	-	-	-	-	-	-	-	-	-	-
Targeted Case Management	\$6.50	\$6.46	\$6.23	\$6.08	\$5.99	\$5.81	\$5.67	\$5.52	\$5.52	\$5.45	\$5.46	\$5.44	\$5.38
Transportation	\$58.56	\$58.92	\$56.46	\$55.19	\$54.52	\$52.61	\$51.26	\$50.14	\$50.02	\$49.37	\$49.55	\$49.32	\$48.87
Other Practitioner	\$6.96	\$6.98	\$6.78	\$6.63	\$6.57	\$6.35	\$6.18	\$6.03	\$6.03	\$5.95	\$5.97	\$5.94	\$5.89
Other Institutional	-	-	-	-		-	-	-	-	-	-	-	-
Other	-	-	-	-		-	-	-	-	-	-	-	-
Total	\$1,955.87	\$1,971.97	\$1,818.56	\$1,760.97	\$1,735.69	\$1,690.90	\$1,635.19	\$1,605.95	\$1,605.50	\$1,587.55	\$1,579.82	\$1,581.15	\$1,566.86

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

	Forecasted (FC) Costs	Actual % of FC
First 12 Months	\$2,010.15	90.5%
Months 13-24	\$2,063.75	84.1%
Months 25-36	\$2,115.72	77.3%
Months 37-48	\$2,156.64	74.4%
Months 49-60	\$2,179.30	72.5%
Months 61-72	\$2,200.19	71.2%