Calendar Year 2023

Independent Evaluation

SoonerCare Chronic Care Management Program

March 2025

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Prepared for:

State of Oklahoma
Oklahoma Health Care Authority

THE PACIFIC HEALTH POLICY GROUP

OKLAHOMA
Health Care Authority

READER NOTES

The Pacific Health Policy Group (PHPG) has been retained to conduct a multi-year independent evaluation of the third generation SoonerCare Health Management Program (HMP) and the OHCA-administered SoonerCare Chronic Care Management Program (CCM).

This report contains evaluation findings for the SoonerCare CCM through calendar year 2023; SoonerCare HMP evaluation findings have been issued in a companion report.

Related Evaluation

PHPG also serves as the independent evaluator of the SoonerCare Choice Section 1115 Demonstration. The Section 1115 evaluation is performed in accordance with a Centers for Medicare and Medicaid Services (CMS)-approved design. PHPG has adopted the Section 1115 evaluation methodology, where applicable, for the SoonerCare HMP and CCM evaluations.

Impact of COVID-19 Public Health Emergency

The COVID-19 public health emergency (PHE) had a significant impact on SoonerCare beneficiary service utilization in calendar year 2020. PHPG followed National Committee for Quality Assurance (NCQA) guidance when evaluating quality-of-care using Healthcare Effectiveness Data and Information Set (HEDIS®) measures and considered the pandemic's impact on other components of the evaluation, as discussed in the body of the report.

Some report exhibits include trendline data for 2019 – 2023. Readers should exercise caution when reviewing 2020 results and the 2020 – 2021 portion of trendlines, as some findings may prove anomalous.

Acknowledgments

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

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EXECUTIVE SUMMARY

Introduction

Chronic disease is the leading cause of death and disability in the United States. According to the Centers for Disease Control and Prevention, about six-in-ten of all adults have at least one chronic health condition such as diabetes or heart disease. About four-in-ten 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. Over 1,500 Oklahomans die each year due to complications from diabetes. This equates to a diabetes-related mortality rate of nearly 33 persons per 100,000 residents, versus the national rate of approximately 25 per 100,000. The mortality rate for other chronic conditions, such as lower respiratory illnesses and heart diseases, 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.

SOONERCARE CCM EVALUATION KEY TAKEAWAYS

- *Participants are very satisfied with their experience – 97 percent would recommend to a friend with similar needs*

- *The program has demonstrated high quality-of-care, based on HEDIS® measures – both in comparison to the general SoonerCare Choice population and to national benchmarks*

- *The program has succeeded in targeting the highest-risk SoonerCare Choice members, in terms of service utilization and cost*

- *Average costs of longer-tenured members declined in 2023, even as the broader SoonerCare program experienced higher per member costs*

- *The program's targeted hepatitis-C activities from 2019 – 2021 demonstrated savings, by assisting more members to complete treatment than otherwise would have been the case. A new hepatitis-C initiative was launched in late 2023 and will be evaluated in the next report*

- *The program has achieved its core objectives of improving member quality-of-life and care for the SoonerCare CCM population, with a plurality of members crediting it with changing their health for the better*

In response, the OHCA developed the SoonerCare Health Management Program (HMP), which offers care management to qualifying members with or at risk for one or more chronic conditions.

The program also offers practice facilitation and education to primary care providers treating the chronically ill.

The OHCA implemented the SoonerCare HMP in February 2008 in partnership with a contracted vendor. The SoonerCare HMP has evolved over time and currently is operating under a "Third Generation" model that combines health coaches embedded in provider offices with telephonic and field-based care management. The program is offered statewide, although enrollment is subject to vendor capacity.

Chronic Care Management

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 responded in 2014 by establishing the Chronic Care Unit, now known as Chronic Care Management (CCM), to expand access to telephonic care management.

The SoonerCare CCM is responsible for members with specialized needs, including persons with hemophilia and sickle cell anemia.

SoonerCare Choice and Traditional members both are eligible for participation in the SoonerCare CCM. The SoonerCare CCM 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 CCM 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.

"(My nurse) has been instrumental, and the only one, to help me and my husband. He saved my life..." – CCM Participant

- Members with hepatitis-C (starting in the fall of 2023).

- Members undergoing bariatric surgery.

- A portion of members identified through a Health Risk Assessment (HRA), which SoonerCare applicants are given the option of completing at enrollment.

- Members referred by providers and contracted entities in need of care management and assistance navigating SoonerCare health care system; and

- Following-up on legislative inquiries and referrals.

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

When asked to rate their experience in the program, 91 percent of survey respondents said they were "very satisfied."
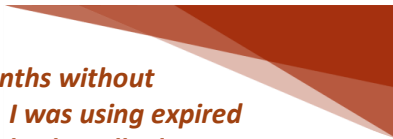
The RNs work to address the health status, health literacy, behavioral health and prescription drug utilization of participants through care coordination, self-management principles and behavior modification techniques. The ongoing case management typically includes one or two monthly telephone contacts, depending on the member's level of need.

The CCM is staffed by a small team of front-line nurses (known as Nurse Care Managers) who provided telephonic case management, as well as supervisory and training staff. The unit served 795 members in calendar year 2019 (for at least three months); 1,006 members in calendar year 2020; 619 members in calendar year 2021; 631 members in calendar year 2022 and 610 members in 2023. (Many of the members were enrolled for two or more years.)

Independent Evaluation of the SoonerCare CCM

As part of its continuous quality improvement activities, the OHCA has retained the Pacific Health Policy Group (PHPG) to conduct periodic independent evaluations of the SoonerCare HMP and SoonerCare CCM. This report contains SoonerCare CCM evaluation findings for calendar years 2019 - 2023. (SoonerCare HMP findings are addressed in a companion report.)

"I went two months without enough insulin. I was using expired insulin that I had. She talked to my doctor and got him to prescribe the right amount. It took several phone calls too."
– CCM Participant

The SoonerCare HMP operates under the authority of the broader SoonerCare Section 1115 research and demonstration authority. The federal Centers for Medicare and Medicaid Services (CMS) requires that states contract for independent evaluations of Section 1115 demonstrations; PHPG also has been retained to conduct the SoonerCare 1115 evaluation.

PHPG designed the methodology for the SoonerCare HMP evaluation to conform with CMS guidelines for Section 1115 demonstration evaluations. For consistency, PHPG applied the same methodology to the SoonerCare CCM evaluation, even though the SoonerCare CCM (unlike the HMP) is not a reportable group under the SoonerCare 1115 demonstration evaluation. The methodology is described in detail in the body of the report.

The 2020 and 2021 portions of the evaluation occurred during the COVID-19 Public Health Emergency. Caution should be exercised when reviewing findings, in light of the disruptions to care that were experienced during the emergency.

Evaluation Findings

SoonerCare CCM Participant Satisfaction and Perceived Health Status

Participant satisfaction is a key component of SoonerCare CCM 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 recommendations.
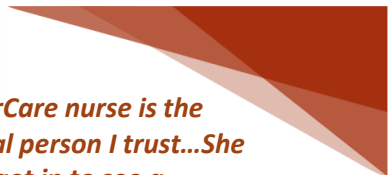
Nearly all participants (96 percent) who reported improved health credited their participation in the program for the change.

PHPG completed 433 initial surveys over the study period with SoonerCare CCM participants, as well as 223 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.

SoonerCare CCM 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 (99 percent) of the initial survey respondents indicated that their 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 (90 percent); helped with management of medications (82 percent); and answered questions about their health (82 percent).

"My SoonerCare nurse is the only medical person I trust…She helped me get in to see a specialist for (surgery). This program is the best thing SoonerCare ever did! I love my SoonerCare nurse!" – CCM Participant

Smaller numbers of respondents said their nurse helped to identify changes in health that might be an early sign of a problem (23 percent); helped them to talk to and work with their regular provider and his/her staff (17 percent); helped to make physical health appointments (16 percent); and helped to make mental health appointments (two percent).

Respondents next were asked to rate their satisfaction with each "yes" activity. Excluding mental health appointment assistance, with its very low response rate, between 88 and 95 percent reported being very satisfied with the help they received, depending on the item. This attitude carried over to the members' overall satisfaction with their nurses; 92 percent reported being very satisfied. Results for the follow-up survey closely aligned to the initial survey.

Respondents also were asked whether their 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).

The CCM participant HEDIS compliance rate exceeded the rate for a comparison group by a statistically significant amount on COPD, diabetes, hypertension, opioid use disorder and preventive care measures.

A majority of respondents reported discussing each of the activities with their nurse. (The portion across activities ranged from 69 percent for alcohol/substance consumption to 80 percent for medication management.) 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.

Survey respondents reported very high levels of satisfaction with the SoonerCare CCM overall, consistent with their opinion of the nurse, who serves as their point of contact with the program. Ninety-one percent of initial survey respondents and 89 percent of follow-up survey respondents stated they were very satisfied. Nearly all respondents (96 percent of initial survey and 99 percent of follow-up survey) said they would recommend the program to a friend with health care needs like theirs.

"If it wasn't for (my nurse) I would not have gotten the care I needed for myself and my daughter. She got me the doctor appointments we both needed." - CCM Participant

The ultimate objectives of the SoonerCare CCM 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 (56 percent) said "fair", while 30 percent said "good", 13 percent said "poor" and fewer than one percent said "excellent."

When next asked if their health status had changed since enrolling in the SoonerCare CCM, 44 percent said it was "better" and 51 percent said it was "about the same"; only five percent said it was "worse." Among those members who reported a positive change, nearly all (96 percent) credited the SoonerCare CCM with contributing to their improved health.

The results were even more encouraging among follow-up survey respondents. A majority (53 percent) reported that their health had improved, with 97 percent crediting this improvement to the program.

Impact of the SoonerCare CCM on Quality-of-care

SoonerCare CCM 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.
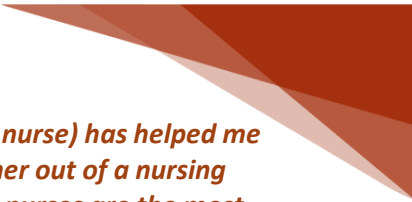
The CCM participant HEDIS compliance rate exceeded the national benchmark rate on all three measures for which a benchmark was available.

PHPG evaluated the impact of the SoonerCare CCM on quality-of-care through calculation of Healthcare Effectiveness Data and Information Set (HEDIS®) measures applicable to the SoonerCare CCM population. The evaluation included 15 diagnosis-specific measures and two population-wide preventive measures (17 in total). For example, the quality-of-care for participants with diabetes was analyzed with respect to their LDL-C (cholesterol), retinal eye and HbA1c (blood sugar) monitoring, as well as medical attention for nephropathy (kidney damage).

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 a comparison group selected from the general SoonerCare Choice population and matched to the SoonerCare CCM population on the basis of age, gender, place of residence (urban/rural), aid category (aged, blind, disabled and other) and, for adults, Medicaid expansion status (traditional Medicaid or expansion). The second data set contained national compliance rates for Medicaid MCOs. The national benchmark was defined as the 50th percentile (median) of all MCOs.

"Having (my nurse) has helped me keep my father out of a nursing home. These nurses are the most unknown but most loved people out there! I tell everyone that gets on SoonerCare to call and get themselves a nurse care manager because it will change their lives!"
– CCM participant

The SoonerCare CCM participant compliance rate exceeded the comparison group rate on nine of 17 measures by a statistically significant amount; the comparison group exceeded the CCM participant rate by a statistically significant amount on two measures. (There was no statistically significant difference on the other six measures.)

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

The SoonerCare CCM participant population compliance rate also exceeded the national benchmark rate on all three measures for which a benchmark was available. (The differences were not tested for statistical significance.)

SoonerCare CCM Cost Effectiveness

The impact of the SoonerCare CCM on member utilization and expenditures is challenging to measure. The program includes a mix of persons with long term complex/chronic health conditions and others with shorter term care management needs.

Average per member per month costs for SoonerCare CCM members enrolled in 2022 and 2023 declined by nearly 11 percent, even as PMPM costs for the broader SoonerCare Choice program were rising.

The results for SoonerCare CCM participants were evaluated two ways: first, against a comparison group (similar to quality-of-care analysis) and second, through a longitudinal analysis of member costs.

The comparison group method was inconclusive, in part because of the difficulty in matching the CCM membership to a like population in the broader SoonerCare Choice program. The analysis served primarily to quantify the very-high risk nature of the CCM population, in terms of service use and cost.

The longitudinal method was more definitive. PHPG identified 164 SoonerCare CCM members who were enrolled both in Calendar Year 2022 and 2023. The population was restricted to members with 12 months of enrollment in both years, to ensure comparability in cost data across the two years.

PHPG calculated average per member per month costs in both years, to document any upward or downward trend. Average PMPM expenditures declined by 10.6 percent for the SoonerCare CCM population, falling from $2,559 in 2022 to $2,289 in 2023.

"Can I say 'extremely satisfied' in place of 'very satisfied' option? (My nurse) has helped me in so many ways. I would not have gotten my physical therapy without her. She also was concerned about not drinking enough water because I hate tap water so she got me a water filter jug system." – CCM Participant

The downward trend exhibited by SoonerCare CCM members, despite growth in PMPM costs for the overall SoonerCare Choice program during the same period, supports the hypothesis that the SoonerCare CCM is having a positive effect on medical costs for members with longer enrollment tenures.

Conclusions

The SoonerCare CCM is meeting its core mission of improving the quality-of-life and care for SoonerCare CCM participants, who are among the most vulnerable and high-risk members in SoonerCare Choice. It also appears to be contributing to lower medical costs among members who receive care management for an extended period of time.

CHAPTER 1 – INTRODUCTION

Chronic Disease Management

Chronic disease is the leading cause of death and disability in the United States. According to the Centers for Disease Control and Prevention, about six-in-ten of all adults have at least one chronic health condition such as diabetes or heart disease. About four-in-ten have multiple chronic conditions, those that last a year or more and require ongoing medical attention or that limit activities of daily living[1].

Ninety percent of the nation's $4.3 trillion in annual health expenditures are for persons with chronic physical and mental health conditions[2]. The per capita impact of chronic disease is even greater in Oklahoma than for the nation as a whole. In 2020, 1,552 Oklahomans died due to complications from diabetes. This equated to a diabetes-related mortality rate of 32.8 persons per 100,000 residents, versus the national rate of 24.8[3].

The mortality rate for other chronic conditions, such as lower respiratory illnesses and heart disease, is similarly higher in Oklahoma than in the nation overall (Exhibit 1-1)[4].

Exhibit 1-1 – **Chronic Disease Mortality Rates, 2020 – OK and US (Selected Conditions)[5]**

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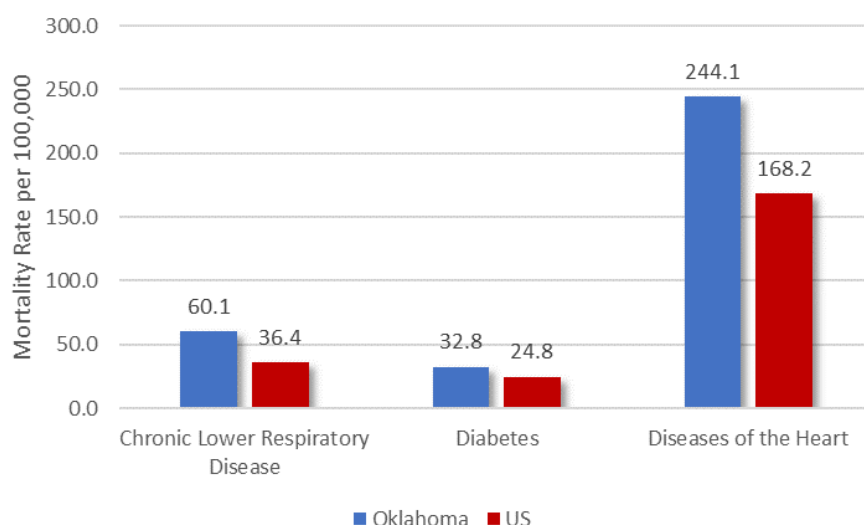
[1] Chronic Diseases in America | CDC. Total expenditure figure is for 2021 (most recent year available).
[2] https://www.cdc.gov/chronicdisease/about/costs/index.htm#ref1 Expenditures in 2019.
[3] National Vital Statistics Reports Volume 72, Number 10 (September 22, 2023) Deaths: Final Data for 2020 (cdc.gov) Age adjusted rates. 2020 is the most recent year available.
[4] Oklahoma has a more favorable rate for one major chronic condition: essential hypertension and hypertensive renal disease. Oklahoma's rate is 8.4 per 100,000 versus the national rate of 10.1 per 100,000.
[5] Ibid. Rate for chronic lower respiratory disease, also known as chronic obstructive pulmonary disease, includes asthma, chronic bronchitis and emphysema.

Chronic diseases also are among the costliest of all health problems. Persons with multiple chronic conditions account for over 70 percent of health spending nationally[6]. 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 exceeded $10 billion in 2020 and will approach $13 billion in 2025[7]. The SoonerCare program is responsible for ensuring delivery of care to a large segment of Oklahomans with chronic conditions.

SoonerCare members with prevalent chronic conditions, such as chronic lower respiratory disease (e.g., asthma), diabetes, heart disease and hypertension, account for a significant portion of total agency expenditures. Their per member costs far exceeded those of the average SoonerCare member (Exhibit 1-2).

Exhibit 1-2 – **SoonerCare Members – Prevalent Chronic Conditions[8]**

Chronic Condition	Members		Annual Expenditures	
	Number	Percent of Members[9]	Per Member	Total (millions)
Chronic lower respiratory disease	72,906	7.1%	$13,923	$1,015
Diabetes	90,523	6.2%	$18,096	$1,638
Heart Disease (adults only)	43,718	10.8%	$18,042	$789
Hypertension	90,508	8.8%	$16,962	$1,535
All SoonerCare	*1,323,301*	*100.%*	*$5,118*	*$6,773*

Note: Members and their costs can be reported in more than one category. The values should <u>not</u> be combined.

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

[7] Expenditure estimates developed using CDC Chronic Disease Cost Calculator.

[8] Source for "all SoonerCare" is OHCA SFY 2022 Annual Report Appendix, exhibits 6 (enrollment) and 19 (expenditures). Source for chronic condition data is the OHCA Office of Data Governance and Analytics. Hypertension statistics are for SFY 2020; Heart Disease statistics are for SFY 2021; CLRD statistics are for SFY 2022; diabetes statistics are for SFY 2023. Complete abstracts by chronic condition (these and others) are available at: Chronic Condition Executive Summaries (oklahoma.gov)

[9] Percent of all members in the state fiscal year in which the data for a particular condition was collected.

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 proactively seek to address the individual needs of patients through planned, ongoing follow-up, assessment and education.[10] Under the Chronic Care Model, as first developed by Dr. Edward H. Wagner, community providers collaborate to effect positive changes for health care recipients with chronic diseases.

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

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

Exhibit 1-3 – The Chronic Care Model

The Chronic Care Model

Community
Resources and Policies

Health Systems
Organization of Health Care

Self-Management Support

Delivery System Design

Decision Support

Clinical Information Systems

Informed, Activated Patient

Productive Interactions

Prepared, Proactive Practice Team

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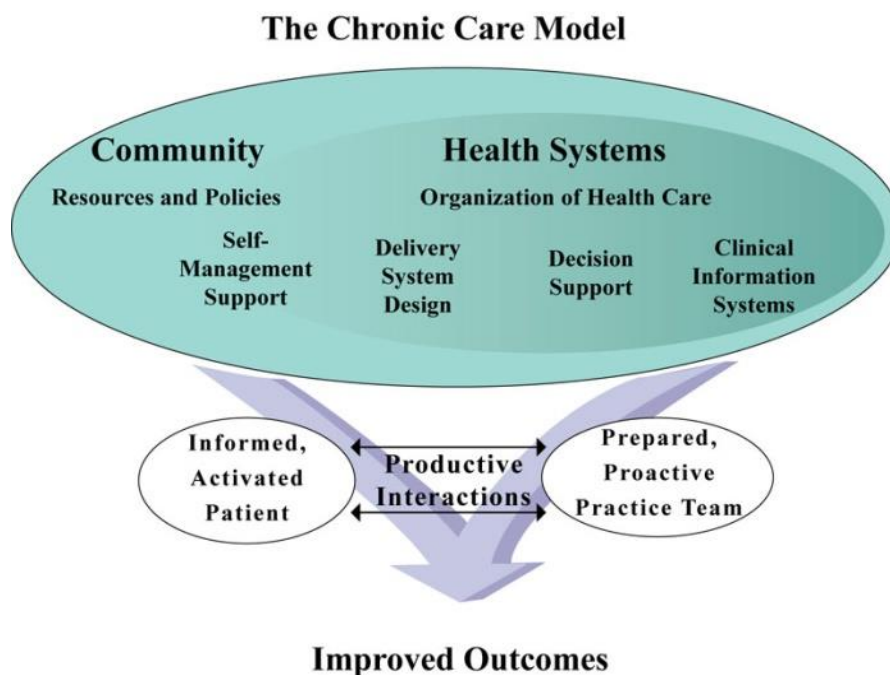
Developed by The MacColl Institute
® ACP-ASIM Journals and Books

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

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 (for example): asthma, chronic obstructive pulmonary disease 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 its initial 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 room 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 chronic care management 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.

The OHCA contracted with a vendor through a competitive bid process to implement and operate the SoonerCare HMP. Telligen[11] 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.

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

Medical Artificial Intelligence (MEDai), already was serving as a subcontractor to DXC Technology (now Gainwell), 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's predictive modeling software to generate member-specific risk profiles based on historical utilization/diagnostic data, to assist in identifying candidates for enrollment in the SoonerCare HMP.

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.

"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. 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.

To enhance member identification and participation, as well as coordination with primary care providers, the OHCA implemented a "Second Generation" model that replaced 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 area[12].

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.

Health coaches only would be embedded at practices that had first undergone practice facilitation. In order to participate in the second generation SoonerCare HMP at its outset, members would have to be receiving primary care from a practice with an embedded health coach.

The OHCA conducted a competitive procurement to select a vendor to administer the second generation HMP. Telligen was awarded the contract.

"Third Generation" SoonerCare HMP

In November 2018, the OHCA released an RFP to contract with a vendor to implement and administer a Third Generation Health Management Program. The OHCA sought to build upon, and expand, the existing model, both geographically and in terms of health coaching modalities.

The "Third Generation" model retained the health coaching and practice facilitation components from the existing model but directed the vendor to expand health coaching statewide using a combination of practice-based, field-based and telephonic modalities, taking into consideration beneficiary preferences.

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[12] The descriptions 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.

OHCA Chronic Care Management

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 operated directly by the OHCA.

The SoonerCare CCU, now known as Chronic Care Management (CCM), was created to expand care management opportunities to members not served through the HMP. SoonerCare Choice and SoonerCare Traditional members both are eligible for participation in the SoonerCare CCM. The SoonerCare CCM 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 CCM also is responsible for[13],[14]:

- Members with hemophilia[15] or sickle cell anemia[16], even if the member otherwise would be enrolled in the SoonerCare HMP.
- Members identified as high utilizers of the emergency room[17].
- Members undergoing bariatric surgery[18].
- Women with peripartum cardiomyopathy.
- Members with hepatitis-C not yet in treatment (new initiative as of late 2023).
- 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 CCM.
- Members referred by providers and contracted entities in need of care management and assistance navigating SoonerCare health care system; and
- Following-up on legislative inquiries and referrals.

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

[14] Prior to calendar year 2022, the SoonerCare CCM also was responsible for care management of members with hepatitis-C referred for care management by their treating physician.

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

[16] In 2022, the Legislature directed the OHCA to evaluate care for SoonerCare members with sickle cell disease. The OHCA retained PHPG to conduct the study. PHPG's analysis was not confined to members enrolled in the CCM but did conclude that members receiving care management through the CCM or another source benefited from this assistance. See: "Independent Evaluation of Sickle Cell Disease Management within the SoonerCare Population" (January 2023).

[17] The CCM evaluation includes ED visit rate data across all participants.

[18] The average CCM caseload for this population is approximately 10 patients.

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

The CCM is staffed by a small team of front-line nurses (known as Nurse Care Managers) who provide telephonic case management, as well as supervisory and training staff. The CCM nurses 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.

To ensure there is no duplication in care management, Telligen (SoonerCare HMP vendor) sends a list of enrolled members each month. This list is matched to both HAN and CCM-enrolled member rosters to identify duplication across care management programs. Once identified, the member is given the opportunity to decide what program best fits their individual needs.

Characteristics of CCM Participants

The evaluation included participants enrolled in the SoonerCare CCM in calendar years 2019, 2020, 2021, 2022 and/or 2023. PHPG removed a portion of the participant population from the evaluation to improve the integrity of the results. Specifically:

- Members who were enrolled for fewer than three months in a calendar year were excluded from that calendar year's analysis, to ensure that the participation tenure was sufficient for the program to have had an impact.

- Members who were enrolled for three months or longer in a calendar year, but who also were enrolled in the SoonerCare HMP for a portion of that year were excluded, if their HMP tenure exceeded their CCM tenure. (The members were included in the SoonerCare HMP evaluation.)

Exhibit 1-4 below presents CCM member counts by year. A portion of the members each year still were enrolled the following year. (The percentage declined in 2023.)

Exhibit 1-4 – SoonerCare CCM Participants by Year

2019	2020	2021	2022	2023
795	1,006	619	631	610
Enrolled prior year[19]	422 (53.1%)	336 (54.3%)	359 (56.9%)	164 (26.8%)[20]

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[19] Imputed by counting the number of participants with 12 months of enrollment in HMP in the measurement year.

[20] The decline in 2023 prior year counts may be attributable at least in part to the introduction of a new initiative for members with hepatitis-C late in calendar year 2023.

In calendar year 2023, the SoonerCare CCM enrolled members residing in 66 of the 77 Oklahoma counties, up from 61 counties in 2022 and 55 counties in 2021 (Exhibit 1-5).

Exhibit 1-5 – SoonerCare CCM 2023 Enrollment by County

Demographic and health data for CCU members is presented below. The data is for calendar year 2022 participants .

Participants by Gender and Age

A slight majority of CCM participants are women, with females outnumbering males by 12 percentage points (Exhibit 1-6).

Exhibit 1-6 – Gender Mix for SoonerCare CCM Participants

Not surprisingly, SoonerCare CCM participants are older than the general Medicaid population. Thirty-eight percent of SoonerCare HMP participants are under the age of 21, while approximately 50 percent are age 50 or older (Exhibit 1-7). In contrast, 53 percent of the total SoonerCare population in December 2023 was under the age of 18.[21]

Exhibit 1-7 – Age Distribution for SoonerCare CCM Participants
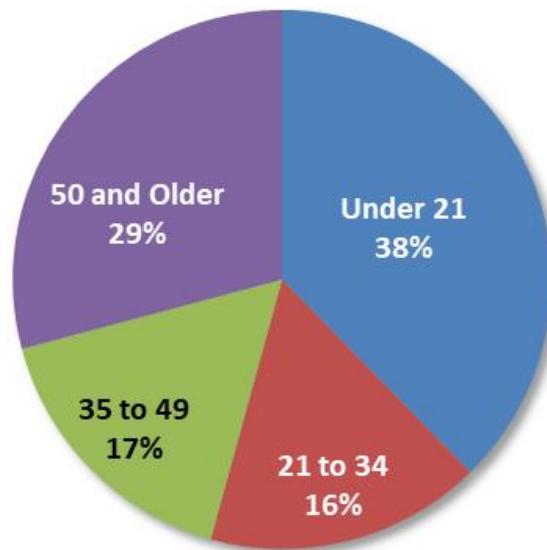
Participants by Place of Residence

Fifty-six percent of SoonerCare CCM participants resided in rural Oklahoma in 2023, while 44 percent resided in urban counties comprising the greater Oklahoma City, Tulsa and Lawton metropolitan areas (Exhibit 1-8 on the following page). By contrast, approximately 45 percent of the general SoonerCare population resides in rural counties and 55 percent in urban counties[22].

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[21] Source for total SoonerCare percentage: OHCA December 2023 Enrollment Report.
[22] Source: OHCA October 2023 Enrollment Report by County. Urban counties include Canadian, Cleveland, Comanche, Creek, Logan, McClain, Oklahoma, Osage, Rogers, Tulsa and Wagoner.

Exhibit 1-8 – SoonerCare CCM Participants by Location: Urban/Rural Mix
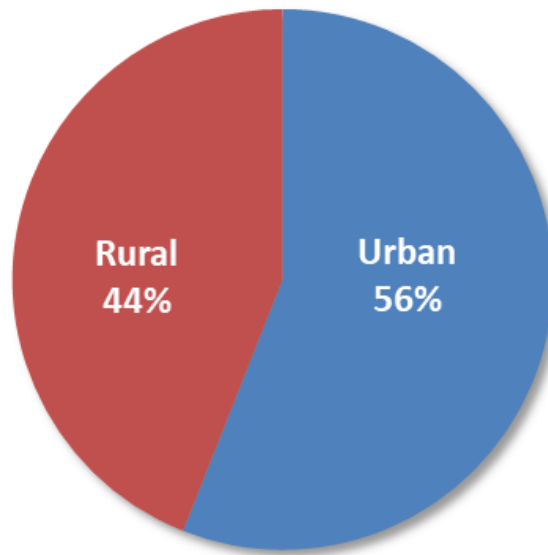
Participants by Aid Category

Thirty-four percent of SoonerCare CCM participants were enrolled under the Aged, Blind and Disabled (ABD) aid category grouping (Exhibit 1-9 on the following page). This was down from 44 percent in 2022 and 52 percent in 2021. However, the CCM percentage still far exceeds that of the general SoonerCare population, of which ABD beneficiaries comprise only about 15 percent of total enrollment[23].

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[23] Source for total SoonerCare ABD percentage: OHCA December 2023 Enrollment Report.

Exhibit 1-9 – SoonerCare CCM Participants by Aid Category Group
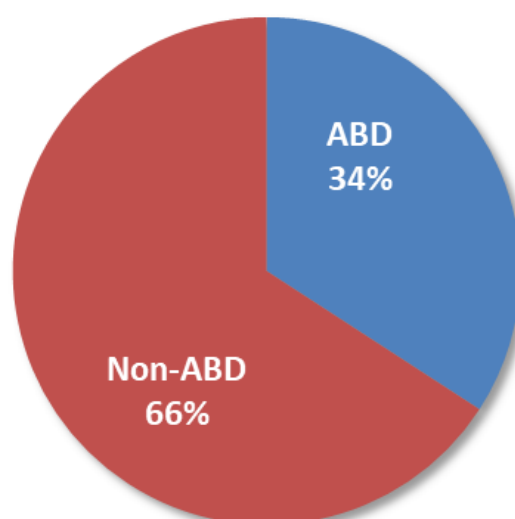
Participants by Major Chronic Conditions[24]

SoonerCare CCM participants enrolled for treatment of chronic conditions typically have multiple physical health diagnoses, often accompanied by behavioral health needs. The CCM evaluation examines the program's overall impact on member health but also analyzes its impact with respect to five major chronic conditions: asthma, coronary artery disease (CAD), chronic obstructive pulmonary disease (COPD), diabetes and hypertension.

Diabetes was the most prevalent of the five conditions, occurring in approximately 29 percent of SoonerCare CCM participants. Hypertension was the second most prevalent, with the other conditions occurring in smaller portions of the SoonerCare CCM population (Exhibit 1-10 on the following page).

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

Exhibit 1-10 – Prevalence of Major Chronic Conditions (Multiple Responses Allowed)
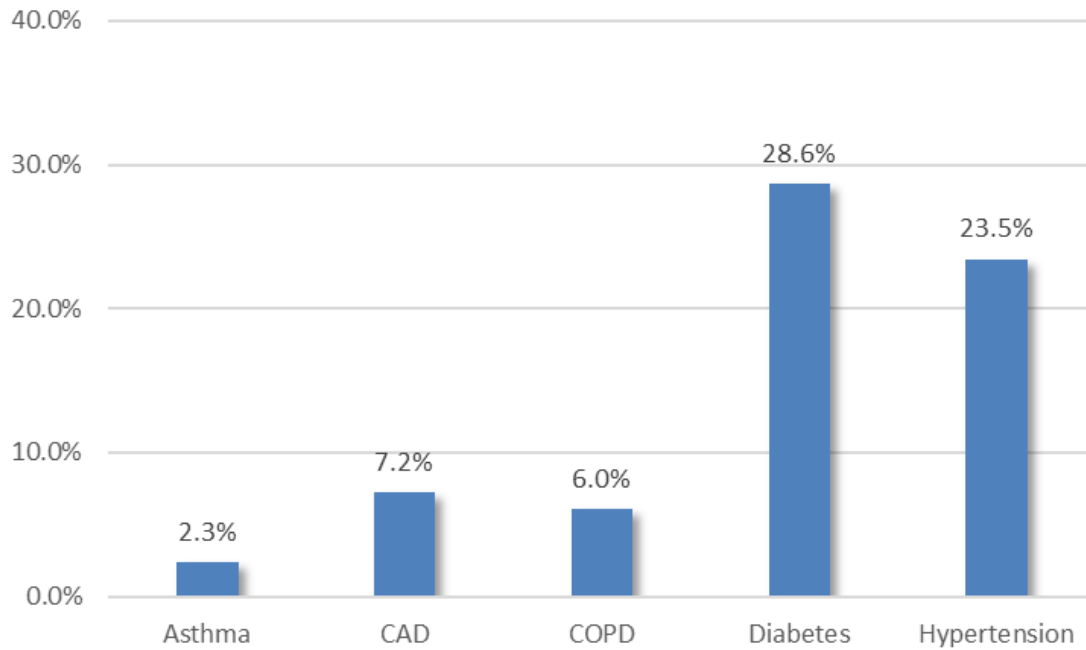
Approximately 41 percent of SoonerCare CCM participants had at least one of the five conditions, down from 54 percent in 2022 and 60 percent in 2021. Approximately 20 percent had two or more (Exhibit 1-11 on the following page).

Other CCM-prevalent conditions include hepatitis-C, hemophilia and sickle cell disease. Care management of members with hepatitis-C also was added to the program late 2023. (Hepatitis-C was a target condition prior to 2022, before transitioning-out of the CCM. The new initiative is more expansive in scope and will be a focal point of the 2024 evaluation.)

Exhibit 1-11 – Number of Chronic Conditions (Among the Five Target Conditions)
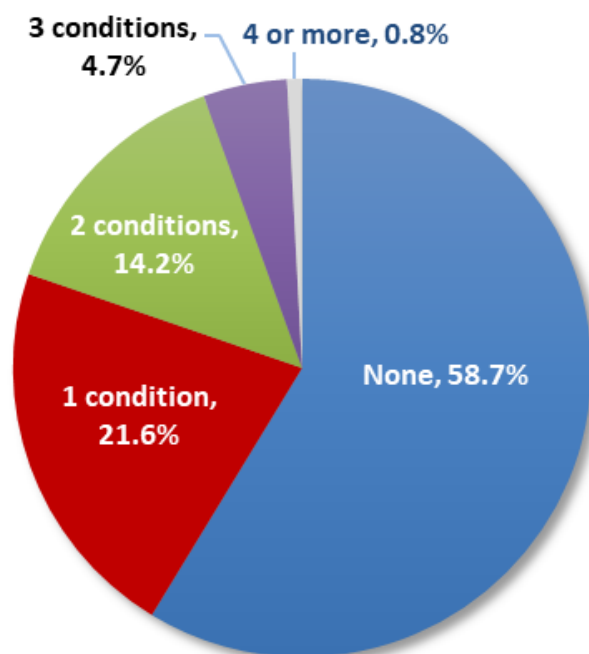
Behavioral Health

Approximately 60 percent of the participant population had both a physical and behavioral health condition. Members with coronary artery disease were the group most likely to have a co-morbidity; 91 percent had both CAD and a behavioral health diagnosis (Exhibit 1-12 on the following page).[25]

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[25] Behavioral health conditions defined to include the following ICD-10 diagnoses: dementia, depression (major and other), mental and behavioral disorders, other bipolar disorder, personality disorder, psychosis and psychotic disorders.

Exhibit 1-12 – Behavioral Health Co-Morbidity Rate[26]
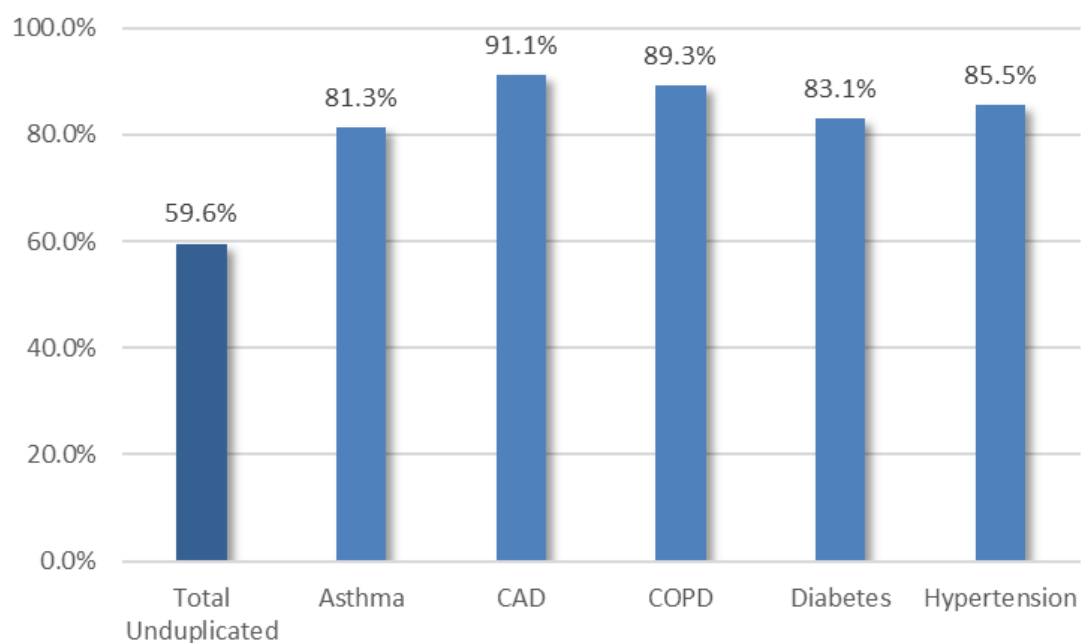
Conclusion

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

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[26] Total unduplicated also includes members without one of the five physical health conditions.

SoonerCare CCM Independent Evaluation

The OHCA has retained the Pacific Health Policy Group (PHPG) to conduct a multi-year, independent evaluation of the SoonerCare CCM. 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 (emergency room visits, hospital admissions and re-admissions) and associated expenditures, while taking into account program administrative costs.

PHPG is presenting evaluation findings in a series of annual reports. This report includes five calendar years – 2019 to 2023 – in order to allow for trending of results.

The use of calendar years, rather than state fiscal years, was chosen in order to align with the evaluation and reporting periods for the SoonerCare HMP evaluation. The SoonerCare HMP must be evaluated on a calendar year basis to conform to CMS reporting requirements for the Section 1115 Demonstration, of which the SoonerCare HMP population is a reportable component.

Caution should be exercised when reviewing findings, in light of the COVID-19 public health emergency. Calendar year 2020 in particular included nine months (March to December) when patterns of care changed significantly in response to the pandemic.

CHAPTER 2 – SOONERCARE CCM PARTICIPANT SATISFACTION

Introduction

Participant satisfaction is a key component of SoonerCare CCM 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 recommendations.

Satisfaction is measured through participant telephone surveys. PHPG attempts to conduct an initial survey with all SoonerCare CCM 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

PHPG mails introductory letters to all CCM participants, informing them that they will be contacted by telephone to complete a survey asking their opinions of the CCM 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 CCM

- Experience with CCM nurse and satisfaction

- Overall satisfaction with the SoonerCare CCM

- Health status and lifestyle

In addition to the five CCM-specific survey domains, PHPG asks a series of questions about access to primary and specialty care, and overall satisfaction with the SoonerCare program. These questions are taken from the Consumer Assessment of Health Care Providers and Systems (CAHPS®) survey, which the OHCA is required by CMS to conduct on a sample of SoonerCare beneficiaries.

The CAHPS survey of the general SoonerCare population is administered by a vendor under contract to the OHCA. The CAHPS survey results are a component of the SoonerCare 1115 evaluation but the CAHPS surveyor does not have the ability to stratify survey responses based

on participation in the SoonerCare CCM. PHPG therefore has added the relevant CAHPS questions to the SoonerCare CCM beneficiary survey in order to collect the data for this population.

Six-month Follow-up Survey

The follow-up survey covers the same areas as the initial survey, to allow for comparison of participant responses across the two surveys.

Survey Population Size, Margin of Error and Confidence Levels

The evaluation includes data from 81 initial surveys conducted in Calendar Year 2019, 149 initial surveys conducted in Calendar Year 2020, 90 initial surveys conducted in Calendar Year 2021, 70 initial surveys conducted in Calendar Year 2022 and 43 initial surveys conducted in Calendar Year 2023 (433 total). The evaluation also includes data from 54 follow-up surveys conducted in Calendar Year 2019, 38 follow-up surveys conducted in Calendar Year 2020, 46 follow-up surveys conducted in Calendar Year 2021, 45 follow-up surveys conducted in Calendar Year 2022 and 40 follow-up surveys conducted in Calendar Year 2023 (223 total).

The survey results are based on a subset of the total SoonerCare CCM 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 presents the sample size and margin of error for each of the surveys. The margin of error is for the total survey population based on the average distribution of responses to individual questions. The margin can vary by question to some degree, upward or downward, depending on the number of respondents and distribution of responses. CCM survey responses should be interpreted with caution, given the relatively small sample size.

