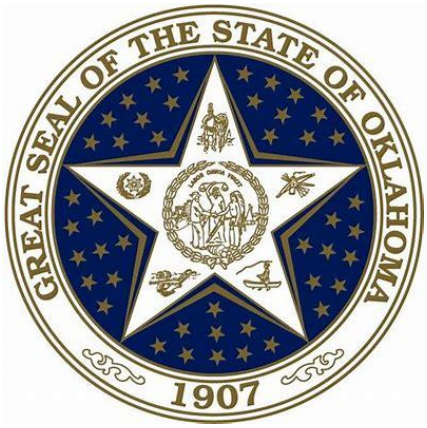
Oklahoma Health Care Authority



Evaluation Design for the SoonerCare §1115(a) Waiver Demonstration 11-W-00048/6

***Final Revised* – June 2019**

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A. GENERAL BACKGROUND INFORMATION

Medicaid is the largest health care provider in the state of Oklahoma. In State Fiscal Year (SFY) 2018, the program provided coverage to over 860,000 Oklahomans, out of a total population of approximately four million (22 percent). In calendar year 2016 (the most recent year available), the program covered 30,490 births out of a statewide total of 52,607 (58 percent).

The Oklahoma Health Care Authority (OHCA), Oklahoma's Single-State Agency for Medicaid, administers SoonerCare, the State's Section 1115(a) Research and Demonstration waiver, which includes SoonerCare Choice managed care and Insure Oklahoma (11-W-00048/6). The Demonstration was originally approved to begin operations in January 1996. The OHCA received approval in August 2018 of its latest renewal application, for the period August 31, 2018 – December 31, 2023.

1. Demonstration Goals

The OHCA's overarching goals for the SoonerCare Choice program are to address the health care needs of Oklahomans through provision of high quality, accessible and cost-effective care.

In accordance with Section XV of the SoonerCare Special Terms and Conditions (STCs), the OHCA proposes this Evaluation Design for the August 31, 2018 – December 31, 2023 extension period. The design has been developed and is organized in accordance with CMS guidance, as outlined in STC Attachment A.

The OHCA will amend the Evaluation Design as waiver amendments are approved over the life of the demonstration, to ensure it continues to align with program policies and initiatives.

2. Description of the Demonstration

The SoonerCare Demonstration was implemented in 1996 to address concerns regarding access and quality of care in a fiscally prudent manner. In the period leading-up to the Demonstration, the State experienced an economic downturn and was forced to reduce benefits and provider reimbursement to meet its obligations under Title XIX.

The OHCA was established to oversee the program's transition to managed care and implement and administer the SoonerCare Demonstration. The program initially included children in mandatory state plan groups, pregnant women and 1931 low income families. SoonerCare members were enrolled in managed care organizations (MCOs) in three metropolitan areas (Oklahoma City, Tulsa and Lawton) and a primary care case management (PCCM) model in the remainder of the State. In its original design, the PCCM

model included a partial capitation payment to cover primary care services and office-based laboratory and radiology services.

The Demonstration has evolved and expanded significantly over the years. The program's covered populations and major components are described below. They include the core SoonerCare Choice program, Insure Oklahoma, Health Access Networks and Health Management Program.

Covered Populations (Populations Impacted by the Demonstration)

The Demonstration today covers children in mandatory state plan groups, pregnant women and Aged, Blind and Disabled (ABD) members who are not dually-eligible and not receiving long term care, as well as 1931 low-income families and IV-E foster care or adoption assistance children, the latter with voluntary enrollment. In accordance with Oklahoma Senate Bill 741, the OHCA serves individuals in need of breast or cervical cancer treatment and children with disabilities in accordance with the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA).

In May 2019, SoonerCare Choice program enrollment stood at 527,929. (Total Medicaid enrollment was 789,497, including 233,602 SoonerCare Traditional members, such as dual eligibles and long-term care recipients, and 27,966 SoonerPlan family planning members.)

SoonerCare Choice (Core Program)

The Demonstration operates statewide under an enhanced PCCM model in which the OHCA contracts directly with primary care providers to serve as patient centered medical homes (PCMH) for SoonerCare Choice members. PCMH providers receive monthly care coordination payments for each member on their panels.