Exhibit 2-1 – Survey Sample Size and Margin of Error

Survey	Sample Size	Confidence Level	Margin of Error
Initial	433	95%	+/- 4.7%
Six-month Follow-up	223	95%	+/- 6.6%

SoonerCare CCM Participant Survey Findings

Respondent Demographics

Initial Survey Respondents

The gender split among SoonerCare CCM initial survey respondents in aggregate was 58 percent female and 42 percent male. The great majority of surveys (86 percent) was conducted with the actual SoonerCare CCM 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 CCM. After screening out persons no longer participating in the program, the initial survey respondent sample included 417 persons (across all five years).

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

Exhibit 2-2 – Respondent Tenure in SoonerCare CCM – Initial Survey
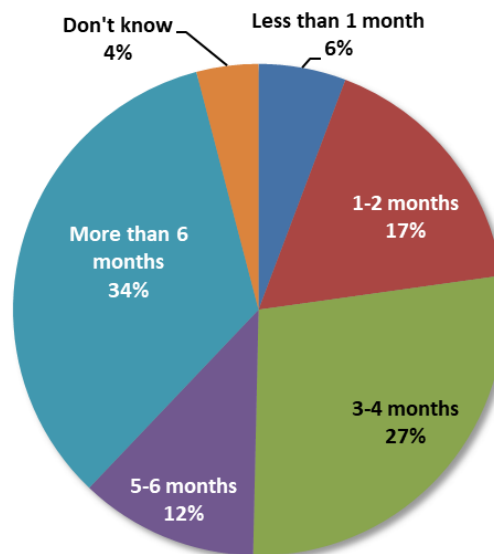
Follow-up Survey Respondents

The gender split among follow-up survey respondents was nearly identical to the initial survey group; 60 percent were female and 40 percent were male. Because follow-up surveys are limited to individuals participating in CCM for at least six months, the average tenure of follow-up respondents was significantly greater, with the largest segment (34 percent) reporting tenure of nine to 12 months (Exhibit 2-3 on the following page).

Exhibit 2-3 – Respondent Tenure in SoonerCare CCM – Follow-up Survey
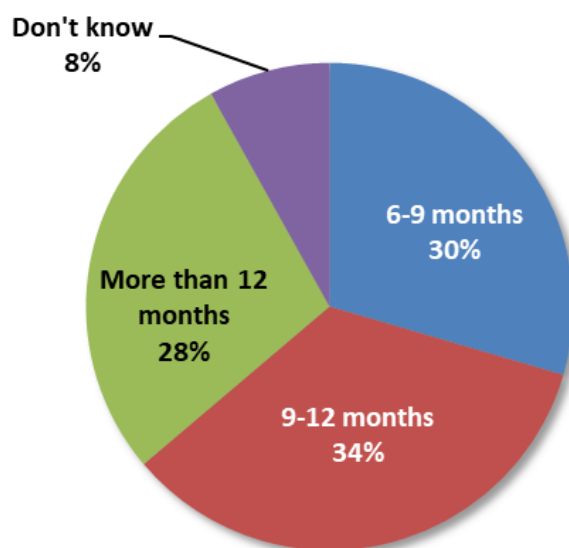
Key findings for the initial and follow-up surveys are presented starting on the following page. Findings are shown in aggregate for all initial survey respondents interviewed in 2019, 2020, 2021, 2022 and 2023. The aggregate initial survey results also are broken-out into calendar year subgroups. This 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. (Some initial survey topics, such as reasons for enrollment, were not repeated in the follow-up survey.) 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[27].

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[27]For narrative clarity, survey data in the remainder of the chapter is presented in slightly different order than the order in which questions were asked. The original question order is shown in the instrument and appendix table.

Primary Reason for Enrolling

The SoonerCare CCM seeks to teach participants how to manage better 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; other reasons included having someone to call regarding health-related questions and getting help making healthcare appointments. However, 23 percent of the respondents enrolled simply because they were asked, and four percent enrolled on the recommendation of their doctor (Exhibit 2-4).

Exhibit 2-4 – Primary Reason for Enrolling in SoonerCare CCM – Initial Survey (All Years)[28]
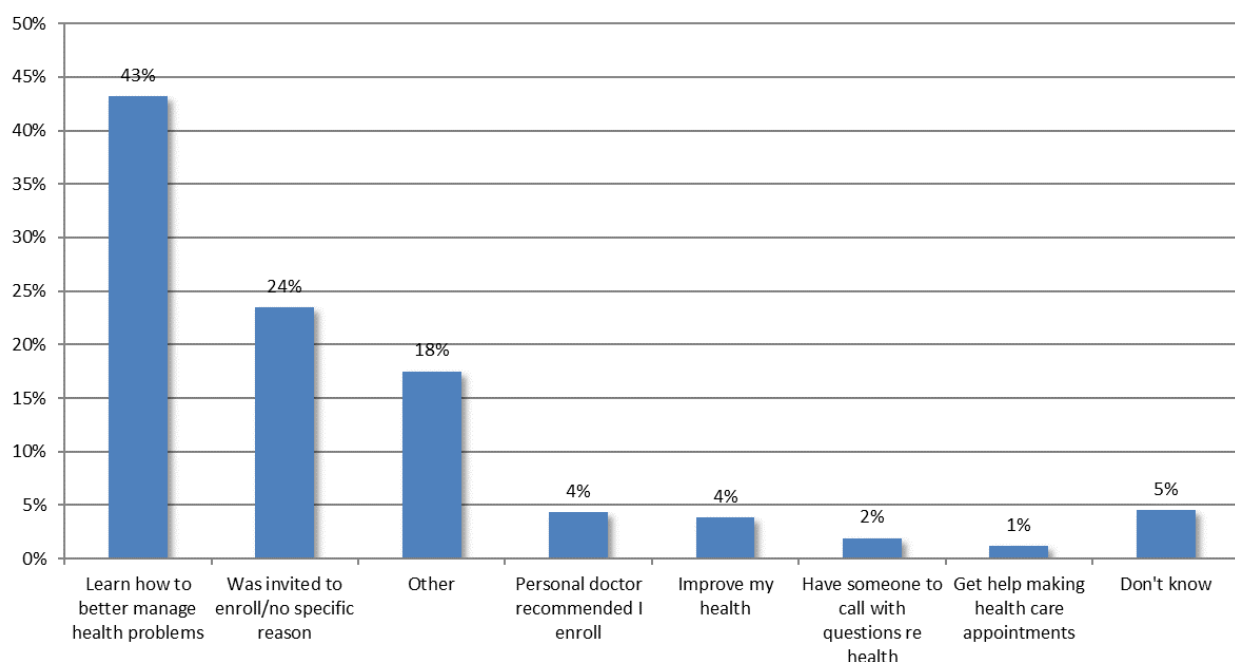
The percentage citing each reason shifted across survey time periods. A significant segment of respondents from 2020 through 2021 cited "getting help managing hepatitis-C medication" as their primary reason for enrollment (included within the "other" category[29]). The number increased from zero in 2019, to 13 percent of all respondents in 2020 and 27 percent in 2021. The SoonerCare CCM ceased enrolling members for management of hepatitis-C in 2022, at which time this activity was transitioned to the OHCA Pharmacy Benefit Manager (PBM). (Enrollment of members with hepatitis-C was restarted under a new initiative in 2023, as discussed later in the report.)

Caution should be exercised when interpreting year-over-year changes due to the small sample size (Exhibit 2-5 on the following page).

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[28] This question was not asked on the follow-up survey.
[29] The "other" category also included persons preparing for gastric bypass surgery, persons getting assistance in managing mental health needs and persons seeking help in obtaining medical equipment (e.g., C-PAP machine).

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

Reason	Primary Reason for Enrolling (Percent Naming)					
	2019	**2020**	**2021**	**2022**	**2023**	**Aggregate**
1. Learn how to better manage health problems	42.7%	50.3%	35.6%	32.8%	51.2%	*42.9%*
2. Was invited/no specific reason	34.7%	19.3%	19.5%	22.4%	27.9%	*23.5%*
3. Other	4.0%	14.5%	32.2%	26.9%	7.0%	*17.5%*
4. Personal doctor recommended I enroll	1.3%	6.9%	4.6%	1.5%	4.7%	*4.3%*
5. Improve my health	4.0%	3.4%	1.1%	9.0%	2.3%	*3.8%*
6. Have someone to call with questions regarding health	8.0%	0.7%	0.0%	0.0%	2.3%	*1.9%*
7. Get help making personal health care appointments	2.7%	0.7%	1.1%	0.0%	2.3%	*1.2%*
8. Don't know/not sure	2.7%	4.1%	5.7%	7.5%	2.3%	*4.6%*

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

CCM Nurse Contact

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

Forty-seven percent of initial survey respondents reported speaking to their CCM nurse within the previous two weeks and 76 percent within the past four weeks (Exhibit 2-6).

Exhibit 2-6 – Most Recent Contact with CCM Nurse – Initial Survey (All Years)
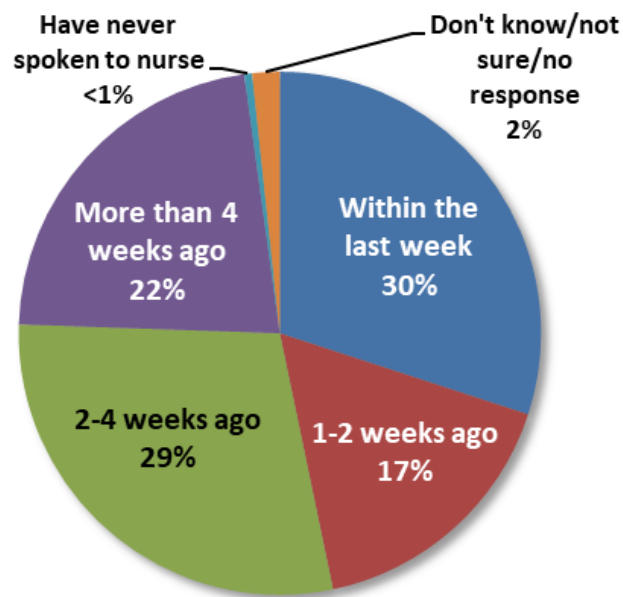
The percentage reporting contact within the past two weeks was relatively consistent across time periods, taking into consideration the small sample size. However, follow-up survey respondents were more likely to report that their most recent contact occurred more than four weeks ago. The program seeks to improve self-management skills, and 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 on the following page).

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

	Last Time Spoke with CCM Nurse												
	Initial Survey							Follow-up Survey					
Time Elapsed	**2019**	**2020**	**2021**	**2022**	**2023**	**All Years**		**2019**	**2020**	**2021**	**2022**	**2023**	**All Years**
Within last week	28.0%	28.0%	40.0%	28.4%	23.3%	*30.0%*		10.0%	28.9%	23.9%	20.5%	13.9%	*19.2%*
1 to 2 weeks ago	20.0%	14.0%	16.5%	20.9%	14.0%	*16.7%*		12.0%	15.8%	13.0%	9.1%	16.7%	*13.1%*
2 to 4 weeks ago	33.3%	23.8%	28.2%	26.9%	41.9%	*28.8%*		26.0%	15.2%	15.2%	18.2%	33.3%	*22.0%*
More than 4 weeks ago	17.3%	31.5%	12.9%	20.9%	20.9%	*22.3%*		52.0%	36.8%	47.8%	43.2%	36.1%	*43.9%*
Have never spoken to nurse	0.0%	0.7%	0.0%	1.5%	0.0%	*0.5%*		0.0%	0.0%	0.0%	0.0%	0.0%	*0.0%*
Don't know/not sure/no response	1.3%	2.1%	2.4%	1.5%	0.0%	*1.7%*		0.0%	0.0%	0.0%	9.1%	0.0%	*1.9%*

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

Fifty-four percent of initial survey respondents were able to name their CCM nurse, suggesting that many participants have formed a strong connection with the program[30] (Exhibit 2-8).

Exhibit 2-8 – Able to Name CCM Nurse – Initial Survey (All Years)
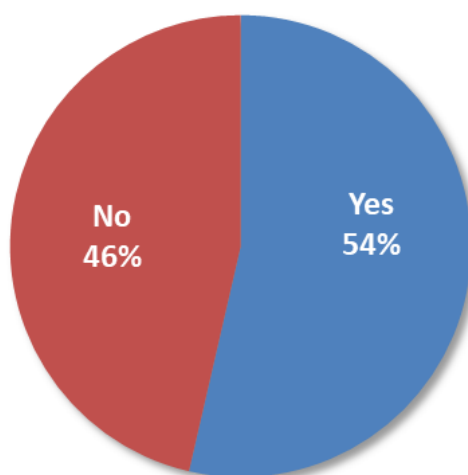
The portion able to name their CCM nurse was only slightly lower among follow-up survey respondents, despite their less frequent contact with the nurse (Exhibit 2-9).

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

	Able to Name CCM Nurse												
	Initial Survey							**Follow-up Survey**					
Response	2019	2020	2021	2022	2023	All Years		2019	2020	2021	2022	2023	All Years
Yes	58.7%	54.2%	60.9%	44.8%	41.9%	*53.6%*		40.0%	71.1%	45.7%	54.5%	50.0%	*51.4%*
No	41.3%	45.8%	39.1%	55.2%	58.1%	*46.4%*		60.0%	28.9%	54.3%	45.5%	50.0%	*48.6%*

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

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[30] Respondents who answered yes were asked for a name but PHPG did not verify the accuracy of the information.

CCM nurses are required to provide a contact telephone number to their members. Approximately 90 percent of respondents confirmed that they were given a number.

Thirty-five percent of the initial survey respondents who remembered being given a number stated they had tried to call their CCM nurse at least once (Exhibit 2-10).

Exhibit 2-10 – Tried to Call CCM Nurse – Initial Survey (All Years)
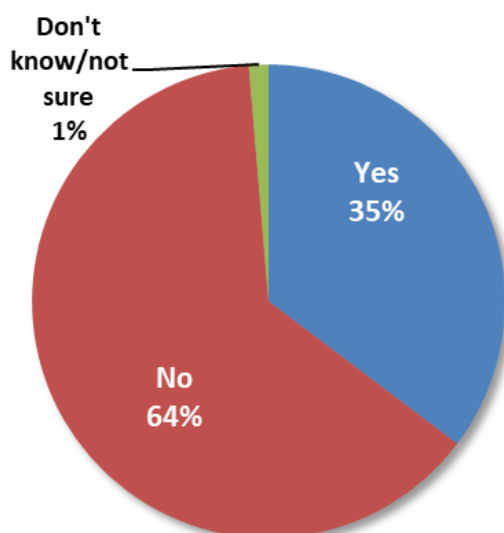
The percentage increased during the 2020 survey period among both initial and follow-up survey respondents, concurrent with the peak of the COVID-19 PHE (Exhibit 2-11).

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

	Tried to Call CCM Nurse											
	Initial Survey						Follow-up Survey					
Response	2019	2020	2021	2022	2023	All Years	2019	2020	2021	2022	2023	All Years
Yes	37.1%	45.0%	32.1%	20.7%	27.0%	*35.3%*	36.4%	51.3%	28.6%	47.4%	46.9%	*41.4%*
No	61.4%	54.2%	66.7%	77.6%	70.3%	*63.4%*	61.4%	45.9%	61.9%	50.0%	46.9%	*53.9%*
Don't know/Not sure	1.4%	0.8%	1.2%	1.7%	2.7%	*1.3%*	2.3%	2.7%	9.5%	2.6%	6.3%	*4.7%*

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

Among those who had tried calling, the great majority (79 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 (All Years)
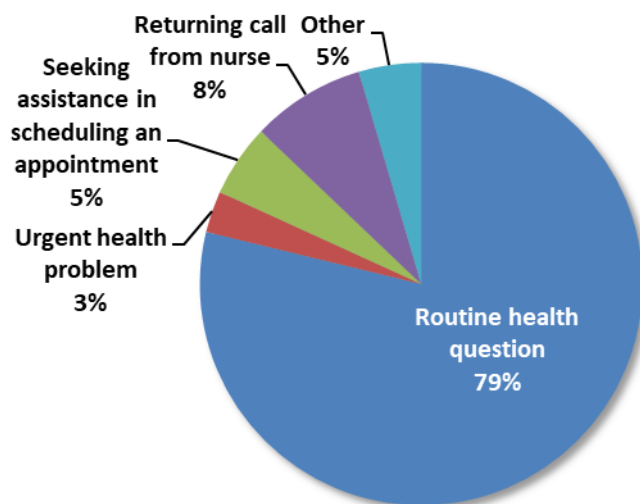
Follow-up respondents were more likely to be returning a call from their nurse, although a majority still reported calling with a routine health question (Exhibit 2-13).

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

	Reason for Most Recent Call											
	Initial Survey							Follow-up Survey				
Response	2019	2020	2021	2022	2023	All Years		2019	2020	2021	2022	2023	All Years
Routine health question	88.5%	76.3%	72.0%	75.0%	90.0%	*78.8%*		56.3%	78.9%	50.0%	83.3%	53.3%	*63.3%*
Urgent health problem	3.8%	1.7%	4.0%	8.3%	0.0%	*3.0%*		0.0%	5.3%	0.0%	0.0%	0.0%	*1.3%*
Seeking assistance in scheduling appointment	3.8%	8.5%	4.0%	0.0%	0.0%	*5.3%*		6.3%	5.3%	8.3%	5.6%	6.7%	*6.3%*
Returning call from Nurse	0.0%	8.5%	16.0%	8.3%	10.0%	*8.3%*		37.5%	5.3%	25.0%	11.1%	33.3%	*21.3%*
Other	3.8%	5.1%	4.0%	8.3%	0.0%	*4.5%*		0.0%	5.3%	8.3%	0.0%	0.0%	*2.5%*
Don't know/No response	0.0%	0.0%	0.0%	0.0%	0.0%	*0.0%*		0.0%	0.0%	8.3%	0.0%	6.7%	*2.5%*

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

Nearly all (90 percent) initial survey respondents who called the number reached their nurse immediately or heard back later the same day. Only three respondents (two percent of respondents) reported not getting a call back (Exhibit 2-14).

Exhibit 2-14 – CCM Nurse Call-Back Time – Initial Survey (All Years)
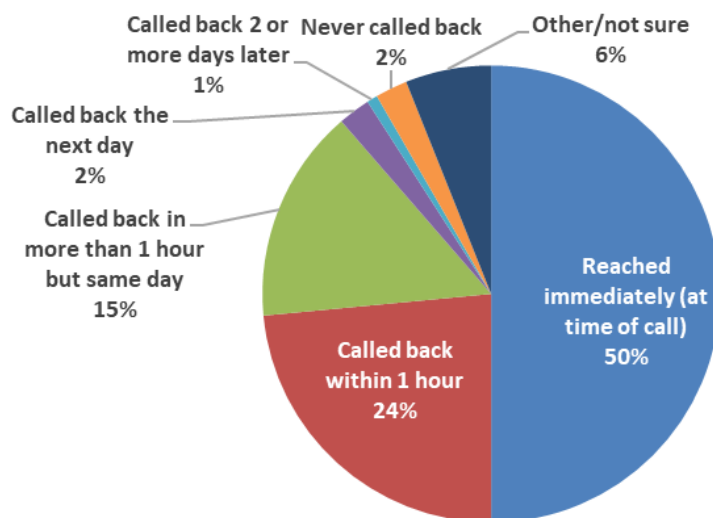
The same-day call back rate was consistent across surveys. As with the initial survey group, only a small subset (six respondents) reported not getting a call-back (Exhibit 2-15).

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

	CCM Nurse Call-Back Time											
	Initial Survey							Follow-up Survey				
Response	2019	2020	2021	2022	2023	All Years		2019	2020	2021	2022	2023	All Years
Reached immediately (time of call)	38.5%	54.2%	48.0%	58.3%	50.0%	*50.0%*		53.3%	63.2%	25.0%	55.6%	46.7%	*50.0%*
Called back within 1 hour	30.8%	23.7%	28.0%	8.3%	10.0%	*23.5%*		20.0%	15.8%	25.0%	11.1%	13.3%	*16.3%*
Called back > 1 hour	23.1%	11.9%	12.0%	16.7%	20.0%	*15.2%*		13.3%	5.3%	8.3%	11.1%	20.0%	*11.3%*
Called back the next day	0.0%	3.4%	0.0%	0.0%	10.0%	*2.3%*		6.7%	5.3%	16.7%	0.0%	13.3%	*7.5%*
Called back 2+ days later	0.0%	0.0%	4.0%	0.0%	0.0%	*0.8%*		0.0%	0.0%	0.0%	5.6%	0.0%	*1.3%*
Never called back	0.0%	1.7%	4.0%	8.3%	10.0%	*1.5%*		0.0%	5.3%	8.3%	16.7%	0.0%	*7.5%*
Other/Don't know/Not sure	7.6%	5.1%	4.0%	8.3%	0.0%	*4.5%*		6.7	5.3%	16.7%	0.0%	6.7%	*6.3%*

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

CCM Nurse Activities

CCM 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 (99 percent) of initial survey respondents stated that their CCM nurse asked questions about health problems or concerns, and the great majority stated their nurse 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 – CCM Nurse Activity – Initial Survey (All Years)
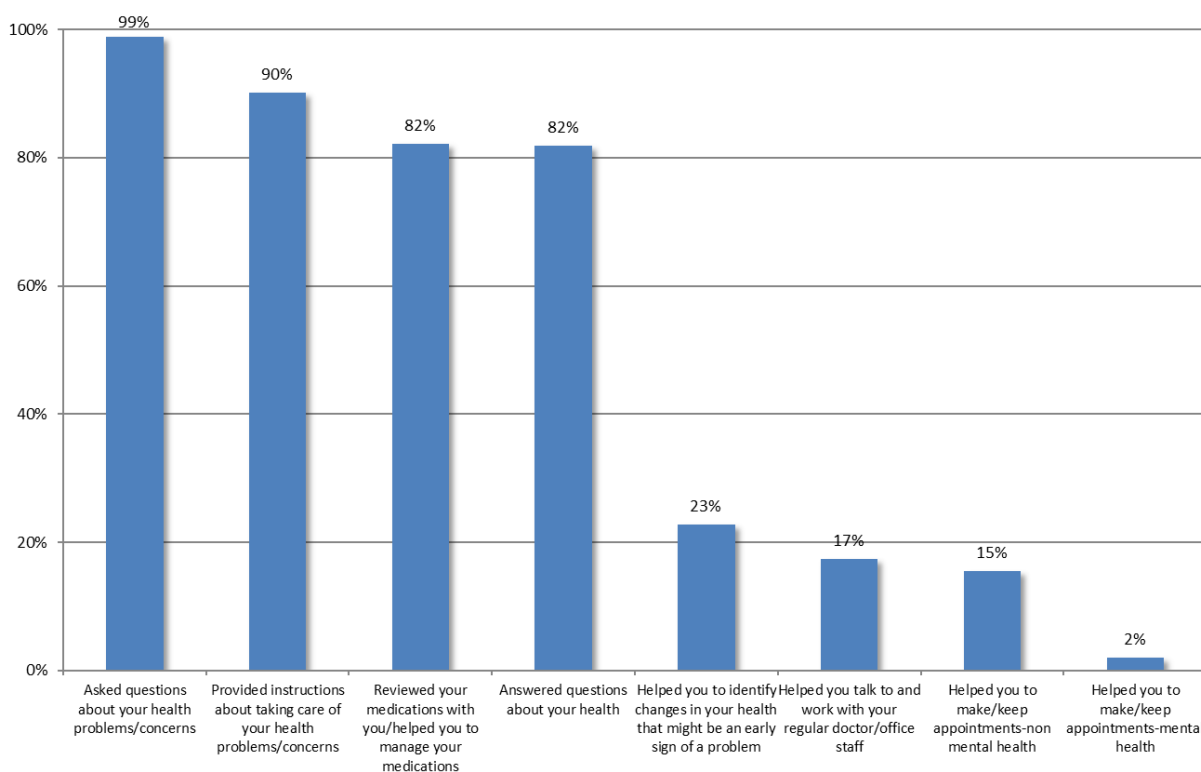
The rate at which activities occurred generally was consistent across initial survey time periods and between the initial and follow-up surveys (Exhibit 2-17 on the following page).

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

	CCM Nurse Activity											
	Initial Survey (% "yes")						Follow-up Survey (% "yes")					
Response	**2019**	**2020**	**2021**	**2022**	**2023**	**All Years**	**2019**	**2020**	**2021**	**2022**	**2023**	**All Years**
1. Asked questions about your health problems/ concerns	100.0%	99.3%	97.6%	98.5%	97.7%	*98.8%*	100.0%	100.0%	97.8%	97.7%	100.0%	*99.1%*
2. Provided instructions about taking care of your health problems/ concerns	94.7%	92.3%	90.7%	82.1%	86.0%	*90.1%*	98.0%	94.7%	95.7%	93.2%	88.9%	*94.4%*
3. Helped you to identify changes in health that might be an early sign of a problem	28.0%	29.4%	11.6%	22.4%	14.0%	*22.7%*	28.0%	39.5%	23.9%	27.3%	36.1%	*30.4%*
4. Answered questions about your health	82.7%	84.6%	80.2%	80.6%	76.7%	*81.9%*	82.0%	84.2%	91.3%	90.9%	77.8%	*85.5%*
5. Helped you talk to and work with your regular doctor/staff	20.0%	21.7%	11.6%	16.4%	11.6%	*17.4%*	22.0%	42.1%	10.9%	27.3%	22.2%	*24.3%*
6. Helped you make/ keep appointments with other doctors, such as specialists	18.7%	21.0%	10.5%	11.9%	7.0%	*15.5%*	16.0%	23.7%	15.2%	22.7%	22.2%	*19.6%*
7. Helped you to make/ keep appointments for MH/SA problems	2.7%	2.8%	0.0%	1.5%	2.3%	*1.9%*	2.0%	0.0%	2.2%	1.5%	2.3%	*1.9%*
8. Reviewed your medications and helped you manage	77.3%	87.4%	83.7%	79.1%	74.4%	*82.1%*	70.0%	89.5%	87.0%	79.1%	74.4%	*82.1%*

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 receive help reported being either very or somewhat satisfied.

Exhibit 2-18 – Satisfaction with CCM Nurse Activity ("Very Satisfied")[31] – Initial Survey (Longitudinal) & Follow-up

	CCM Nurse Activity												
	Initial Survey (% "very satisfied")							Follow-up Survey (% "very satisfied")					
Response	2019	2020	2021	2022	2023	All Years		2019	2020	2021	2022	2023	All Years
1. Asked questions about your health problems/ concerns	90.7%	95.8%	96.5%	84.8%	93.0%	*92.9%*		88.0%	89.5%	88.9%	93.0%	83.3%	*88.7%*
2. Provided instructions about taking care of your health problems/ concerns	91.5%	96.2%	93.8%	89.5%	87.2%	*92.9%*		89.8%	88.9%	90.9%	95.2%	84.8%	*90.2%*
3. Helped you to identify changes in health that might be an early sign of a problem	100.0%	95.6%	83.3%	87.5%	100.0%	*94.0%*		63.2%	93.3%	92.3%	92.3%	85.7%	*83.8%*
4. Answered questions about your health	96.8%	94.1%	91.8%	87.7%	91.2%	*92.8%*		97.6%	97.0%	95.1%	95.1%	93.1%	*95.7%*
5. Helped you talk to and work with your regular doctor/staff	100.0%	97.1%	91.7%	90.9%	80.0%	*94.9%*		100.0%	93.8%	100.0%	92.3%	90.0%	*94.5%*
6. Helped you make/ keep appointments with other doctors, such as specialists	91.7%	92.3%	66.7%	87.5%	100.0%	*87.9%*		100.0%	87.5%	100.0%	88.9%	88.9%	*92.7%*
7. Helped you to make/ keep appointments for MH/SA problems	50.0%	100.0%	0.0%	0.0%	0.0%	*44.4%*		50.0%	N/A	N/A	N/A	66.7%	*60.0%*
8. Reviewed your medications and helped you manage	86.4%	93.2%	88.6%	80.0%	81.6%	*87.7%*		78.3%	86.8%	95.2%	85.7%	73.5%	*84.2%*

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

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[31] 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.

Exhibit 2-19 – Satisfaction with CCM Nurse – Initial Survey (All Years)
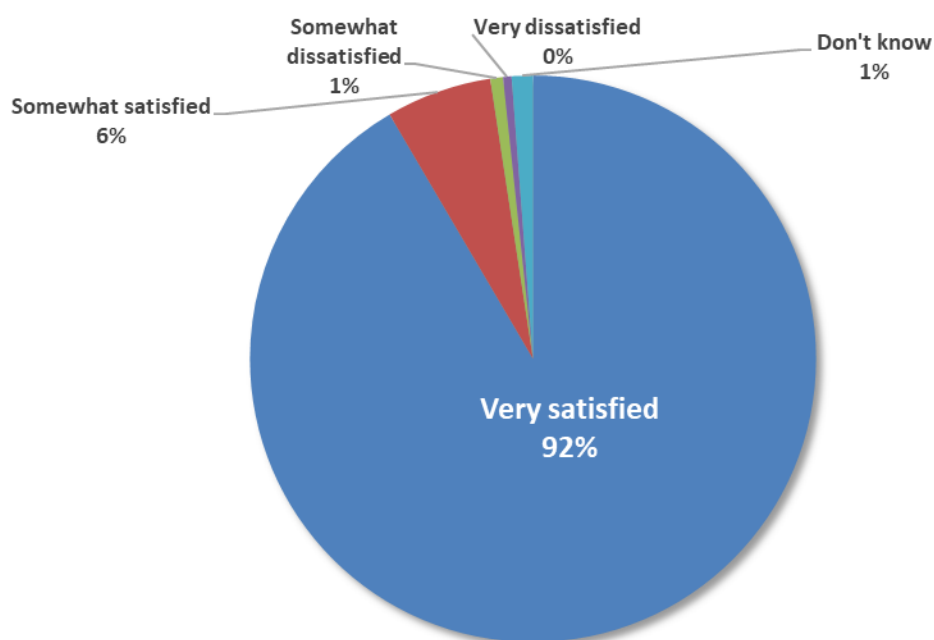
The high level of satisfaction was consistent across survey time periods and between the initial and follow-up surveys (Exhibit 2-20).

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

	Satisfaction with CCM Nurse												
	Initial Survey							Follow-up Survey					
Response	2019	2020	2021	2022	2023	All Years		2019	2020	2021	2022	2023	All Years
Very satisfied	89.3%	94.4%	94.2%	83.6%	93.0%	91.5%		88.0%	89.5%	87.0%	93.0%	88.9%	89.2%
Somewhat satisfied	9.3%	4.2%	3.5%	10.4%	4.7%	6.0%		12.0%	5.3%	10.8%	4.7%	8.3%	8.5%
Somewhat dissatisfied	0.0%	1.4%	0.0%	0.0%	2.3%	0.7%		0.0%	0.0%	0.0%	2.3%	0.0%	0.5%
Very dissatisfied	1.3%	0.0%	0.0%	1.5%	0.0%	0.5%		0.0%	5.3%	0.0%	0.0%	2.8%	1.4%
Don't know/not sure/no response	0.0%	0.0%	2.3%	4.5%	0.0%	1.2%		0.0%	0.0%	2.2%	0.0%	0.0%	0.5%

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

Health Status and Lifestyle

The ultimate objectives of the CCM are to assist members in adopting healthier lifestyles and improving their overall health. When asked to rate their current health status, a majority of initial survey respondents (55 percent) said "fair" (Exhibit 2-21).

Exhibit 2-21 – Current Health Status – Initial Survey (All Years)
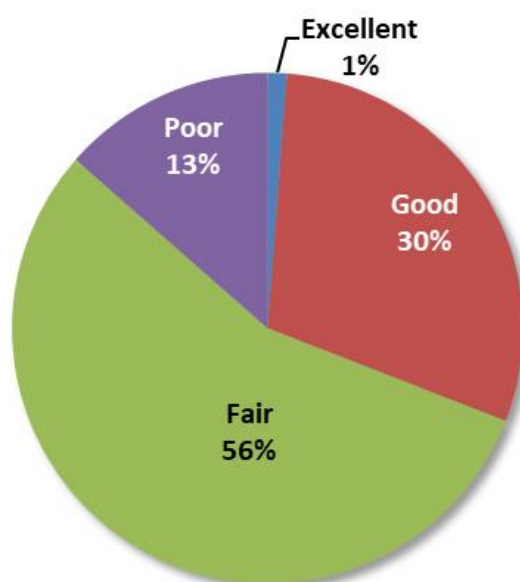
The "fair" health status was the largest segment across survey time periods and between the initial and follow-up surveys (Exhibit 2-22).

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

	Current Health Status											
	Initial Survey						Follow-up Survey					
Response	2019	2020	2021	2022	2023	All Years	2019	2020	2021	2022	2023	All Years
Excellent	0.0%	0.7%	1.2%	1.5%	4.7%	*1.2%*	0.0%	0.0%	2.2%	0.0%	0.0%	*0.5%*
Good	18.7%	36.8%	30.2%	25.4%	30.2%	*29.7%*	38.0%	26.3%	37.0%	44.2%	30.6%	*35.7%*
Fair	66.7%	51.4%	55.8%	52.2%	55.8%	*55.6%*	60.0%	50.0%	52.1%	37.2%	55.6%	*51.2%*
Poor	14.7%	11.1%	12.8%	20.9%	9.3%	*13.5%*	2.0%	23.7%	8.7%	16.3%	13.9%	*12.2%*
DK/not sure/no response	0.0%	0.0%	0.0%	0.0%	0.0%	*0.0%*	0.0%	0.0%	0.0%	2.3%	0.0%	*0.5%*

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

When next asked if their health status had changed since enrolling in the SoonerCare CCM, the largest segment of initial survey respondents (51 percent) said it was "about the same." However, 44 percent said it was "better" and only five percent said it was "worse." Among those respondents who reported a positive change, nearly all (96 percent) credited the SoonerCare CCM with contributing to their improved health (Exhibit 2-23).

Exhibit 2-23 – Health Status as Compared to Pre-CCM Enrollment – Initial Survey (All Years)
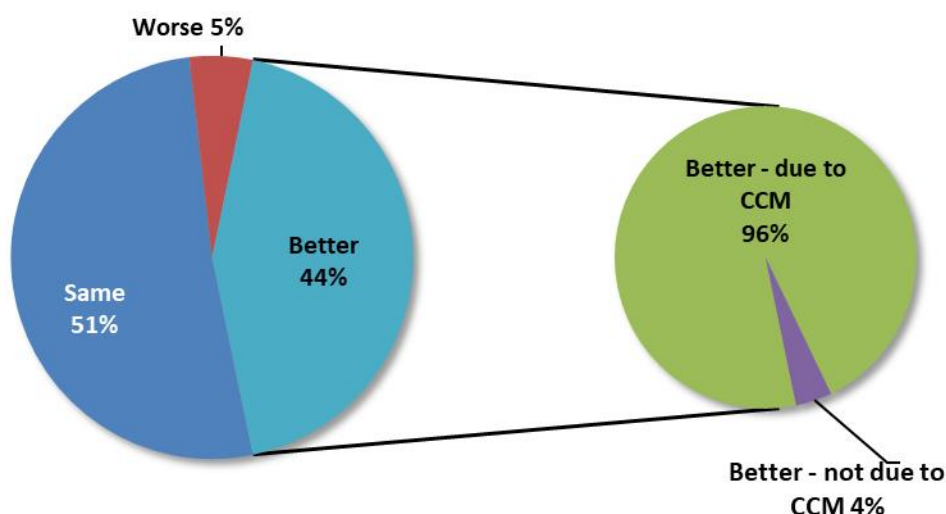
The results were even more positive among follow-up survey respondents. A majority (53 percent) reported improved health, with 96 percent again crediting this improvement to the program (Exhibit 2-24).

Exhibit 2-24 – Health Status as Compared to Pre-CCM Enrollment – Follow-up Survey
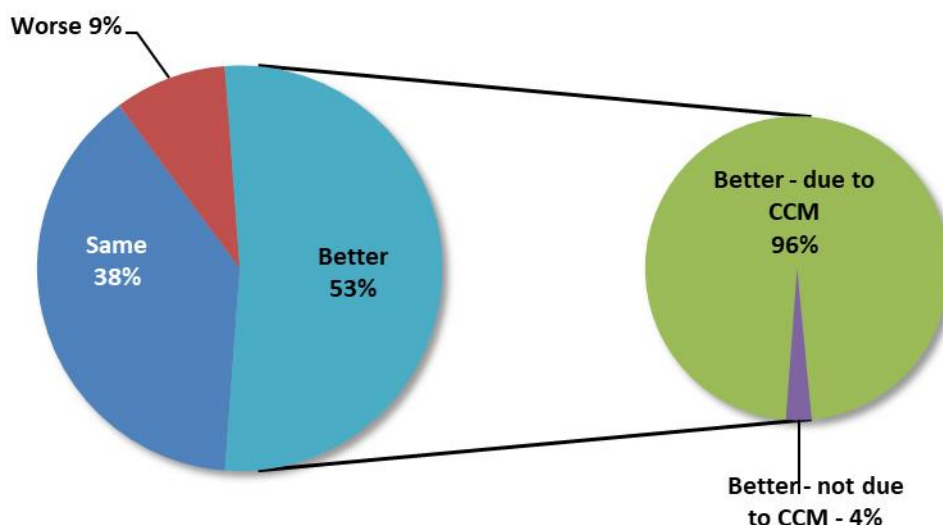
Respondents in the follow-up survey who stated that the SoonerCare CCM contributed to their improved health were asked to provide examples of the program's impact. The answers generally referred back to the activities shown in Exhibits 2-17 and 2-18. However, many respondents also simply were grateful to have someone to talk to who they viewed as compassionate and interested in their health.

Respondents also were asked whether their CCM 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 CCM nurse. A significant percentage also reported continuing to make changes with respect to exercise, diet, water intake and medication management. Smaller percentages reported working to reduce tobacco, alcohol or other substance use.

The percentage that reported continuing change increased for several activities from 2019 to 2021 but decreased from 2020 to 2023 (Exhibit 2 – 25).

Exhibit 2-25 – Changes in Behavior – "Continuing Change" – Initial Survey[32]

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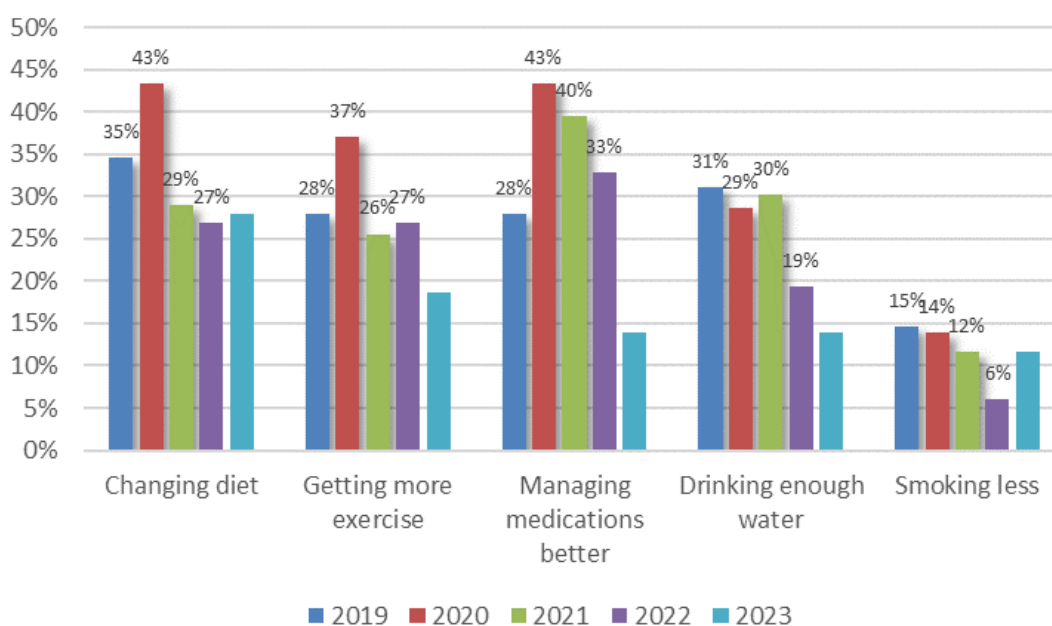
[32] The sixth behavior, drinking or using other substances less, was identified as an area of continuing change by 1.9 percent of the initial survey group and 1.7 percent of the follow-up survey group. It is omitted from the exhibit due to the difference in scale versus the other behavior items.