Payments vary depending on the PCMH provider's tier level[1] and the mix of children and adults on the provider's panel. Providers also can qualify for "SoonerExcel" performance incentive payments by meeting one or more OHCA-defined quality improvement targets. Aside from care coordination, all services furnished in the medical home and by other providers (specialists, hospitals etc.) are reimbursed fee-for-service.

Insure Oklahoma Premium Assistance Program

The OHCA operates the Insure Oklahoma premium assistance program under the authority of the SoonerCare waiver. Insure Oklahoma offers two ways for individuals to receive premium assistance: Employer Sponsored Insurance (ESI) and Individual Plan (IP) programs.

Individuals in ESI enroll in an Insure Oklahoma-participating private health plan and pay up to 15 percent of the premium. The remaining premium cost is shared between the individual's employer and the state and federal governments.

[1] There are three tiers – 1 "Entry Level", 2 "Advanced" and 3 "Optimal".

Individuals in the IP program, other than American Indians, are responsible for health plan premiums up to four percent of their monthly gross household income. In accordance with Oklahoma Administrative Code 317:45-9-4 and 317:45-11-24, American Indians providing documentation of tribal citizenship are exempt from premium payments.

In May 2019, Insure Oklahoma enrollment totaled 19,113. This included 13,681 ESI members and 5,432 IP members.

Health Access Networks

The OHCA has contracted with three Health Access Networks (HANs) under the Demonstration: University of Oklahoma (OU) Sooner HAN; Partnership for Healthy Central Communities (PHCC) HAN; and Oklahoma State University (OSU) HAN. Each HAN is a non-profit, administrative entity that works with affiliated providers to coordinate and improve the quality of care provided to SoonerCare Choice members. The HANs receive a nominal $5.00 per member per month (PMPM) payment.

The HANs offer care management and care coordination to SoonerCare Choice members with complex health care needs who are enrolled with affiliated PCMH providers. The HANs also work to establish new initiatives to address complex medical, social and behavioral health issues. For example, the HANs have implemented evidence-based protocols for care management of ABD members with, or at risk for, complex/chronic health conditions, as well as TANF and related members with asthma and diabetes, among other conditions.

In October 2018, total HAN enrollment was 176,323. OU Sooner HAN served approximately 87 percent of the members, followed by OSU HAN with 11 percent and PHCC HAN with two percent.

Under prior Demonstration periods, the HANs operated as a less-than-statewide pilot program, with affiliated providers located in a mix of urban and rural counties. STC 40, which addresses HAN operations, no longer classifies the HANs as a pilot and permits the HANs to expand statewide. (The OHCA will be requesting that CMS update the corresponding STC 84, which addresses evaluation of the HANs and still refers to the program as a pilot.)

Health Management Program

The SoonerCare Health Management Program (HMP) is an initiative under the Demonstration developed to offer care management to SoonerCare Choice members most at-risk for chronic disease and other adverse health events. The program is administered by the OHCA and is managed by a vendor selected through a competitive procurement. The program is authorized to operate statewide.

The SoonerCare HMP serves SoonerCare Choice beneficiaries ages four through 63 who have one or more chronic illnesses and are at high risk for adverse outcomes and increased health care expenditures. The program is holistic, rather than disease-specific, but prominent conditions of members in the program include asthma, cardiovascular disease, chronic obstructive pulmonary disorder, diabetes, heart failure and hypertension.

The SoonerCare HMP was implemented in 2008 and has evolved over time. During its first five years, individuals 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.

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 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 elected to replace centralized nurse care management services with registered nurse health coaches embedded at primary care practice sites. The health coaches would work closely with practice staff and provide coaching services to participating members. Health coaches either could be dedicated to a single practice with one or more providers or shared between multiple practice sites within a geographic area. This change took effect with implementation of the "second generation" SoonerCare HMP in 2013.

In addition to health coaching, the SoonerCare HMP incorporates Practice Facilitation into each location with an embedded health coach. A practice facilitator nurse assesses the office's existing processes related to care of patients with chronic conditions. The practice facilitator then undertakes education and academic detailing appropriate to the office's needs before deployment of the health coach.

In 2014, the OHCA authorized its vendor to resume telephonic case management (health coaching) and, in limited cases, care coordination in members' homes. Telephonic health coaches would focus their efforts on engaging new members, actively pursuing members needing assistance with care transitions and serving high risk members not assigned to a primary care provider with an embedded coach. The majority of health coaching would continue to occur through the embedded health coaches at provider offices.

The OHCA also authorized its vendor to hire practice facilitators and substance use resource specialists dedicated to improving the effectiveness of providers caring for members with chronic pain and opioid drug use. The new staff would assist providers with implementation of a chronic pain management toolkit and principles of proper prescribing. These staff members work both with offices that have an embedded health coach and offices that do not.

The OHCA recently re-procured SoonerCare HMP vendor services for a "third generation" contract to take effect in July 2019. (The incumbent vendor, Telligen, was awarded the contract.) The OHCA will require the vendor to do the following under the new contract:

- Implement an assessment and person-centered care planning process that aligns with processes used by the HANs and internal OHCA care management staff;
- Employ a risk stratification methodology to identify the appropriate mode and frequency of health coaching, based on each member's needs and goals;
- Integrate pain management into general health coaching and practice facilitation activities, as part of promoting whole person care; and
- Expand practice facilitation by offering it to interested providers who may be unable to host an embedded health coach.

The OHCA is aligning SoonerCare HMP, HAN and internal care management activities to ensure all SoonerCare Choice members have access to this level of support, regardless of their location or PCMH provider. This is part of a broader strategy under the SoonerCare Demonstration to advance managed care principles and a statewide Quality Improvement Program (QIP)[2] through delivery and financing models other than traditional risk-based managed care organizations.

The evaluation design includes questions and hypotheses related to the two major SoonerCare Choice care management systems: HANs and SoonerCare HMP. The design incorporates access, quality and health outcome measures relevant to each system.

[2] Formal name is the OHCA Performance & Health Improvement Program, or PHIP.

Retroactive Eligibility

The evaluation design also addresses another important feature of the Demonstration: the impact of the OHCA's waiver of a retroactive eligibility period for a portion of the SoonerCare population. As described in the STCs, the retroactive eligibility waiver tests the efficacy of measures designed to encourage eligible individuals to enroll earlier, to maintain health insurance coverage even while healthy, and to obtain preventive health care. Under the approved STCs, the OHCA is permitted to waive retroactive eligibility for the following groups:

- 1931 low-income families;
- Non-IV-E foster care children in state or tribal custody, ages 19-20;
- Non-disabled low-income workers and spouses, ages 19-64 (employer-sponsored plan);
- Working disabled adults, ages 19-64 (employer-sponsored plan);
- Full-time college students, ages 19-22 (employer-sponsored plan);
- Foster parents, ages 19-64 (employer-sponsored plan)
- Qualified employees of not-for-profit business, ages 19-64 (employer-sponsored plan);
- Non-disabled low-income workers and spouses, ages 19-64 (individual plan);
- Working disabled adults, ages 19-64 (individual plan);
- Full-time college students, ages 19-22 (individual plan);
- Foster parents, ages 19-64 (individual plan); and
- Qualified employees of not-for-profit business, ages 19-64 (individual plan).

B. EVALUATION QUESTIONS AND HYPOTHESES

1. Quantifiable Targets for Improvement

The SoonerCare Demonstration's goals focus on improving access and quality of care, while controlling costs. The Demonstration seeks to accomplish these goals through advancement of managed care principles, including enhanced primary care and effective care management of members with, or at risk for, complex/chronic conditions. The Demonstration Special Terms and Conditions include questions and hypotheses selected to evaluate the program's performance in the three goal areas.

The OHCA has identified measures for each of the evaluation questions and hypotheses that can be expressed as numerical values and can be tracked on a longitudinal basis. The OHCA's target will be to document improvement in the trendline, either upward or downward, depending on the specific measure.

A subset of the measures (e.g., HEDIS®) have national benchmarks. The OHCA also will evaluate SoonerCare outcomes against these national benchmarks, where available. The target will be to exceed the applicable national benchmark value (e.g., median rate for Medicaid managed care, in the case of HEDIS measures).

2. Driver Diagrams

The Driver Diagrams presented below (Exhibits 1 and 2) illustrate the relationship between the OHCA's overall goals for SoonerCare Choice and the primary and secondary drivers for achieving these goals.