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

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

Behavior	Survey	Discussion and Change in Behavior					
		N/A – Not Discussed[33]	Discussed – No Change	Discussed – Temporary Change	Discussed – Continuing Change	Discussed – But Not Applicable	Unsure/ No Response
1. Smoking less or using other tobacco products less	Initial	26.3%	4.1%	1.0%	12.1%	44.7%	11.8%
	Follow-up	21.6%	4.7%	0.5%	8.9%	49.3%	15.0%
2. Moving around more or getting more exercise	Initial	30.2%	4.8%	0.2%	29.5%	26.1%	9.2%
	Follow-up	24.9%	5.6%	1.9%	35.2%	23.0%	9.4%
3. Changing your diet	Initial	27.3%	5.6%	1.7%	34.5%	8.5%	22.5%
	Follow-up	17.8%	8.0%	1.4%	47.4%	17.4%	8.0%
4. Managing and taking your medications better	Initial	19.8%	0.2%	0.0%	35.0%	35.5%	9.4%
	Follow-up	10.8%	0.0%	0.0%	30.0%	43.2%	16.0%
5. Making sure to drink enough water throughout the day	Initial	24.2%	2.2%	1.9%	26.4%	32.0%	13.3%
	Follow-up	15.5%	8.0%	0.9%	31.0%	27.2%	17.4%
6. Drinking or using other substances less	Initial	31.4%	0.0%	0.0%	1.7%	51.2%	15.7%
	Follow-up	29.6%	0.5%	0.0%	2.3%	46.5%	21.1%

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

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

Overall Satisfaction

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

Exhibit 2-27 – Overall Satisfaction with SoonerCare CCM – Initial Survey (All Years)
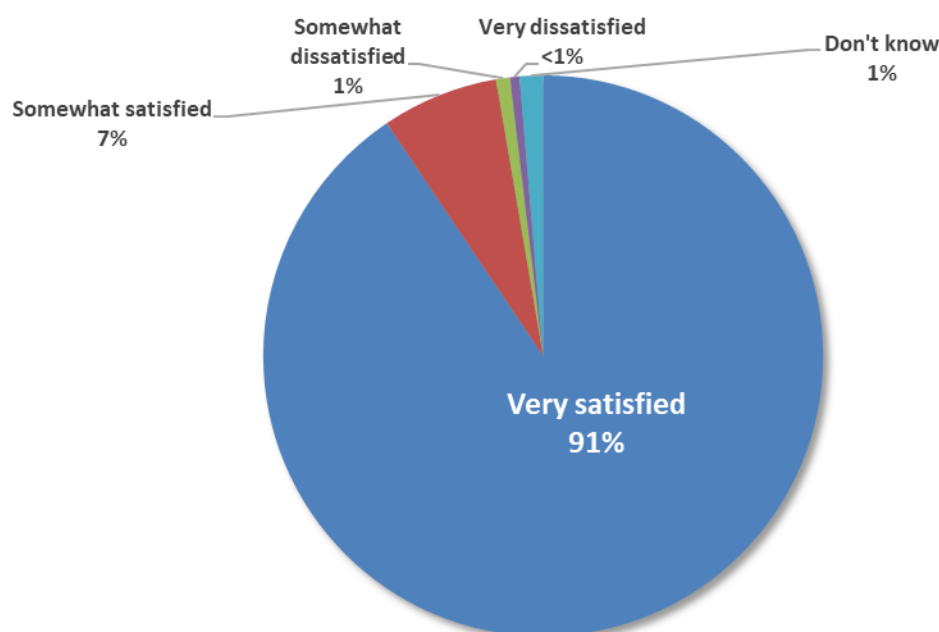
The "very satisfied" percentage declined among initial survey respondents from 2021 to 2022 before rebounding in 2023. The results otherwise were consistent across time periods and survey groups (Exhibit 2-28 on the following page).

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

	Satisfaction with SoonerCare CCM												
	Initial Survey							Follow-up Survey					
Response	2019	2020	2021	2022	2023	All Years		2019	2020	2021	2022	2023	All Years
Very satisfied	88.0%	95.1%	93.0%	80.6%	90.7%	*90.6%*		88.0%	89.5%	89.1%	93.0%	86.1%	*89.2%*
Somewhat satisfied	10.7%	2.8%	4.7%	13.4%	7.0%	*6.8%*		12.0%	7.9%	8.7%	2.3%	11.1%	*8.5%*
Somewhat dissatisfied	0.0%	2.1%	0.0%	0.0%	2.3%	*1.0%*		0.0%	0.0%	0.0%	2.3%	0.0%	*0.5%*
Very dissatisfied	1.3%	0.0%	0.0%	1.5%	0.0%	*0.5%*		0.0%	2.6%	0.0%	2.3%	2.8%	*1.4%*
Don't know/not sure/no response	0.0%	0.0%	2.3%	4.5%	0.0%	*1.2%*		0.0%	0.0%	2.2%	0.0%	0.0%	*0.5%*

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

Participant appreciation of the CCM nurse and CCM 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. (Comments are from across all survey periods, with more recent comments shown first.)

> *"If it wasn't for (my nurse) I would not have gotten the care I needed for myself and my daughter. She got me the doctor appointments we both needed."*
>
> *"I went two months without enough insulin. I was using expired insulin that I had. She talked to my doctor and got him to prescribe the right amount. It took several phone calls too."*
>
> *"(My nurse) has been instrumental, and the only one, to help me and my husband. He saved my life after the Health Care Authority canceled my insurance by helping me get it back."*
>
> *"She helped me find housing when I lost my house."*
>
> *"Having my (nurse) call me every month keeps me more positive. I have had a bad year and knowing she is going to call helps me feel better. She also explains my test results better than my doctor does."*

"My lady helped me understand what the SoonerCare rules are. When I first joined, I had cataract surgery and couldn't read the information they sent. She explained it all to me. She also helped me get more medications than I was getting at first."

"(My nurse) has saved me. I was not able to get appointments with the specialists that I really needed to see. (She) in 10 minutes got done what I had been trying for months to do. She is right there to call doctors and SoonerCare for help for appointments or medication approval. I would be in very bad shape if I didn't have her. More people need to know about this program, it is great."

"My nurse straightened out my doctor's office fast. I was having so much trouble with my appointments way before COVID. They would cancel them last minute and sometimes even when I walked in the door, they would tell me they had to cancel it. I do my part, come in regularly as they require, but then they would cancel on me and not reschedule for months. My SoonerCare nurse called and I have not had that problem again! She also sent me exercises I could do after I broke my foot."

"I would not have gotten my medications if it wasn't for (my nurse). She got on the phone and got my medication approved."

"(My nurse) has helped me work through my depression and anxiety. She and my other nurse, whose name I can't remember, both are so easy to talk to. I usually don't like talking to people on the phone, not as comfortable as face to face, but you guys do an excellent job at picking the nurses – they are great."

"I started taking care of my dad a few years ago when he was going to be put in a nursing home. I had a nurse care manager for my daughter and loved the program. I called SoonerCare and got my dad a nurse too. She has helped so much. She does research and calls the doctor and pharmacy for me and coordinates his care which leaves me time to work with him on his walking and getting him out of his wheelchair. Having (my nurse) has helped me keep my father out of a nursing home. These nurses are the most unknown but most loved people out there! I tell everyone that gets on SoonerCare to call and get themselves a nurse care manager because it will change their lives!"

"My nurse helps me with my anxiety and getting me over the fear of going to the doctor. I have a hard time leaving the house so I used to miss a lot of doctor appointments. Now with COVID it is even worse. She talks to me so patiently and helps me do what I need to do."

"(My nurse) figured out that my sleep apnea machine was not set at the right level. I was always tired and groggy. She told me to talk to my doctor and check if my

machine was working right. Sure enough, it was giving me only half the air flow that I needed. The difference now has changed my life! I have so much more energy and feel great."

"Can I say 'extremely satisfied' in place of 'very satisfied' option? (My nurse) has helped me in so many ways. I would not have gotten my physical therapy without her. She also was concerned about not drinking enough water because I hate tap water so she got me a water filter jug system."

CAHPS Access to Care Questions

The OHCA contracts with a vendor to administer the nationally-validated Consumer Assessment of Healthcare Providers and Systems (CAHPS) survey. The vendor surveys SoonerCare beneficiaries to document their attitudes about the SoonerCare program, including access to care.

The CMS-approved evaluation design for the SoonerCare 1115 Demonstration (2019 – 2023 period) requires the independent evaluator (PHPG) to compare CAHPS access to care results for the general SoonerCare population to CAHPS results for SoonerCare HMP beneficiaries. The purpose is to explore whether participation in the SoonerCare HMP improves a beneficiary's satisfaction with his or her access to primary and specialty care services.

PHPG added the relevant CAHPS questions to the SoonerCare HMP survey in 2020, to allow for comparison to the general SoonerCare population. Although the CCM population is not a reportable group under the SoonerCare 1115 Demonstration evaluation, PHPG also added CAHPS questions to the CCM survey, for internal OHCA tracking purposes.

Findings for the SoonerCare CCM population are presented below. Results are shown separately for adult and child SoonerCare CCM participants, in alignment with the CAHPS survey structure.

Results are for initial survey respondents only, consistent with SoonerCare 1115 Demonstration evaluation specifications. Data for the follow-up survey group is included in Appendix B[34].

Access to Care (General)

Respondents were asked how often it was easy to get the care, tests and treatment they needed in the last six months: always, usually, sometimes or never. A majority of SoonerCare CCM participants stated it was "always" easy for themselves or (if applicable) their child (Exhibit 2-29 on the following page).

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[34] The comparison group methodology for the 1115 Demonstration evaluation does not distinguish between SoonerCare HMP survey populations. PHPG omitted the follow-up survey results from the SoonerCare HMP findings, rather than combine them with the initial survey results, to avoid double-counting respondents who appear in both samples. PHPG followed the same methodology for the SoonerCare CCM analysis. The initial and follow-up survey group findings are nearly identical.

***Exhibit 2-29 – Access to Care (General) in Last Six Months –
Initial Survey (Adults and Children)***
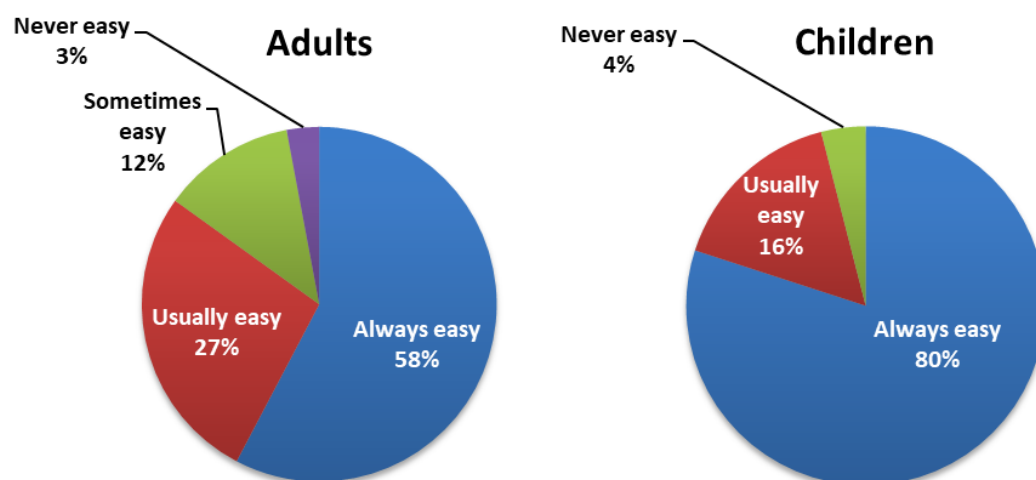
Access to Care (Specialists)

Respondents were asked whether they had made an appointment with a specialist in the last six months and, if yes, how often they were able to get an appointment as soon as needed: always, usually, sometimes or never.

Seventy-four percent of adults and 86 percent of parents of children said they had made one or more specialist appointments. Large majorities of both groups again stated it was "always" easy (Exhibit 2-30 on the following page).

Exhibit 2-30 – Access to Specialty Care in Last Six Months –
Initial Survey (Adults and Children)
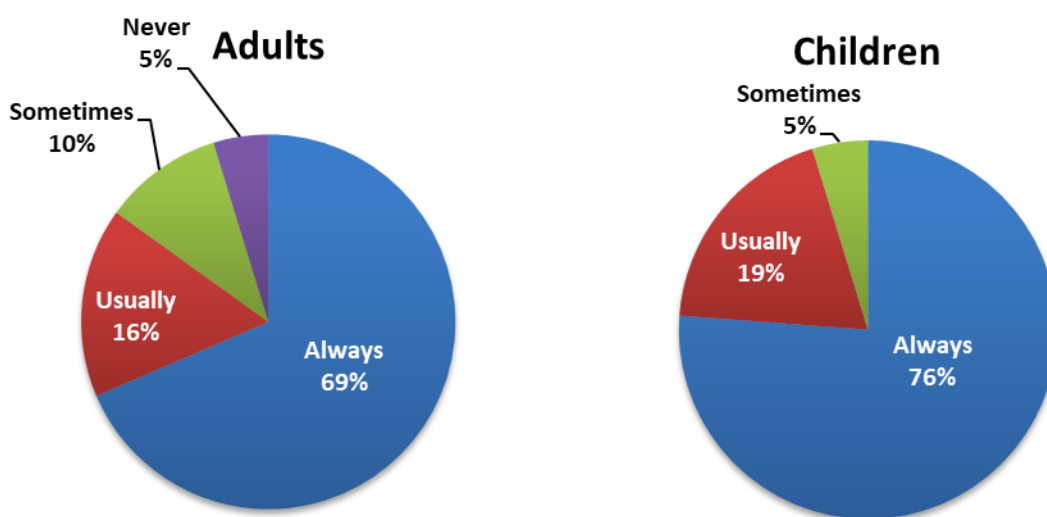
Overall Rating of Health Care

Respondents also were asked to rate their health care (or child's health care) in the last six months, using a scale from 0 to 10, where "0" represented the worst possible health care and "10" the best possible health care. Generally, a score of "8", "9" or "10" is considered to indicate a high level of satisfaction. Large majorities of both groups picked one of the top three ratings (Exhibit 2-31 on the following page).

The average rating among SoonerCare CCM adults was 8.6. The average rating among parents of SoonerCare CCM children also was 8.6; the lowest rating given by any parent was "4".

Exhibit 2-31 – Health Care Rating in Last Six Months –
Initial Survey (Adults and Children)
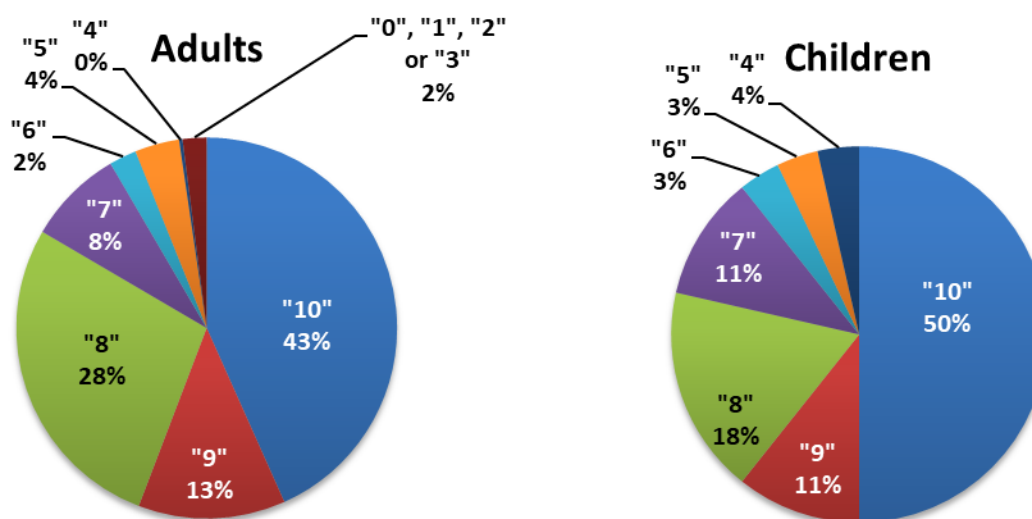
Summary Findings

SoonerCare CCM members report being very satisfied with their experience in the program and value highly their relationship with the CCM 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.

The high satisfaction level is consistent with findings from earlier SoonerCare CCM evaluation cycles. It is particularly noteworthy for calendar years 2020 and 2021, given the vulnerability of the SoonerCare CCM population to COVID-19 in terms of risk factors (e.g., age and co-morbidities), and the impact of the public health emergency on the health care delivery system.

CHAPTER 3 – SOONERCARE CCM QUALITY-OF-CARE ANALYSIS

Introduction

SoonerCare CCM 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 CCM on quality-of-care through calculation of Healthcare Effectiveness Data and Information Set (HEDIS®) measures applicable to the SoonerCare CCM population. The evaluation included 17 condition-specific measures and two population-wide preventive measures:

- Asthma measures
  - o Asthma medication ratio – 5 to 18 years
  - o Asthma medication ratio – 19 to 64 years

- Cardiovascular (CAD and heart failure) measures
  - o Persistence of beta-blocker treatment after a heart attack
  - o Cholesterol management for patients with cardiovascular conditions – LDL-C screening

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

- Diabetes measures
  - o Percentage of members who had LDL-C screening
  - o Percentage of members who had retinal eye exam performed
  - o Percentage of members who had Hemoglobin A1c (HbA1c) testing
  - o Percentage of members who received medical attention for nephropathy

- Hypertension measures
  - o Percentage of members who had LDL-C screening
  - o Percentage of members prescribed ACE/ARB therapy

- Opioid use measures
  - o Use of opioids at high dosage in persons without cancer
  - o Concurrent use of opioids and benzodiazepines

- Preventive health measures
  - o Adult access to preventive/ambulatory health services
  - o Children and adolescents' access to PCPs

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

Methodology

The quality-of-care analysis targeted SoonerCare CCM participants meeting the criteria outlined in chapter 1. The analysis was performed in accordance with HEDIS specifications, using administrative (claims) data.

PHPG determined the total number of SoonerCare CCM participants ("treatment group") to be evaluated for each measure (denominator), the number meeting the clinical standard (numerator) and the resultant "percent compliant" or "use rate" (for opioid measures). PHPG also calculated compliance/use rates for populations consisting of persons with the condition being evaluated (asthma, diabetes etc.) who had not been enrolled in any care management program ("comparison group").

PHPG identified a distinct comparison group for each measure category (e.g., asthma measures). The comparison groups were further refined using a statistical technique known as Coarsened Exact Matching (CEM).

CEM attempts to estimate the effect of a treatment, policy, or other intervention by accounting for the covariates that predict receiving the treatment. CEM seeks to reduce the bias due to confounding variables that could be found in an estimate of the treatment effect obtained from simply comparing outcomes among units that received the "treatment" (i.e., care management) versus those that did not[35].

Consistent with prior years, the CEM analysis controlled for age, gender, aid category[36] and place of residence[37] across all measures. The 2022 and 2023 analyses also controlled for Medicaid expansion status among adults. This was done to account for potential health differences between traditional Medicaid beneficiaries and persons newly-eligible, starting in 2021, due to the expansion of Medicaid among qualifying adults to 138 percent of the federal poverty level.

Appendix C contains covariate balance data for CEM variables. The objective was to identify a comparison population whose covariates were "balanced" with (close to) the treatment population[38].

T-tests were used to evaluate results for SoonerCare CCM participants against the comparison group populations, with statistically significant results reported based on p ≤ 0.05. Statistically

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[35] For a description of the matching process in general, and CEM specifically, see: Sizemore, Samantha; Alkurdi, Raiber (2019). "Matching Methods for Causal Inference: A Machine Learning Update." Matching Methods for Causal Inference: A Machine Learning Update (humboldt-wi.github.io)

[36] Aged, Blind and Disabled (ABD) and other. The ABD designation serves as a proxy for health status.

[37] Urban or rural county of residence. Urban counties consisted of those comprising the greater Oklahoma City, Tulsa and Lawton metropolitan areas. Rural counties consisted of the rest of the state.

[38] The appendix presents the "standardized difference" of variable values for the treatment and comparison groups both pre- and post-balancing. A standardized difference of 0.00 indicates perfect balance.

significant differences between SoonerCare CCM participants and the comparison group are noted in the exhibits.

Results in the body of the report are presented for calendar years 2019 – 2023, as well as in aggregate for the five-year period. Caution should be exercised when reviewing individual year results and year-over-year changes, where substantial variance may in part be an artifact of small treatment group population sizes. The aggregate data was used to calculate T-test results in order to maximize the statistical power of the analysis[39].   Appendix D contains year-specific compliance/use rates, pooled rates and p-values.

A portion of the HEDIS measures included in the evaluation also are part of CMS' schedule of Core Set Measures for children and adults. CMS publishes an annual report of Core Set Measure data for reporting states and identifies the median (50th percentile) rate across reporting states for each measure.

PHPG included the 50th percentile rate for measure year 2023, where available, as a point of comparison to the Oklahoma data. (Caution: the benchmark population characteristics were not matched to the OHCA groups to minimize differences in the populations. The data is presented for informational purposes only.)

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[39] Statistical significance (P-value) calculated through application of Fisher's Combined Probability Test.

Asthma Measure – Asthma Medication Ratio – 5 to 18 Years of Age

Measure Description: Percentage of members 5 to 18 years of age who were identified as having persistent asthma and had a ratio of controller medications to total asthma medication of 0.50 or greater during the measurement year.

Findings versus Comparison Group: Approximately 85 percent of CCM members and 87 percent of comparison group members were compliant on this measure across the five years (Exhibit 3-1). The compliance rate for the CCM population rose from 2019 to 2021 before declining in 2022 and rising again in 2023. The compliance rate for the comparison group rose from 2019 to 2021 before declining in 2022 and 2023.

Exhibit 3-1 – Asthma Medication Ratio – 5 – 18 Years of Age
Calendar Years 2019 – 2023
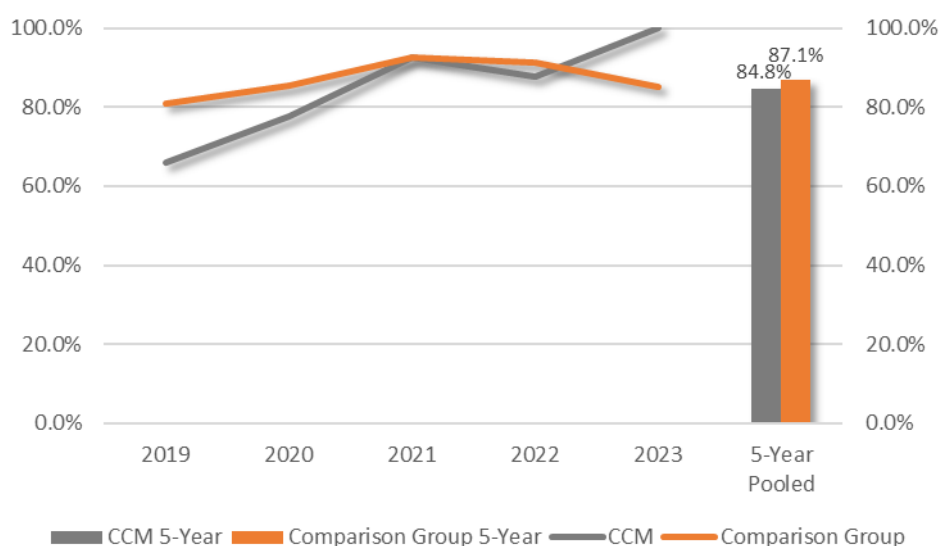
The difference between the CCM and comparison group compliance rates was statistically significant in 2019. It also was statistically significant for the five-year pooled data (Exhibit 3-2). (The lack of statistical significance in 2023 was due to the small sample size in that year.)

Exhibit 3-2 – Health Coaching – Asthma – Medication Ratio – 5 to 18 Years of Age						
	2019	**2020**	**2021**	**2022**	**2023**	**5-Year Pooled**
CCM	66.0%	77.5%	92.5%	87.8%	100.0%	84.8%
Comparison Group	80.9%	85.5%	92.5%	91.4%	85.0%	87.1%
Difference	(14.9%)‡	(8.0%)	---	(3.6%)	15.0%	(2.3%)‡
‡ CCM rate differs from comparison group rate by a statistically significant amount (95% confidence level)						

Findings versus National Benchmark: The five-year pooled rate for the SoonerCare CCM population exceeded the national benchmark rate by approximately 13 percentage points (Exhibit 3-3).

Exhibit 3-3 – Asthma Medication Ratio – 5 – 18 Years of Age
SoonerCare CCM versus Benchmark
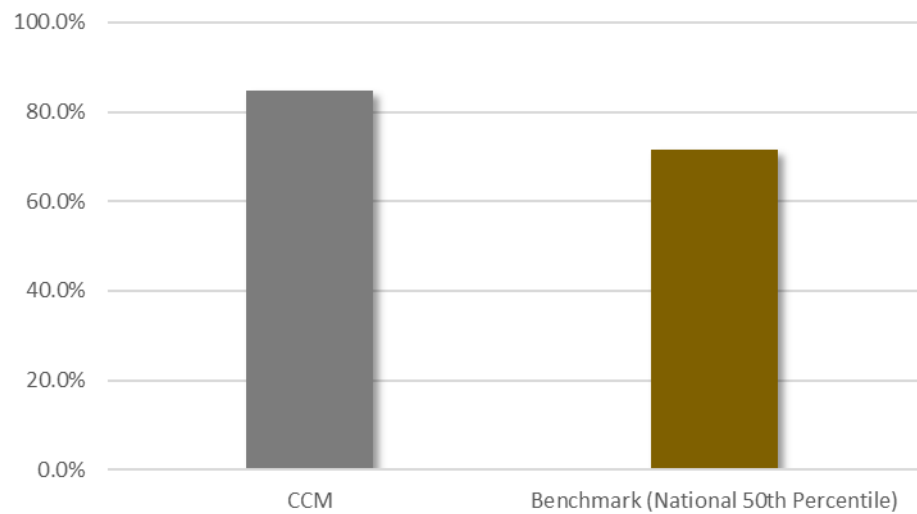
	CCM	Benchmark
Compliance Rate	84.8%	71.6%

Asthma Measure – Asthma Medication Ratio – 19 to 64 Years of Age

Measure Description: Percentage of members 19 to 64 years of age who were identified as having persistent asthma and had a ratio of controller medications to total asthma medication of 0.50 or greater during the measurement year.

Findings versus Comparison Group: Approximately 76 percent of CCM members and 81 percent of comparison group members were compliant on this measure across the five years (Exhibit 3-4). The compliance rate for the CCM population rose from 2019 to 2023. The compliance rate for the comparison group population was nearly unchanged from 2019 to 2020 and rose from 2020 to 2021 before declining in 2022 and 2023.

Exhibit 3-4 – Asthma Medication Ratio – 19 – 64 Years of Age
Calendar Years 2019 – 2023
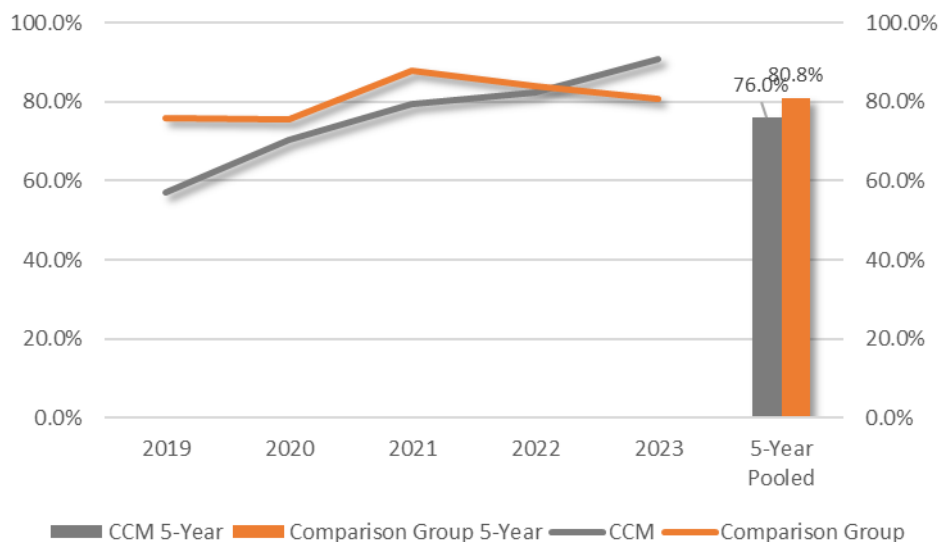
The difference between the CCM and comparison group compliance rates was statistically significant in 2019 and 2021. It also was statistically significant for the five-year pooled data (Exhibit 3-5).

Exhibit 3-5 – CCM – Asthma – Medication Ratio – 19 to 64 Years of Age						
	2019	**2020**	**2021**	**2022**	**2023**	**5-Year Pooled**
CCM	57.1%	70.3%	79.3%	82.4%	90.9%	76.0%
Comparison Group	75.8%	75.4%	88.0%	84.1%	80.6%	80.8%
Difference	(18.7%)‡	(5.1%)	(8.7%)‡	(1.7%)	10.3%	(4.8%)‡
‡ CCM rate differs from comparison group rate by a statistically significant amount (95% confidence level)						

Findings versus National Benchmark: The five-year pooled rate for the SoonerCare CCM population exceeded the national benchmark rate by approximately 18 percentage points (Exhibit 3-6).

Exhibit 3-6 – Asthma Medication Ratio – 19 – 64 Years of Age
SoonerCare CCM versus Benchmark
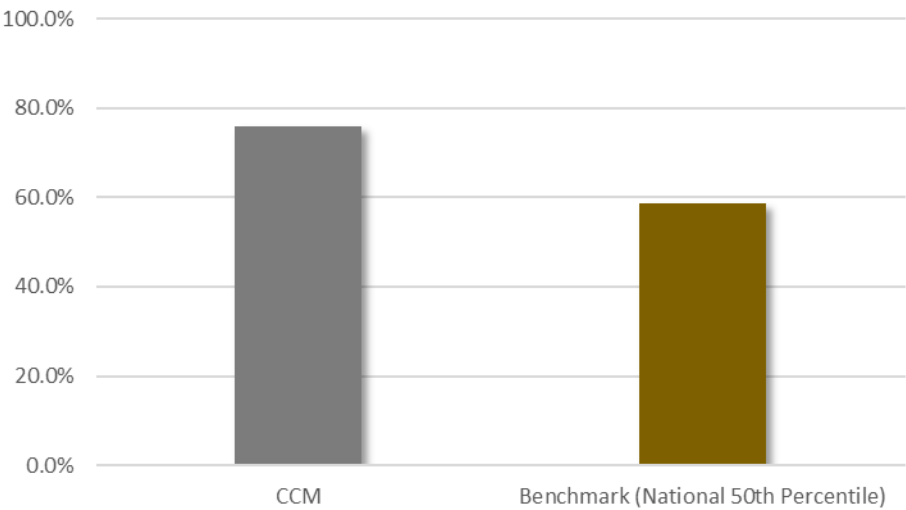
	CCM	Benchmark
Compliance Rate	76.0%	58.5%

CAD Measure – Persistence of Beta Blocker Treatment after a Heart Attack

Measure Description: Percentage of members 18 years of age and older during the measurement year who were hospitalized and discharged from July 1 of the year prior to the measurement year to June 30 of the measurement year with a diagnosis of acute myocardial infarction (AMI) and who received persistent beta-blocker treatment for six months after discharge.

Findings versus Comparison Group: Forty-three percent of CCM members and approximately 45 percent of comparison group members were compliant on this measure across the five years (Exhibit 3-7). The compliance rate for the CCM population rose from 2019 to 2022 before declining in 2023. The compliance rate for the comparison group population rose from 2019 to 2020 before declining from 2020 to 2021 and rising again in 2022. The comparison group rate was nearly unchanged in 2023.

Exhibit 3-7 – Persistence of Beta Blocker Treatment after a Heart Attack
Calendar Years 2019 – 2023
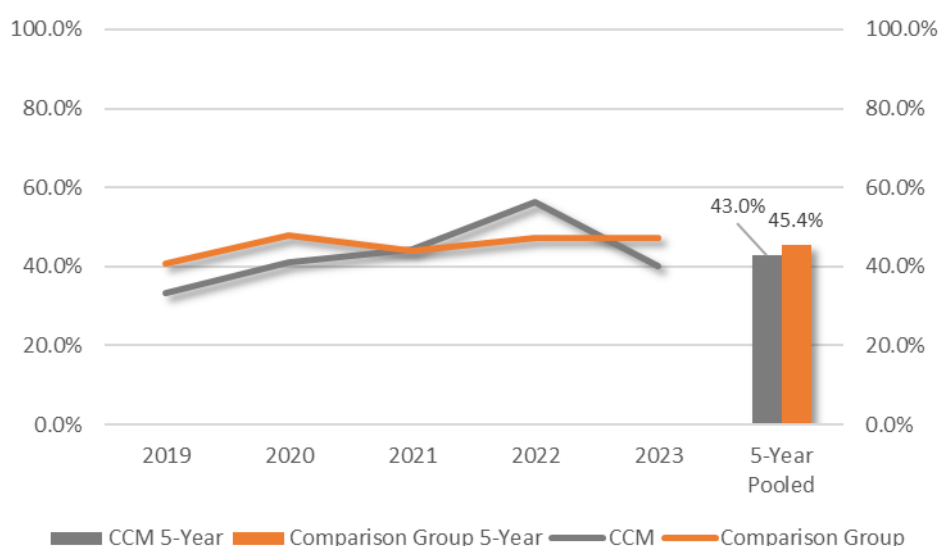
The difference between the CCM and comparison group compliance rates was not statistically significant in any of the individual years. It also was not statistically significant for the five-year pooled data (Exhibit 3-8).

Exhibit 3-8 – CCM – CAD – Beta Blocker after Heart Attack						
	2019	**2020**	**2021**	**2022**	**2023**	**5-Year Pooled**
CCM	33.3%	41.0%	44.4%	56.3%	40.0%	43.0%
Comparison Group	40.8%	47.9%	44.0%	47.3%	47.2%	45.4%
Difference	(7.5%)	(6.9%)	0.4%	(9.0%)	(7.2%)	(2.4%)
‡ CCM rate differs from comparison group rate by a statistically significant amount (95% confidence level)						

CAD Measure – Cholesterol Management for Patients with Cardiovascular Conditions – LDL-C Screening

Measure Description: Percentage of members 18 to 75 years of age with cardiovascular disease who had an LDL-C (cholesterol) test during the measurement year.

Findings versus Comparison Group: Approximately 61 percent of CCM members and 63 percent of comparison group members were compliant on this measure across the five years (Exhibit 3-9). The compliance rate for the CCM population declined from 2019 to 2021 before rising slightly in 2022 and declining again in 2023. The compliance rate for the comparison group population declined from 2019 to 2020 before rising from 2020 to 2022 and declining again in 2023.

Exhibit 3-9– Cholesterol Management for Patients with Cardiovascular Conditions – LDL-C Screening Calendar Years 2019 – 2023
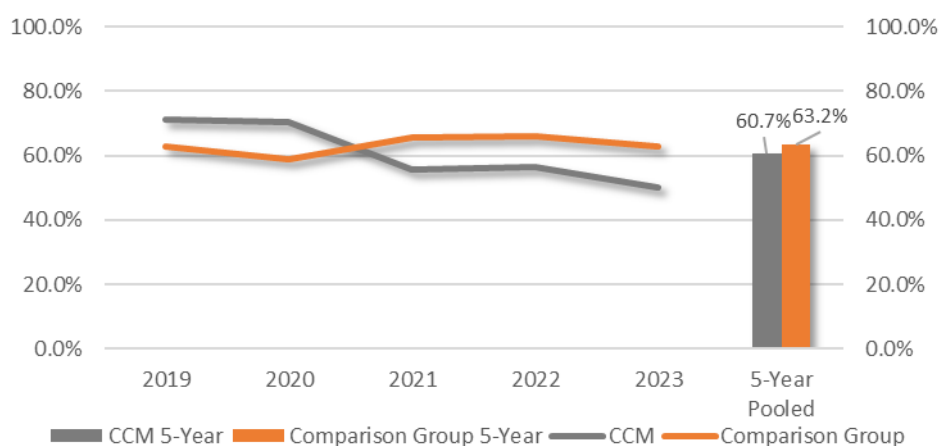
The difference between the CCM and comparison group compliance rates was not statistically significant in any of the individual years. It also was not statistically significant for the five-year pooled data (Exhibit 3-10).

Exhibit 3-10 – CCM – CAD – Cholesterol Management – LDL-C Test						
	2019	**2020**	**2021**	**2022**	**2023**	**5-Year Pooled**
CCM	71.2%	70.5%	55.6%	56.3%	50.0%	60.7%
Comparison Group	62.7%	58.9%	65.6%	66.1%	62.9%	63.2%
Difference	8.5%	11.6%	(10.0%)	(9.8%)	(12.9%)	(2.5%)
‡ CCM rate differs from comparison group rate by a statistically significant amount (95% confidence level)						

COPD Measure – Use of Spirometry Testing in the Assessment and Diagnosis of COPD

Measure Description: Percentage of members 40 years of age and older with a new diagnosis of chronic obstructive pulmonary disease (COPD) or newly active COPD, who received appropriate spirometry testing to confirm the diagnosis.

Findings versus Comparison Group: Approximately 30 percent of CCM members and 20 percent of comparison group members were compliant on this measure across the five years (Exhibit 3-11). The compliance rate for both populations rose from 2019 to 2020, declined from 2020 to 2021, rose in in 2022 and declined again in 2023.

Exhibit 3-11 – Use of Spirometry Testing in the Assessment and Diagnosis of COPD Calendar Years 2019 – 2023
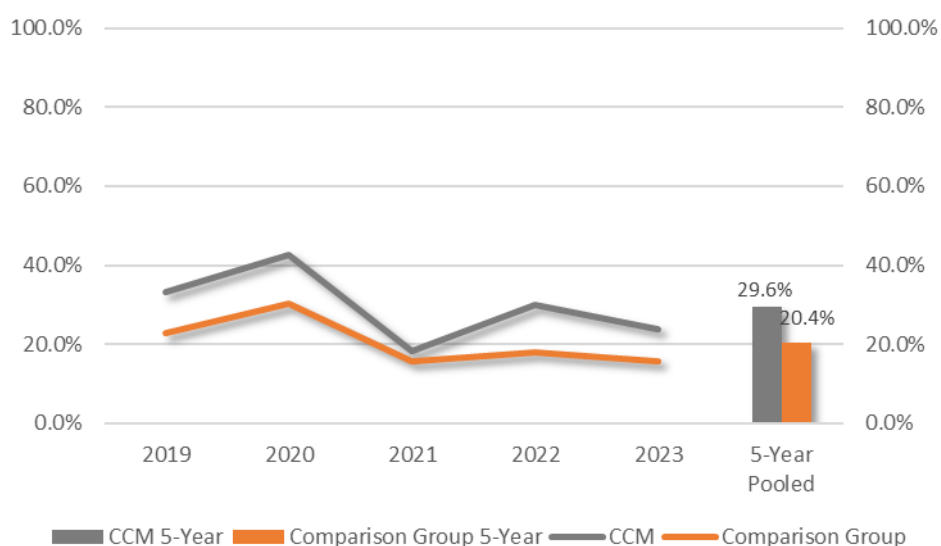
The difference between the CCM and comparison group compliance rates was not statistically significant in any of the individual years. However, it was statistically significant for the five-year pooled data (Exhibit 3-12).

Exhibit 3-12 – CCM – COPD – Use of Spirometry Testing						
	2019	**2020**	**2021**	**2022**	**2023**	**5-Year Pooled**
CCM	33.3%	42.5%	18.2%	30.0%	23.8%	29.6%
Comparison Group	22.7%	30.2%	15.6%	17.8%	15.8%	20.4%
Difference	10.6%	12.3%	2.6%	15.6%	8.0%	**9.2%‡**
‡ CCM rate differs from comparison group rate by a statistically significant amount (95% confidence level)						

COPD Measure – Pharmacotherapy Management of COPD Exacerbation – 14 Days

Measure Description: Percentage of COPD exacerbations for members 40 years of age and older who had an acute inpatient discharge or emergency room visit on or between January 1 to November 30 of the measurement year and who were dispensed a systemic corticosteroid (or there was evidence of an active prescription) within 14 days of the event.

Findings versus Comparison Group: Fifty-six percent of CCM members and approximately 63 percent of comparison group members were compliant on this measure across the five years (Exhibit 3-13). The compliance rate for the CCM population rose from 2019 to 2020 before declining from 2020 to 2022 and rising again in 2023. The compliance rate for the comparison group population rose from 2019 to 2021 before declining in 2022 and rising again in 2023.

Exhibit 3-13 – Pharmacotherapy Management of COPD Exacerbation – 14 Days Calendar Years 2019 – 2023
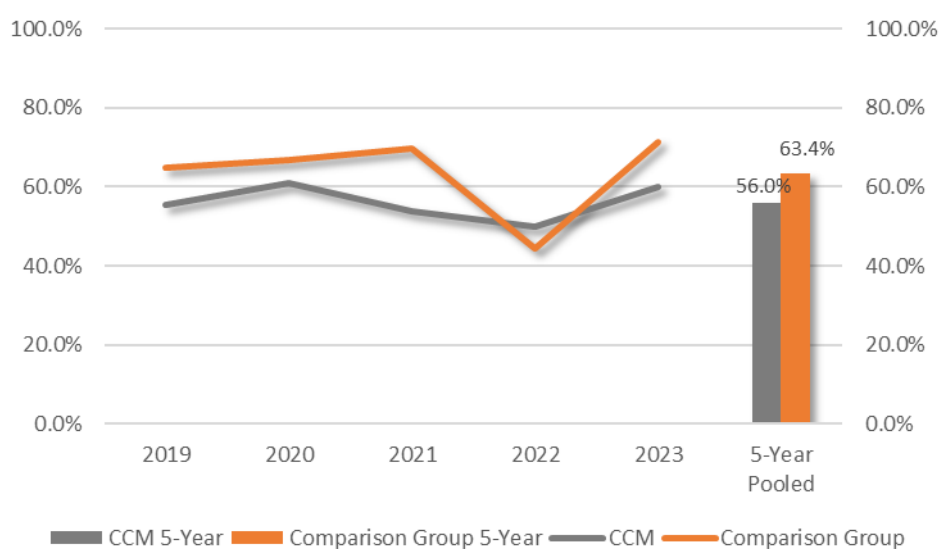
The difference between the CCM and comparison group compliance rates was not statistically significant in any of the individual years. It also was not statistically significant for the five-year pooled data (Exhibit 3-14).

Exhibit 3-14 – CCM – COPD – Pharmacotherapy – 14 Days						
	2019	**2020**	**2021**	**2022**	**2023**	**5-Year Pooled**
CCM	55.3%	61.1%	53.8%	50.0%	60.0%	56.0%
Comparison Group	64.8%	66.9%	69.6%	44.5%	71.3%	63.4%
Difference	(9.5%)	(5.8%)	(15.8%)	5.5%	(11.3%)	(7.4%)
‡ CCM rate differs from comparison group rate by a statistically significant amount (95% confidence level)						

COPD Measure – Pharmacotherapy Management of COPD Exacerbation – 30 Days

Measure Description: Percentage of COPD exacerbations for members 40 years of age and older who had an acute inpatient discharge or emergency room visit on or between January 1 to November 30 of the measurement year and who were dispensed a systemic corticosteroid (or there was evidence of an active prescription) within 30 days of the event.

Findings versus Comparison Group: Approximately 80 percent of CCM members and 77 percent of comparison group members were compliant on this measure across the five years (Exhibit 3-15). The compliance rate for both populations rose from 2019 to 2022 before declining in 2023.

Exhibit 3-15 – Pharmacotherapy Management of COPD Exacerbation – 30 Days Calendar Years 2019 – 2023
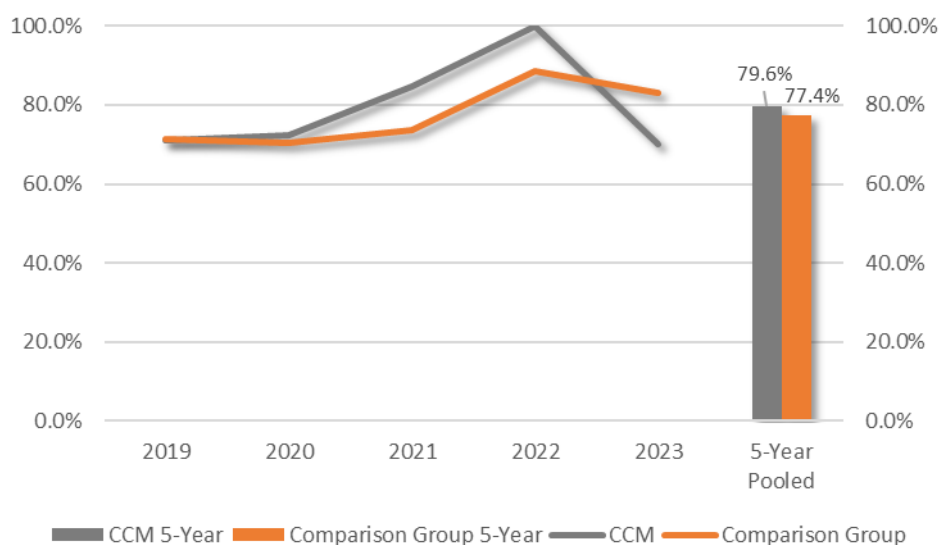
The difference between the CCM and comparison group compliance rates was not statistically significant in any of the individual years. It also was not statistically significant for the five-year pooled data (Exhibit 3-16).

Exhibit 3-16 – CCM – COPD – Pharmacotherapy – 30 Days						
	2019	**2020**	**2021**	**2022**	**2023**	**5-Year Pooled**
CCM	71.1%	72.2%	84.6%	100.0%	60.0%	79.6%
Comparison Group	71.3%	70.5%	73.6%	88.7%	71.3%	77.4%
Difference	(0.2%)	1.7%	11.0%	11.3%	(11.3%)	2.2%
‡ CCM rate differs from comparison group rate by a statistically significant amount (95% confidence level)						

Diabetes Measure – Percentage of Members who had LDL-C Screening

Measure Description: Percentage of members 18 to 75 years of age with diabetes (type 1 and type 2) who had LDL-C performed.

Findings versus Comparison Group: Approximately 60 percent of CCM members and 55 percent of comparison group members were compliant on this measure across the five years (Exhibit 3-17). The compliance rate for the CCM population declined from 2019 to 2020 before rising from 2020 to 2022 and declining again in 2023. The compliance rate for the comparison group population declined from 2019 to 2020 before rising from 2020 to 2021, declining in 2022 and rising again in 2023.

Exhibit 3-17 – Percentage of Members who had LDL-C Screening Calendar Years 2019 – 2023
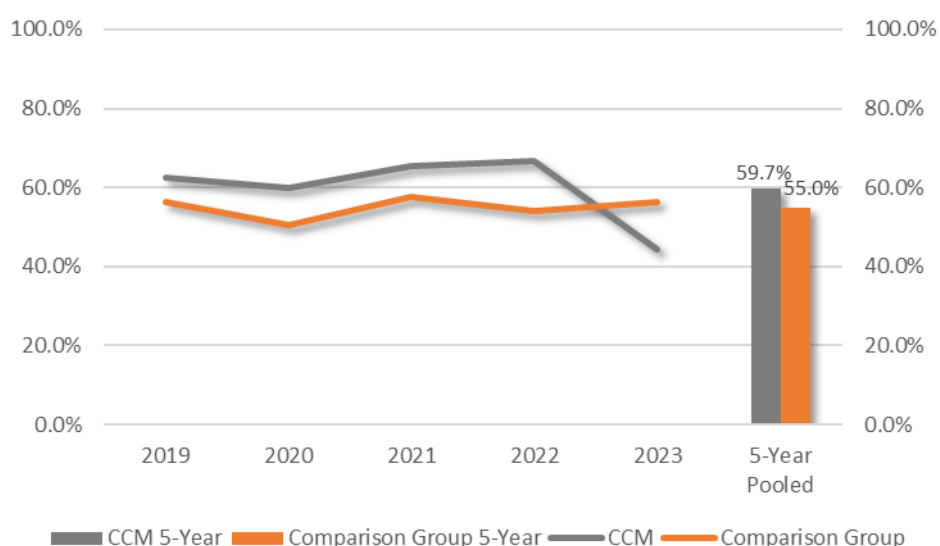
The difference between the CCM and comparison group compliance rates was statistically significant in each of the individual years. It also was statistically significant for the five-year pooled data (Exhibit 3-18).

Exhibit 3-18 – CCM – Diabetes – LDL-C Test						
	2019	**2020**	**2021**	**2022**	**2023**	**5-Year Pooled**
CCM	62.5%	59.8%	65.3%	66.7%	44.3%	59.7%
Comparison Group	56.4%	50.5%	57.7%	54.1%	56.2%	55.0%
Difference	**6.1%‡**	**9.3%‡**	**7.6%‡**	**12.6%‡**	**(11.9%)‡**	**4.7%‡**
‡ CCM rate differs from comparison group rate by a statistically significant amount (95% confidence level)						

Diabetes Measure – Percentage of Members who had Retinal Eye Exam Performed

Measure Description: Percentage of members 18 to 75 years of age with diabetes (type 1 and type 2) who had retinal eye exam performed.

Findings versus Comparison Group: Approximately 35 percent of CCM members and 23 percent of comparison group members were compliant on this measure across the five years (Exhibit 3-19). The compliance rate for the CCM population declined from 2019 to 2020 before rising from 2020 to 2021, declining in 2022 and rising again in 2023. The compliance rate for the comparison group population declined from 2019 to 2020 before rising from 2020 to 2023.

Exhibit 3-19 – Percentage of Members who had Retinal Eye Exam Performed Calendar Years 2019 – 2023
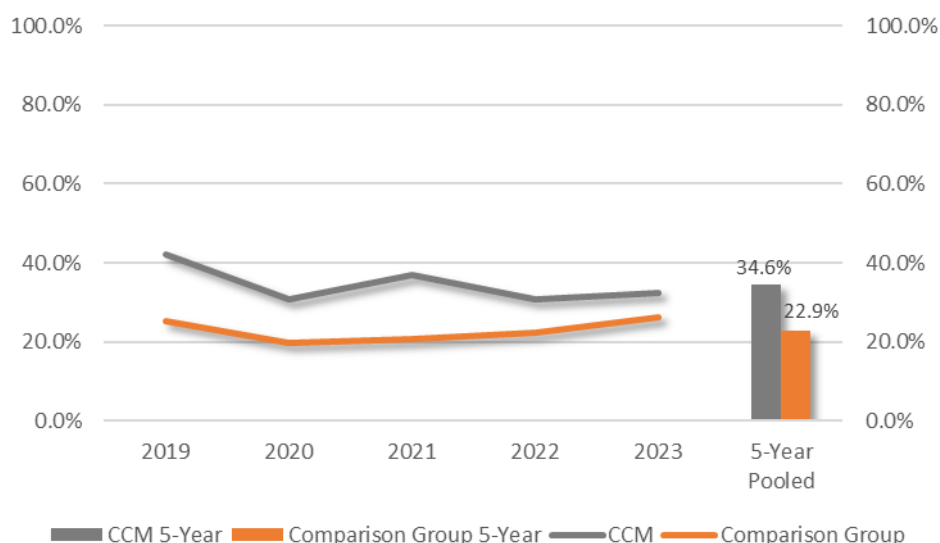

The difference between the CCM and comparison group compliance rates was statistically significant in 2019, 2020, 2021 and 2022. It also was statistically significant for the five-year pooled data (Exhibit 3-20).

Exhibit 3-20 – CCM – Diabetes – Retinal Eye Exam						
	2019	**2020**	**2021**	**2022**	**2023**	**5-Year Pooled**
CCM	42.1%	30.7%	37.0%	30.9%	32.3%	34.6%
Comparison Group	25.3%	19.8%	20.8%	22.5%	26.2%	22.9%
Difference	**16.8%‡**	**10.9%‡**	**16.2%‡**	**8.4%‡**	6.1%	**11.7%‡**
‡ CCM rate differs from comparison group rate by a statistically significant amount (95% confidence level)						

Diabetes Measure – Percentage of Members who had HbA1c Testing

Measure Description: Percentage of members 18 to 75 years of age with diabetes (type 1 and type 2) who had Hemoglobin A1c (HbA1c) testing performed.

Findings versus Comparison Group: Approximately 77 percent of CCM members and 69 percent of comparison group members were compliant on this measure across the five years (Exhibit 3-21). The compliance rate for both populations declined from 2019 to 2020 before rising from 2020 to 2021 and declining again in 2022. The CCM member rate continued to decline in 2023 while the comparison group rate rose.

Exhibit 3-21 – Percentage of Members who had HbA1c Testing
Calendar Years 2019 – 2023
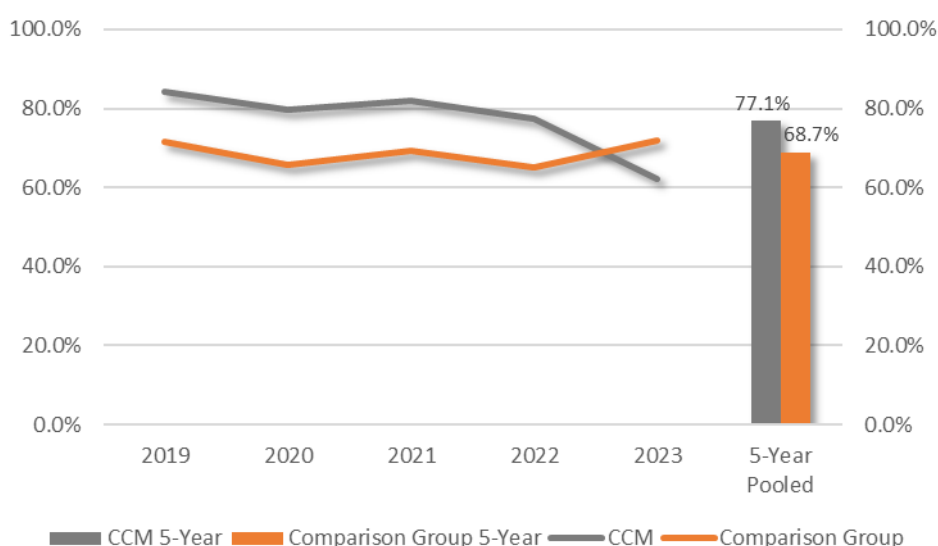
The difference between the CCM and comparison group compliance rates was statistically significant in each of the individual years. It also was statistically significant for the five-year pooled data (Exhibit 3-22).

Exhibit 3-22 – CCM – Diabetes – HbA1c Testing						
	2019	**2020**	**2021**	**2022**	**2023**	**5-Year Pooled**
CCM	84.1%	79.6%	82.1%	77.3%	62.3%	77.1%
Comparison Group	71.7%	65.8%	69.2%	65.2%	71.8%	68.7%
Difference	**12.4%‡**	**13.8%‡**	**12.9%‡**	**12.1%‡**	**(9.5%)‡**	**8.4%‡**
‡ CCM rate differs from comparison group rate by a statistically significant amount (95% confidence level)						

Diabetes Measure – Percentage of Members who Received Medical Attention for Nephropathy

Measure Description: Percentage of members 18 to 75 years of age with diabetes (type 1 and type 2) who received medical attention for nephropathy.

Findings versus Comparison Group: Approximately 87 percent of CCM members and 78 percent of comparison group members were compliant on this measure across the five years (Exhibit 3-23). The compliance rate for both populations declined from 2019 to 2020 before rising from 2020 to 2021 and declining again in 2022. The CCM member rate continued to decline in 2023 while the comparison group rate rose.

Exhibit 3-23 – Percentage of Members who Received Medical Attention for Nephropathy Calendar Years 2019 – 2023
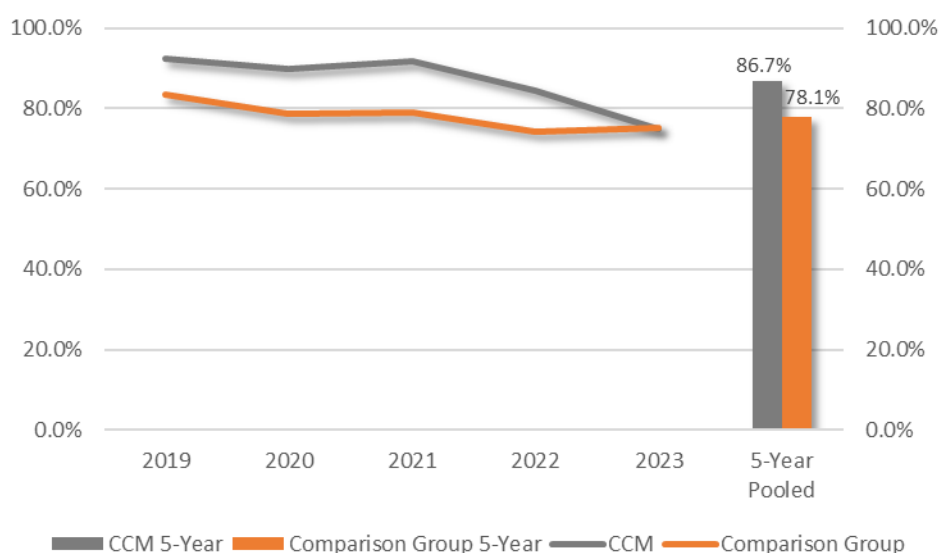

The difference between the CCM and comparison group compliance rates was statistically significant in 2019, 2020, 2021 and 2022. It also was statistically significant for the five-year pooled data (Exhibit 3-24).

Exhibit 3-24 – CCM – Diabetes – Medical Attention for Nephropathy						
	2019	**2020**	**2021**	**2022**	**2023**	**5-Year Pooled**
CCM	92.4%	89.9%	91.9%	84.5%	74.9%	86.7%
Comparison Group	83.4%	78.6%	79.0%	74.1%	75.2%	78.1%
Difference	**9.0%‡**	**11.3%‡**	**11.9%‡**	**10.4%‡**	(0.3%)	**8.6%‡**
‡ CCM rate differs from comparison group rate by a statistically significant amount (95% confidence level)						

Hypertension Measure – Percentage of Members who had LDL-C Screening

Measure Description: Percentage of members 18 years of age and older with hypertension who had an LDL-C test performed.

Findings versus Comparison Group: Approximately 60 percent of CCM members and 56 percent of comparison group members were compliant on this measure across the five years (Exhibit 3-25). The compliance rate for both populations declined from 2019 to 2020 before rising again from 2020 to 2022. The CCM member rate declined in 2023 while the comparison group rate continued to rise.

***Exhibit 3-25 – Percentage of Members who had LDL-C Screening
Calendar Years 2019 – 2023***
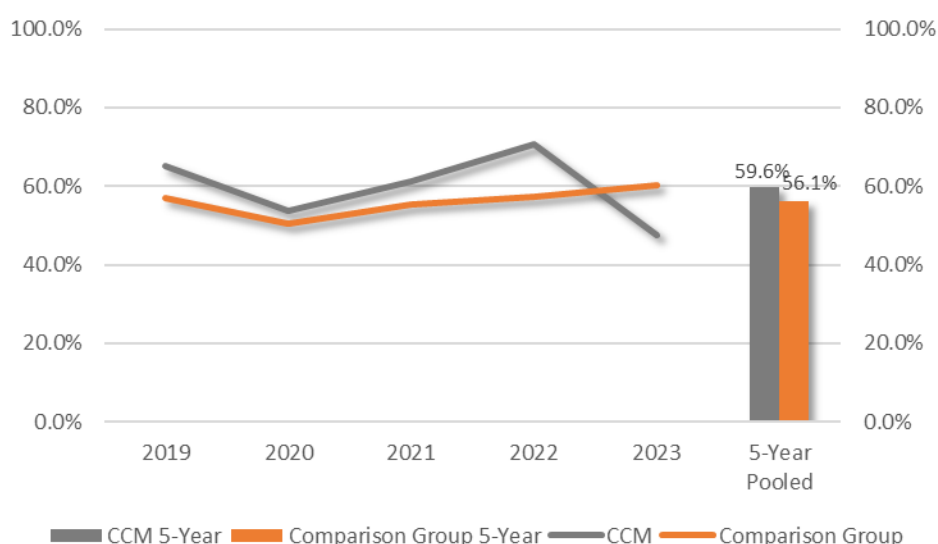
The difference between the CCM and comparison group compliance rates was statistically significant in 2019, 2022 and 2023. It also was statistically significant for the five-year pooled data (Exhibit 3-26).

Exhibit 3-26 – CCM – Hypertension – LDL-C Test						
	2019	**2020**	**2021**	**2022**	**2023**	**5-Year Pooled**
CCM	65.2%	53.8%	61.2%	70.6%	47.4%	59.6%
Comparison Group	56.9%	50.4%	55.4%	57.3%	60.3%	56.1%
Difference	**8.3%‡**	3.4%	5.8%	**13.3%‡**	**(12.9%)‡**	**3.5%‡**
‡ CCM rate differs from comparison group rate by a statistically significant amount (95% confidence level)						

Hypertension Measure – Percentage of Members Prescribed ACE/ARB Therapy

Measure Description: Percentage of members 18 years of age and older with hypertension who were prescribed angiotensin converting enzyme inhibitors or angiotensin receptor blockers (ACE/ARB therapy).

Findings versus Comparison Group: Approximately 58 percent of CCM members and 60 percent of comparison group members were compliant on this measure across the five years (Exhibit 3-27). The compliance rate for both populations rose from 2019 to 2021 before declining in 2022. The CCM member rate continued to decline in 2023 while the comparison group rate rose.

Exhibit 3-27 – Percentage of Members Prescribed ACE/ARB Therapy
Calendar Years 2019 – 2023
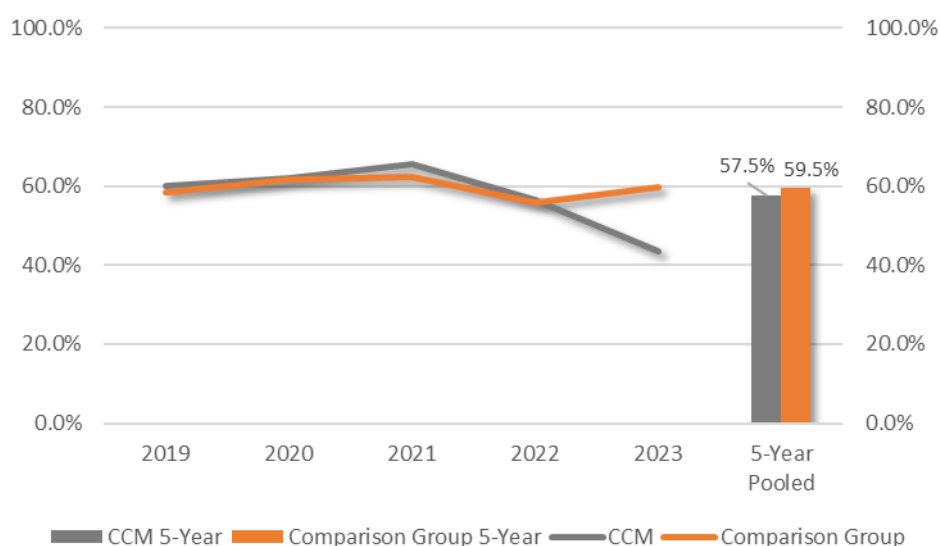
The difference between the CCM and comparison group compliance rates was statistically significant in 2023. It was not statistically significant for the five-year pooled data (Exhibit 3-28).

Exhibit 3-28 – CCM – Hypertension – ACE/ARB Therapy						
	2019	**2020**	**2021**	**2022**	**2023**	**5-Year Pooled**
CCM	60.0%	62.0%	65.7%	56.3%	43.6%	57.5%
Comparison Group	58.3%	61.6%	62.4%	55.7%	59.6%	59.5%
Difference	1.7%	0.4%	3.3%	0.6%	(16.0%)‡	(2.0%)
‡ CCM rate differs from comparison group rate by a statistically significant amount (95% confidence level)						

Opioid Use Measure – Use of Opioids at High Dosage in Persons without Cancer

Measure Description: The proportion of members 18 years and older, receiving prescription opioids for ≥15 days during the measurement year at a high dosage (average milligram morphine dose [MME] >120 mg). **Note:** *A lower rate indicates better performance*.

Findings versus Comparison Group: Approximately four percent of CCM members and four percent of comparison group members were positive for this measure (users of prescription opioids at high dosage) across the five years (Exhibit 3-29). The CCM population use rate rose from 2019 to 2020 before declining from 2020 to 2021 and rising again in 2022 and 2023. The comparison group use rate moved in an inverse direction.   Caution: the CCM population size for this measure is very small, which contributes to the year-over-year variability.

Exhibit 3-29 – Use of Opioids at High Dosage in Persons without Cancer
Calendar Years 2019 – 2023
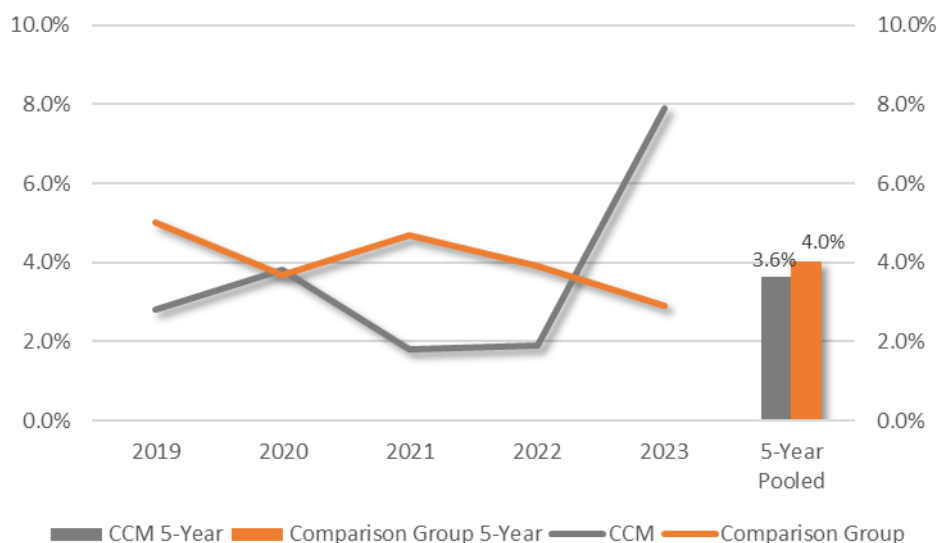
Note: Lower rate is better

The difference between the CCM and comparison group compliance rates was not statistically significant in any of the individual years. It also was not statistically significant for the five-year pooled data (Exhibit 3-30).

Exhibit 3-28 – CCM – Opioid – Use of Opioids at High Dosage						
	2019	**2020**	**2021**	**2022**	**2023**	**5-Year Pooled**
CCM	2.8%	3.8%	1.8%	1.9%	7.9%	3.6%
Comparison Group	5.0%	3.7%	4.7%	3.9%	2.9%	4.0%
Difference	(2.2%)	0.1%	(2.9%)	(2.0%)	5.0%	(0.4%)
‡ CCM rate differs from comparison group rate by a statistically significant amount (95% confidence level)						

Findings versus National Benchmark: The five-year pooled use rate for the SoonerCare CCM population was approximately two percentage points lower than the national benchmark rate (Exhibit 3-31).

Exhibit 3-31 – Use of Opioids at High Dosage in Persons without Cancer
SoonerCare CCM versus Benchmark
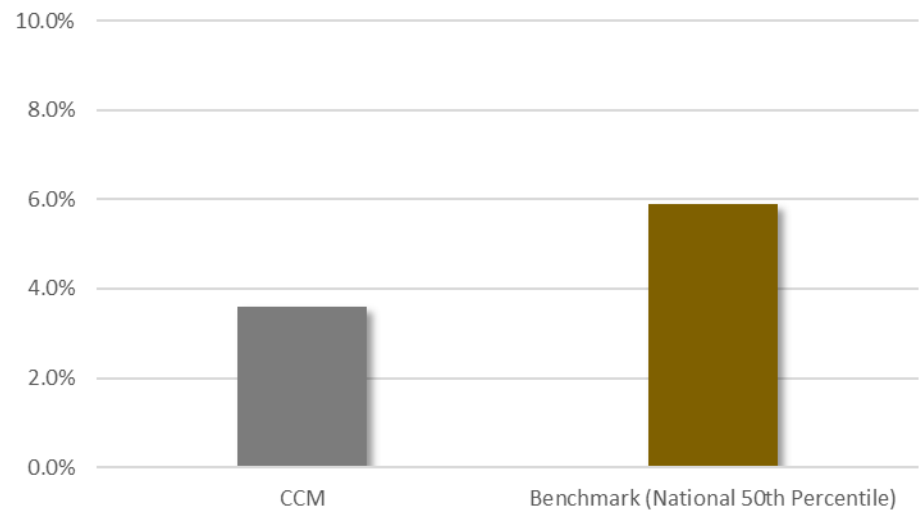
Note: Lower rate is better

	CCM	Benchmark
Use Rate	3.6%	5.9%

Opioid Use Measure – Concurrent use of Opioids and Benzodiazepines

Measure Description: Percentage of beneficiaries age 18 and older with concurrent use of prescription opioids and benzodiazepines. Beneficiaries with a cancer diagnosis, sickle cell disease diagnosis or in hospice are excluded. **Note:** *A lower rate indicates better performance*.

Findings versus Comparison Group: Approximately five percent of CCM members and 11 percent of comparison group members were positive for this measure (concurrent users of prescription opioids and benzodiazepines) across the five years (Exhibit 3-32). The CCM population use rate declined from 2019 to 2020 before rising from 2020 to 2021, declining in 2022 and rising again in 2023. The comparison group use rate declined from 2019 to 2023.

Exhibit 3-32 – Concurrent use of Opioids and Benzodiazepines
Calendar Years 2019 – 2023
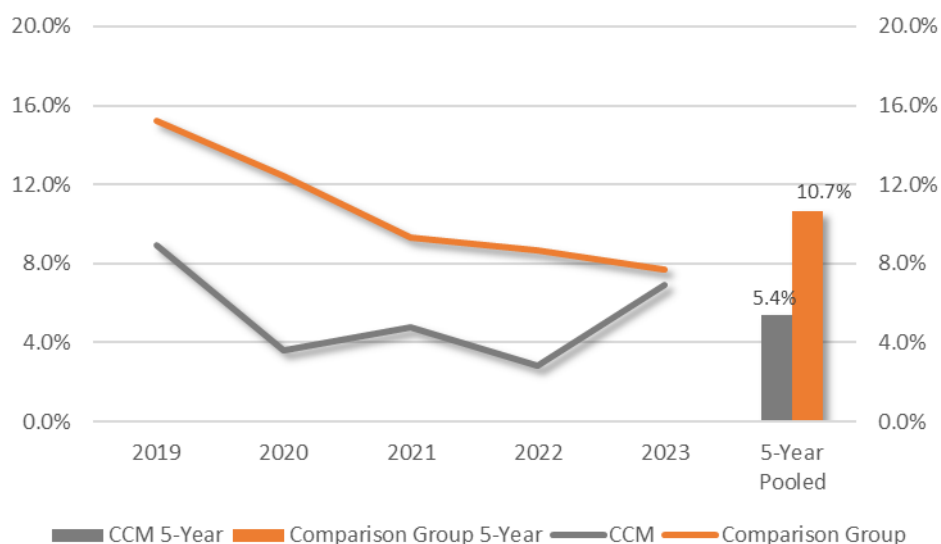
Note: Lower rate is better

The difference between the CCM and comparison group compliance rates was statistically significant in 2019, 2020 and 2022. It also was statistically significant for the five-year pooled data (Exhibit 3-33).

Exhibit 3-33 – CCM – Opioid – Concurrent Use of Opioids and Benzodiazepines						
	2019	**2020**	**2021**	**2022**	**2023**	**5-Year Pooled**
CCM	8.9%	3.6%	4.8%	2.8%	6.9%	5.4%
Comparison Group	15.2%	12.4%	9.3%	8.7%	7.7%	10.7%
Difference	(6.3%)‡	(8.8%)‡	(4.5%)	(5.9%)‡	(0.8%)	(5.3%)‡
‡ CCM rate differs from comparison group rate by a statistically significant amount (95% confidence level)						

Preventive Health Measure – Adults' Access to Preventive/Ambulatory Health Services

Measure Description: Percentage of beneficiaries 20 years and older who had an ambulatory or preventive care visit in the measurement year.

Findings versus Comparison Group: Approximately 95 percent of CCM members and 81 percent of comparison group members were compliant on this measure across the five years (Exhibit 3-34). The compliance rate for the CCM population rose from 2019 to 2021 before declining in 2022 and rising again in 2023. The compliance rate for the comparison group population declined from 2019 to 2021 before rising in 2022 and 2023.

Exhibit 3-34 – Adults' Access to Preventive/Ambulatory Health Services
Calendar Years 2019 – 2023
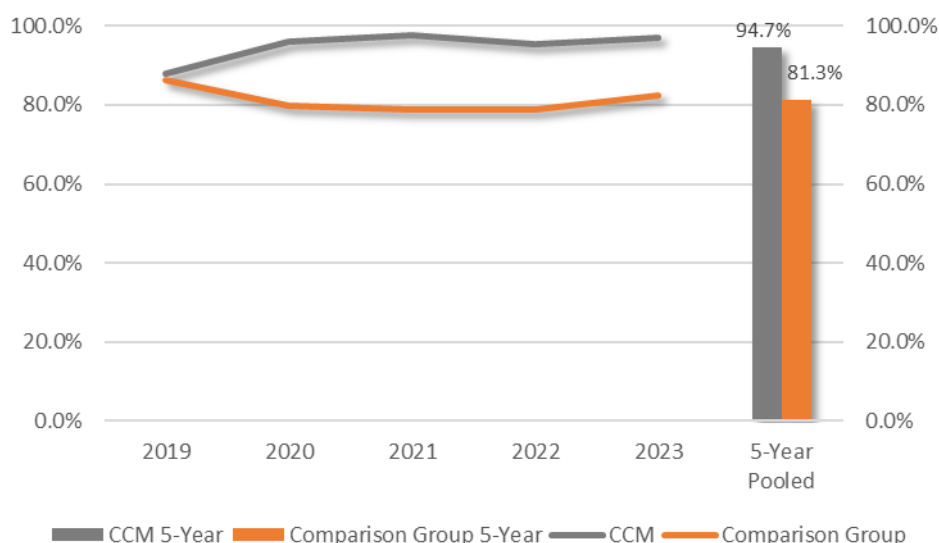
The difference between the CCM and comparison group compliance rates was statistically significant in 2020, 2021, 2022 and 2023. It also was statistically significant for the five-year pooled data (Exhibit 3-35).

Exhibit 3-35 – CCM – Adults' Access to Preventive/Ambulatory Health Services						
	2019	**2020**	**2021**	**2022**	**2023**	**5-Year Pooled**
CCM	87.8%	95.9%	97.5%	95.4%	96.9%	94.7%
Comparison Group	86.4%	79.8%	78.8%	78.9%	82.4%	81.3%
Difference	1.4%	**16.1%‡**	**18.7%‡**	**16.5%‡**	**14.5%‡**	**13.4%‡**
‡ CCM rate differs from comparison group rate by a statistically significant amount (95% confidence level)						

Preventive Health Measure – Children and Adolescents' Access to PCPs

Measure Description: Percentage of beneficiaries 12 months to 19 years of age who had a visit with a PCP during the measurement year or the year prior to the measurement year (depending on the age of the beneficiaries).

Findings versus Comparison Group: Approximately 95 percent of CCM members and 87 percent of comparison group members were compliant on this measure across the five years (Exhibit 3-36). The compliance rate for the CCM population rose slightly from 2019 to 2020 before declining from 2020 to 2022 and rising again in 2023. The compliance rate for the comparison group population declined from 2019 to 2021, was unchanged in 2022 and rose in 2023.

Exhibit 3-36 – Children and Adolescents' Access to PCPs
Calendar Years 2019 – 2023
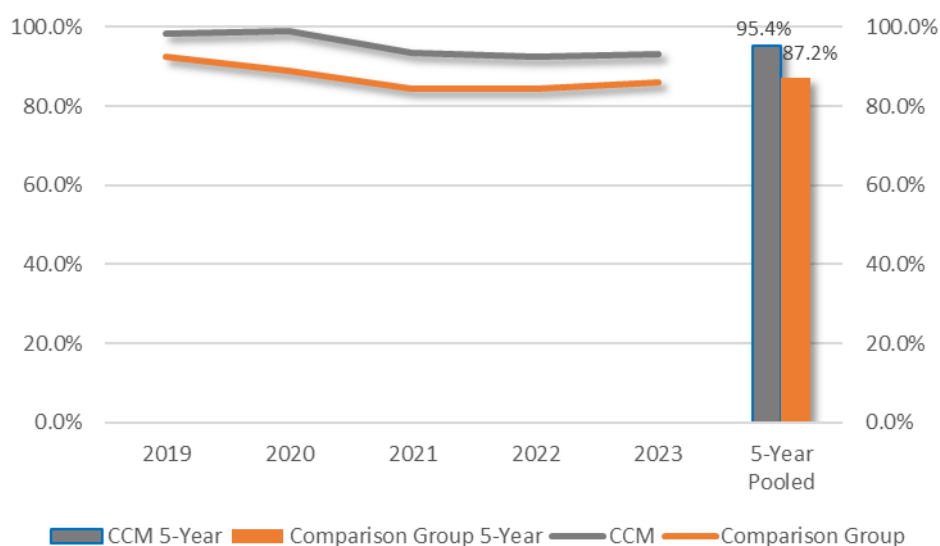
The difference between the CCM and comparison group compliance rates was statistically significant in each of the individual years. It also was statistically significant for the five-year pooled data (Exhibit 3-37).

Exhibit 3-37– CCM – Children's & Adolescents' Access to PCP – 12 Months to 19 Years						
	2019	**2020**	**2021**	**2022**	**2023**	**5-Year Pooled**
CCM	98.5%	99.0%	93.6%	92.6%	93.1%	95.4%
Comparison Group	92.6%	88.9%	84.3%	84.3%	85.9%	87.2%
Difference	**5.9%‡**	**10.1%‡**	**9.3%‡**	**8.3%‡**	**7.2%‡**	**8.2%‡**
‡ CCM rate differs from comparison group rate by a statistically significant amount (95% confidence level)						

Summary of Key Findings

The SoonerCare CCM beneficiary population outperformed the comparison group by a statistically significant amount on nine of 17 HEDIS quality-of-care measures, while the comparison group outperformed the CCM beneficiary on two measures; there was no statistically significant difference on the remaining six measures. The results suggest that the program is having a broad-based, positive effect on quality-of-care, although there is room for continued improvement (Exhibit 3-38).

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

The CCM beneficiary population compliance rate showed greater than usual variation from 2022 to 2023, typically downward. This may have been due at least in part to the changing make-up of the population, including the re-enrollment of members with hepatitis-C. Despite these one-year declines, the five-year average results versus the comparison group were largely unaffected, with the CCM population continuing to outperform by a statistically significant amount across the majority of measures.

The CCM beneficiary population also outperformed the national benchmark on all three HEDIS measures for which a national benchmark exists. (No statistical test was applied to the benchmark analysis. Benchmark population characteristics also were not matched to the OHCA groups. Results are presented for informational purposes only.)

Exhibit 3-38 – CCM Quality-of-care Measures – Summary
(See next page for table legend)

Measure	CCM versus Comparison Group*	CCM versus National Benchmark†
Asthma – Medication Ratio – 5 – 18 Years	✗	✓
Asthma – Medication Ratio – 19 – 64 Years	✗	✓
CAD – Persistence of Beta-Blocker Treatment after a Heart Attack	---	N/A
CAD – Cholesterol Management – LDL-C Test	---	N/A
COPD – Use of Spirometry Testing	✓	N/A
COPD – Pharmacotherapy Management – 14 Days	---	N/A

Measure	CCM versus Comparison Group*	CCM versus National Benchmark†
COPD – Pharmacotherapy Management – 30 Days	---	N/A
Diabetes – LDL-C Test	✔	N/A
Diabetes – Retinal Eye Exam	✔	N/A
Diabetes – HbA1c Testing	✔	N/A
Diabetes – Medical Attention for Nephropathy	✔	N/A
Hypertension – LDL-C Test	✔	N/A
Hypertension – ACE/ARB Therapy	---	N/A
Opioid – Use of Opioids at High Dosage	---	✔
Opioid – Concurrent Use of Opioids and Benzodiazepines	✔	N/A
Preventive Health – Adult Access to Preventive/Ambulatory Health Services	✔	N/A
Preventive Health – Children and Adolescents' Access to PCPs	✔	N/A

*   Results based on pooled five-year average
†   National benchmark data is 50th percentile (median) among reporting states for states for measure year 2023

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✔ –   *CCM population outperforms comparison group by statistically significant amount / CCM population outperforms national benchmark*

✗ –   *Comparison group outperforms CCM population by statistically significant amount / National benchmark outperforms CCM population*

---   *No statistically significant difference between CCM population and comparison group / No difference between CCM population and national benchmark*

CHAPTER 4 – SOONERCARE CCM UTILIZATION & EXPENDITURE ANALYSIS

Introduction

The impact of the SoonerCare CCM on member utilization and expenditures is challenging to measure. The program includes a mix of persons with long term complex/chronic health conditions and others with shorter term care management needs.

Approximately 50 percent of the complex/chronic disease cohort is made-up of members with one or more of the five priority conditions for the agency: asthma, CAD, COPD, diabetes and/or hypertension. Diabetes in particular is a focus of the program.

However, many of the remaining participants have a condition, such as hemophilia or sickle cell disease, whose symptoms can vary greatly in intensity from year-to-year. These members can benefit greatly from having a care manager to assist with navigating the health care system and obtaining necessary treatments, but, unlike hypertension or diabetes, the underlying disease is less susceptible to intervention. Members with hemophilia or sickle cell disease can experience crises that lead to spikes in utilization and cost, regardless of the level of care management offered.

PHPG's evaluation is designed to address these challenges by measuring the impact of the SoonerCare CCM on utilization and cost through two methods. Each technique provides a different perspective on the program's performance. The first (comparison group method) is most useful for quantifying the very high-risk profile of the CCM population. The second (longitudinal method) examines the program's impact on the cost of members with longer enrollment periods.

Comparison Group Method

As a first approach, PHPG applied the same comparison group methodology employed in the quality-of-care analysis and also used in the companion evaluation of the SoonerCare HMP.

Although the comparison group method is well-suited to the Health Management Program, because of that program's emphasis on enrolling members with one or more of the five major chronic conditions, it has limitations with respect to evaluating the CCM population. PHPG's ability to identify a true comparison group is constrained by the unique characteristics of the CCM population. At the same time, the methodology is helpful for evaluating the CCM program's success in identifying and enrolling members with very high risks/needs.

The comparison group method's limitations and usefulness are discussed in more detail below.

Longitudinal Analysis

The SoonerCare CCM population's unique composition makes it difficult to match to a representative comparison group. PHPG's second analysis dispenses with the comparison group and instead examines the cost trend for SoonerCare CCM members enrolled both in 2022 and 2023. Any downward trend in average costs would suggest the program is having an impact on participants, particularly given the general upward movement in per member costs in the overall SoonerCare program.

Analysis of SoonerCare CCM Population – Comparison Group Method

Methodology

The utilization and expenditure analysis included SoonerCare CCM participants meeting the criteria outlined in chapter 1. PHPG identified comparison groups using the same Coarsened Exact Matching technique as applied to the quality-of-care evaluation presented in chapter 3.

The CEM for the quality-of-care evaluation for 2019 – 2021 included four variables: age, gender, type of residence (urban or rural) and aid category (ABD or non-ABD); expansion versus traditional Medicaid was added as a fifth variable in 2022. The utilization/expenditure evaluation included the same five, plus one additional variable intended to account further for health status. This addition was necessary to improve the likelihood that the comparison group would include persons with health profiles similar to those of the care managed population[40].