As depicted in the diagrams, the HAN and HMP initiatives serve as the platforms, or primary drivers, for achieving Demonstration aims with respect to access/quality (Exhibit 1) and cost effectiveness (Exhibit 2). Both initiatives are supported by secondary drivers related to changes in preventive/primary care access, utilization of emergency room and inpatient services, provider payment systems and enrollment continuity (for beneficiaries who are subject to the retroactive eligibility waiver).

Exhibit 1 - SoonerCare Choice Driver Diagram (Access & Quality)

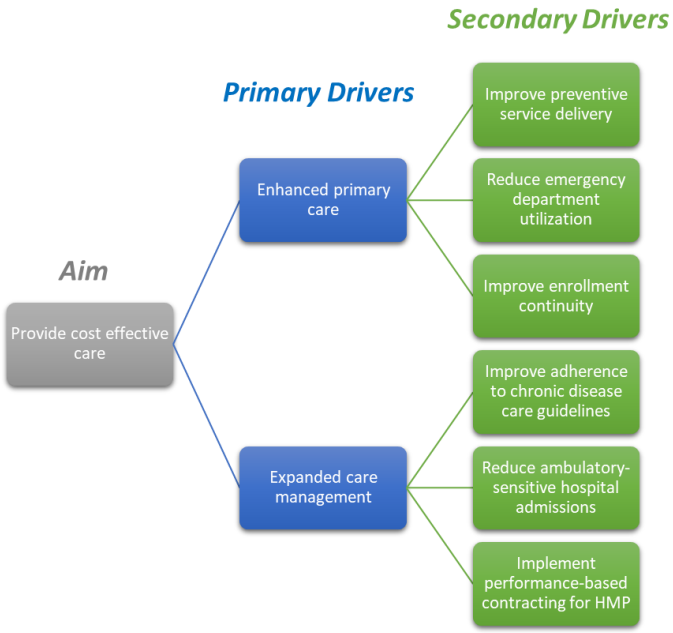
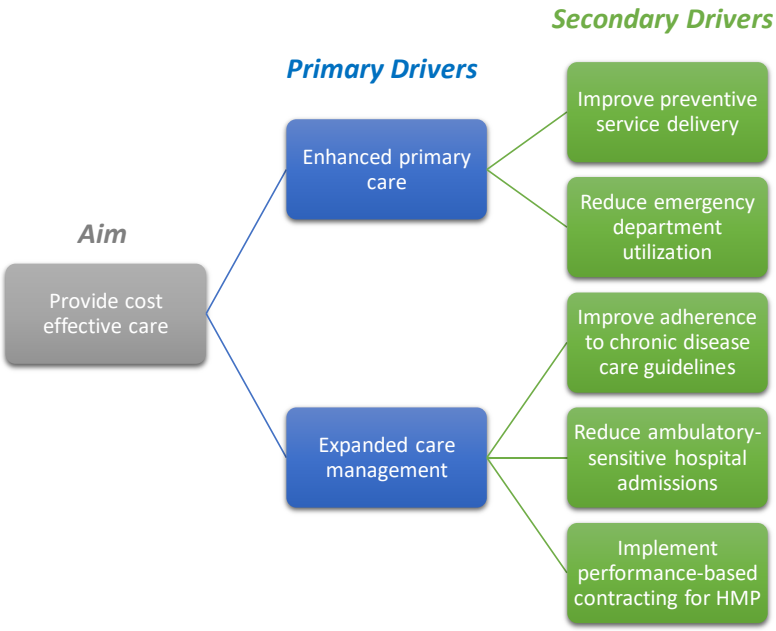


Exhibit 2 - SoonerCare Choice Driver Diagram (Cost Effectiveness)



3. Demonstration Hypotheses

The Demonstration will be evaluated through testing of hypotheses related to the HANs, HMP, Insure Oklahoma program and waiver of retroactive eligibility. Specifically:

1. Evaluation of Health Access Networks

    a. *Impact on Costs:* The implementation and expansion of the HANs will reduce costs associated with the provision of health care services to SoonerCare beneficiaries served by the HANs;

    b. *Impact on Access:* The implementation and expansion of the HANs will improve access to and the availability of health care services to SoonerCare beneficiaries served by the HANs;

    c. *Impact on Quality and Coordination:* The implementation and expansion of the HANs will improve the quality and coordination of health care services to SoonerCare beneficiaries served by the HANs, with specific focus on the populations at greatest risk, including those with multiple chronic illnesses; and

    d. *Impact on PCMH Program:* The implementation and expansion of the HANs will enhance the State's Patient Centered Medical Home program by making HAN care management support and practice enhancement available to more providers, as documented through an evaluation of PCP profiles that incorporates a review of utilization, disease guideline compliance and cost.