PHPG tested multiple variables, including historical utilization/cost data, diagnostic data and components of the MEDai forecast data set. The best matching results were achieved using PMPM beneficiary costs in the year prior to the year being evaluated (i.e., calendar year 2018 costs for the 2019 evaluation, 2019 costs for the 2020 evaluation, 2020 costs for the 2021 evaluation; 2021 costs for the 2022 evaluation; and 2022 costs for the 2023 evaluation).

Specifically, PHPG assigned a "care management candidate" flag to non-care managed beneficiaries whose PMPM costs in the prior year were similar to the care managed population (approximately the top five percent in PMPM cost). Care managed participants were automatically assigned a "care management candidate" flag for matching purposes.

Appendix C contains covariate balance data for CEM variables. The objective was to identify a comparison population whose covariates were "balanced" with (close to) the treatment population.

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[40] A health status variable was not necessary for the HEDIS evaluation because the individual HEDIS measure specifications serve to define a universe of "like" persons, who then can be separated based on care managed status.

Prior to conducting the analysis, PHPG also removed a small number of outlier cases, specifically the top 0.005 percent of SoonerCare Choice beneficiaries, in terms of PMPM expenditures in 2023 . This was done to eliminate any skewing of results due to conditions (e.g., hemophilia) and related expenditures not susceptible to care management. The outlier exclusion was applied to the total universe of beneficiaries, both treatment and comparison group.

T-tests were used to evaluate results for SoonerCare CCM participants against the comparison group populations, with statistically significant results reported based on $p \leq 0.05$. Statistically significant differences between SoonerCare CCM participants and the comparison group are noted in the exhibits.

Results in the body of the report are presented for calendar years 2019 – 2023, as well as in aggregate for the five-year period. Caution should be exercised when reviewing individual year results and year-over-year changes, where substantial variance may in part be an artifact of small treatment group population sizes. The aggregate data was used to calculate T-test results in order to maximize the statistical power of the analysis[41]. Appendix D contains year-specific compliance rates, five-year pooled rates and p-values.

Caution when Interpreting Findings

Limits of Matching Methodology

PHPG employed Coarsened Exact Matching to align with the CMS-recommended methodology used for evaluating the SoonerCare HMP, which is similar to the SoonerCare CCM and is a component of the Section 1115 demonstration. CEM is a reasonable technique for identifying a comparison group with like characteristics to the population being studied.

However, as noted earlier, the SoonerCare CCM program presents a particular challenge for matching because of the unique characteristics of its enrolled population. The program includes persons with rare conditions, such as hemophilia and sickle cell disorder, as well as individuals who are enrolled for shorter-term, intensive monitoring, such as members with hepatitis-C.

PHPG was able to match only a portion of the SoonerCare CCM members each year to an appropriate comparison group universe. The resultant case counts were low, e.g., fewer than 400 members in 2021, fewer than 600 in 2022 and fewer than 400 again in 2023. In this circumstance, even a small number of individual cases can have an outsize effect on results.

The comparison group portion of the analysis should be treated primarily as informational and should not be used in isolation from the other tests to draw conclusions about the program's relative impact on service use or cost. It can, however, serve to highlight the high-risk nature of the CCM population, thereby demonstrating the OHCA's degree of success in identifying an appropriate population in terms of need for care management.

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[41] Statistical significance (P-value) calculated through application of Fisher's Combined Probability Test.

Impact of COVID-19 Public Health Emergency

The COVID-19 public health emergency disrupted utilization and expenditure patterns across the entire SoonerCare population. Caution should be exercised when reviewing year-over-year variation in utilization and expenditures.

Broader SoonerCare Program

The OHCA routinely publishes data on health care utilization and expenditures for the broader SoonerCare program. The SoonerCare CCM population and comparison group are comprised of members with health care needs in excess of the average SoonerCare beneficiary. Results therefore should not be compared to broader data for the purpose of evaluating the program's effectiveness.

All Participants – Emergency Room Utilization (Visit) Rate

Measure Description: Emergency room visits (for any reason) per 1,000 member months (i.e., the average number of visits per month for every 1,000 beneficiaries). ***Note:*** *A lower rate indicates better performance*.

Findings versus Comparison Group: SoonerCare CCM members averaged approximately 317 emergency room visits per 1,000 member months and comparison group members averaged 158 visits per 1,000 member months across the five years (Exhibit 4-1). The visit rate for the CCM population declined from 2019 to 2021 before rising in 2022 and 2023. The visit rate for the comparison group population declined from 2019 to 2022 before rising in 2023. It is important to note that the CCM visit rate is susceptible to spikes in usage by members with conditions such as Sickle Cell Disease and Hemophilia (which are not reduceable through care management).

Exhibit 4-1 – Emergency Room Utilization (Visit) Rate
Calendar Years 2019 – 2023
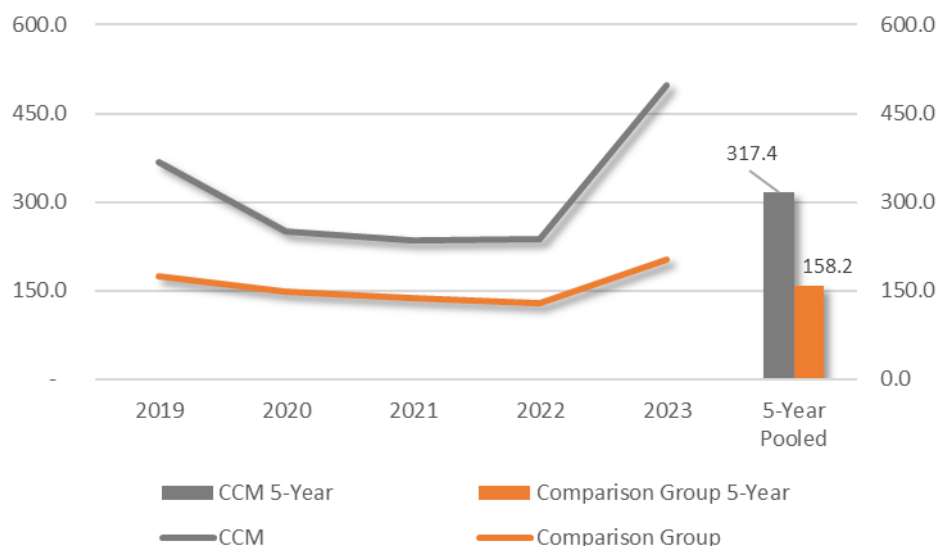
Note: Lower rate is better

The difference between the SoonerCare CCM and comparison group compliance rates was statistically significant in each of the individual years. It also was statistically significant for the five-year pooled data (Exhibit 4-2).

Exhibit 4-2 – SoonerCare CCM – Emergency Room Visits per 1,000 Member Months						
	2019	**2020**	**2021**	**2022**	**2023**	**5-Year Pooled**
CCM	366.5	249.7	234.6	237.4	498.7	317.4
Comparison Group	174.1	148.4	136.4	128.5	203.4	158.2
Difference	**192.4‡**	**101.3‡**	**98.2‡**	**108.9‡**	**295.3‡**	**159.2‡**
‡ CCM rate differs from comparison group rate by a statistically significant amount (95% confidence level)						

All Participants – Inpatient Hospital Utilization (Admission) Rate

Measure Description: Hospital admissions (for any reason) per 100,000 member months (i.e., the average number of admissions per month for every 100,000 beneficiaries). **Note:** *A lower rate indicates better performance*.

Findings versus Comparison Group: SoonerCare CCM members averaged 6,748 hospital admissions per 100,000 member months and comparison group members averaged approximately 3,480 admissions per 100,000 member months across the five years (Exhibit 4-3). The admission rate for the CCM population declined from 2019 to 2020 before rising from 2020 to 2023. The admission rate for the comparison group population declined from 2019 to 2020 before rising from 2020 to 2021, declining in 2022 and rising again in 2023.

Exhibit 4-3 – Inpatient Hospital Utilization (Admission) Rate Calendar Years 2019 – 2023
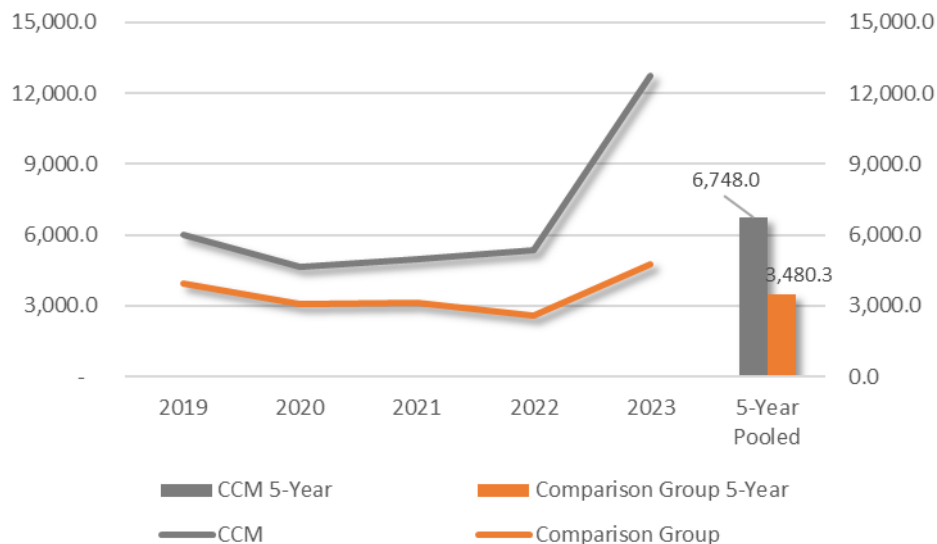
Note: Lower rate is better

The difference between the SoonerCare CCM and comparison group compliance rates was statistically significant in each of the individual years. It also was statistically significant for the five-year pooled data (Exhibit 4-4).

Exhibit 4-4 – SoonerCare CCM – Hospital Admissions per 100,000 Member Months						
	2019	**2020**	**2021**	**2022**	**2023**	**5-Year Pooled**
CCM	5,999.4	4,645.8	4,982.4	5,367.2	12,745.1	6,748.0
Comparison Group	3,962.5	3,052.9	3,108.2	2,552.2	4,725.6	3,480.3
Difference	**2,036.9‡**	**1,592.9‡**	**1,874.2‡**	**2,815.0‡**	**8,019.5‡**	**3,267.7‡**
‡ CCM rate differs from comparison group rate by a statistically significant amount (95% confidence level)						

All Participants – Inpatient Hospital Readmission Rate

Measure Description: Thirty-day hospital readmission rate. ***Note:*** *A lower rate indicates better performance*.

Findings versus Comparison Group: SoonerCare CCM and comparison group members both had an average 30-day hospital readmission rate of approximately seven percent across the five years (Exhibit 4-5). The readmission rate for the SoonerCare CCM population declined from 2019 to 2021 before rising in 2022 and 2023. The readmission rate for the comparison group population declined from 2019 to 2020 before rising slightly from 2020 to 2021, declining in 2022 and rising again in 2023.

Exhibit 4-5 – Inpatient Hospital Readmission Rate
Calendar Years 2019 – 2023
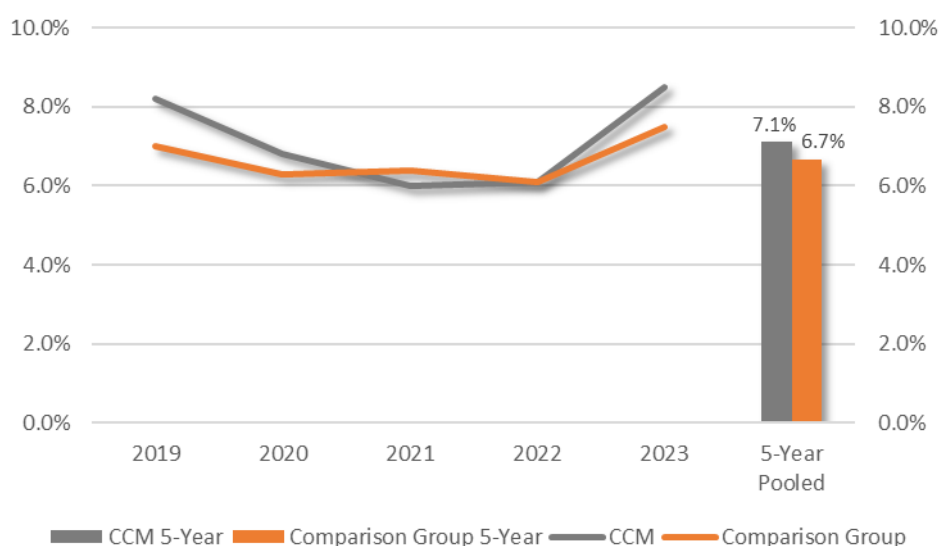
Note: Lower rate is better

The difference between the SoonerCare CCM and comparison group compliance rates was not statistically significant in any of the individual years. It also was not significant for the five-year pooled data (Exhibit 4-6).

Exhibit 4-6 – SoonerCare CCM – Hospital 30-Day Readmission Rate						
	2019	**2020**	**2021**	**2022**	**2023**	**5-Year Pooled**
CCM	8.2%	6.8%	6.0%	6.1%	8.5%	7.1%
Comparison Group	7.0%	6.3%	6.4%	6.1%	7.5%	6.7%
Difference	1.2%	0.5%	(0.4%)	---	1.0%	(0.4%)
‡ CCM rate differs from comparison group rate by a statistically significant amount (95% confidence level)						

All Participants – Healthcare Expenditures (PMPM)

Measure Description: Average monthly expenditures per member for Medicaid-covered health care services. ***Note:*** *A lower value indicates better performance*.

Findings versus Comparison Group: SoonerCare CCM member expenditures averaged approximately $1,187 PMPM and comparison group member expenditures averaged $954 PMPM across the five years (Exhibit 4-7). Average expenditures for both populations declined slightly from 2019 to 2020 before rising from 2020 to 2023.

Exhibit 4-7 – Healthcare Expenditures (PMPM)
Calendar Years 2019 – 2023
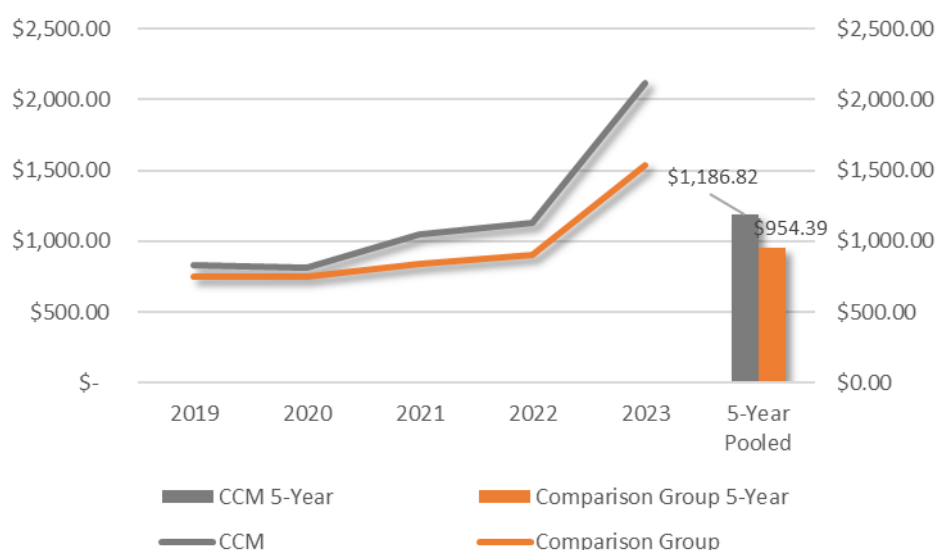
Note: Lower rate is better

The difference between the SoonerCare CCM and comparison group PMPM was statistically significant in 2021 and 2022. It also was statistically significant for the five-year pooled data (Exhibit 4-8).

Exhibit 4-8 – SoonerCare CCM – PMPM Expenditures						
	2019	**2020**	**2021**	**2022**	**2023**	**5-Year Pooled**
CCM	$828.29	$810.83	$1,051.79	$1,130.18	$2,113.01	$1,186.82
Comparison Group	$748.57	$745.97	$836.80	$899.95	$1,540.67	$954.39
Difference	$79.72	$64.86	**$214.99‡**	**$230.23‡**	**$572.34‡**	**$232.43‡**
‡ CCM rate differs from comparison group rate by a statistically significant amount (95% confidence level)						

Summary of Key Findings – All SoonerCare CCM Participants

Findings with respect to SoonerCare CCM cost effectiveness using the comparison group methodology were inconclusive. The SoonerCare CCM population in total did not demonstrate superior outcomes to the comparison group; rather, the comparison group outperformed by a statistically significant amount in three-of-four categories (Exhibit 4-9).

However, as noted earlier, the SoonerCare CCM program presents a particular challenge for evaluation against a comparison group because of the unique characteristics of the enrolled population. The SoonerCare CCM's small size also means that a few high-cost cases can have an outsize impact on average utilization and cost figures.

Instead, the most beneficial use of the comparison group data is to quantify the very high-risk nature of the CCM population. The findings affirm that the CCM unit has been effective in identifying an appropriate subset of the SoonerCare population to assist with its finite resources.

Exhibit 4-9 – SoonerCare CCM Comparison Group Method – Summary

Measure	CCM versus Comparison Group*
Emergency Room Utilization – All	✗
Inpatient Hospital Admissions – All	✗
Inpatient Hospital Readmissions - All	---
PMPM Expenditures (Health Services Component) - All	✗

*   Results based on pooled five-year average

_____

✓ – *SoonerCare CCM population outperforms comparison group by statistically significant amount*

✗ – *Comparison group outperforms SoonerCare CCM population by statistically significant amount*

---   *No statistically significant difference between SoonerCare CCM population and comparison group*

Analysis of SoonerCare CCM Population – Longitudinal Method

Methodology

PHPG identified 164 SoonerCare CCM members who were enrolled both in Calendar Year 2022 and 2023. The population was restricted to members with 12 months of enrollment in both years, to ensure comparability in cost data across the two years.

PHPG calculated average per member per month costs in both years, to document any upward or downward trend. The same values were calculated for the entire SoonerCare Choice population in each year, to have a reference point with respect to broader inflationary trends. (This is distinct from the formal matching exercise performed under the comparison group methodology presented in the prior section.)

Findings

Average PMPM expenditures declined by 10.6 percent for the SoonerCare CCM population, falling from $2,559 in 2022 to $2,289 in 2023. Average PMPM expenditures for the broader SoonerCare Choice population over the same period increased by 17.9 percent, rising from $255 in 2022 to $300 in 2023[42] (Exhibit 4-10).

The downward trend exhibited by SoonerCare CCM members, despite the growth in PMPM costs for the overall program, supports the hypothesis that the SoonerCare CCM is having a positive effect on medical costs for members with longer enrollment tenures.

Exhibit 4-10 – Healthcare Expenditures (PMPM)
Calendar Years 2022 – 2023[43]

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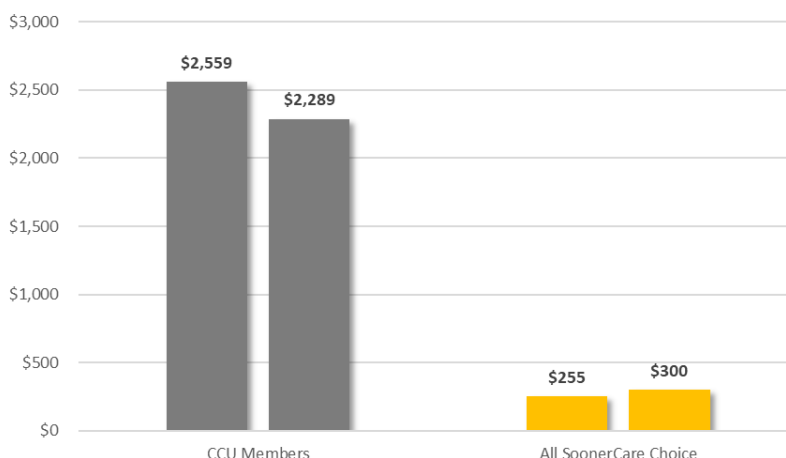
[42] The SoonerCare Choice PMPM values are for members enrolled across an entire 12-month period each year and so are not equivalent to PMPM costs published for the entire universe of members.

[43] The CCU 2023 PMPM is approximately three percent higher than the value shown under the comparison group method. The difference is due to the population selection methods. The two populations are not identical.

Future Analysis Population: SoonerCare CCM Members with Hepatitis-C (HCV)

The SoonerCare CCM launched a hepatitis-C care management initiative in late 2023 for members diagnosed with the condition but not yet receiving curative anti-viral medications.

The SoonerCare CCM previously operated a version of this program that relied on physician referrals of members who had started treatment but were at risk of non-compliance. PHPG evaluated this program, which was discontinued in 2022, and found it to be having a positive impact on member outcomes and costs, both immediate and with respect to averted future medical events (e.g., liver failure)[44].

PHPG will examine the new initiative and report preliminary findings as part of the 2024 evaluation. If the results mirror the earlier study, the impact could be significant.

SoonerCare CCM Return-on-Investment

In prior evaluation reports, PHPG has estimated the SoonerCare CCM's net return-on-investment by comparing program medical savings to administrative expenses. The hepatitis-C evaluation has been a key component of the evaluation, as its impact is most readily quantifiable.

PHPG will include the ROI calculation in the 2024 report, when sufficient hepatitis-C data is available. It is likely that the initiative began to generate results by the end of calendar year 2023, but too soon to be captured through claims data.

In addition to any impact on medical expenses, it is important to note that the SoonerCare CCM delivers care management to SoonerCare's highest-risk members at a relatively low cost (salary/benefit costs for a small team of nurses plus allocated agency overhead). Ultimately, the program's performance should be evaluated in terms of its contribution to participant quality-of-life and quality-of-care, as well as its effect on current or future health expenditures.

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[44] See PHPG CY 2021 and 2022 evaluation reports for detailed findings.

APPENDIX A – PARTICIPANT SURVEY INSTRUMENT

Appendix A includes the advance letter sent to SoonerCare CCM participants and initial (baseline) survey instrument. COVID-19 questions are shown in red. (The follow-up survey differs primarily in that questions regarding reason(s) for joining the program are not re-asked.)

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.

Note: Letterhead was updated in 2023 upon appointment of a new OHCA CEO.

SOONERCARE CCM MEMBER SURVEY – INITIAL

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?[45]

   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 → [END CALL]

   c. Don't Know/Not Sure → [END CALL]

---

[45] 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.

4. Did you decide to participate?
    a. Yes
    b. No → [GO TO Q30]
    c. Not yet, but still considering → [INFORM THAT WE MAY CALL BACK AT A LATER DATE AND END CALL]
    d. Don't Know/Not Sure → [END CALL]

5. Are you still participating today in the Chronic Care Program?
    a. Yes
    b. No → [GO TO Q28]
    c. Don't Know/Not Sure → [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 <u>most important</u> 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. What is the usual way you have contact with your Nurse Care Manager? [IF MULTIPLE METHODS ASK FOR MOST COMMON]

     a. Telephone call

     b. Text messaging

     c. Other [SPECIFY]

     d. Don't Know/Not Sure

13. About when was the last time you had contact with 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

14. Did your Nurse Care Manager give you a telephone number to use if you needed help with your care?

     a. Yes

     b. No → [GO TO Q18]

     c. Don't Know/Not Sure → [GO TO Q18]

15. Have you tried to contact your Nurse Care Manager at the number you were given?

     a. Yes

     b. No → [GO TO Q18]

     c. Don't Know/Not Sure → [GO TO Q18]

16. Thinking about the last time you tried to contact your Nurse Care Manager, what was the reason?

     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

17. Did you reach your Nurse Care Manager immediately? [IF NO] How quickly did you hear back?

     a. Reached immediately (at time of call or text)

     b. Heard back within one hour

     c. Heard back in more than one hour but same day

d. Heard back the next day

e. Heard back two or more days later

f. Never heard back

g. Other. SPECIFY: _____

h. Don't Know/Not Sure

18. [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			

19. [ASK FOR EACH "YES" ACTIVITY IN Q18] 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						

	Very Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Very Dissatisfied	DK	N/A
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						

20. 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
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					

21. Overall, how satisfied are you with your Nurse Care Manager? Would you say you are very satisfied, somewhat satisfied, somewhat dissatisfied or very dissatisfied?

      a.   Very satisfied

      b.   Somewhat satisfied

      c.   Somewhat dissatisfied

      d.   Very dissatisfied

      e.   Don't Know/Not Sure

OVERALL SATISFACTION

22. 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

23. 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

24. Do you have any suggestions for improving the Chronic Care Program?

    _____

    _____

HEALTH STATUS & LIFESTYLE

25. 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

26. 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 Q32 FOR ADULTS OR Q37 FOR CHILDREN]

      c. About the same → [Q32 FOR ADULTS OR Q37 FOR CHILDREN]

27. Do you think the Chronic Care Program has contributed to your improvement in health?

      a. Yes

      b. No

      c. Don't know/not sure

[GO TO QUESTION 32 FOR ADULTS OR QUESTION 37 FOR CHILDREN]

Follow-up Questions: Members Claiming No Longer Participating ("Dropout")

(Q28 – Q29 have been discontinued)

28. [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

29. 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: _____
    l. Not Sure/Don't Know

[GO TO QUESTION 32 FOR ADULTS OR QUESTION 37 FOR CHILDREN]

Follow-up Questions: Members Claiming Elected to Not Participate ("Opt Out")

(Q30 – Q31 have been discontinued)

30. [IF RESPONDENT ANSWERED "NO" TO Q4] About when did you decide to not participate?
    a. Month/Year [SPECIFY] _____
    b. Don't Know/Not Sure

31. 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: _____
    l. Not Sure/Don't Know

[GO TO QUESTION 32 FOR ADULTS OR QUESTION 37 FOR CHILDREN]

[For next section, ask adult questions if CCM member is an adult; ask child questions if CCM member is a child.]

CAHPS ADULT QUESTIONS

We're almost done. I have just a few more questions. For these last questions, I would like you to think about your experience with your SoonerCare health plan overall, not just the Chronic Care Program.

I'm going to begin by asking a few questions about your care in general. I'm then going to ask some questions specifically about the coronavirus pandemic and whether it has affected your health care.

These first questions ask about your own health care. Do not include care you got when you stayed overnight in a hospital. Do not include the times you went for dental care visits.

32. In the last six months, how often was it easy to get the care, tests or treatment you needed?

       a. Never

       b. Sometimes

       c. Usually

       d. Always

33. Specialists are doctors like surgeons, heart doctors, allergy doctors, skin doctors and other doctors who specialize in one area of health care. In the last six months, did you make any appointments to see a specialist?

       a. Yes

       b. No → [GO TO Q35]

34. In the last six months, how often did you get an appointment to see a specialist as soon as you needed?

       a. Never

       b. Sometimes

       c. Usually

       d. Always

35. Using any number from 0 to 10, where 0 is the worst health care possible and 10 is the best health care possible, what number would you use to rate all your health care in the last six months?

       RECORD NUMBER _____

36. This next question asks about your experience with your SoonerCare health plan. Using any number from 0 to 10, where 0 is the worst health plan possible and 10 is the best health plan possible, what number would you use to rate your health plan?

    RECORD NUMBER _____

CAHPS CHILD QUESTIONS

We're almost done. I have just a few more questions. For these last questions, I would like you to think about your child's experience with his/her SoonerCare health plan overall, not just the Chronic Care Program.

I'm going to begin by asking a few questions about your child's care in general. I'm then going to ask some questions specifically about the coronavirus pandemic and whether it has affected your child's health care.

These first questions ask about your child's health care. Do not include care your child got when he or she stayed overnight in a hospital. Do not include the times your child went for dental care visits.

37. In the last six months, how often was it easy to get the care, tests or treatment your child needed?
    a. Never
    b. Sometimes
    c. Usually
    d. Always

38. Specialists are doctors like surgeons, heart doctors, allergy doctors, skin doctors and other doctors who specialize in one area of health care. In the last six months, did you make any appointments for your child to see a specialist?
    a. Yes
    b. No → [GO TO Q40]

39. In the last six months, how often did you get appointments for your child to see a specialist as soon as he or she needed?
    a. Never
    b. Sometimes
    c. Usually
    d. Always

40. Using any number from 0 to 10, where 0 is the worst health care possible and 10 is the best health care possible, what number would you use to rate all your child's health care in the last six months?

    RECORD NUMBER _____

41. This next question asks about your experience with your SoonerCare health plan. Using any number from 0 to 10, where 0 is the worst health plan possible and 10 is the best health plan possible, what number would you use to rate your child's health plan?

RECORD NUMBER _____

Now I'm going to ask a few questions about the coronavirus pandemic and whether your child delayed getting care or did not get care because of it.

42. At any time, did your child <u>delay</u> getting medical care because of the coronavirus pandemic?

    a. Yes

    b. No → [GO TO Q60]

43. What type of care did your child delay getting because of the coronavirus pandemic? [RECORD ALL THAT APPLY]

    a. Primary care visit/routine follow-up care with regular doctor

    b. Specialty care visit (medical)

    c. Mental health care visit

    d. Substance use disorder visit

    e. Physical/occupational therapy

    f. Prescription drug refill

    g. Colonoscopy

    h. Radiation treatment/chemotherapy for cancer

    i. Dental care

    j. Other [SPECIFY] _____

44. At any time, did your child need medical care for something other than the coronavirus but <u>did not get it</u> because of the coronavirus pandemic?

    a. Yes

    b. No → [IF YES TO 62, GO TO Q63; IF NO TO 58 <u>AND</u> 60, GO TO 67]

45. What type of care did your child not get because of the coronavirus pandemic? [RECORD ALL TYPES]

    a. Primary care visit/routine follow-up care with regular doctor

    b. Specialty care visit (medical)

    c. Mental health care visit

    d. Substance use disorder visit

    e. Physical/occupational therapy

    f. Prescription drug refill

    g.   Colonoscopy

    h.   Radiation treatment/chemotherapy for cancer

    i.   Dental care

    j.   Other [SPECIFY] _____

46. Why did your child delay getting care or not get care during the pandemic? [RECORD ALL REASONS]

    a.   Concerned about going out in public

    b.   Concerned about going into a medical facility/doctor's office

    c.   Provider cancelled the appointment and rescheduled for a later date

    d.   Provider cancelled the appointment and did not reschedule

    e.   Other [SPECIFY]

47. Have you talked to, texted or emailed with your child's Nurse Care Manager concerning the coronavirus pandemic?

    a.   Yes

    b.   No → [GO TO Q67]

    c.   Don't Know/Not Sure → [GO TO Q67]

48. Did your child's Nurse Care Manager provide information on how to avoid contracting the coronavirus during the pandemic?

    a.   Yes

    b.   No

    c.   Have tested positive for coronavirus

    d.   Don't Know/Not Sure

49. Did your child's Nurse Care Manager provide information on getting medical care during the pandemic?

    a.   Yes

    b.   No

    c.   Don't Know/Not Sure

50. Did your child's Nurse Care Manager help you to schedule medical care during the pandemic?

    a.   Yes

    b.   No

    c.   Don't Know/Not Sure

51. Some providers during the pandemic are seeing patients using telemedicine, which requires patients to have a computer, tablet device or smartphone, as well as connection to the internet. Did your

52. child's Nurse Care Manager or medical provider give you information about how to receive medical care through telemedicine, rather than an in-person appointment?

    a. Yes – Nurse Care Manager only

    b. Yes – Provider only

    c. Yes – Both

    d. No

    e. Don't Know/Not Sure

53. Do you have access to a computer, tablet device or smartphone, and an internet connection that would allow your child to receive medical care through telemedicine?

    a. Yes

    b. No → [GO TO Q72]

    c. Don't Know/Not Sure

54. Has your child had any telemedicine visits since the beginning of March?

    a. Yes

    b. No → [GO TO Q72]

    c. Don't Know/Not Sure

55. What was the purpose of the visit or visits? [RECORD ALL THAT APPLY]

    a. Primary care visit/routine follow-up care with regular doctor

    b. Specialty care visit (medical)

    c. Mental health care visit

    d. Substance use disorder visit

    e. Other [SPECIFY] _____

56. Overall, how satisfied are you with telemedicine as a way for your child to receive care? Would you say you are very satisfied, somewhat satisfied, somewhat dissatisfied or very dissatisfied? [RECORD AND GO TO Q73]

    a. Very satisfied

    b. Somewhat satisfied

    c. Somewhat dissatisfied

    d. Very dissatisfied

    e. Don't Know/Not Sure

57. Would you be interested in using telemedicine if your child's provider offered this option?

    a. Yes

    b. No

     c.   Don't Know/Not Sure

58. Do you have any suggestions for how your Nurse Care Manager could better help you with your child's medical needs during the coronavirus pandemic? [RECORD]

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. (Response percentages may not total 100 percent due to rounding.)

Survey Questions (numbering based on initial survey)	Initial Survey						Six-Month Follow-up Survey					
	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years
1) Are you currently enrolled in SoonerCare?												
A. Yes	**81**	**149**	**90**	**70**	**43**	**433**	**54**	**38**	**46**	**45**	**40**	**223**
	100.0%	*100.0%*	*100.0%*	*100.0%*	*100.0%*	*100.0%*	*100.0%*	*97.4%*	*100.0%*	*100.0%*	*97.6%*	*99.1%*
B. No	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**
	0.0%	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*2.4%*	*0.4%*
C. Don't know/not sure	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**
	0.0%	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*2.6%*	*0.0%*	*0.0%*	*0.0%*	*0.4%*
2) Have you heard of the SoonerCare Chronic Care Management Program (CCM?)?												
A. Yes	**75**	**149**	**88**	**67**	**43**	**422**	*N/A – not asked*					
	92.6%	*100.0%*	*97.8%*	*95.7%*	*100.%*	*97.5%*						
B. No	**6**	**0**	**2**	**2**	**0**	**10**						
	7.4%	*0.0%*	*2.2%*	*2.9%*	*0.0%*	*2.3%*						
C. Don't know/not sure	**0**	**0**	**0**	**1**	**0**	**1**						
	0.0%	*0.0%*	*0.0%*	*1.4%*	*0.0%*	*0.2%*						
3) Were you contacted and offered a chance to participate in the CCM?												
A. Yes	**75**	**149**	**88**	**68**	**43**	**423**	*N/A – not asked*					
	100.0%	*100.0%*	*97.8%*	*97.1%*	*100.0%*	*99.1%*						
B. No	**0**	**0**	**1**	**2**	**0**	**3**						
	0.0%	*0.0%*	*1.1%*	*2.9%*	*0.0%*	*0.7%*						
C. Don't know/not sure	**0**	**0**	**1**	**0**	**0**	**1**						
	0.0%	*0.0%*	*1.1%*	*0.0%*	*0.0%*	*0.2%*						

Survey Questions (numbering based on initial survey)	Initial Survey						Six-Month Follow-up Survey					
	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years
4) Did you decide to participate?												
A. Yes	75	149	88	68	43	423	*N/A – not asked*					
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%						
B. No	0	0	0	0	0	0						
	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%						
C. Don't know/not sure	0	0	0	0	0	0						
	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%						
5) Are you still participating today in the CCM?												
A. Yes	75	145	87	67	43	417	50	38	46	44	36	214
	100.0%	97.3%	98.9%	98.5%	100.0%	98.6%	92.6%	97.4%	100.0%	97.8	87.8%	95.5%
B. No	0	4	1	1	0	6	4	0	0	0	2	6
	0.0%	2.7%	1.1%	1.5%	0.0%	1.4%	7.4%	0.0%	0.0%	0.0%	4.9%	2.7%
C. Don't know/not sure	0	0	0	0	0	0	0	1	0	1	2	4
	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.6%	0.0%	2.2%	4.9%	1.8%
6) How long have you been participating in the CCM?												
A. Less than 1 month	5	3	8	6	2	24	0	0	0	0	0	0
	6.7%	2.1%	9.2%	9.0%	4.7	5.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
B. 1 to 2 months	16	10	31	11	3	71	0	0	0	0	0	0
	21.3%	6.9%	35.6%	16.4%	7.0	17.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
C. 3 to 4 months	16	26	30	23	20	115	0	0	0	0	0	0
	21.3%	17.9%	34.5%	34.3%	46.5	27.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%
D. 5 to 6 months	10	15	7	10	7	49	0	0	2	2	0	4
	13.3%	10.3%	8.0%	14.9%	16.3	11.8%	0.0%	0.0%	4.3%	4.6%	0.0%	1.9%

Survey Questions (numbering based on initial survey)	Initial Survey						Six-Month Follow-up Survey					
	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years
E. More than 6 months	27	83	8	12	11	141	See below	See below	See below	See below		See below
	36.0%	57.2%	9.2%	17.9%	25.6	33.8%						
F. 6 to 9 months	For initial survey, tenures greater than six months are not further stratified						11	11	15	9	16	62
							22.0%	28.9%	32.6%	20.5%	44.4%	29.0%
G. 9 to 12 months							17	13	11	21	10	72
							34.0%	34.2%	23.9%	47.7%	27.8%	33.6%
H. More than 12 months							18	12	16	5	8	59
							36.0%	36.0%	31.6%	11.4%	22.2%	27.6%
I. Don't know/not sure	1	8	3	5	0	17	4	2	2	7	2	17
	1.3%	5.5%	3.4%	7.5%	0.0%	4.1%	18.0%	5.3%	4.3%	15.9%	5.6%	7.9%
7) How did you learn about the CCM?												
A. Received information in the mail	9	9	9	5	1	33	N/A – not asked					
	12.0%	6.2%	10.3%	7.5%	2.3%	7.9%						
B. Received a call from my Nurse Care Manager	59	95	57	36	31	278						
	78.7%	65.5%	65.5%	53.7%	72.1%	66.7%						
C. Received a call from someone else	0	0	0	3	0	3						
	0.0%	0.0%	0.0%	4.5%	0.0%	0.7%						
D. Doctor referred me while I was in his/her office	1	20	12	11	5	49						

Survey Questions (numbering based on initial survey)	Initial Survey						Six-Month Follow-up Survey					
	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years
	1.3%	*13.8%*	*13.8%*	*16.4%*	*11.6%*	*11.8%*						
E. Other	**1**	**10**	**4**	**6**	**3**	**24**						
	1.3%	*6.9%*	*4.6%*	*9.0%*	*7.0%*	*5.8%*						
F. Don't know/not sure	**5**	**11**	**5**	**6**	**3**	**30**						
	6.7%	*7.6%*	*5.7%*	*9.0%*	*7.0%*	*7.2%*						
8) What were your reasons for deciding to participate in the CCM? (Multiple answers allowed.)												
A. Learn how to better manage health problems	**32**	**73**	**30**	**22**	**22**	**179**	*N/A – not asked*					
	42.7%	*50.3%*	*34.5%*	*32.8%*	*51.2%*	*42.9%*						
B. Learn how to identify changes in health	**0**	**0**	**1**	**0**	**0**	**1**						
	0.0%	*0.0%*	*1.1%*	*0.0%*	*0.0%*	*0.2%*						
C. Have someone to call with questions re health	**6**	**1**	**0**	**0**	**1**	**8**						
	8.0%	*0.7%*	*0.0%*	*0.0%*	*2.3%*	*1.9%*						
D. Get help making health care appointments	**2**	**1**	**1**	**0**	**1**	**5**						
	2.7%	*0.7%*	*1.1%*	*0.0%*	*2.3%*	*1.2%*						
E. Personal doctor recommended I enroll	**1**	**10**	**4**	**1**	**2**	**18**						
	1.3%	*6.9%*	*4.6%*	*1.5%*	*4.7%*	*4.3%*						
F. Improve my health	**3**	**5**	**1**	**6**	**1**	**16**						
	4.0%	*3.4%*	*1.1%*	*9.0%*	*2.3%*	*3.8%*						
G. Was invited to enroll/no specific reason	**26**	**28**	**17**	**15**	**12**	**98**						
	34.7%	*19.3%*	*19.5%*	*22.4%*	*27.9%*	*23.5%*						
H. Other	**3**	**21**	**28**	**18**	**3**	**73**						
	4.0%	*14.5%*	*32.2%*	*26.9%*	*7.0%*	*17.5%*						
I. Don't know/not sure	**2**	**6**	**5**	**5**	**1**	**19**						

Survey Questions (numbering based on initial survey)	Initial Survey						Six-Month Follow-up Survey					
	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years
	2.7%	4.1%	5.7%	7.5%	2.3%	4.6%						
9) Among the reasons you gave, what was your most important reason for deciding to participate?												
A. Learn how to better manage health problems	**32**	**73**	**31**	**22**	**43**	**43**	*N/A – not asked*					
	42.7%	50.3%	35.6%	32.8%	100.0%	100.0%						
B. Learn how to identify changes in health	**0**	**0**	**0**	**0**	**0**	**0**						
	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%						
C. Have someone to call with questions about health	**6**	**1**	**0**	**0**	**0**	**0**						
	8.0%	0.7%	0.0%	0.0%	0.0%	0.0%						
D. Get help making health care appointments	**2**	**1**	**1**	**0**	**43**	**43**						
	2.7%	0.7%	1.1%	0.0%	100.0%	100.0%						
E. Personal doctor recommended I enroll	**1**	**10**	**4**	**1**	**0**	**0**						
	1.3%	6.9%	4.6%	1.5%	0.0%	0.0%						
F. Improve my health	**3**	**5**	**1**	**6**	**0**	**0**						
	4.0%	3.4%	1.1%	9.0%	0.0%	0.0%						
G. Was invited to enroll/no specific reason	**26**	**28**	**17**	**15**	**43**	**43**						
	34.7%	19.3%	19.5%	22.4%	100.0%	100.0%						
H. Other	**3**	**21**	**28**	**18**	**0**	**0**						
	4.0%	14.5%	32.2%	26.9%	0.0%	0.0%						
I. Don't know/not sure	**2**	**6**	**5**	**5**	**0**	**0**						
	2.7%	4.1%	5.7%	7.5%	0.0%	0.0%						

Survey Questions (numbering based on initial survey)	Initial Survey						Six-Month Follow-up Survey					
	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years
10) How soon after you started participating in the CCM were you contacted by your Nurse Care Manager?												
A. Contacted at time of enrollment in the doctor's office or over the telephone	**64**	**107**	**65**	**40**	**30**	**306**	*N/A – not asked*					
	85.3%	*73.8%*	*74.7%*	*59.7%*	*69.8%*	*73.4%*						
B. Less than 1 week	**4**	**9**	**10**	**15**	**4**	**42**						
	5.3%	*6.2%*	*11.5%*	*22.4%*	*9.3%*	*10.1%*						
C. 1 to 2 weeks	**0**	**4**	**1**	**0**	**3**	**8**						
	0.0%	*2.8%*	*1.1%*	*0.0%*	*7.0%*	*1.9%*						
D. More than 2 weeks	**0**	**1**	**0**	**1**	**0**	**2**						
	0.0%	*0.7%*	*0.0%*	*1.5%*	*0.0%*	*0.5%*						
E. Have not been contacted - enrolled 2 weeks ago or less	**0**	**0**	**1**	**0**	**0**	**1**						
	0.0%	*0.0%*	*1.1%*	*0.0%*	*0.0%*	*0.2%*						
F. Have not been contacted - enrolled 2 to 4 weeks ago	**0**	**0**	**0**	**0**	**0**	**0**						
	0.0%	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*						
G. Have not been contacted - enrolled more than 4 weeks ago	**0**	**1**	**0**	**1**	**0**	**2**						
	0.0%	*0.7%*	*0.0%*	*1.5%*	*0.0%*	*0.5%*						
H. Don't know/not sure/other	**7**	**23**	**10**	**10**	**6**	**56**						
	9.3%	*15.9%*	*11.5%*	*14.9%*	*14.0%*	*13.4%*						
11) Can you tell me the name of your Nurse Care Manager?												
A. Yes	**44**	**78**	**53**	**30**	**18**	**223**	**20**	**27**	**21**	**24**	**18**	**110**

Survey Questions (numbering based on initial survey)	Initial Survey						Six-Month Follow-up Survey					
	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years
	58.7%	54.2%	60.9%	44.8%	41.9%	53.6%	40.0%	71.1%	45.7%	54.5%	50.0%	51.4%
B. No	**31**	**66**	**34**	**37**	**25**	**193**	**30**	**11**	**25**	**20**	**18**	**104**
	41.3%	45.8%	39.1%	55.2%	58.1%	46.4%	60.0%	28.9%	54.3%	45.5%	50.0%	48.6%
12) What is the usual way you have contact with your Nurse Care Manager?												
A. Telephone call		**127**	**85**	**64**	**43**	**319**		**38**	**46**	**44**	**36**	**164**
		99.2%	97.7%	95.5%	100.0%	98.2%		100.0%	100.0%	100.0%	100.0%	100.0%
B. Text messaging		**0**	**0**	**0**	**0**	**0**		**0**	**0**	**0**	**0**	**0**
	N/A – not asked	0.0%	0.0%	0.0%	0.0%	0.2%	*N/A – not asked*	0.0%	0.0%	0.0%	0.0%	0.0%
C. Other (specify)		**0**	**1**	**1**	**0**	**2**		**0**	**0**	**0**	**0**	**0**
		0.0%	1.1%	1.5%	0.0%	0.6%		0.0%	0.0%	0.0%	0.0%	0.0%
D. Don't know/not sure		**1**	**1**	**2**	**0**	**4**		**0**	**0**	**0**	**0**	**0**
		0.8%	1.1%	3.0%	0.0%	1.2%		0.0%	0.0%	0.0%	0.0%	0.0%
13) About when was the last time you spoke to your Nurse Care Manager?												
A. Within last week	**21**	**40**	**34**	**19**	**10**	**124**	**5**	**11**	**11**	**9**	**5**	**41**
	28.0%	28.0%	40.0%	28.4%	23.3%	30.0%	10.0%	28.9%	23.9%	20.5%	13.9%	19.2%
B. 1 to 2 weeks ago	**15**	**20**	**14**	**14**	**6**	**69**	**6**	**6**	**6**	**4**	**6**	**28**
	20.0%	14.0%	16.5%	20.9%	14.0%	16.7%	12.0%	15.8%	13.0%	9.1%	16.7%	13.1%
C. 2 to 4 weeks ago	**25**	**34**	**24**	**18**	**18**	**119**	**13**	**7**	**7**	**8**	**12**	**47**
	33.3%	23.8%	28.2%	26.9%	41.9%	28.8%	26.0%	15.2%	15.2%	18.2%	33.3%	22.0%
D. More than 4 weeks ago	**13**	**45**	**11**	**14**	**9**	**92**	**26**	**14**	**22**	**19**	**13**	**94**
	17.3%	31.5%	12.9%	20.9%	20.9%	22.3%	52.0%	36.8%	47.8%	43.2%	36.1%	43.9%
E. Have never spoken to Nurse Care Manager	**0**	**1**	**0**	**1**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**
	0.0%	0.7%	0.0%	1.5%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
F. Don't know/not sure	**1**	**3**	**2**	**1**	**0**	**7**	**0**	**0**	**0**	**4**	**0**	**4**

Survey Questions (numbering based on initial survey)	Initial Survey						Six-Month Follow-up Survey					
	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years
	1.3%	*2.1%*	*2.4%*	*1.5%*	*0.0%*	*1.7%*	*0.0%*	*0.0%*	*0.0%*	*9.1%*	*0.0%*	*1.9%*
14) Did your Nurse Care Manager give you a telephone number/text to call?												
A. Yes	**70**	**131**	**78**	**58**	**37**	**374**	**44**	**37**	**42**	**38**	**32**	**193**
	93.3%	*92.3%*	*89.7%*	*86.6%*	*86.0%*	*90.3%*	*88.0%*	*97.4%*	*91.3%*	*86.4%*	*88.9%*	*90.2%*
B. No	**0**	**2**	**3**	**1**	**2**	**8**	**1**	**0**	**0**	**2**	**0**	**3**
	0.0%	*1.4%*	*3.4%*	*1.5%*	*4.7%*	*1.9%*	*2.0%*	*0.0%*	*0.0%*	*4.5%*	*0.0%*	*1.4%*
C. Don't know/not sure	**5**	**9**	**6**	**8**	**4**	**32**	**5**	**1**	**4**	**4**	**4**	**18**
	6.7%	*6.3%*	*6.9%*	*11.9%*	*9.3%*	*7.7%*	*10.0%*	*2.6%*	*8.7%*	*9.1%*	*11.1%*	*8.4%*
15) Have you tried to call/text your Nurse Care Manager?												
A. Yes	**26**	**59**	**25**	**12**	**10**	**132**	**16**	**19**	**12**	**18**	**15**	**80**
	37.1%	*45.0%*	*32.1%*	*20.7%*	*27.0%*	*35.3%*	*36.4%*	*51.3%*	*28.6%*	*47.4%*	*46.9%*	*41.4%*
B. No	**43**	**71**	**52**	**45**	**26**	**237**	**27**	**17**	**26**	**19**	**15**	**104**
	61.4%	*54.2%*	*66.7%*	*77.6%*	*70.3%*	*63.4%*	*61.4%*	*45.9%*	*61.9%*	*50.0%*	*46.9%*	*53.9%*
C. Don't know/not sure	**1**	**1**	**1**	**1**	**1**	**5**	**1**	**1**	**4**	**1**	**2**	**9**
	1.4%	*0.8%*	*1.3%*	*1.7%*	*2.7%*	*1.3%*	*2.3%*	*2.7%*	*9.5%*	*2.6%*	*6.3%*	*4.7%*
16) Thinking about the last time you called your Nurse Care Manager, what was the reason for your call?												
A. Routine health question	**23**	**45**	**18**	**9**	**9**	**104**	**9**	**15**	**6**	**15**	**8**	**53**
	88.5%	*76.3%*	*72.0%*	*75.0%*	*90.0*	*78.8%*	*56.3%*	*78.9%*	*50.0%*	*83.3%*	*53.3%*	*66.3%*
B. Urgent health problem	**1**	**1**	**1**	**1**	**0**	**4**	**0**	**1**	**0**	**0**	**0**	**1**
	3.8%	*1.7%*	*4.0%*	*8.3%*	*0.0%*	*3.0%*	*0.0%*	*5.3%*	*0.0%*	*0.0%*	*0.0%*	*1.3%*
C. Seeking assistance in scheduling an appt.	**1**	**5**	**1**	**0**	**0**	**7**	**1**	**1**	**1**	**1**	**1**	**5**
	3.8%	*8.5%*	*4.0%*	*0.0%*	*0.0%*	*5.3%*	*6.3%*	*5.3%*	*8.3%*	*5.6%*	*6.7%*	*6.3%*

Survey Questions (numbering based on initial survey)	Initial Survey						Six-Month Follow-up Survey					
	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years
D. Returning call from Nurse Care Manager	0	5	4	1	1	11	6	1	3	2	5	17
	0.0%	8.3%	16.0%	8.3%	10.0%	8.3%	37.5%	5.3%	25.0%	11.1%	33.3%	21.3%
E. Other	1	3	1	1	0	6	0	1	1	0	0	2
	3.8%	5.1%	4.0%	8.3%	0.0%	4.5%	0.0%	5.3%	8.3%	0.0%	0.0%	2.5%
F. Don't know/not sure	0	0	0	0	0	0	0	0	1	0	1	2
	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.3%	0.0%	6.7%	2.5%
17) 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)	10	32	12	7	5	66	8	12	3	10	7	40
	38.5%	54.2%	48.0%	58.3%	50.0	50.0%	50.0%	63.2%	25.0%	55.6%	46.7%	50.0%
B. Called back within 1 hour	8	14	7	1	1	31	3	3	3	2	2	13
	30.8%	23.7%	28.0%	8.3%	10.0	23.5%	18.8%	15.8%	25.0%	11.1%	13.3%	16.3%
C. Called back in more than 1 hour but same day	6	7	3	2	2	20	2	1	1	2	3	9
	23.1%	11.9%	12.0%	16.7%	20.0	15.2%	12.5%	5.3%	8.3%	11.1%	20.0%	11.3%
D. Called back the next day	0	2	0	0	1	3	1	1	2	0	2	6
	0.0%	3.4%	0.0%	0.0%	10.0	2.3%	6.3%	5.3%	16.7%	0.0%	13.3%	7.5%
E. Called back 2 or more days later	0	0	1	0	0	1	0	0	0	1	0	1
	0.0%	0.0%	4.0%	0.0%	0.0%	0.8%	0.0%	0.0%	0.0%	5.6%	0.0%	1.3%
F. Never called back	0	1	1	1	0	3	1	1	1	3	0	6
	0.0%	1.7%	4.0%	8.3%	0.0%	2.3%	6.3%	5.3%	8.3%	16.7%	0.0%	7.5%
G. Other	1	0	0	0	1	2	0	0	0	0	0	0
	3.8%	0.0%	0.0%	0.0%	10.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
H. Don't know/not sure	1	3	1	1	0	6	1	1	2	0	1	4
	3.8%	5.1%	4.0%	8.3%	0.0%	1.5%	6.3%	5.3%	16.7%	0.0%	6.7%	6.3%

Survey Questions (numbering based on initial survey)	Initial Survey						Six-Month Follow-up Survey					
	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years
18) 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	**75**	**142**	**84**	**66**	**42**	**409**	**50**	**38**	**45**	**43**	**36**	**212**
	100.0%	99.3%	97.7%	98.5%	97.7%	98.8%	100.0%	100.0%	97.8%	97.7%	100.0%	99.1%
B. No	**0**	**1**	**1**	**1**	**0**	**3**	**0**	**0**	**1**	**1**	**0**	**2**
	0.0%	0.7%	1.2%	1.5%	0.0%	0.7%	0.0%	0.0%	2.2%	2.3%	0.0%	0.9%
C. Don't know/not sure	**0**	**0**	**1**	**0**	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**0**
	0.0%	0.0%	1.2%	0.0%	2.3%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(b) Provided instructions about taking care of your health problems or concerns												
A. Yes	**71**	**132**	**78**	**55**	**37**	**373**	**49**	**36**	**44**	**41**	**32**	**202**
	94.7%	92.3%	90.7%	82.1%	86.0%	90.1%	98.0%	94.7%	95.7%	93.2%	88.9%	94.4%
B. No	**4**	**11**	**5**	**9**	**4**	**33**	**1**	**2**	**2**	**2**	**3**	**10**
	5.3%	7.7%	5.8%	13.4%	9.3%	8.0%	2.0%	5.3%	4.3%	4.5%	8.3%	4.7%
C. Don't know/not sure	**0**	**0**	**3**	**3**	**2**	**8**	**0**	**0**	**0**	**1**	**1**	**2**
	0.0%	0.%	3.5%	4.5%	4.7%	1.9%	0.0%	0.0%	0.0%	2.3%	2.8%	0.9%
(c) Helped you to identify changes in your health that might be an early sign of a problem												
A. Yes	**21**	**42**	**10**	**15**	**6**	**94**	**14**	**15**	**11**	**12**	**13**	**65**
	28.0%	29.4%	11.6%	22.4%	14.0%	22.7%	28.0%	39.5%	23.9%	27.3%	36.1%	30.4%
B. No	**54**	**99**	**74**	**50**	**37**	**314**	**30**	**23**	**34**	**31**	**22**	**140**
	72.0%	69.2%	86.0%	74.6%	86.0%	75.8%	60.0%	60.5%	73.9%	70.5%	61.1%	65.4%
C. Don't know/not sure	**0**	**2**	**2**	**2**	**0**	**6**	**6**	**0**	**1**	**1**	**1**	**9**
	0.0%	1.4%	2.3%	3.0%	0.0%	1.4%	12.0%	0.0%	2.2%	2.3%	2.8%	4.2%

Survey Questions (numbering based on initial survey)	Initial Survey						Six-Month Follow-up Survey					
	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years
(d) Answered questions about your health												
A. Yes	**62**	**121**	**69**	**54**	**33**	**339**	**41**	**32**	**42**	**40**	**28**	**183**
	82.7%	*84.6%*	*80.2%*	*80.6%*	*76.7%*	*81.9%*	*82.0%*	*84.2%*	*91.3%*	*90.9%*	*77.8%*	*85.5%*
B. No	**13**	**20**	**13**	**9**	**9**	**64**	**8**	**6**	**4**	**3**	**7**	**28**
	17.3%	*14.0%*	*15.1%*	*13.4%*	*20.9%*	*15.5%*	*16.0%*	*15.8%*	*8.7%*	*6.8%*	*19.4%*	*13.1%*
C. Don't know/not sure	**0**	**2**	**4**	**4**	**1**	**11**	**1**	**0**	**0**	**1**	**1**	**3**
	0.0%	*1.4%*	*4.7%*	*6.0%*	*2.3%*	*2.7%*	*2.0%*	*0.0%*	*0.0%*	*2.3%*	*2.8%*	*1.4%*
(e) Helped you talk to and work with your regular doctor and your regular doctor's office staff												
A. Yes	**15**	**31**	**10**	**11**	**5**	**72**	**11**	**16**	**5**	**12**	**8**	**52**
	20.0%	*21.7%*	*11.6%*	*16.4%*	*11.6%*	*17.4%*	*22.0%*	*42.1%*	*10.9%*	*27.3%*	*22.2%*	*24.3%*
B. No	**60**	**112**	**75**	**55**	**38**	**340**	**39**	**22**	**41**	**32**	**27**	**161**
	80.0%	*78.3%*	*87.2%*	*82.1%*	*88.4%*	*82.1%*	*78.0%*	*57.9%*	*89.1%*	*72.7%*	*75.0%*	*75.2%*
C. Don't know/not sure	**0**	**0**	**1**	**1**	**0**	**2**	**0**	**0**	**0**	**0**	**1**	**1**
	0.0%	*0.0%*	*1.2%*	*1.5%*	*0.0%*	*0.5%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*2.8%*	*0.5%*
(f) Helped you to make and keep health care appointments with other doctors, such as specialists, for medical problems?												
A. Yes	**14**	**30**	**9**	**8**	**3**	**64**	**8**	**9**	**7**	**10**	**8**	**42**
	18.7%	*21.0%*	*10.5%*	*11.9%*	*7.0%*	*15.5%*	*16.0%*	*23.7%*	*15.2%*	*22.7%*	*22.2%*	*19.6%*
B. No	**61**	**113**	**76**	**58**	**40**	**348**	**42**	**29**	**39**	**34**	**28**	**172**
	81.3%	*79.0%*	*88.4%*	*86.6%*	*93.0%*	*84.1%*	*84.0%*	*76.3%*	*84.8%*	*77.3%*	*77.8%*	*80.4%*
C. Don't know/not sure	**0**	**0**	**1**	**1**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**
	0.0%	*0.0%*	*1.2%*	*1.5%*	*0.0%*	*0.5%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
(g) Helped you to make and keep health care appointments for mental health or substance abuse problems												

Survey Questions (numbering based on initial survey)	Initial Survey						Six-Month Follow-up Survey					
	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years
A. Yes	2	4	0	1	1	8	1	0	1	0	2	4
	2.7%	2.8%	0.0%	1.5%	2.3%	1.9%	2.0%	0.0%	2.2%	0.0%	5.6%	1.9%
B. No	73	139	85	65	42	404	49	38	45	44	34	210
	97.3%	97.2%	98.8%	97.0%	97.7%	97.6%	98.0%	100.0%	97.8%	100.0%	94.4%	98.1%
C. Don't know/not sure	0	0	1	1	0	2	0	0	0	0	0	0
	0.0%	0.0%	1.2%	1.5%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(h) Reviewed your medications with you and helped you to manage your medications												
A. Yes	58	125	72	53	32	340	35	34	40	38	27	174
	77.3%	87.4%	83.7%	79.1%	74.4%	82.1%	70.0%	89.5%	87.0%	86.4%	75.0%	81.3%
B. No	10	12	6	6	5	39	5	2	4	2	2	15
	13.3%	8.4%	7.0%	9.0%	11.6%	9.4%	10.0%	5.3%	8.7%	4.5%	5.6%	7.0%
C. Don't know/not sure	7	6	8	8	6	35	10	2	2	4	7	25
	9.3%	4.2%	9.3%	11.9%	14.0%	8.5%	20.0%	5.3%	4.3%	9.1%	19.4%	11.7%
19) (For each activity performed) How satisfied are you with the help you received?												
(a) Asked questions about your health problems or concerns												
A. Very satisfied	68	136	82	56	40	382	44	34	40	40	30	188
	90.7%	95.1%	95.3%	83.6%	93.0%	92.3%	88.0%	89.5%	87.0%	90.9%	83.3%	87.9%
B. Somewhat satisfied	6	5	2	7	2	22	6	2	5	3	5	21
	8.0%	3.5%	2.3%	10.4%	4.7%	5.3%	12.0%	5.3%	10.9%	6.8%	13.9%	9.8%
C. Somewhat dissatisfied	0	1	0	0	0	1	0	0	0	0	0	0
	0.0%	0.7%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
D. Very dissatisfied	1	0	0	1	0	2	0	2	0	0	1	3
	1.3%	0.0%	0.0%	1.5%	0.0%	0.5%	0.0%	5.3%	0.0%	0.0%	2.8%	1.4%

Survey Questions (numbering based on initial survey)	Initial Survey						Six-Month Follow-up Survey					
	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years
E. Don't know/Not Applicable	0	1	2	3	1	7	0	0	1	1	0	2
	0.0%	0.7%	2.4%	4.5%	2.3%	1.7%	0.0%	0.0%	2.2%	2.3%	0.0%	0.9%
(b) Provided instructions about taking care of your health problems or concerns												
A. Very satisfied	65	127	76	51	34	353	44	32	40	40	28	184
	86.7%	88.8%	88.4%	76.1%	79.1%	85.3%	88.0%	84.2%	87.0%	90.9%	77.8%	86.0%
B. Somewhat satisfied	6	5	2	4	2	19	5	2	4	2	4	17
	8.0%	3.5%	2.3%	6.0%	4.7%	4.6%	10.0%	5.3%	8.7%	4.5%	11.1%	7.9%
C. Somewhat dissatisfied	0	0	0	0	1	1	0	0	0	0	0	0
	0.0%	0.0%	0.0%	0.0%	2.3%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
D. Very dissatisfied	0	0	0	0	0	0	0	2	0	0	0	2
	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.3%	0.0%	0.0%	0.0%	0.9%
E. Don't know/Not Applicable	4	11	8	12	6	41	1	2	2	2	4	11
	5.3%	7.7%	9.3%	17.9%	14.0%	9.9%	2.0%	5.3%	4.3%	4.5%	11.1%	5.2%
(c) Helped you to identify changes in your health that might be an early sign of a problem												
A. Very satisfied	21	43	10	14	6	94	12	14	12	12	12	62
	28.0%	30.1%	11.6%	20.9%	14.0%	22.7%	24.0%	36.8%	26.1%	27.3%	33.3%	29.0%
B. Somewhat satisfied	0	0	0	1	0	1	0	1	0	0	1	2
	0.0%	0.0%	0.0%	1.5%	0.0%	0.2%	0.0%	2.6%	0.0%	0.0%	2.8%	0.9%
C. Somewhat dissatisfied	0	0	0	0	0	0	0	0	0	0	0	0
	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
D. Very dissatisfied	0	0	0	0	0	0	0	0	0	0	0	0
	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E. Don't know/Not Applicable	54		76	52	37	319	38	23	34	32	23	150
	72.0%	69.9%	88.4%	77.6%	86.0%	77.0%	76.0%	60.5%	73.9%	72.8%	63.9%	70.1%

Survey Questions (numbering based on initial survey)	Initial Survey						Six-Month Follow-up Survey					
	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years
(d) Answered questions about your health												
A. Very satisfied	60	112	67	50	31	320	41	32	39	39	27	178
	80.0%	*78.3%*	*77.9%*	*74.6%*	*72.1%*	*77.3%*	*82.0%*	*84.2%*	*84.8%*	*88.6%*	*75.0%*	*83.2%*
B. Somewhat satisfied	2	5	2	4	2	15	1	1	2	2	1	7
	2.7%	*3.5%*	*2.3%*	*6.0%*	*4.7%*	*3.6%*	*2.0%*	*2.6%*	*4.3%*	*4.5%*	*2.8%*	*3.3%*
C. Somewhat dissatisfied	0	0	0	0	0	0	0	0	0	0	0	0
	0.0%	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
D. Very dissatisfied	0	0	0	0	0	0	0	0	0	0	0	0
	0.0%	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
E. Don't know/Not Applicable	13	26	17	13	10	79	8	5	5	3	8	29
	17.3%	*18.2%*	*19.8%*	*19.4%*	*23.2%*	*19.1%*	*16.0%*	*10.9%*	*10.9%*	*6.8%*	*22.2%*	*13.6%*
(e) Helped you talk to and work with your regular doctor and your regular doctor's office staff												
A. Very satisfied	15	34	11	10	4	74	10	15	6	12	9	52
	20.0%	*23.8%*	*12.8%*	*14.9%*	*9.3%*	*17.9%*	*20.0%*	*39.5%*	*13.0%*	*27.3%*	*25.0%*	*24.3%*
B. Somewhat satisfied	0	0	0	1	1	2	0	0	0	1	0	1
	0.0%	*0.0%*	*0.0%*	*1.5%*	*2.3*	*0.5%*	*0.0%*	*0.0%*	*0.0%*	*2.3%*	*0.0%*	*0.5%*
C. Somewhat dissatisfied	0	0	0	0	0	0	0	1	0	0	0	1
	0.0%	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*2.6%*	*0.0%*	*0.0%*	*0.0%*	*0.5%*
D. Very dissatisfied	0	1	0	0	0	1	0	0	0	0	0	0
	0.0%	*0.7%*	*0.0%*	*0.0%*	*0.0%*	*0.2%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
E. Don't know/Not Applicable	60	108	75	56	38	337	40	22	40	31	27	160
	80.0%	*75.5%*	*87.2%*	*83.6%*	*88.4%*	*81.4%*	*80.0%*	*57.9%*	*87.0%*	*70.5%*	*75.0%*	*74.8%*
(f) Helped you to make and keep health care appointments with other doctors, such as specialists, for medical problems?												

Survey Questions (numbering based on initial survey)	Initial Survey						Six-Month Follow-up Survey					
	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years
A. Very satisfied	11	24	6	7	3	51	8	7	7	8	8	38
	14.7%	16.8%	7.0%	10.4%	7.0%	12.3%	16.0%	18.4%	15.2%	18.2%	22.2%	17.8%
B. Somewhat satisfied	1	1	0	1	0	3	0	0	0	1	1	2
	1.3%	0.7%	0.0%	1.5%	0.0%	0.7%	0.0%	0.0%	0.0%	2.3%	2.8%	0.9%
C. Somewhat dissatisfied	0	1	1	0	0	2	0	0	0	0	0	0
	0.0%	0.7%	1.2%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
D. Very dissatisfied	0	0	0	0	0	0	0	1	0	0	0	1
	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.6%	0.0%	0.0%	0.0%	0.6%
E. Don't know/Not Applicable	63	117	79	59	40	358	42	30	39	35	27	173
	84.0%	81.8%	91.8%	88.1%	93.0%	86.5%	84.0%	78.9%	84.8%	79.5%	75.0%	80.8%
(g) Helped you to make and keep health care appointments for mental health or substance abuse problems												
A. Very satisfied	1	3	0	0	0	4	1	0	0	0	2	3
	1.3%	2.1%	0.0%	0.0%	0.0%	1.0%	2.0%	0.0%	0.0%	0.0%	5.6%	1.4%
B. Somewhat satisfied	1	0	0	1	1	3	0	0	0	0	1	1
	1.3%	0.0%	0.0%	1.5%	2.3%	0.7%	0.0%	0.0%	0.0%	0.0%	2.8%	0.5%
C. Somewhat dissatisfied	0	0	0	1	0	1	0	0	0	0	0	0
	0.0%	0.0%	0.0%	1.5%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
D. Very dissatisfied	0	0	0	0	0	0	0	0	0	0	0	0
	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E. Don't know/Not Applicable	63	140	86	65	42	406	49	38	46	44	33	209
	84.0%	97.9%	100.0%	97.0%	97.7%	98.0%	98.0%	100.0%	100.0%	100.0%	91.7%	97.7%
(h) Reviewed your medications with you and helped you to manage your medications												
A. Very satisfied	57	123	70	48	31	329	36	33	40	36	25	170
	76.0%	86.0%	81.4%	71.6%	72.1%	79.5%	72.0%	86.8%	87.0%	81.8%	69.4%	79.4%
B. Somewhat satisfied	2	3	2	5	1	13	0	2	0	3	2	7

Survey Questions (numbering based on initial survey)	Initial Survey						Six-Month Follow-up Survey					
	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years
	2.7%	*2.1%*	*2.3%*	*7.5%*	*2.3%*	*3.1%*	*0.0%*	*5.3%*	*0.0%*	*6.8%*	*5.6*	*3.3%*
C. Somewhat dissatisfied	0	0	0	0	0	0	0	0	0	0	0	0
	0.0%	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
D. Very dissatisfied	0	0	0	0	0	0	0	1	0	0	0	1
	0.0%	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*2.6%*	*0.0%*	*0.0%*	*0.0%*	*0.5%*
E. Don't know/Not Applicable	16	17	14	14	11	72	14	2	6	5	9	36
	21.3%	*11.9%*	*16.2%*	*20.8%*	*25.6%*	*17.4%*	*28.0%*	*5.3%*	*13.0%*	*11.3%*	*25.0%*	*16.8%*
20) I'm going to mention a few areas where Nurse Care Managers sometimes try to help members improve their health by changing behaviors. For each, tell me if your Nurse Care Manager spoke to you, and if so, whether you changed your behavior as a result.												
(a) Smoking less or using other tobacco products less A. N/A - not discussed	19	28	29	21	12	109	18	6	7	11	4	46
	25.3%	*19.6%*	*33.7%*	*31.3%*	*27.9%*	*26.3%*	*36.0%*	*15.8%*	*15.2%*	*25.6%*	*11.1%*	*21.6%*
B. Discussed - no change	3	4	6	2	2	17	3	1	1	4	1	10
	4.0%	*2.8%*	*7.0%*	*3.0%*	*4.7%*	*4.1%*	*6.0%*	*2.6%*	*2.2%*	*9.3%*	*2.8%*	*4.7%*
C. Discussed - temporary change	0	3	0	0	1	4	0	1	0	0	0	1
	0.0%	*2.1%*	*0.0%*	*0.0%*	*2.3%*	*1.0%*	*0.0%*	*2.6%*	*0.0%*	*0.0%*	*0.0%*	*0.5%*
D. Discussed - continuing change	11	20	10	4	5	50	3	6	3	2	5	19
	14.7%	*14.0%*	*11.6%*	*6.0%*	*11.6%*	*12.1%*	*6.0%*	*15.8%*	*6.5%*	*4.7%*	*13.9%*	*8.9%*
E. Don't know/not sure/no response	8	16	8	13	4	49	6	3	6	6	11	32
	10.7%	*11.2%*	*9.3%*	*19.4%*	*9.3%*	*11.8%*	*12.0%*	*7.9%*	*13.0%*	*14.0%*	*30.6%*	*15.0%*
F. Discussed but not applicable	34	72	33	27	19	185	20	21	29	20	15	105
	45.3%	*50.3%*	*38.4%*	*40.3%*	*44.2%*	*44.7%*	*40.0%*	*55.3%*	*63.0%*	*46.5%*	*41.7%*	*49.3%*
(b) Moving around more or getting more exercise												

Survey Questions (numbering based on initial survey)	Initial Survey						Six-Month Follow-up Survey					
	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years
A. N/A - not discussed	23	33	34	21	14	125	20	7	10	11	5	53
	30.7%	23.1%	39.5%	31.3%	32.6%	30.2%	40.0%	18.4%	21.7%	25.6%	13.9%	24.9%
B. Discussed - no change	3	8	4	5	0	20	2	1	2	2	5	12
	4.0%	5.6%	4.7%	7.5%	0.0%	4.8%	4.0%	2.6%	4.3%	4.7%	13.9%	5.6%
C. Discussed - temporary change	0	1	0	0	0	1	1	0	0	2	1	4
	0.0%	0.7%	0.0%	0.0%	0.0%	0.2%	2.0%	0.0%	0.0%	4.7%	2.8%	1.9%
D. Discussed - continuing change	21	53	22	18	8	122	15	15	17	14	14	75
	28.0%	37.1%	25.6%	26.9%	18.6%	29.5%	30.0%	39.5%	37.0%	32.6%	38.9%	35.2%
E. Don't know/not sure/no response	6	8	9	12	3	38	5	1	5	4	5	20
	8.0%	5.6%	10.5%	17.9%	7.0%	9.2%	10.0%	2.6%	10.9%	9.3%	13.9%	9.4%
F. Discussed but not applicable	22	40	17	11	18	108	7	14	12	10	6	49
	29.3%	28.0%	19.8%	16.4%	41.9%	26.1%	14.0%	36.8%	26.1%	23.3%	16.7%	23.0%
(c) Changing your diet												
A. N/A - not discussed	15	29	33	22	14	113	14	4	8	9	3	38
	20.0%	20.3%	38.4%	32.8%	32.6%	27.3%	28.0%	10.5%	17.4%	20.9%	8.3%	17.8%
B. Discussed - no change	9	8	2	4	0	23	7	2	1	1	6	17
	12.0%	5.6%	2.3%	6.0%	0.0%	5.6%	14.0%	5.3%	2.2%	2.3%	16.7%	8.0%
C. Discussed - temporary change	2	3	0	1	1	7	1	0	0	1	1	3
	2.7%	2.1%	0.0%	1.5%	2.3%	1.7%	2.0%	0.0%	0.0%	2.3%	2.8%	1.4%
D. Discussed - continuing change	26	62	25	18	12	143	20	20	24	20	17	101
	34.7%	43.4%	29.1%	26.9%	27.9%	34.5%	40.0%	52.6%	52.2%	46.5%	47.2%	47.4%
E. Don't know/not sure/no response	4	9	8	11	3	35	3	1	5	4	4	17
	5.3%	6.3%	9.3%	16.4%	7.0%	8.5%	6.0%	2.6%	10.9%	9.3%	11.1%	8.0%
F. Discussed but not applicable	19	32	18	11	13	93	5	11	8	8	5	37
	25.3%	22.4%	20.9%	16.4%	30.2%	22.5%	10.0%	28.9%	17.4%	18.6%	13.9%	17.4%
(d) Managing and taking your medications better												

Survey Questions (numbering based on initial survey)	Initial Survey						Six-Month Follow-up Survey					
	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years
A. N/A - not discussed	16	17	19	17	13	82	8	4	2	5	4	23
	21.3%	11.9%	22.1%	25.4%	30.2%	19.8%	16.0%	10.5%	4.3%	11.6%	11.1%	10.8%
B. Discussed - no change	0	0	0	1	0	1	0	0	0	0	0	0
	0.0%	0.0%	0.0%	1.5%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
C. Discussed - temporary change	0	0	0	0	0	0	0	0	0	0	0	0
	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
D. Discussed - continuing change	21	62	34	22	6	145	15	5	14	18	12	64
	28.0%	43.4%	39.5%	32.8%	14.0%	35.0%	30.0%	13.2%	30.4%	41.9%	33.3%	30.0%
E. Don't know/not sure/no response	5	12	6	13	3	39	13	2	7	3	9	34
	6.7%	8.4%	7.0%	19.4%	7.0%	9.4%	26.0%	5.3%	15.2%	7.0%	25.0%	16.0%
F. Discussed but not applicable	33	52	27	14	21	147	14	27	23	17	11	92
	44.0%	36.4%	31.4%	20.9%	48.8%	35.5%	28.0%	71.1%	50.0%	39.5%	30.6%	43.2%
(e) Making sure to drink enough water throughout the day A. N/A - not discussed	14	22	29	21	14	100	10	6	5	9	3	33
	18.9%	15.4%	33.7%	31.3%	32.6%	24.2%	20.0%	15.8%	10.9%	20.9%	8.3%	15.5%
B. Discussed - no change	4	3	1	0	1	9	3	3	3	2	6	17
	5.4%	2.1%	1.2%	0.0%	2.3%	2.2%	6.0%	7.9%	6.5%	4.7%	16.7%	8.0%
C. Discussed - temporary change	1	4	1	2	0	8	0	0	0	1	1	2
	1.4%	2.8%	1.2%	3.0%	0.0%	1.9%	0.0%	0.0%	0.0%	2.3%	2.8%	0.9%
D. Discussed - continuing change	23	41	26	13	6	109	16	12	16	14	8	66
	31.1%	28.7%	30.2%	19.4%	14.0%	26.4%	32.0%	31.6%	34.8%	32.6%	22.2%	31.0%
E. Don't know/not sure/no response	9	18	9	13	6	55	10	5	08	5	9	37
	12.2%	12.6%	10.5%	19.4%	14.0%	13.3%	20.0%	13.2%	17.4%	11.6%	25.0%	17.4%
F. Discussed but not applicable	23	55	20	18	16	132	11	12	14	12	9	58
	31.1%	38.5%	23.3%	26.9%	37.2%	32.0%	22.0%	31.6%	30.4%	27.9%	25.0%	27.2%
(f) Drinking or using other substances less A. N/A - not discussed	28	32	30	25	15	130	27	11	7	11	7	63

Survey Questions (numbering based on initial survey)	Initial Survey						Six-Month Follow-up Survey					
	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years
	37.3%	22.4%	34.9%	37.3%	34.9%	31.4%	54.0%	28.9%	15.2%	25.6%	19.4%	29.6%
B. Discussed - no change	0	0	0	0	0	0	0	0	0	1	0	1
	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.3%	0.0%	0.5%
C. Discussed - temporary change	0	0	0	0	0	0	0	0	0	0	0	0
	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
D. Discussed - continuing change	1	1	5	0	0	7	0	1	0	2	2	5
	1.3%	0.7%	5.8%	0.0%	0.0%	1.7%	0.0%	2.6%	0.0%	4.7%	5.6%	2.3%
E. Don't know/not sure/no response	9	23	11	17	5	65	9	6	10	8	12	45
	12.0%	16.1%	12.8%	25.4%	11.6%	15.7%	18.0%	15.8%	21.7%	18.6%	33.3%	21.1%
F. Discussed but not applicable	37	87	40	25	23	212	14	20	29	21	15	99
	49.3%	60.8%	46.5%	37.3%	53.5%	51.2%	28.0%	52.6%	63.1%	48.8%	41.7%	46.5%
21) Overall, how satisfied are you with your Nurse Care Manager?												
A. Very satisfied	67	135	81	56	40	379	44	34	40	40	32	190
	89.3%	94.4%	94.2%	83.6%	93.0%	91.5%	88.0%	89.5%	87.0%	93.0%	88.9%	89.2%
B. Somewhat satisfied	7	6	3	7	2	25	6	2	5	2	3	18
	9.3%	4.2%	3.5%	10.4%	4.7%	6.0%	12.0%	5.3%	10.9%	4.7%	8.3%	8.5%
C. Somewhat dissatisfied	0	2	0	0	1	3	0	0	0	1	0	1
	0.0%	1.4%	0.0%	0.0%	2.3%	0.7%	0.0%	0.0%	0.0%	2.3%	0.0%	0.5%
D. Very dissatisfied	1	0	0	1	0	2	0	2	0	0	1	3
	1.3%	0.0%	0.0%	1.5%	0.0%	0.5%	0.0%	5.3%	0.0%	0.0%	2.8%	1.4%
E. Don't know/not sure	0	0	2	3	0	5	0	0	1	0	0	1
	0.0%	0.0%	2.3%	4.5%	0.0%	1.2%	0.0%	0.0%	2.2%	0.0%	0.0%	0.5%
22) Overall, how satisfied are you with your whole experience in the CCM?												
A. Very satisfied	66	136	80	54	39	375	44	34	41	40	31	190
	88.0%	95.1%	93.0%	80.6%	90.7%	90.6%	88.0%	89.5%	89.1%	93.0%	86.1%	89.2%

Survey Questions (numbering based on initial survey)	Initial Survey						Six-Month Follow-up Survey					
	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years
B. Somewhat satisfied	8	4	4	9	3	28	6	3	4	1	4	18
	10.7%	2.8%	4.7%	13.4%	7.0%	6.8%	12.0%	7.9%	8.7%	2.3%	11.1%	8.5%
C. Somewhat dissatisfied	0	3	0	0	1	4	0	0	0	1	0	1
	0.0%	2.1%	0.0%	0.0%	2.3%	1.0%	0.0%	0.0%	0.0%	2.3%	0.0%	0.5%
D. Very dissatisfied	1	0	0	1	0	2	0	1	0	1	1	3
	1.3%	0.0%	0.0%	1.5%	0.0%	0.5%	0.0%	2.6%	0.0%	2.3%	2.8%	1.4%
E. Don't know/not sure	0	0	2	3	0	5	0	0	1	0	0	1
	0.0%	0.0%	2.3%	4.5%	0.0%	1.2%	0.0%	0.0%	2.2%	0.0%	0.0%	0.5%
23) Would you recommend the CCM to a friend who has health care needs like yours?												
A. Yes	73	138	82	62	42	397	50	36	46	43	35	210
	97.3%	96.5%	95.3%	92.5%	97.7%	95.9%	100.0%	94.7%	100.0%	100.0%	97.2%	98.6%
B. No	1	4	2	1	0	8	0	2	0	0	0	2
	1.3%	2.8%	2.3%	1.5%	0.0%	1.9%	0.0%	5.3%	0.0%	0.0%	0.0%	0.9%
C. Don't know/not sure	1	1	2	4	1	9	0	0	0	0	1	1
	1.3%	0.7%	2.3%	6.0%	2.3%	2.2%	0.0%	0.0%	0.0%	0.0%	2.8%	0.5%
24) Do you have any suggestions for improving the program?												
25) Overall, how would you rate your health today?												
A. Excellent	0	1	1	1	2	5	0	0	1	0	0	1
	0.0%	0.7%	1.2%	1.5%	4.7%	1.2%	0.0%	0.0%	2.2%	0.0%	0.0%	0.5%
B. Good	14	53	26	17	13	123	19	10	17	19	11	76
	18.7%	37.1%	30.2%	25.4%	30.2%	29.7%	38.0%	26.3%	37.0%	44.2%	30.6%	35.7%
C. Fair	50	73	48	35	24	230	30	19	24	16	20	109
	66.7%	51.0%	55.8%	52.2%	55.8%	55.6%	60.0%	50.0%	52.2%	37.2%	55.6%	51.2%
D. Poor	11	16	11	14	4	56	1	9	4	7	5	26