2. Evaluation of the Health Management Program

    a. *Impact on Enrollment Figures:* The implementation of the third generation HMP, including health coaches and practice facilitation, will result in an increase in enrollment, as compared to baseline;

    b. *Impact on Access to Care:* Incorporating health coaches into primary care practices will result in increased contact with HMP beneficiaries by the PCP (measured through claims encounter data), as compared to baseline, when care management occurred (exclusively) via telephonic or face-to-face contact with a nurse care manager;

    c. *Impact on Identifying Appropriate Target Population:* The implementation of the third generation HMP, including geographic expansion and introduction of additional health coaching modalities, will result in an increase in the average risk profile of newly-enrolled members (based on the average number of chronic conditions) as the program becomes

available to qualified members who do not currently have access to the HMP;

d. *Impact on Health Outcomes:* Use of disease registry functions by the health coach will improve the quality of care delivered to beneficiaries, as measured by changes in performance on the initial set of Health Care Quality Measures for Medicaid-Eligible Adults or CHIPRA Core Set of Children's Healthcare Quality Measures;

e. *Impact on Cost/Utilization of Care - ER:* Beneficiaries using HMP services will have fewer ER visits, compared to beneficiaries not receiving HMP services (as measured through claims data);

f. *Impact on Cost/Utilization of Care - Hospital:* Beneficiaries using HMP services will have fewer (admissions and) readmissions to hospitals, compared to beneficiaries not receiving HMP services (as measured through claims data);

g. *Impact on Satisfaction/Experience with Care:* Beneficiaries using HMP services will have higher satisfaction, compared to beneficiaries not receiving HMP services (as measured through survey data employing CAHPS® questions); and

h. *Impact on Effectiveness of Care:* Total and per member per month expenditures for members enrolled in HMP will be lower than would have occurred absent their participation in nurse care management.

3. Evaluation of Insure Oklahoma: The evaluation will support the hypothesis that Insure Oklahoma is improving access to care for low-income Oklahomans not eligible for Medicaid, as measured by:

   a. The number of individuals enrolled in Insure Oklahoma;
   b. The number of employers participating in the ESI portion of Insure Oklahoma; and
   c. The number of primary care providers participating in the Individual Plan portion of Insure Oklahoma.

4. Evaluation of Retroactive Eligibility Waiver: The evaluation will support the hypothesis that the waiver of retroactive eligibility is an appropriate feature of the program, as measured by:

   a. *Impact on Access to Care – Enrollment:* Eliminating retroactive eligibility will increase the likelihood of enrollment and enrollment continuity;

   b. *Impact on Quality of Care – Health Status at Enrollment:* Eliminating retroactive eligibility will increase enrollment of eligible people when they

are healthy relative to those eligible people who have the option of retroactive eligibility; and

c. *Impact on Quality of Care - Health Outcomes:* Through greater continuity of coverage, health outcomes will be better for those subject to retroactive eligibility waivers compared to other Medicaid beneficiaries who have access to retroactive eligibility.

Alignment of Demonstration Goals and Hypotheses

The OHCA's overarching goals for SoonerCare Choice are to provide accessible, high quality and cost-effective care to SoonerCare Choice beneficiaries. The research questions to be answered by testing Demonstration hypotheses align closely with these goals, as illustrated in Exhibit 3 below.

Exhibit 3 – Alignment of Goals and Hypotheses

Goal	Demonstration Component	Hypothesis/Research Question(s)
Health Access Networks		
Accessible Care	Health Access Network	Will the implementation and expansion of the HANs improve access to and the availability of health care services to SoonerCare beneficiaries served by the HANs?
High Quality Care	Health Access Networks	Will the implementation and expansion of the HANs improve the quality and coordination of health care services to SoonerCare beneficiaries served by the HANs, including specifically populations at greatest risk (e.g., those with multiple chronic illnesses)? Will the implementation and expansion of the HANs enhance the State's Patient Centered Medical Home program by making HAN care management support and practice enhancement available to more providers (as documented through an evaluation of PCP

Goal	Demonstration Component	Hypothesis/Research Question(s)
		profiles that incorporates a review of utilization, disease guideline compliance and cost)? Will beneficiaries enrolled with a HAN PCMH provider have higher satisfaction, compared to beneficiaries enrolled with a non-HAN PCMH (as measured through CAHPS survey data)?
Cost Effectiveness	Health Access Networks	Will the implementation and expansion of the HANs reduce cost associated with provision of health care services to SoonerCare beneficiaries served by the HANs?
Health Management Program		
Accessible Care	Health Management Program	Will implementation of the third generation HMP, including health coaches and practice facilitation, result in an increase in enrollment, as compared to baseline? Will incorporating health coaches into primary care practices result in increased contact with HMP beneficiaries by the PCP (measured through claims encounter data), as compared to baseline, when care management occurred (exclusively) via telephonic or face-to-face contact with a nurse care manager?
High Quality Care	Health Management Program	Will implementation of the third generation HMP result in an increase in the average risk profile of newly-enrolled members (based on the average number of chronic conditions) as the program becomes available to qualified members who do not currently have access to the HMP?

Goal	Demonstration Component	Hypothesis/Research Question(s)
		Will the use of disease registry functions by the health coach (along with other coaching activities) improve the quality of care delivered to beneficiaries, as measured by changes in performance on the initial set of Health Care Quality Measures for Medicaid-Eligible Adults or CHIPRA Core Set of Children's Healthcare Quality Measures? Will beneficiaries using HMP services have higher satisfaction compared to beneficiaries not receiving HMP services (as measured through CAHPS survey data)?
Cost Effectiveness	Health Management Program	Will ER and hospital utilization for members enrolled in the HMP be lower than would have occurred absent their participation? Will total and per member per month expenditures for members enrolled in the HMP be lower than would have occurred absent their participation?
Insure Oklahoma		
Accessible Care	Insure Oklahoma	Will the evaluation support the hypothesis that Insure Oklahoma is improving access to care for low-income Oklahomans not eligible for Medicaid?

Goal	Demonstration Component	Hypothesis/Research Question(s)
Waiver of Retroactive Eligibility		
Accessible Care	Waiver of Retroactive Eligibility	Do eligible people subject to retroactive eligibility waivers enroll in Medicaid at the same rates as other eligible people who have access to retroactive eligibility? What is the likelihood of enrollment continuity for those subject to a retroactive eligibility waiver compared to other Medicaid beneficiaries who have access to retroactive eligibility? Do beneficiaries subject to retroactive eligibility waivers who disenroll from Medicaid have shorter enrollment gaps than other beneficiaries who have access to retroactive eligibility?
High Quality Care	Waiver of Retroactive Eligibility	Do newly-enrolled beneficiaries subject to a waiver of retroactive eligibility have higher self-assessed health status than other newly enrolled beneficiaries who have access to retroactive eligibility? Do beneficiaries subject to the retroactive eligibility waiver have better health outcomes than other beneficiaries who have access to retroactive eligibility?

Promotion of Title XIX Objectives

The Affordable Care Act (ACA) included provisions for Medicaid related to quality of care and delivery systems. Specifically, the ACA anticipates that, "improvements will be made in the quality of care and the manner in which that care is delivered, while at the same time reducing costs."[3]

The SoonerCare Demonstration promotes these ideals through the overarching goals of providing accessible, high quality and cost-effective care to SoonerCare Choice beneficiaries. The evaluation methodology presented in the next section is designed to measure the Demonstration's performance in achieving these goals.

[3] https://www.medicaid.gov/about-us/program-history/index.html

C. METHODOLOGY

The SoonerCare Choice evaluation is designed to measure the Demonstration's performance in achieving program goals, while also providing actionable information for improving the program in the future. The proposed methodology is outlined in detail below.

1. Evaluation Design (Overview)

The evaluation will use a combination of analytical techniques, as determined by best available data and the presence or absence of a valid comparison group. The evaluation will employ nationally-validated measures (e.g., HEDIS and CAHPS) where appropriate and State-specific measures where a national measure does not exist (e.g., data on enrollment or PCMH status, as well as member surveys tailored to assess specific HAN and HMP care management activities). Nationally-validated measures that are part of the CMS Scorecard will be given priority for measure selection.