Survey Questions (numbering based on initial survey)	Initial Survey						Six-Month Follow-up Survey					
	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years
	14.7%	*11.2%*	*12.8%*	*20.9%*	*9.3%*	*13.5%*	*2.0%*	*23.7%*	*8.7%*	*16.3%*	*13.9%*	*12.2%*
E. Don't know/not sure/no response	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**
	0.0%	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*2.3%*	*0.0%*	*0.5%*
26) Compared to before you participated in the CCM, how has your health changed?												
A. Better	**26**	**75**	**39**	**25**	**15**	**180**	**28**	**18**	**24**	**25**	**17**	**112**
	34.7%	*52.4%*	*45.3%*	*37.3%*	*34.9%*	*43.5%*	*56.0%*	*47.4%*	*52.2%*	*58.1%*	*47.2%*	*52.6%*
B. Worse	**6**	**12**	**0**	**2**	**1**	**21**	**1**	**8**	**5**	**4**	**1**	**19**
	8.0%	*8.4%*	*0.0%*	*3.0%*	*2.3%*	*5.1%*	*2.0%*	*21.1%*	*10.9%*	*9.3%*	*2.8%*	*8.9%*
C. About the same	**43**	**56**	**47**	**40**	**27**	**213**	**21**	**12**	**17**	**14**	**18**	**82**
	57.3%	*39.2%*	*54.7%*	*59.7%*	*62.8%*	*51.4%*	*42.0%*	*31.6%*	*37.0%*	*32.6%*	*50.0%*	*38.5%*
D. Don't know/not sure	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	0.0%	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
27) (If better) Do you think the CCM has contributed to your improvement in health?												
A. Yes	**25**	**75**	**37**	**24**	**12**	**173**	**28**	**16**	**24**	**23**	**17**	**108**
	96.2%	*100.0%*	*94.9%*	*96.0%*	*80.0%*	*96.1%*	*100.0%*	*88.9%*	*100.0%*	*92.0%*	*100.0%*	*96.4%*
B. No	**1**	**0**	**2**	**1**	**3**	**7**	**0**	**2**	**0**	**1**	**0**	**3**
	3.8%	*0.0%*	*5.1%*	*4.0%*	*20.0%*	*3.9%*	*0.0%*	*11.1%*	*0.0%*	*4.0%*	*0.0%*	*2.7%*
C. Don't know/not sure	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**
	0.0%	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.%*	*0.0%*	*0.0%*	*0.0%*	*4.0%*	*0.0%*	*0.9%*
CAHPS SURVEY QUESTIONS **C1) In the last six months, how often was it easy to get the care you needed?**												
A. Never	*N/A – not asked*	**3**	**2**	**1**	**3**	**9**		**1**	**3**	**2**	**1**	**7**
		2.5%	*2.4%*	*1.5%*	*7.9%*	*3.0%*		*3.0%*	*7.0%*	*4.7%*	*2.8%*	*4.5%*
B. Sometimes		**12**	**13**	**6**	**6**	**37**		**4**	**5**	**6**	**2**	**17**

Survey Questions (numbering based on initial survey)	Initial Survey						Six-Month Follow-up Survey					
	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years
		10.2%	15.9%	9.0%	15.8%	12.1%	N/A – not asked	12.1%	11.6%	14.0%	5.6%	11.0%
C. Usually		29	22	20	12	83		12	15	14	9	50
		24.6%	26.8%	29.9%	31.6%	27.2%		36.4%	34.9%	32.6%	25.0%	32.3%
D. Always		74	45	40	17	176		16	20	21	24	81
		62.7%	54.9%	59.7%	44.7%	57.7%		48.5%	46.5%	48.8%	66.7%	52.3%
C2) In the last six months, did you make a specialist appointment?												
A. Yes	N/A – not asked	88	62	52	30	232	N/A – not asked	25	27	33	23	108
		74.6%	75.6%	77.6%	78.9%	76.1%		75.8%	62.8%	78.6%	63.9%	70.1%
B. No		30	20	15	8	73		8	16	9	13	46
		24.4%	24.4%	22.4%	21.1%	23.9%		24.2%	37.2%	21.4%	36.1%	29.9%
C3) In the last six months, how often did you get an appointment to see a specialist as soon as you needed?												
A. Never	N/A – not asked	3	2	2	4	11	N/A – not asked	4	1	3	3	11
		3.4%	3.2%	3.8%	13.3%	4.7%		16.0%	3.7%	9.1%	13.0%	10.2%
B. Sometimes		9	7	6	2	24		2	5	3	2	12
		10.2%	11.3%	11.5%	6.7%	10.3%		8.0%	18.5%	9.1%	8.7%	11.1%
C. Usually		16	10	5	7	38		3	1	7	8	19
		18.2%	16.1%	9.6%	23.3%	16.4%		12.0%	3.7%	21.2%	34.8%	17.6%
D. Always		60	43	39	17	159		16	20	20	10	66
		68.2%	69.4%	75.0%	56.7%	68.5%		64.0%	74.1%	60.6%	43.5%	61.1%
C4) What number would you use to rate your health care in the last six months?												
0	N/A – not asked	1	0	0	1	2		0	1	0	1	2
		0.8%	0.0%	0.0%	2.6%	0.6%		0.0%	2.3%	0.0%	2.8%	1.3%
1		0	0	0	0	0		0	0	0	0	0

Survey Questions (numbering based on initial survey)	Initial Survey						Six-Month Follow-up Survey					
	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years
		0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%	0.0%
2		0	2	0	0	2	N/A – not asked	0	0	0	0	0
		0.0%	1.6%	0.0%	0.0%	0.6%		0.0%	0.0%	0.0%	0.0%	0.0%
3		1	1	1	0	3		0	0	0	0	0
		0.8%	0.8%	1.5%	0.0%	0.9%		0.0%	0.0%	0.0%	0.0%	0.0%
4		0	1	0	0	1		1	0	0	0	1
		0%	0.8%	0.0%	0.0%	0.3%		3.0%	0.0%	0.0%	0.0%	0.6%
5		4	3	3	3	13		2	1	2	4	9
		3.4%	2.5%	4.5%	7.9%	3.8%		6.1%	2.3%	4.8%	11.1%	5.8%
6		1	1	4	2	8		1	1	3	2	7
		0.8%	0.8%	6.1%	5.3%	2.3%		3.0%	2.3%	7.1%	5.6%	4.5%
7		10	8	7	3	28		3	5	2	7	17
		8.5%	6.6%	10.6%	7.9%	8.1%		9.1%	11.6%	4.8%	19.4%	11.0%
8		32	33	18	12	95		6	13	13	9	41
		27.1%	27.0%	27.3%	31.6%	27.6%		18.2%	30.2%	31.0%	25.0%	26.6%
9		17	15	10	1	43		2	7	3	4	16
		14.4%	12.3%	15.2%	2.6%	12.5%		6.1%	16.3%	7.1%	11.1%	10.4%
10		52	58	23	16	149		18	15	19	9	61
		44.1%	47.5%	34.8%	42.1%	43.3%		54.5%	34.9%	45.2%	25.0%	39.6%
C5) What number would you use to rate your health plan?												
0	N/A – not asked	0	0	1	0	1		1	0	1	0	2
		0.0%	0.0%	1.5%	0.0%	0.3%		3.0%	0.0%	2.4%	0.0%	1.3%
1		0	0	0	0	0		0	0	0	0	0
		0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%	0.0%
2		1	0	1	0	2		0	0	0	1	0

Survey Questions (numbering based on initial survey)	Initial Survey						Six-Month Follow-up Survey					
	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years
		0.8%	0.0%	1.5%	0.0%	0.7%	N/A – not asked	0.0%	0.0%	0.0%	2.8%	0.6%
3		1	0	0	0	1		0	0	2	0	2
		0.8%	0.0%	0.0%	0.0%	0.3%		0.0%	0.0%	.8%	0.0%	1.3%
4		2	0	1	0	3		1	0	0	0	1
		1.7%	0.0%	1.5%	0.0%	1.0%		3.0%	0.0%	0.0%	0.0%	0.6%
5		3	1	2	2	8		2	1	1	1	5
		2.5%	1.2%	3.0%	5.4%	2.6%		6.1%	2.3%	2.4%	2.8%	3.2%
6		0	1	0	1	2		0	1	0	0	1
		0.0%	1.2%	0.0%	2.7%	0.7%		0.0%	2.3%	0.0%	0.0%	0.6%
7		13	4	0	2	19		3	3	3	3	12
		11.0%	4.9%	0.0%	5.4%	6.3%		9.1%	7.0%	7.1%	8.3%	7.8%
8		24	16	18	11	69		4	8	6	6	24
		20.3%	19.8%	26.9%	29.7%	22.8%		12.1%	18.6%	14.3%	16.7%	15.6%
9		17	10	12	2	41		4	9	5	10	28
		14.4%	12.3%	17.9%	5.4%	13.5%		12.1%	20.9%	11.9%	27.8%	18.2%
10		57	49	32	19	157		18	21	24	15	78
		48.3%	60.5%	47.8%	51.4%	51.8%		54.5%	48.8%	57.1%	41.7%	50.6%
C6) In the last six months, how often was it easy to get your child the care s/he needed?				*No children*						*No children*		
A. Never		0	1	0	0	1		0	1	0	0	1
		0.0%	16.7%	0.0%	0.0%	4.0%		0.0%	33.3%	0.0%	0.0%	11.1%
B. Sometimes	N/A – not asked	0	0	0	0	0	N/A – not asked	2	0	0	0	2
		0.0%	0.0%	0.0%	0.0%	0.0%		40.0%	0.0%	0.0%	0.0%	22.2%
C. Usually		2	1	0	1	4		1	1	0	0	2
		13.3%	16.7%	0.0%	25.0%	16.0%		20.0%	33.3%	0.0%	0.0%	22.2%
D. Always		13	4	0	3	20		2	1	0	1	4

Survey Questions (numbering based on initial survey)	Initial Survey						Six-Month Follow-up Survey					
	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years
		86.7%	*66.7%*	*0.0%*	*75.0%*	*80.0%*		*40.0%*	*33.3%*	*0.0%*	*100.0%*	*44.4%*
C7) In the last six months, did you make a specialist appointment?												
A. Yes	*N/A – not asked*	**12** *80.0%*	**6** *100.0%*	**0** *0.0%*	**3** *75.0%*	**21** *84.0%*	*N/A – not asked*	**4** *80.0%*	**3** *100.0%*	**0** *0.0%*	**1** *100.0%*	**8** *88.9%*
B. No		**3** *20.0%*	**0** *0.0%*	**0** *0.0%*	**1** *25.0%*	**4** *16.0%*		**1** *20.0%*	**0** *0.0%*	**0** *0.0%*	**0** *0.0%*	**1** *11.1%*
C8) In the last six months, how often did you get an appointment for your child to see a specialist as soon as you needed?												
A. Never	*N/A – not asked*	**0** *0.0%*	**0** *0.0%*	**0** *0.0%*	**0** *0.0%*	**0** *0.0%*	*N/A – not asked*	**0** *0.0%*	**1** *33.3%*	**0** *0.0%*	**0** *0.0%*	**1** *12.5%*
B. Sometimes		**0** *0.0%*	**1** *16.7%*	**0** *0.0%*	**0** *0.0%*	**1** *4.8%*		**0** *0.0%*	**0** *0.0%*	**0** *0.0%*	**0** *0.0%*	**0** *0.0%*
C. Usually		**2** *16.7%*	**2** *33.3%*	**0** *0.0%*	**0** *0.0%*	**4** *19.0%*		**1** *25.0%*	**1** *33.3%*	**0** *0.0%*	**0** *0.0%*	**2** *25.0%*
D. Always		**10** *83.3%*	**3** *50.%*	**0** *0.0%*	**3** *100.0%*	**16** *76.2%*		**3** *75.0%*	**1** *33.3%*	**0** *0.0%*	**1** *100.0%*	**5** *62.5%*
C9) What number would you use to rate your child's health care in the last six months?												
0	*N/A – not asked*	**0** *0.0%*	**0** *0.0%*	**0** *0.0%*	**0** *0.0%*	**0** *0.0%*		**0** *0.0%*	**0** *0.0%*	**0** *0.0%*	**0** *0.0%*	**0** *0.0%*
1		**0** *0.0%*	**0** *0.0%*	**0** *0.0%*	**0** *0.0%*	**0** *0.0%*		**0** *0.0%*	**0** *0.0%*	**0** *0.0%*	**0** *0.0%*	**0** *0.0%*
2		**0** *0.0%*	**0** *0.0%*	**0** *0.0%*	**0** *0.0%*	**0** *0.0%*		**0** *0.0%*	**0** *0.0%*	**0** *0.0%*	**0** *0.0%*	**0** *0.0%*

Survey Questions (numbering based on initial survey)	Initial Survey						Six-Month Follow-up Survey					
	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years
3		0 / 0.0%	0 / 0.0%	0 / 0.0%	0 / 0.0%	0 / 0.0%	N/A – not asked	0 / 0.0%	0 / 0.0%	0 / 0.0%	0 / 0.0%	0 / 0.0%
4		0 / 0.0%	1 / 11.1%	0 / 0.0%	0 / 0.0%	1 / 3.6%	N/A – not asked	1 / 20.0%	0 / 0.0%	0 / 0.0%	0 / 0.0%	1 / 11.1%
5		0 / 0.0%	1 / 11.1%	0 / 0.0%	0 / 0.0%	1 / 3.6%	N/A – not asked	0 / 0.0%	1 / 33.3%	0 / 0.0%	0 / 0.0%	1 / 11.1%
6		0 / 0.0%	0 / 0.00%	0 / 0.0%	1 / 25.0%	1 / 3.6%	N/A – not asked	0 / 0.0%	1 / 33.3%	0 / 0.0%	0 / 0.0%	1 / 11.1%
7	1 / 6.7%	0 / 0.0%	0 / 0.0%	0 / 0.0%	2 / 50.0%	3 / 10.7%	N/A – not asked	1 / 20.0%	0 / 0.0%	0 / 0.0%	0 / 0.0%	1 / 11.1%
8	4 / 26.7%	1 / 11.1%	0 / 0.0%	0 / 0.0%	0 / 0.0%	5 / 17.9%	N/A – not asked	0 / 0.0%	0 / 0.0%	0 / 0.0%	0 / 0.0%	0 / 0.0%
9	1 / 6.7%	2 / 22.2%	0 / 0.0%	0 / 0.0%	0 / 0.0%	3 / 10.7%	N/A – not asked	2 / 40.0%	0 / 0.0%	0 / 0.0%	1 / 100.0%	3 / 33.3%
10	9 / 60.0%	4 / 44.4%	0 / 0.0%	0 / 0.0%	1 / 25.0%	14 / 50.0%	N/A – not asked	1 / 20.0%	1 / 33.3%	0 / 0.0%	0 / 0.0%	2 / 22.2%
C10) What number would you use to rate your child's health plan?												
0	N/A – not asked	N/A – not asked	0 / 0.0%	0 / 0.0%	0 / 0.0%	0 / 0.0%	N/A – not asked	N/A – not asked	0 / 0.0%	0 / 0.0%	0 / 0.0%	0 / 0.0%
1	N/A – not asked	N/A – not asked	0 / 0.0%	0 / 0.0%	0 / 0.0%	0 / 0.0%	N/A – not asked	N/A – not asked	0 / 0.0%	0 / 0.0%	0 / 0.0%	0 / 0.0%
2	N/A – not asked	N/A – not asked	0 / 0.0%	0 / 0.0%	0 / 0.0%	0 / 0.0%	N/A – not asked	N/A – not asked	0 / 0.0%	0 / 0.0%	0 / 0.0%	0 / 0.0%
3	N/A – not asked	N/A – not asked	0 / 0.0%	0 / 0.0%	0 / 0.0%	0 / 0.0%	N/A – not asked	N/A – not asked	0 / 0.0%	0 / 0.0%	0 / 0.0%	0 / 0.0%
4	N/A – not asked	N/A – not asked	0 / 0.0%	0 / 0.0%	0 / 0.0%	0 / 0.0%	N/A – not asked	N/A – not asked	1 / 20.0%	0 / 0.0%	0 / 0.0%	1 / 11.1%

Survey Questions (numbering based on initial survey)	Initial Survey						Six-Month Follow-up Survey					
	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	All Years
5			0	0	0	0			0	0	0	0
			0.0%	0.0%	0.0%	0.0%			0.0%	0.0%	0.0%	0.0%
6			0	0	0	0			0	2	0	2
			0.0%	0.0%	0.0%	0.0%			0.0%	66.7%	0.0%	22.2%
7			2	0	0	2			0	0	0	0
			13.3%	0.0%	0.0%	8.3%			0.0%	0.0%	0.0%	0.0%
8			2	0	2	4			1	0	0	1
			13.3%	0.0%	50.0%	16.7%			20.0%	0.0%	0.0%	11.1%
9			0	2	1	3			2	0	1	3
			0.0%	40.0%	25.0%	12.5%			40.0%	0.0%	100.0%	33.3%
10			11	3	1	15			1	1	0	2
			73.3%	60.0%	25.0%	62.5%			20.0%	33.3%	0.0%	22.2%

APPENDIX C – CEM BALANCE TABLES

Appendix C presents Coarsened Exact Matching (CEM) balance tables for the SoonerCare CCM evaluation. Pre- and post-balancing results are shown individually for Calendar Years 2019 – 2023.

Calendar Year 2019

CHRONIC CARE MANAGEMENT	2019 All Data (pre-balancing)			2019 Matched Data (post-balancing)		
HEDIS and Utilization/Expenditure Measures	CCM Mean	Comparison Mean	Standardized Difference	CCM Mean	Comparison Mean	Standardized Difference
HEDIS Measures						
Asthma - Medication Ratio - 5 to 18 years						
Age	10.996	11.073	-0.020	10.996	10.996	0.000
Gender (0 = male; 1 = female)	0.410	0.493	-0.168	0.410	0.410	0.000
Urban/Rural (0 = urban; 1 = rural)	0.225	0.581	-0.855	0.225	0.225	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.269	0.038	0.521	0.269	0.269	0.000
Asthma - Medication Ratio - 19 to 64 years						
Age	46.524	38.670	0.621	46.524	46.474	0.004
Sex (0 = male; 1 = female)	0.675	0.689	-0.030	0.675	0.675	0.000
Urban/Rural (0 = urban; 1 = rural)	0.226	0.600	-0.894	0.226	0.226	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.762	0.428	0.785	0.762	0.762	0.000
CAD - Persistent Beta-Blocker Treatment after a Heart Attack						
Age	55.343	54.758	0.072	55.773	55.587	0.023
Sex (0 = male; 1 = female)	0.582	0.526	0.114	0.576	0.576	0.000
Urban/Rural (0 = urban; 1 = rural)	0.358	0.620	-0.546	0.364	0.364	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.881	0.831	0.154	0.879	0.879	0.000
CAD - Cholesterol Management - LDL-C Test	*Same population as CAD Beta Blocker*			*Same population as CAD Beta Blocker*		
Age	55.343	54.758	0.072	55.773	55.587	0.023
Sex (0 = male; 1 = female)	0.582	0.526	0.114	0.576	0.576	0.000
Urban/Rural (0 = urban; 1 = rural)	0.358	0.620	-0.546	0.364	0.364	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.881	0.831	0.154	0.879	0.879	0.000
COPD - Use of Spirometry Testing						
Age	50.000	46.804	0.242	53.115	53.211	-0.007
Sex (0 = male; 1 = female)	0.759	0.626	0.311	0.808	0.808	0.000
Urban/Rural (0 = urban; 1 = rural)	0.207	0.648	-1.088	0.192	0.192	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.862	0.656	0.598	0.846	0.846	0.000

CHRONIC CARE MANAGEMENT	2019 All Data (pre-balancing)			2019 Matched Data (post-balancing)		
HEDIS and Utilization/Expenditure Measures	CCM Mean	Comparison Mean	Standardized Difference	CCM Mean	Comparison Mean	Standardized Difference
HEDIS Measures						
COPD - Pharmacotherapy Management of Exacerbation - 14 days						
Age	54.711	52.715	0.274	55.472	55.489	-0.002
Sex (0 = male; 1 = female)	0.790	0.684	0.259	0.806	0.806	0.000
Urban/Rural (0 = urban; 1 = rural)	0.211	0.630	-1.028	0.222	0.222	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.921	0.837	0.313	0.972	0.972	0.000
COPD - Pharmacotherapy Management of Exacerbation - 30 days	*Same population as 14 days*			*Same population as 14 days*		
Age	54.711	52.715	0.274	55.472	55.489	-0.002
Sex (0 = male; 1 = female)	0.790	0.684	0.259	0.806	0.806	0.000
Urban/Rural (0 = urban; 1 = rural)	0.211	0.630	-1.028	0.222	0.222	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.921	0.837	0.313	0.972	0.972	0.000
Diabetes - Members who had LDL-C Test						
Age	50.634	47.676	0.266	50.329	50.388	-0.005
Sex (0 = male; 1 = female)	0.652	0.652	0.002	0.652	0.652	0.000
Urban/Rural (0 = urban; 1 = rural)	0.238	0.617	-0.892	0.224	0.224	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.802	0.688	0.285	0.798	0.798	0.000
Diabetes - Retinal Eye Exam	*Same population as LDL-C*			*Same population as LDL-C*		
Age	50.634	47.676	0.266	50.329	50.388	-0.005
Sex (0 = male; 1 = female)	0.652	0.652	0.002	0.652	0.652	0.000
Urban/Rural (0 = urban; 1 = rural)	0.238	0.617	-0.892	0.224	0.224	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.802	0.688	0.285	0.798	0.798	0.000
Diabetes - HbA1c Testing	*Same population as LDL-C*			*Same population as LDL-C*		
Age	50.634	47.676	0.266	50.329	50.388	-0.005
Sex (0 = male; 1 = female)	0.652	0.652	0.002	0.652	0.652	0.000
Urban/Rural (0 = urban; 1 = rural)	0.238	0.617	-0.892	0.224	0.224	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.802	0.688	0.285	0.798	0.798	0.000

CHRONIC CARE MANAGEMENT	2019 All Data (pre-balancing)			2019 Matched Data (post-balancing)		
HEDIS and Utilization/Expenditure Measures	CCM Mean	Comparison Mean	Standardized Difference	CCM Mean	Comparison Mean	Standardized Difference
HEDIS Measures						
Diabetes - Medical Attention for Nephropathy	*Same population as LDL-C*			*Same population as LDL-C*		
Age	50.634	47.676	0.266	50.329	50.388	-0.005
Sex (0 = male; 1 = female)	0.652	0.652	0.002	0.652	0.652	0.000
Urban/Rural (0 = urban; 1 = rural)	0.238	0.617	-0.892	0.224	0.224	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.802	0.688	0.285	0.798	0.798	0.000
Hypertension - LDL-C Test						
Age	52.342	49.071	0.333	52.010	51.810	0.020
Sex (0 = male; 1 = female)	0.642	0.612	0.063	0.644	0.644	0.000
Urban/Rural (0 = urban; 1 = rural)	0.240	0.607	-0.861	0.222	0.222	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.847	0.684	0.452	0.843	0.843	0.000
Hypertension - ACE/ARB Therapy	*Same population as LDL-C*			*Same population as LDL-C*		
Age	52.342	49.071	0.333	52.010	51.810	0.020
Sex (0 = male; 1 = female)	0.642	0.612	0.063	0.644	0.644	0.000
Urban/Rural (0 = urban; 1 = rural)	0.240	0.607	-0.861	0.222	0.222	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.847	0.684	0.452	0.843	0.843	0.000
Opioid - Use of Opioids at High Dosage						
Age	50.451	47.712	0.254	50.348	50.232	0.011
Sex (0 = male; 1 = female)	0.646	0.698	-0.109	0.643	0.643	0.000
Urban/Rural (0 = urban; 1 = rural)	0.274	0.639	-0.818	0.277	0.277	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.850	0.620	0.642	0.857	0.857	0.000
Opioid - Concurrent Use of Opioids and Benzodiazepines						
Age	49.653	45.810	0.340	49.569	49.638	-0.006
Sex (0 = male; 1 = female)	0.646	0.709	-0.131	0.644	0.644	0.000
Urban/Rural (0 = urban; 1 = rural)	0.272	0.632	-0.808	0.274	0.274	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.830	0.566	0.703	0.836	0.836	0.000

CHRONIC CARE MANAGEMENT	2019 All Data (pre-balancing)			2019 Matched Data (post-balancing)		
HEDIS and Utilization/Expenditure Measures	CCM Mean	Comparison Mean	Standardized Difference	CCM Mean	Comparison Mean	Standardized Difference
HEDIS Measures						
Child and Adolescents' Access to PCP - 12 months to 19 years						
Age	10.559	9.025	0.326	10.559	10.559	0.000
Sex (0 = male; 1 = female)	0.399	0.492	-0.190	0.399	0.399	0.000
Urban/Rural (0 = urban; 1 = rural)	0.232	0.576	-0.814	0.232	0.232	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.255	0.033	0.510	0.255	0.255	0.000
Adults' Access to Preventive/Ambulatory Health Services						
Age	48.142	39.761	0.668	47.951	47.862	0.007
Sex (0 = male; 1 = female)	0.668	0.694	-0.055	0.669	0.669	0.000
Urban/Rural (0 = urban; 1 = rural)	0.236	0.598	-0.854	0.229	0.229	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.785	0.441	0.836	0.783	0.783	0.000

CHRONIC CARE MANAGEMENT	2019 All Data (pre-balancing)			2019 Matched Data (post-balancing)		
HEDIS and Utilization/Expenditure Measures	CCM Mean	Comparison Mean	Standardized Difference	CCM Mean	Comparison Mean	Standardized Difference
Utilization/Expenditure Measures						
Emergency Room Visits (per 1,000 member months) - All						
Age	33.619	13.419	0.974	33.570	33.590	-0.001
Sex	0.570	0.518	0.106	0.570	0.570	0.000
Urban/Rural	0.180	0.564	-0.999	0.179	0.179	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.595	0.098	1.012	0.596	0.596	0.000
Prior year PMPM threshold	0.388	0.047	0.701	0.389	0.389	0.000
Hospital Admissions (per 100,000 member months) - All	*Same population as Emergency Room*			*Same population as Emergency Room*		
Age	33.619	13.419	0.974	33.570	33.590	-0.001
Sex	0.570	0.518	0.106	0.570	0.570	0.000
Urban/Rural	0.180	0.564	-0.999	0.179	0.179	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.595	0.098	1.012	0.596	0.596	0.000
Prior year PMPM threshold	0.388	0.047	0.701	0.389	0.389	0.000
Hospital Readmission Rate - All	*Same population as Emergency Room*			*Same population as Emergency Room*		
Age	33.619	13.419	0.974	33.570	33.590	-0.001
Sex	0.570	0.518	0.106	0.570	0.570	0.000
Urban/Rural	0.180	0.564	-0.999	0.179	0.179	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.595	0.098	1.012	0.596	0.596	0.000
Prior year PMPM threshold	0.388	0.047	0.701	0.389	0.389	0.000
Per Member Per Month Expenditures - All	*Same population as Emergency Room*			*Same population as Emergency Room*		
Age	33.619	13.419	0.974	33.570	33.590	-0.001
Sex	0.570	0.518	0.106	0.570	0.570	0.000
Urban/Rural	0.180	0.564	-0.999	0.179	0.179	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.595	0.098	1.012	0.596	0.596	0.000
Prior year PMPM threshold	0.388	0.047	0.701	0.389	0.389	0.000

Calendar Year 2020

CHRONIC CARE MANAGEMENT	2020 All Data (pre-balancing)			2020 Matched Data (post-balancing)		
HEDIS and Utilization/Expenditure Measures	CCM Mean	Comparison Mean	Standardized Difference	CCM Mean	Comparison Mean	Standardized Difference
HEDIS Measures						
Asthma - Medication Ratio - 5 to 18 years						
Age	11.513	11.139	0.097	11.513	11.513	0.000
Gender (0 = male; 1 = female)	0.395	0.492	-0.198	0.395	0.395	0.000
Urban/Rural (0 = urban; 1 = rural)	0.303	0.576	-0.595	0.303	0.303	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.248	0.034	0.496	0.248	0.248	0.000
Asthma - Medication Ratio - 19 to 64 years						
Age	46.041	35.222	0.840	46.041	46.001	0.003
Sex (0 = male; 1 = female)	0.640	0.699	-0.124	0.640	0.640	0.000
Urban/Rural (0 = urban; 1 = rural)	0.323	0.580	-0.551	0.323	0.323	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.656	0.285	0.792	0.660	0.660	0.000
CAD - Persistent Beta-Blocker Treatment after a Heart Attack						
Age	56.525	55.551	0.129	56.190	56.037	0.020
Sex (0 = male; 1 = female)	0.541	0.509	0.065	0.535	0.535	0.000
Urban/Rural (0 = urban; 1 = rural)	0.377	0.623	-0.507	0.379	0.379	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.836	0.824	0.033	0.862	0.862	0.000
CAD - Cholesterol Management - LDL-C Test	*Same population as CAD Beta Blocker*			*Same population as CAD Beta Blocker*		
Age	56.525	55.551	0.129	56.190	56.037	0.020
Sex (0 = male; 1 = female)	0.541	0.509	0.065	0.535	0.535	0.000
Urban/Rural (0 = urban; 1 = rural)	0.377	0.623	-0.507	0.379	0.379	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.836	0.824	0.033	0.862	0.862	0.000
COPD - Use of Spirometry Testing						
Age	44.750	37.031	0.363	44.361	43.975	0.018
Sex (0 = male; 1 = female)	0.525	0.553	-0.056	0.528	0.528	0.000
Urban/Rural (0 = urban; 1 = rural)	0.375	0.611	-0.488	0.361	0.361	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.700	0.527	0.378	0.667	0.667	0.000

CHRONIC CARE MANAGEMENT	2020 All Data (pre-balancing)			2020 Matched Data (post-balancing)		
HEDIS and Utilization/Expenditure Measures	CCM Mean	Comparison Mean	Standardized Difference	CCM Mean	Comparison Mean	Standardized Difference
HEDIS Measures						
COPD - Pharmacotherapy Management of Exacerbation - 14 days						
Age	55.056	53.066	0.183	55.943	55.629	0.029
Sex (0 = male; 1 = female)	0.722	0.645	0.173	0.743	0.743	0.000
Urban/Rural (0 = urban; 1 = rural)	0.361	0.585	-0.466	0.343	0.343	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.889	0.821	0.217	0.886	0.886	0.000
COPD - Pharmacotherapy Management of Exacerbation - 30 days	*Same population as 14 days*			*Same population as 14 days*		
Age	55.056	53.066	0.183	55.943	55.629	0.029
Sex (0 = male; 1 = female)	0.722	0.645	0.173	0.743	0.743	0.000
Urban/Rural (0 = urban; 1 = rural)	0.361	0.585	-0.466	0.343	0.343	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.889	0.821	0.217	0.886	0.886	0.000
Diabetes - Members who had LDL-C Test						
Age	50.316	46.351	0.346	50.147	50.126	0.002
Sex (0 = male; 1 = female)	0.647	0.667	-0.041	0.650	0.650	0.000
Urban/Rural (0 = urban; 1 = rural)	0.276	0.597	-0.720	0.269	0.269	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.712	0.586	0.279	0.713	0.713	0.000
Diabetes - Retinal Eye Exam	*Same population as LDL-C*			*Same population as LDL-C*		
Age	50.316	46.351	0.346	50.147	50.126	0.002
Sex (0 = male; 1 = female)	0.647	0.667	-0.041	0.650	0.650	0.000
Urban/Rural (0 = urban; 1 = rural)	0.276	0.597	-0.720	0.269	0.269	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.712	0.586	0.279	0.713	0.713	0.000
Diabetes - HbA1c Testing	*Same population as LDL-C*			*Same population as LDL-C*		
Age	50.316	46.351	0.346	50.147	50.126	0.002
Sex (0 = male; 1 = female)	0.647	0.667	-0.041	0.650	0.650	0.000
Urban/Rural (0 = urban; 1 = rural)	0.276	0.597	-0.720	0.269	0.269	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.712	0.586	0.279	0.713	0.713	0.000

CHRONIC CARE MANAGEMENT	2020 All Data (pre-balancing)			2020 Matched Data (post-balancing)		
HEDIS and Utilization/Expenditure Measures	**CCM Mean**	**Comparison Mean**	**Standardized Difference**	**CCM Mean**	**Comparison Mean**	**Standardized Difference**
HEDIS Measures						
Diabetes - Medical Attention for Nephropathy	*Same population as LDL-C*			*Same population as LDL-C*		
Age	50.316	46.351	0.346	50.147	50.126	0.002
Sex (0 = male; 1 = female)	0.647	0.667	-0.041	0.650	0.650	0.000
Urban/Rural (0 = urban; 1 = rural)	0.276	0.597	-0.720	0.269	0.269	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.712	0.586	0.279	0.713	0.713	0.000
Hypertension - LDL-C Test						
Age	52.353	47.621	0.439	52.187	52.141	0.004
Sex (0 = male; 1 = female)	0.605	0.624	-0.038	0.609	0.609	0.000
Urban/Rural (0 = urban; 1 = rural)	0.296	0.588	-0.638	0.289	0.289	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.758	0.584	0.407	0.758	0.758	0.000
Hypertension - ACE/ARB Therapy	*Same population as LDL-C*			*Same population as LDL-C*		
Age	52.353	47.621	0.439	52.187	52.141	0.004
Sex (0 = male; 1 = female)	0.605	0.624	-0.038	0.609	0.609	0.000
Urban/Rural (0 = urban; 1 = rural)	0.296	0.588	-0.638	0.289	0.289	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.758	0.584	0.407	0.758	0.758	0.000
Opioid - Use of Opioids at High Dosage						
Age	51.602	47.419	0.391	51.255	51.267	-0.001
Sex (0 = male; 1 = female)	0.639	0.702	-0.131	0.642	0.642	0.000
Urban/Rural (0 = urban; 1 = rural)	0.352	0.602	-0.524	0.349	0.349	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.778	0.575	0.488	0.774	0.774	0.000
Opioid - Concurrent Use of Opioids and Benzodiazepines						
Age	50.645	45.297	0.464	50.239	50.213	0.002
Sex (0 = male; 1 = female)	0.667	0.716	-0.104	0.667	0.667	0.000
Urban/Rural (0 = urban; 1 = rural)	0.355	0.600	-0.513	0.348	0.348	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.773	0.514	0.620	0.768	0.768	0.000

CHRONIC CARE MANAGEMENT HEDIS and Utilization/Expenditure Measures	2020 All Data (pre-balancing)			2020 Matched Data (post-balancing)		
	CCM Mean	Comparison Mean	Standardized Difference	CCM Mean	Comparison Mean	Standardized Difference
HEDIS Measures						
Child and Adolescents' Access to PCP - 12 months to 19 years						
Age	10.799	9.254	0.311	10.799	10.799	0.000
Sex (0 = male; 1 = female)	0.401	0.493	-0.187	0.401	0.401	0.000
Urban/Rural (0 = urban; 1 = rural)	0.325	0.574	-0.531	0.325	0.325	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.242	0.029	0.498	0.242	0.242	0.000
Adults' Access to Preventive/Ambulatory Health Services						
Age	47.778	37.771	0.773	47.624	47.551	0.006
Sex (0 = male; 1 = female)	0.635	0.725	-0.187	0.637	0.637	0.000
Urban/Rural (0 = urban; 1 = rural)	0.318	0.578	-0.559	0.313	0.313	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.681	0.320	0.775	0.680	0.680	0.000

CHRONIC CARE MANAGEMENT	2020 All Data (pre-balancing)			2020 Matched Data (post-balancing)		
HEDIS and Utilization/Expenditure Measures	CCM Mean	Comparison Mean	Standardized Difference	CCM Mean	Comparison Mean	Standardized Difference
Utilization/Expenditure Measures						
Emergency Room Visits (per 1,000 member months) - All						
Age	33.326	13.515	0.973	33.242	33.130	0.006
Sex	0.547	0.519	0.057	0.549	0.549	0.000
Urban/Rural	0.267	0.574	-0.694	0.268	0.268	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.580	0.087	0.999	0.582	0.582	0.000
Prior year PMPM threshold	0.292	0.046	0.541	0.292	0.292	0.000
Hospital Admissions (per 100,000 member months) - All	*Same population as Emergency Room*			*Same population as Emergency Room*		
Age	33.326	13.515	0.973	33.242	33.130	0.006
Sex	0.547	0.519	0.057	0.549	0.549	0.000
Urban/Rural	0.267	0.574	-0.694	0.268	0.268	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.580	0.087	0.999	0.582	0.582	0.000
Prior year PMPM threshold	0.292	0.046	0.541	0.292	0.292	0.000
Hospital Readmission Rate - All	*Same population as Emergency Room*			*Same population as Emergency Room*		
Age	33.326	13.515	0.973	33.242	33.130	0.006
Sex	0.547	0.519	0.057	0.549	0.549	0.000
Urban/Rural	0.267	0.574	-0.694	0.268	0.268	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.580	0.087	0.999	0.582	0.582	0.000
Prior year PMPM threshold	0.292	0.046	0.541	0.292	0.292	0.000
Per Member Per Month Expenditures - All	*Same population as Emergency Room*			*Same population as Emergency Room*		
Age	33.326	13.515	0.973	33.242	33.130	0.006
Sex	0.547	0.519	0.057	0.549	0.549	0.000
Urban/Rural	0.267	0.574	-0.694	0.268	0.268	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.580	0.087	0.999	0.582	0.582	0.000
Prior year PMPM threshold	0.292	0.046	0.541	0.292	0.292	0.000

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CHRONIC CARE MANAGEMENT	2021 All Data (pre-balancing)			2021 Matched Data (post-balancing)		
HEDIS and Utilization/Expenditure Measures	CCM Mean	Comparison Mean	Standardized Difference	CCM Mean	Comparison Mean	Standardized Difference
HEDIS Measures						
Asthma - Medication Ratio - 5 to 18 years						
Age	11.848	11.257	0.157	11.848	11.848	0.000
Gender (0 = male; 1 = female)	0.386	0.491	-0.215	0.386	0.386	0.000
Urban/Rural (0 = urban; 1 = rural)	0.257	0.589	-0.760	0.257	0.257	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.252	0.029	0.512	0.252	0.252	0.000
Asthma - Medication Ratio - 19 to 64 years						
Age	44.625	33.357	0.877	44.625	44.561	0.005
Sex (0 = male; 1 = female)	0.610	0.688	-0.159	0.610	0.610	0.000
Urban/Rural (0 = urban; 1 = rural)	0.309	0.594	-0.618	0.309	0.309	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.618	0.233	0.793	0.618	0.618	0.000
CAD - Persistent Beta-Blocker Treatment after a Heart Attack						
Age	56.267	55.940	0.033	54.667	54.781	-0.011
Sex (0 = male; 1 = female)	0.633	0.501	0.274	0.630	0.630	0.000
Urban/Rural (0 = urban; 1 = rural)	0.333	0.622	-0.613	0.333	0.333	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.858	0.827	0.094	0.870	0.870	0.000
CAD - Cholesterol Management - LDL-C Test	*Same population as CAD Beta Blocker*			*Same population as CAD Beta Blocker*		
Age	56.267	55.940	0.033	54.667	54.781	-0.011
Sex (0 = male; 1 = female)	0.633	0.501	0.274	0.630	0.630	0.000
Urban/Rural (0 = urban; 1 = rural)	0.333	0.622	-0.613	0.333	0.333	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.858	0.827	0.094	0.870	0.870	0.000
COPD - Use of Spirometry Testing						
Age	54.583	53.918	0.074	54.364	0.026	0.000
Sex (0 = male; 1 = female)	0.417	0.629	-0.430	0.455	0.455	0.000
Urban/Rural (0 = urban; 1 = rural)	0.417	0.671	-0.516	0.455	0.455	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.781	0.591	0.488	0.756	0.756	0.000

CHRONIC CARE MANAGEMENT	2021 All Data (pre-balancing)			2021 Matched Data (post-balancing)		
HEDIS and Utilization/Expenditure Measures	CCM Mean	Comparison Mean	Standardized Difference	CCM Mean	Comparison Mean	Standardized Difference
HEDIS Measures						
COPD - Pharmacotherapy Management of Exacerbation - 14 days						
Age	57.294	56.097	0.121	53.539	53.539	0.000
Sex (0 = male; 1 = female)	0.765	0.659	0.249	0.846	0.846	0.000
Urban/Rural (0 = urban; 1 = rural)	0.235	0.633	-0.937	0.308	0.308	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.905	0.829	0.265	0.929	0.929	0.000
COPD - Pharmacotherapy Management of Exacerbation - 30 days	*Same population as 14 days*			*Same population as 14 days*		
Age	57.294	56.097	0.121	53.539	53.539	0.000
Sex (0 = male; 1 = female)	0.765	0.659	0.249	0.846	0.846	0.000
Urban/Rural (0 = urban; 1 = rural)	0.235	0.633	-0.937	0.308	0.308	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.905	0.829	0.265	0.929	0.929	0.000
Diabetes - Members who had LDL-C Test						
Age	50.706	46.105	-0.022	50.249	50.226	0.002
Sex (0 = male; 1 = female)	0.667	0.677	-0.854	0.676	0.676	0.000
Urban/Rural (0 = urban; 1 = rural)	0.249	0.618	0.000	0.243	0.243	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.757	0.637	0.282	0.755	0.755	0.000
Diabetes - Retinal Eye Exam	*Same population as LDL-C*			*Same population as LDL-C*		
Age	50.706	46.105	-0.022	50.249	50.226	0.002
Sex (0 = male; 1 = female)	0.667	0.677	-0.854	0.676	0.676	0.000
Urban/Rural (0 = urban; 1 = rural)	0.249	0.618	0.000	0.243	0.243	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.757	0.637	0.282	0.755	0.755	0.000
Diabetes - HbA1c Testing	*Same population as LDL-C*			*Same population as LDL-C*		
Age	50.706	46.105	-0.022	50.249	50.226	0.002
Sex (0 = male; 1 = female)	0.667	0.677	-0.854	0.676	0.676	0.000
Urban/Rural (0 = urban; 1 = rural)	0.249	0.618	0.000	0.243	0.243	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.757	0.637	0.282	0.755	0.755	0.000