As discussed below, the evaluation will include a comparison group for a portion of the analysis. It also will include an interrupted time series analysis for the HMP program, which is transitioning to an enhanced model of care in July 2019.

The analysis will be stratified into urban and rural subgroups, subject to sample size limitations. The urban subgroup will consist of the counties comprising the greater Oklahoma City, Tulsa and Lawton metropolitan areas; the rural subgroup will consist of the remainder of the State[4].

2. Target and Comparison Populations

HAN and HMP Component of Evaluation

The SoonerCare Choice target populations are HAN and HMP members. The two populations do not overlap; the OHCA reviews enrollment data monthly to identify and resolve any instances of members being co-enrolled in both programs.

The evaluation is structured to isolate, as much as possible, the discrete impact of the HAN and HMP initiatives with respect to access, quality and cost effectiveness. This will be accomplished by stratifying SoonerCare Choice members into three population segments for applicable measures: members enrolled with a SoonerCare HAN PCMH; members enrolled in the SoonerCare HMP; and all other SoonerCare Choice members (comparison group).

[4] Due to space constraints, Exhibit 5, which presents the detailed evaluation measure set, does not specify urban/rural stratification by measure. However, the independent evaluator will apply urban/rural stratification across measures, in accordance with sample size requirements.

The HAN and HMP programs are expanding statewide and have sufficient enrollment to be evaluated in isolation. The OHCA estimates that the HMP population in 2019 will be approximately 10,000 members, while the HAN population will be approximately 200,000 members. The residual comparison group will exceed 300,000 members.

The HAN population closely resembles the comparison group population in terms of demographics. HAN members are primarily non-disabled children, pregnant women, parents and members with disabilities who are not eligible for Medicare. (High risk pregnant women receive care management directly from the OHCA, regardless of HAN status, and therefore are not a focus of the HAN evaluation.)

The HMP population consists primarily of adults and has a higher percentage of ABD members than the comparison group population. The differences will be controlled for in the evaluation, including through stratification of the three populations by aid category (ABD or TANF), age cohort and health condition(s). Propensity score matching also will be used to account for differences between the HMP population and the comparison group.

The evaluation will encompass the entire universe of members, with the exception of member surveys (CAHPS and program-specific surveys). These will be conducted on a randomly-selected representative sample of HAN and HMP members.

Comparison Group Method

All SoonerCare Choice members should have access to preventive services through their PCMH, regardless of their status in terms of HAN or HMP enrollment. An in-state comparison group method therefore will be used for calculation of HEDIS rates across the three populations. This will include both population-wide preventive measures and preventive care measures specific to various chronic health conditions.

The comparison group method also will be used for evaluating CAHPS ratings among HAN, HMP and comparison group members with respect to access to care. The OHCA's CAHPS vendor is able to stratify CAHPS results for the HAN and comparison group populations, although not for the HMP population. The evaluator will include CAHPS-validated questions in a targeted HMP member survey to obtain equivalent data for the HMP population.

Finally, the comparison group method will be used to evaluate the cost effectiveness of the HAN and HMP models versus the population not enrolled in either program. This will include evaluation of inpatient hospital utilization, emergency room utilization and per member per month expenditures.

Interrupted Time Series

The SoonerCare HMP will be transitioning to an enhanced model of care in July 2019. The OHCA will use an interrupted time series analysis to evaluate the impact of the enhanced model on beneficiary utilization and costs. The time series will include three years of data preceding the program changes.

Beneficiary Surveys

The evaluation will assess member satisfaction with access to care and care management, including the member's perception of care management's impact on health status, through a combination of CAHPS and targeted surveys. The targeted survey samples will be randomly drawn from the care managed population in each of the two programs.

Insure Oklahoma Evaluation

The evaluation of Insure Oklahoma is distinct from other portions of the design and is based on tracking beneficiary, employer and provider participation rates over time. It does not require use of comparison groups or qualitative research to attain reliable findings.

Waiver of Retroactive Eligibility

The evaluation of the waiver of retroactive eligibility for a portion of the SoonerCare Choice population also is distinct from the other portions of the design. The OHCA has reviewed and followed CMS guidelines[5] in designing this component of the evaluation.