CHRONIC CARE MANAGEMENT	2021 All Data (pre-balancing)			2021 Matched Data (post-balancing)		
HEDIS and Utilization/Expenditure Measures	CCM Mean	Comparison Mean	Standardized Difference	CCM Mean	Comparison Mean	Standardized Difference
HEDIS Measures						
Diabetes - Medical Attention for Nephropathy	*Same population as LDL-C*			*Same population as LDL-C*		
Age	50.706	46.105	-0.022	50.249	50.226	0.002
Sex (0 = male; 1 = female)	0.667	0.677	-0.854	0.676	0.676	0.000
Urban/Rural (0 = urban; 1 = rural)	0.249	0.618	0.000	0.243	0.243	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.757	0.637	0.282	0.755	0.755	0.000
Hypertension - LDL-C Test						
Age	52.654	48.613	0.371	51.820	51.578	0.022
Sex (0 = male; 1 = female)	0.611	0.617	-0.012	0.612	0.612	0.000
Urban/Rural (0 = urban; 1 = rural)	0.297	0.610	-0.685	0.303	0.303	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.802	0.634	0.430	0.801	0.801	0.000
Hypertension - ACE/ARB Therapy	*Same population as LDL-C*			*Same population as LDL-C*		
Age	52.654	48.613	0.371	51.820	51.578	0.022
Sex (0 = male; 1 = female)	0.611	0.617	-0.012	0.612	0.612	0.000
Urban/Rural (0 = urban; 1 = rural)	0.297	0.610	-0.685	0.303	0.303	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.802	0.634	0.430	0.801	0.801	0.000
Opioid - Use of Opioids at High Dosage						
Age	49.288	48.313	0.080	48.456	48.387	0.006
Sex (0 = male; 1 = female)	0.695	0.698	-0.006	0.719	0.719	0.000
Urban/Rural (0 = urban; 1 = rural)	0.339	0.629	-0.612	0.351	0.351	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.814	0.598	0.565	0.815	0.815	0.000
Opioid - Concurrent Use of Opioids and Benzodiazepines						
Age	49.279	45.540	0.316	48.714	48.636	0.007
Sex (0 = male; 1 = female)	0.663	0.720	-0.120	0.679	0.679	0.000
Urban/Rural (0 = urban; 1 = rural)	0.302	0.626	-0.704	0.310	0.310	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.801	0.540	0.661	0.802	0.802	0.000

CHRONIC CARE MANAGEMENT	2021 All Data (pre-balancing)			2021 Matched Data (post-balancing)		
HEDIS and Utilization/Expenditure Measures	CCM Mean	Comparison Mean	Standardized Difference	CCM Mean	Comparison Mean	Standardized Difference
HEDIS Measures						
Child and Adolescents' Access to PCP - 12 months to 19 years						
Age	11.471	9.832	0.345	11.471	11.466	0.001
Sex (0 = male; 1 = female)	0.373	0.492	-0.247	0.373	0.373	0.000
Urban/Rural (0 = urban; 1 = rural)	0.279	0.587	-0.686	0.279	0.279	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.249	0.031	0.504	0.249	0.249	0.000
Adults' Access to Preventive/Ambulatory Health Services						
Age	47.294	37.063	0.773	46.717	46.569	0.011
Sex (0 = male; 1 = female)	0.615	0.729	-0.234	0.613	0.613	0.000
Urban/Rural (0 = urban; 1 = rural)	0.301	0.594	-0.638	0.303	0.303	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.733	0.381	0.806	0.732	0.732	0.000

CHRONIC CARE MANAGEMENT	2021 All Data (pre-balancing)			2021 Matched Data (post-balancing)		
HEDIS and Utilization/Expenditure Measures	CCM Mean	Comparison Mean	Standardized Difference	CCM Mean	Comparison Mean	Standardized Difference
Utilization/Expenditure Measures						
Emergency Room Visits (per 1,000 member months) - All						
Age	31.061	13.992	0.845	31.061	31.067	0.000
Sex	0.513	0.524	-0.022	0.513	0.513	0.000
Urban/Rural	0.262	0.588	-0.742	0.262	0.262	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.540	0.078	0.926	0.540	0.540	0.000
Prior year PMPM threshold	0.310	0.045	0.572	0.310	0.310	0.000
Hospital Admissions (per 100,000 member months) - All	*Same population as Emergency Room*			*Same population as Emergency Room*		
Age	31.061	13.992	0.845	31.061	31.067	0.000
Sex	0.513	0.524	-0.022	0.513	0.513	0.000
Urban/Rural	0.262	0.588	-0.742	0.262	0.262	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.540	0.078	0.926	0.540	0.540	0.000
Prior year PMPM threshold	0.310	0.045	0.572	0.310	0.310	0.000
Hospital Readmission Rate - All	*Same population as Emergency Room*			*Same population as Emergency Room*		
Age	31.061	13.992	0.845	31.061	31.067	0.000
Sex	0.513	0.524	-0.022	0.513	0.513	0.000
Urban/Rural	0.262	0.588	-0.742	0.262	0.262	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.540	0.078	0.926	0.540	0.540	0.000
Prior year PMPM threshold	0.310	0.045	0.572	0.310	0.310	0.000
Per Member Per Month Expenditures - All	*Same population as Emergency Room*			*Same population as Emergency Room*		
Age	31.061	13.992	0.845	31.061	31.067	0.000
Sex	0.513	0.524	-0.022	0.513	0.513	0.000
Urban/Rural	0.262	0.588	-0.742	0.262	0.262	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.540	0.078	0.926	0.540	0.540	0.000
Prior year PMPM threshold	0.310	0.045	0.572	0.310	0.310	0.000

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CHRONIC CARE MANAGEMENT	2022 All Data (pre-balancing)			2022 Matched Data (post-balancing)		
HEDIS and Utilization/Expenditure Measures	CCM Mean	Comparison Mean	Standardized Difference	CCM Mean	Comparison Mean	Standardized Difference
HEDIS Measures						
Asthma - Medication Ratio						
Age	19.345	19.032	0.020	19.345	19.384	-0.003
Gender (0 = male; 1 = female)	0.517	0.517	0.001	0.517	0.517	0.000
Urban/Rural (0 = urban; 1 = rural)	0.138	0.552	-1.200	0.138	0.138	0.000
ABD/non-ABD (0 = non-ABD; 1 = ABD)	0.293	0.117	0.388	0.293	0.293	0.000
Expansion Adult (0 = non-Expansion; 1 = Expansion)	0.069	0.159	-0.356	0.069	0.069	0.000
Asthma - Medication Ratio - 19 to 64 years						
Age	0.000	0.000	0.000	0.000	0.000	0.005
Sex (0 = male; 1 = female)	0.000	0.000	0.000	0.000	0.000	#DIV/0!
Urban/Rural (0 = urban; 1 = rural)	0.000	0.000	0.000	0.000	0.000	#DIV/0!
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.000	0.000	0.000	0.000	0.000	#DIV/0!
CAD - Persistent Beta-Blocker Treatment after a Heart Attack						
Age	55.200	54.776	0.041	54.750	55.137	-0.038
Sex (0 = male; 1 = female)	0.629	0.462	0.345	0.688	0.688	0.000
Urban/Rural (0 = urban; 1 = rural)	0.257	0.617	-0.823	0.250	0.250	0.000
ABD/non-ABD (0 = non-ABD; 1 = ABD)	0.657	0.419	0.502	0.625	0.625	0.000
Expansion Adult (0 = non-Expansion; 1 = Expansion)	0.286	0.530	-0.542	0.281	0.281	0.000
CAD - Cholesterol Management - LDL-C Test	*Same population as CAD Beta Blocker*			*Same population as CAD Beta Blocker*		
Age	55.200	54.776	0.041	54.750	55.137	-0.038
Sex (0 = male; 1 = female)	0.629	0.462	0.345	0.688	0.688	0.000
Urban/Rural (0 = urban; 1 = rural)	0.257	0.617	-0.823	0.250	0.250	0.000
ABD/non-ABD (0 = non-ABD; 1 = ABD)	0.657	0.419	0.502	0.625	0.625	0.000
Expansion Adult (0 = non-Expansion; 1 = Expansion)	0.286	0.530	-0.542	0.281	0.281	0.000
COPD - Use of Spirometry Testing						
Age	54.870	54.553	0.039	54.450	54.354	0.012
Sex (0 = male; 1 = female)	0.739	0.598	0.322	0.750	0.750	0.000
Urban/Rural (0 = urban; 1 = rural)	0.217	0.666	-1.088	0.250	0.250	0.000
ABD/non-ABD (0 = non-ABD; 1 = ABD)	0.522	0.219	0.606	0.450	0.450	0.000
Expansion Adult (0 = non-Expansion; 1 = Expansion)	0.565	0.737	-0.346	0.550	0.550	0.000

CHRONIC CARE MANAGEMENT	2022 All Data (pre-balancing)			2022 Matched Data (post-balancing)		
HEDIS and Utilization/Expenditure Measures	CCM Mean	Comparison Mean	Standardized Difference	CCM Mean	Comparison Mean	Standardized Difference
HEDIS Measures						
COPD - Pharmacotherapy Management of Exacerbation - 14 days						
Age	58.417	55.267	0.522	57.364	57.566	-0.034
Sex (0 = male; 1 = female)	0.667	0.629	0.081	0.727	0.727	0.000
Urban/Rural (0 = urban; 1 = rural)	0.333	0.672	-0.718	0.273	0.273	0.000
ABD/non-ABD (0 = non-ABD; 1 = ABD)	0.833	0.453	1.021	0.818	0.818	0.000
Expansion Adult (0 = non-Expansion; 1 = Expansion)	0.167	0.522	-0.953	0.182	0.182	0.000
COPD - Pharmacotherapy Management of Exacerbation - 30 days	*Same population as 14 days*			*Same population as 14 days*		
Age	58.417	55.267	0.522	57.364	57.566	-0.034
Sex (0 = male; 1 = female)	0.667	0.629	0.081	0.727	0.727	0.000
Urban/Rural (0 = urban; 1 = rural)	0.333	0.672	-0.718	0.273	0.273	0.000
ABD/non-ABD (0 = non-ABD; 1 = ABD)	0.833	0.453	1.021	0.818	0.818	0.000
Expansion Adult (0 = non-Expansion; 1 = Expansion)	0.167	0.522	-0.953	0.182	0.182	0.000
Diabetes - Members who had LDL-C Test						
Age	48.459	46.533	0.170	48.286	48.285	0.000
Sex (0 = male; 1 = female)	0.694	0.620	0.160	0.699	0.699	0.000
Urban/Rural (0 = urban; 1 = rural)	0.316	0.621	-0.656	0.316	0.316	0.000
ABD/non-ABD (0 = non-ABD; 1 = ABD)	0.474	0.228	0.492	0.466	0.466	0.000
Expansion Adult (0 = non-Expansion; 1 = Expansion)	0.421	0.621	-0.405	0.422	0.422	0.000
Diabetes - Retinal Eye Exam	*Same population as LDL-C*			*Same population as LDL-C*		
Age	48.459	46.533	0.170	48.286	48.285	0.000
Sex (0 = male; 1 = female)	0.694	0.620	0.160	0.699	0.699	0.000
Urban/Rural (0 = urban; 1 = rural)	0.316	0.621	-0.656	0.316	0.316	0.000
ABD/non-ABD (0 = non-ABD; 1 = ABD)	0.474	0.228	0.492	0.466	0.466	0.000
Expansion Adult (0 = non-Expansion; 1 = Expansion)	0.421	0.621	-0.405	0.422	0.422	0.000
Diabetes - HbA1c Testing	*Same population as LDL-C*			*Same population as LDL-C*		
Age	48.459	46.533	0.170	48.286	48.285	0.000
Sex (0 = male; 1 = female)	0.694	0.620	0.160	0.699	0.699	0.000
Urban/Rural (0 = urban; 1 = rural)	0.316	0.621	-0.656	0.316	0.316	0.000
ABD/non-ABD (0 = non-ABD; 1 = ABD)	0.474	0.228	0.492	0.466	0.466	0.000
Expansion Adult (0 = non-Expansion; 1 = Expansion)	0.421	0.621	-0.405	0.422	0.422	0.000

CHRONIC CARE MANAGEMENT	2022 All Data (pre-balancing)			2022 Matched Data (post-balancing)		
HEDIS and Utilization/Expenditure Measures	**CCM Mean**	**Comparison Mean**	**Standardized Difference**	**CCM Mean**	**Comparison Mean**	**Standardized Difference**
HEDIS Measures						
Diabetes - Medical Attention for Nephropathy	*Same population as LDL-C*			*Same population as LDL-C*		
Age	48.459	46.533	0.170	48.286	48.285	0.000
Sex (0 = male; 1 = female)	0.694	0.620	0.160	0.699	0.699	0.000
Urban/Rural (0 = urban; 1 = rural)	0.316	0.621	-0.656	0.316	0.316	0.000
ABD/non-ABD (0 = non-ABD; 1 = ABD)	0.474	0.228	0.492	0.466	0.466	0.000
Expansion Adult (0 = non-Expansion; 1 = Expansion)	0.421	0.621	-0.405	0.422	0.422	0.000
Hypertension - LDL-C Test						
Age	50.577	48.124	0.222	50.371	50.440	-0.007
Sex (0 = male; 1 = female)	0.647	0.588	0.123	0.659	0.659	0.000
Urban/Rural (0 = urban; 1 = rural)	0.259	0.606	-0.793	0.258	0.258	0.000
ABD/non-ABD (0 = non-ABD; 1 = ABD)	0.629	0.259	0.767	0.623	0.623	0.000
Expansion Adult (0 = non-Expansion; 1 = Expansion)	0.282	0.595	-0.694	0.281	0.281	0.000
Hypertension - ACE/ARB Therapy	*Same population as LDL-C*			*Same population as LDL-C*		
Age	50.577	48.124	0.222	50.371	50.440	-0.007
Sex (0 = male; 1 = female)	0.647	0.588	0.123	0.659	0.659	0.000
Urban/Rural (0 = urban; 1 = rural)	0.259	0.606	-0.793	0.258	0.258	0.000
ABD/non-ABD (0 = non-ABD; 1 = ABD)	0.629	0.259	0.767	0.623	0.623	0.000
Expansion Adult (0 = non-Expansion; 1 = Expansion)	0.282	0.595	-0.694	0.281	0.281	0.000
Opioid - Use of Opioids at High Dosage						
Age	47.959	48.136	-0.017	47.792	47.407	0.038
Sex (0 = male; 1 = female)	0.776	0.675	0.241	0.771	0.771	0.000
Urban/Rural (0 = urban; 1 = rural)	0.225	0.643	-1.003	0.229	0.229	0.000
ABD/non-ABD (0 = non-ABD; 1 = ABD)	0.612	0.322	0.596	0.604	0.604	0.000
Expansion Adult (0 = non-Expansion; 1 = Expansion)	0.265	0.512	-0.559	0.250	0.250	0.000
Opioid - Concurrent Use of Opioids and Benzodiazepines						
Age	46.760	46.242	0.044	47.042	47.269	-0.019
Sex (0 = male; 1 = female)	0.773	0.677	0.231	0.778	0.778	0.000
Urban/Rural (0 = urban; 1 = rural)	0.227	0.629	-0.961	0.236	0.236	0.000
ABD/non-ABD (0 = non-ABD; 1 = ABD)	0.600	0.258	0.697	0.583	0.583	0.000
Expansion Adult (0 = non-Expansion; 1 = Expansion)	0.333	0.562	-0.484	0.319	0.319	0.000

CHRONIC CARE MANAGEMENT	2022 All Data (pre-balancing)			2022 Matched Data (post-balancing)		
HEDIS and Utilization/Expenditure Measures	**CCM Mean**	**Comparison Mean**	**Standardized Difference**	**CCM Mean**	**Comparison Mean**	**Standardized Difference**
HEDIS Measures						
Child and Adolescents' Access to PCP - 12 months to 19 years						
Age	10.754	9.528	0.255	10.754	10.754	0.000
Sex (0 = male; 1 = female)	0.381	0.491	-0.225	0.381	0.381	0.000
Urban/Rural (0 = urban; 1 = rural)	0.298	0.565	-0.584	0.298	0.298	0.000
ABD/non-ABD (0 = non-ABD; 1 = ABD)	0.247	0.024	0.516	0.247	0.247	0.000
Expansion Adult (0 = non-Expansion; 1 = Expansion)	0.019	0.019	0.000	0.019	0.019	0.000
Adults' Access to Preventive/Ambulatory Health Services						
Age	44.908	36.442	0.614	44.549	44.555	-0.001
Sex (0 = male; 1 = female)	0.669	0.649	0.042	0.670	0.670	0.000
Urban/Rural (0 = urban; 1 = rural)	0.277	0.574	-0.663	0.273	0.273	0.000
ABD/non-ABD (0 = non-ABD; 1 = ABD)	0.552	0.103	0.904	0.549	0.549	0.000
Expansion Adult (0 = non-Expansion; 1 = Expansion)	0.341	0.666	-0.685	0.345	0.345	0.000

CHRONIC CARE MANAGEMENT	2022 All Data (pre-balancing)			2022 Matched Data (post-balancing)		
HEDIS and Utilization/Expenditure Measures	CCM Mean	Comparison Mean	Standardized Difference	CCM Mean	Comparison Mean	Standardized Difference
Utilization/Expenditure Measures						
Emergency Room Visits (per 1,000 member months) - All						
Age	32.777	18.639	0.708	32.283	32.320	-0.001
Sex	0.567	0.545	0.044	0.568	0.568	0.000
Urban/Rural	0.286	0.568	-0.625	0.287	0.287	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.443	0.051	0.790	0.437	0.437	0.000
Expansion Adult (0 = non-Expansion; 1 = Expansion)	0.227	0.239	-0.028	0.227	0.227	0.000
Prior year PMPM threshold	0.327	0.041	0.610	0.330	0.330	0.000
Hospital Admissions (per 100,000 member months) - All	*Same population as Emergency Room*			*Same population as Emergency Room*		
Age	32.777	18.639	0.708	32.283	32.320	-0.001
Sex	0.567	0.545	0.044	0.568	0.568	0.000
Urban/Rural	0.286	0.568	-0.625	0.287	0.287	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.443	0.051	0.790	0.437	0.437	0.000
Expansion Adult (0 = non-Expansion; 1 = Expansion)	0.227	0.239	-0.028	0.227	0.227	0.000
Prior year PMPM threshold	0.327	0.041	0.610	0.330	0.330	0.000
Hospital Readmission Rate - All	*Same population as Emergency Room*			*Same population as Emergency Room*		
Age	32.777	18.639	0.708	32.283	32.320	-0.001
Sex	0.567	0.545	0.044	0.568	0.568	0.000
Urban/Rural	0.286	0.568	-0.625	0.287	0.287	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.443	0.051	0.790	0.437	0.437	0.000
Expansion Adult (0 = non-Expansion; 1 = Expansion)	0.227	0.239	-0.028	0.227	0.227	0.000
Prior year PMPM threshold	0.327	0.041	0.610	0.330	0.330	0.000
Per Member Per Month Expenditures - All	*Same population as Emergency Room*			*Same population as Emergency Room*		
Age	32.777	18.639	0.708	32.283	32.320	-0.001
Sex	0.567	0.545	0.044	0.568	0.568	0.000
Urban/Rural	0.286	0.568	-0.625	0.287	0.287	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.443	0.051	0.790	0.437	0.437	0.000
Expansion Adult (0 = non-Expansion; 1 = Expansion)	0.227	0.239	-0.028	0.227	0.227	0.000
Prior year PMPM threshold	0.327	0.041	0.610	0.330	0.330	0.000

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CHRONIC CARE MANAGEMENT	2023 All Data (pre-balancing)			2023 Matched Data (post-balancing)		
HEDIS and Utilization/Expenditure Measures	CCM Mean	Comparison Mean	Standardized Difference	CCM Mean	Comparison Mean	Standardized Difference
HEDIS Measures						
Asthma - Medication Ratio - 5 to 18 years						
Age	8.500	10.856	-0.522	8.500	8.500	0.000
Gender (0 = male; 1 = female)	0.250	0.429	-0.413	0.250	0.250	0.000
Urban/Rural (0 = urban; 1 = rural)	0.750	0.430	0.739	0.750	0.750	0.000
ABD/non-ABD (0 = non-ABD; 1 = ABD)	0.000	0.074	-0.283	0.000	0.000	0.000
Expansion Adult (0 = non-Expansion; 1 = Expansion)	0.000	0.000	0.000	0.000	0.000	0.000
Asthma - Medication Ratio - 19 to 64 years						
Age	45.455	41.521	0.258	45.455	45.374	0.005
Sex (0 = male; 1 = female)	0.818	0.713	0.272	0.818	0.818	0.000
Urban/Rural (0 = urban; 1 = rural)	0.364	0.439	-0.156	0.364	0.364	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.636	0.145	1.022	0.636	0.636	0.000
Expansion Adult (0 = non-Expansion; 1 = Expansion)	0.182	0.630	-1.161	0.182	0.182	0.000
CAD - Persistent Beta-Blocker Treatment after a Heart Attack						
Age	60.455	54.767	0.690	59.325	59.217	0.000
Sex (0 = male; 1 = female)	0.432	0.441	-0.019	0.400	0.400	0.000
Urban/Rural (0 = urban; 1 = rural)	0.296	0.451	-0.341	0.250	0.250	0.000
ABD/non-ABD (0 = non-ABD; 1 = ABD)	0.727	0.252	1.068	0.700	0.700	0.000
Expansion Adult (0 = non-Expansion; 1 = Expansion)	0.227	0.677	-1.074	0.250	0.250	0.000
CAD - Cholesterol Management - LDL-C Test	*Same population as CAD Beta Blocker*			*Same population as CAD Beta Blocker*		
Age	60.455	54.767	0.690	59.325	59.217	0.000
Sex (0 = male; 1 = female)	0.432	0.441	-0.019	0.400	0.400	0.000
Urban/Rural (0 = urban; 1 = rural)	0.296	0.451	-0.341	0.250	0.250	0.000
ABD/non-ABD (0 = non-ABD; 1 = ABD)	0.727	0.252	1.068	0.700	0.700	0.000
Expansion Adult (0 = non-Expansion; 1 = Expansion)	0.227	0.677	-1.074	0.250	0.250	0.000

CHRONIC CARE MANAGEMENT	2023 All Data (pre-balancing)			2023 Matched Data (post-balancing)		
HEDIS and Utilization/Expenditure Measures	**CCM Mean**	**Comparison Mean**	**Standardized Difference**	**CCM Mean**	**Comparison Mean**	**Standardized Difference**
HEDIS Measures						
COPD - Use of Spirometry Testing						
Age	56.536	54.748	0.166	53.191	53.084	0.010
Sex (0 = male; 1 = female)	0.714	0.594	0.265	0.667	0.667	0.000
Urban/Rural (0 = urban; 1 = rural)	0.321	0.493	-0.368	0.381	0.381	0.000
ABD/non-ABD (0 = non-ABD; 1 = ABD)	0.571	0.158	0.835	0.429	0.429	0.000
Expansion Adult (0 = non-Expansion; 1 = Expansion)	0.286	0.770	-1.072	0.333	0.333	0.000
COPD - Pharmacotherapy Management of Exacerbation - 14 days						
Age	57.333	55.307	0.277	57.200	57.201	0.000
Sex (0 = male; 1 = female)	0.417	0.637	-0.447	0.500	0.500	0.000
Urban/Rural (0 = urban; 1 = rural)	0.167	0.472	-0.820	0.200	0.200	0.000
ABD/non-ABD (0 = non-ABD; 1 = ABD)	0.917	0.271	2.366	0.900	0.900	0.000
Expansion Adult (0 = non-Expansion; 1 = Expansion)	0.083	0.666	-2.107	0.100	0.100	0.000
COPD - Pharmacotherapy Management of Exacerbation - 30 days	*Same population as 14 days*			*Same population as 14 days*		
Age	57.333	55.307	0.277	57.200	57.201	0.000
Sex (0 = male; 1 = female)	0.417	0.637	-0.447	0.500	0.500	0.000
Urban/Rural (0 = urban; 1 = rural)	0.167	0.472	-0.820	0.200	0.200	0.000
ABD/non-ABD (0 = non-ABD; 1 = ABD)	0.917	0.271	2.366	0.900	0.900	0.000
Expansion Adult (0 = non-Expansion; 1 = Expansion)	0.083	0.666	-2.107	0.100	0.100	0.000
Diabetes - Members who had LDL-C Test						
Age	49.718	47.670	0.160	48.611	48.483	0.010
Sex (0 = male; 1 = female)	0.644	0.605	0.082	0.635	0.635	0.000
Urban/Rural (0 = urban; 1 = rural)	0.288	0.466	-0.393	0.287	0.287	0.000
ABD/non-ABD (0 = non-ABD; 1 = ABD)	0.446	0.147	0.602	0.425	0.425	0.000
Expansion Adult (0 = non-Expansion; 1 = Expansion)	0.288	0.691	-0.889	0.299	0.299	0.000

CHRONIC CARE MANAGEMENT	2023 All Data (pre-balancing)			2023 Matched Data (post-balancing)		
HEDIS and Utilization/Expenditure Measures	CCM Mean	Comparison Mean	Standardized Difference	CCM Mean	Comparison Mean	Standardized Difference
HEDIS Measures						
Diabetes - Retinal Eye Exam	*Same population as LDL-C*			*Same population as LDL-C*		
Age	49.718	47.670	0.160	48.611	48.483	0.010
Sex (0 = male; 1 = female)	0.644	0.605	0.082	0.635	0.635	0.000
Urban/Rural (0 = urban; 1 = rural)	0.288	0.466	-0.393	0.287	0.287	0.000
ABD/non-ABD (0 = non-ABD; 1 = ABD)	0.446	0.147	0.602	0.425	0.425	0.000
Expansion Adult (0 = non-Expansion; 1 = Expansion)	0.288	0.691	-0.889	0.299	0.299	0.000
Diabetes - HbA1c Testing	*Same population as LDL-C*			*Same population as LDL-C*		
Age	49.718	47.670	0.160	48.611	48.483	0.010
Sex (0 = male; 1 = female)	0.644	0.605	0.082	0.635	0.635	0.000
Urban/Rural (0 = urban; 1 = rural)	0.288	0.466	-0.393	0.287	0.287	0.000
ABD/non-ABD (0 = non-ABD; 1 = ABD)	0.446	0.147	0.602	0.425	0.425	0.000
Expansion Adult (0 = non-Expansion; 1 = Expansion)	0.288	0.691	-0.889	0.299	0.299	0.000
Diabetes - Medical Attention for Nephropathy	*Same population as LDL-C*			*Same population as LDL-C*		
Age	49.718	47.670	0.160	48.611	48.483	0.010
Sex (0 = male; 1 = female)	0.644	0.605	0.082	0.635	0.635	0.000
Urban/Rural (0 = urban; 1 = rural)	0.288	0.466	-0.393	0.287	0.287	0.000
ABD/non-ABD (0 = non-ABD; 1 = ABD)	0.446	0.147	0.602	0.425	0.425	0.000
Expansion Adult (0 = non-Expansion; 1 = Expansion)	0.288	0.691	-0.889	0.299	0.299	0.000
Hypertension - LDL-C Test						
Age	54.306	49.035	0.466	53.173	53.190	-0.002
Sex (0 = male; 1 = female)	0.625	0.570	0.114	0.677	0.677	0.000
Urban/Rural (0 = urban; 1 = rural)	0.243	0.455	-0.493	0.248	0.248	0.000
ABD/non-ABD (0 = non-ABD; 1 = ABD)	0.535	0.160	0.751	0.496	0.496	0.000
Expansion Adult (0 = non-Expansion; 1 = Expansion)	0.271	0.679	-0.918	0.293	0.293	0.000

CHRONIC CARE MANAGEMENT	2023 All Data (pre-balancing)			2023 Matched Data (post-balancing)		
HEDIS and Utilization/Expenditure Measures	CCM Mean	Comparison Mean	Standardized Difference	CCM Mean	Comparison Mean	Standardized Difference
HEDIS Measures						
Hypertension - ACE/ARB Therapy	*Same population as LDL-C*			*Same population as LDL-C*		
Age	54.306	49.035	0.466	53.173	53.190	-0.002
Sex (0 = male; 1 = female)	0.625	0.570	0.114	0.677	0.677	0.000
Urban/Rural (0 = urban; 1 = rural)	0.243	0.455	-0.493	0.248	0.248	0.000
ABD/non-ABD (0 = non-ABD; 1 = ABD)	0.535	0.160	0.751	0.496	0.496	0.000
Expansion Adult (0 = non-Expansion; 1 = Expansion)	0.271	0.679	-0.918	0.293	0.293	0.000
Opioid - Use of Opioids at High Dosage						
Age	49.800	48.729	0.096	48.737	48.961	-0.020
Sex (0 = male; 1 = female)	0.625	0.670	-0.094	0.658	0.658	0.000
Urban/Rural (0 = urban; 1 = rural)	0.425	0.499	-0.149	0.447	0.447	0.000
ABD/non-ABD (0 = non-ABD; 1 = ABD)	0.450	0.221	0.460	0.421	0.421	0.000
Expansion Adult (0 = non-Expansion; 1 = Expansion)	0.325	0.587	-0.560	0.342	0.342	0.000
Opioid - Concurrent Use of Opioids and Benzodiazepines						
Age	47.051	46.867	0.015	46.586	46.592	-0.001
Sex (0 = male; 1 = female)	0.610	0.669	-0.121	0.621	0.621	0.000
Urban/Rural (0 = urban; 1 = rural)	0.356	0.480	-0.258	0.362	0.362	0.000
ABD/non-ABD (0 = non-ABD; 1 = ABD)	0.492	0.171	0.641	0.483	0.483	0.000
Expansion Adult (0 = non-Expansion; 1 = Expansion)	0.339	0.613	-0.579	0.345	0.345	0.000
Child and Adolescents' Access to PCP - 12 months to 19 years						
Age	10.701	9.186	0.246	10.701	10.701	0.000
Sex (0 = male; 1 = female)	0.345	0.493	-0.311	0.345	0.345	0.000
Urban/Rural (0 = urban; 1 = rural)	0.437	0.454	-0.034	0.437	0.437	0.000
ABD/non-ABD (0 = non-ABD; 1 = ABD)	0.230	0.030	0.475	0.230	0.230	0.000
Expansion Adult (0 = non-Expansion; 1 = Expansion)	0.000	0.000	0.000	0.000	0.000	0.000

CHRONIC CARE MANAGEMENT	2023 All Data (pre-balancing)			2023 Matched Data (post-balancing)		
HEDIS and Utilization/Expenditure Measures	CCM Mean	Comparison Mean	Standardized Difference	CCM Mean	Comparison Mean	Standardized Difference
HEDIS Measures						
Adults' Access to Preventive/Ambulatory Health Services						
Age	46.139	37.981	1.469	45.859	45.838	0.001
Sex (0 = male; 1 = female)	0.637	0.629	0.016	0.638	0.638	0.000
Urban/Rural (0 = urban; 1 = rural)	0.273	0.430	-0.352	0.268	0.268	0.000
ABD/non-ABD (0 = non-ABD; 1 = ABD)	0.479	0.078	0.804	0.474	0.474	0.000
Expansion Adult (0 = non-Expansion; 1 = Expansion)	0.240	0.662	-0.988	0.242	0.242	0.000

CHRONIC CARE MANAGEMENT	2023 All Data (pre-balancing)			2023 Matched Data (post-balancing)		
HEDIS and Utilization/Expenditure Measures	CCM Mean	Comparison Mean	Standardized Difference	CCM Mean	Comparison Mean	Standardized Difference
Utilization/Expenditure Measures						
Emergency Room Visits (per 1,000 member months) - All						
Age	40.810	22.011	0.964	39.452	39.344	0.006
Sex (0 = male; 1 = female)	0.578	0.554	0.044	0.573	0.573	0.000
Urban/Rural (0 = urban; 1 = rural)	0.286	0.568	-0.625	0.287	0.287	0.000
ABD/non-ABD (0 = non-ABD; 1 = ABD)	0.487	0.047	0.874	0.461	0.461	0.000
Expansion Adult (0 = non-Expansion; 1 = Expansion)	0.201	0.305	-0.258	0.211	0.211	0.000
Prior year PMPM threshold/active care management	1.000	0.049	4.435	1.000	1.000	0.000
Hospital Admissions (per 100,000 member months) - All	*Same population as Emergency Room*			*Same population as Emergency Room*		
Age	40.810	22.011	0.964	39.452	39.344	0.006
Sex	0.578	0.554	0.044	0.573	0.573	0.000
Urban/Rural	0.286	0.568	-0.625	0.287	0.287	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.487	0.047	0.874	0.461	0.461	0.000
Expansion Adult (0 = non-Expansion; 1 = Expansion)	0.201	0.305	-0.258	0.211	0.211	0.000
Prior year PMPM threshold/active care management	1.000	0.049	4.435	1.000	1.000	0.000
Hospital Readmission Rate - All	*Same population as Emergency Room*			*Same population as Emergency Room*		
Age	40.810	22.011	0.964	39.452	39.344	0.006
Sex	0.578	0.554	0.044	0.573	0.573	0.000
Urban/Rural	0.286	0.568	-0.625	0.287	0.287	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.487	0.047	0.874	0.461	0.461	0.000
Expansion Adult (0 = non-Expansion; 1 = Expansion)	0.201	0.305	-0.258	0.211	0.211	0.000
Prior year PMPM threshold/active care management	1.000	0.049	4.435	1.000	1.000	0.000
Per Member Per Month Expenditures - All	*Same population as Emergency Room*			*Same population as Emergency Room*		
Age	40.810	22.011	0.964	39.452	39.344	0.006
Sex	0.578	0.554	0.044	0.573	0.573	0.000
Urban/Rural	0.286	0.568	-0.625	0.287	0.287	0.000
ABD/non-ABD (0 = non-ABD; 1 - ABD)	0.487	0.047	0.874	0.461	0.461	0.000
Expansion Adult (0 = non-Expansion; 1 = Expansion)	0.201	0.305	-0.258	0.211	0.211	0.000
Prior year PMPM threshold/active care management	1.000	0.049	4.435	1.000	1.000	0.000

APPENDIX D – STATISTICAL SIGNIFICANCE TEST

Appendix D presents year-specific rates, five-year pooled rates and p-values for HEDIS and utilization/expenditure measures included within the SoonerCare CCM evaluation. Statistical significance results also are noted.

CHRONIC CARE MANAGEMENT	Percent Compliant/Rate					P-Value/Statistical Significance (p < .05)				
HEDIS and Utilization/Expenditure Measures	2019	2020	2021	2022	Pooled	2019	2020	2021	2022	Pooled
HEDIS Measures										
Asthma - Medication Ratio - 5 to 18 years										
CCU	66.0%	77.5%	92.5%	87.8%	81.0%	0.0020	0.0950	1.0000	0.4960	0.0000
Comparison Group	80.9%	85.5%	92.5%	91.4%	87.6%	**Yes**	No	No	No	**Yes**
Asthma - Medication Ratio - 19 to 64 years										
CCU	57.1%	70.3%	79.3%	82.4%	72.3%	0.0424	0.5249	0.0000	0.8550	0.0000
Comparison Group	75.8%	75.4%	88.0%	84.1%	80.8%	**Yes**	No	**Yes**	No	**Yes**
CAD - Persistent Beta-Blocker Treatment after a Heart Attack										
CCU	33.3%	41.0%	44.4%	56.3%	43.8%	0.2274	0.3025	0.9644	0.3353	0.3766
Comparison Group	40.8%	47.9%	44.0%	47.3%	45.0%	No	No	No	No	No
CAD - Cholesterol Management - LDL-C Test										
CCU	71.2%	70.5%	55.6%	56.3%	63.4%	0.1494	0.0645	0.3229	0.2893	0.4892
Comparison Group	62.7%	58.9%	65.6%	66.1%	63.3%	No	No	No	No	No
COPD - Use of Spirometry Testing										
CCU	33.3%	42.5%	18.2%	30.0%	31.0%	0.2664	0.1353	0.7653	0.2621	0.0124
Comparison Group	22.7%	30.2%	15.6%	17.8%	21.6%	No	No	No	No	**Yes**
COPD - Pharmacotherapy Management of Exacerbation - 14 days										
CCU	55.3%	61.1%	53.8%	50.0%	55.1%	0.2723	0.5094	0.3173	0.9307	0.1187
Comparison Group	64.8%	66.9%	69.6%	44.5%	61.5%	No	No	No	No	No
COPD - Pharmacotherapy Management of Exacerbation - 30 days										
CCU	71.1%	72.2%	84.6%	100.0%	82.0%	0.9754	0.8279	0.3930	0.2405	0.0983
Comparison Group	71.3%	70.5%	73.6%	88.7%	76.0%	No	No	No	No	No
Diabetes - HbA1c Testing										
CCU	84.1%	79.6%	82.1%	77.3%	80.8%	0.0000	0.0002	0.0000	0.0000	0.0000
Comparison Group	71.7%	65.8%	69.2%	65.2%	68.0%	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Diabetes - LDL-C Test										
CCU	62.5%	59.8%	65.3%	66.7%	63.6%	0.0305	0.0169	0.0433	0.0002	0.0000
Comparison Group	56.4%	50.5%	57.7%	54.1%	54.7%	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**

CHRONIC CARE MANAGEMENT	Percent Compliant/Rate					P-Value/Statistical Significance (p < .05)				
HEDIS and Utilization/Expenditure Measures	2019	2020	2021	2022	Pooled	2019	2020	2021	2022	Pooled
HEDIS Measures										
Diabetes - Retinal Eye Exam										
CCU	42.1%	30.7%	37.0%	30.9%	35.2%	0.0000	0.0005	0.0000	0.0106	0.0000
Comparison Group	25.3%	19.8%	20.8%	22.5%	22.1%	Yes	Yes	Yes	Yes	Yes
Diabetes - Medical Attention for Nephropathy										
CCU	92.4%	89.9%	91.9%	84.5%	89.7%	0.0000	0.0004	0.0000	0.0000	0.0000
Comparison Group	83.4%	78.6%	79.0%	74.1%	78.8%	Yes	Yes	Yes	Yes	Yes
Hypertension - LDL-C Test										
CCU	65.2%	53.8%	61.2%	70.6%	62.7%	0.0033	0.1836	0.1207	0.0000	0.0000
Comparison Group	56.9%	50.4%	55.4%	57.3%	55.0%	Yes	No	No	Yes	Yes
Hypertension - ACE/ARB Therapy										
CCU	60.0%	62.0%	65.7%	56.3%	61.0%	0.4331	0.8888	0.3626	0.8826	0.1653
Comparison Group	58.3%	61.6%	62.4%	55.7%	59.5%	No	No	No	No	No
Opioid - Use of Opioids at High Dosage										
CCU	2.8%	3.8%	1.8%	1.9%	2.6%	0.1498	0.9561	0.1100	0.2986	0.0689
Comparison Group	5.0%	3.7%	4.7%	3.9%	4.3%	No	No	No	No	No
Opioid - Concurrent Use of Opioids and Benzodiazepines										
CCU	8.9%	3.6%	4.8%	2.8%	5.0%	0.0107	0.0000	0.0610	0.0047	0.0000
Comparison Group	15.2%	12.4%	9.3%	8.7%	11.4%	Yes	Yes	No	Yes	Yes
Child and Adolescents' Access to PCP - 12 months to 19 years										
CCU	98.5%	99.0%	93.6%	92.6%	95.9%	0.0000	0.0000	0.0000	0.0000	0.0000
Comparison Group	92.6%	88.9%	84.3%	84.3%	87.5%	Yes	Yes	Yes	Yes	Yes
Adults' Access to Preventive/Ambulatory Health Services										
CCU	87.8%	95.9%	97.5%	95.4%	94.2%	0.3165	0.0000	0.0000	0.0000	0.0000
Comparison Group	86.4%	79.8%	78.8%	78.9%	81.0%	No	Yes	Yes	Yes	Yes

CHRONIC CARE MANAGEMENT	Percent Compliant/Rate						P-Value/Statistical Significance (p < .05)					
HEDIS and Utilization/Expenditure Measures	2019	2020	2021	2022	2023	Pooled	2019	2020	2021	2022	2023	Pooled
Utilization/Expenditure Measures												
Emergency Room Visits (per 1,000 member months) - All												
CCU	366.5	249.7	234.6	237.4	498.7	317.4	0.0000	0.0103	0.0048	0.0000	0.0003	0.0000
Comparison Group	174.1	148.4	136.4	128.5	203.4	158.2	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Hospital Admissions (per 100,000 member months) - All												
CCU	5999.4	4645.8	4982.4	5367.2	12745.1	6748.0	0.0033	0.0166	0.0220	0.0000	0.0000	0.0000
Comparison Group	3962.5	3052.9	3108.2	2552.2	4725.6	3480.3	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**
Hospital Readmission Rate - All												
CCU	8.2%	6.8%	6.0%	6.1%	8.5%	7.1%	0.3441	0.6949	0.8066	0.9922	0.4460	0.2209
Comparison Group	7.0%	6.3%	6.4%	6.1%	7.5%	6.7%	No	No	No	No	No	No
Per Member Per Month Expenditures - All												
CCU	$828.29	$810.83	$1,051.79	$1,130.18	$2,113.01	$1,186.82	0.1722	0.3026	0.0000	0.0010	0.0162	0.0000
Comparison Group	$748.57	$745.97	$836.80	$899.95	$1,540.67	$954.39	No	No	**Yes**	**Yes**	**Yes**	**Yes**