The OHCA waiver is atypical in that, prior to the new renewal period, the retroactive eligibility waiver applied to all Demonstration MEGs except Tax Equity and Fiscal Responsibility Act (TEFRA) and Aged, Blind, and Disabled populations. Effective with the start of the new waiver period, retroactive eligibility will be restored for pregnant women and children under 19, while the waiver remains in place for the populations listed in Section A.2 of the design.

The OHCA therefore proposes to evaluate both the ongoing impact of the retroactive eligibility waiver on beneficiaries to whom it continues to apply and the impact of restoring retroactive eligibility for pregnant women and children.

Comparison Group Method

An in-state comparison group method will be used for evaluating enrollment rates and continuity within the population subject to the retroactive eligibility waiver[6]. Non-pregnant adults not subject to the retroactive eligibility waiver will be employed as the comparison group. Propensity score matching will also be used to account for differences between the retroactive eligibility population and the comparison group.

Interrupted Time Series

The OHCA will use an interrupted time series analysis to evaluate the impact of restoring retroactive eligibility for pregnant women and children. The time series will include one year of data preceding the elimination of the waiver.

[5] Appendix to Eligibility & Coverage Evaluation Guidance – Retroactive Eligibility Waivers (March 2019).
[6] The OHCA gave serious consideration to use of comparison groups from other states. However, the OHCA believes the impact associated with differences in enrollment processes and outreach/notification practices across states would be difficult to control for as part of any evaluation.

Beneficiary Surveys

The OHCA will conduct surveys to evaluate the impact of the retroactive eligibility waiver on enrollment rates of beneficiaries subject to the waiver, as well health outcomes over time. The survey will be conducted at time of enrollment and at 12-, 18- and 24-months post-enrollment.

3. Evaluation Period

The HAN program is being expanded and the HMP program is undergoing both expansion and enhancement, as described in Section A. Therefore, although the OHCA's Independent Evaluator already is tracking a portion of the evaluation measures for the renewal period, the OHCA proposes, with one exception[7], to treat 2019 as a base year. Program performance in 2020 – 2023 will be assessed against performance in 2019[8].

The OHCA's Independent Evaluator will produce findings on a state fiscal year (July to June), rather than calendar year basis for all measures except HEDIS. The OHCA believes this is the most appropriate time period, as it aligns with HMP and HAN contract cycles.

The OHCA recently conducted a procurement to select a vendor to administer the third generation Health Management Program. The new contract will take effect on July 1, 2019 (SFY 2020) and will include provisions for expanding the program statewide and introducing new health coaching modalities. The vendor will be required to offer beneficiaries in-office, telephonic or home-based health coaching, depending on the preferences and needs of the beneficiary.

The OHCA also will be revising contracts with the HANs to address geographic expansion (both within existing counties and into new counties). The new HAN contracts will take effect in SFY 2020.

HEDIS measures will be calculated on a calendar year basis, in accordance with HEDIS specifications, with calendar year 2019 serving as the baseline reporting year (2018 results). (Calculating "HEDIS-like" values on state fiscal year cycle would require generating results twice per year, since the calendar year measures would still be necessary for meeting CMS scorecard reporting requirements.)

[7] The evaluation design for the HMP includes both a comparison group analysis and an interrupted time series. For the interrupted time series portion, the evaluation will use SFY 2017 – SFY 2019 (final three years of predecessor contract) as the prior program comparison period.

[8] The waiver renewal period begins August 31, 2018. The independent evaluator will present data for the final four months of 2018, along with the 2019 base data, where appropriate. The 2018 partial year data will be informational, with 2019 serving as the formal base year period.

Exhibit 4 summarizes the overall evaluation and measurement periods.

Exhibit 4 – Demonstration Years & Measurement Periods

Measures	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5
Non-HEDIS	SFY 2019	SFY 2020	SFY 2021	SFY 2022	SFY 2023	SFY 2024
HEDIS	CY 2018[9]	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023

4. Evaluation Measures

The proposed evaluation measures are listed below, by evaluation component and hypothesis/question. Detailed specifications for each measure are presented in Exhibit 5, immediately following the list.

Evaluation of Health Access Networks – Access to Care

Hypothesis/Question: Will the implementation and expansion of the HANs improve access to and the availability of health care services to SoonerCare beneficiaries served by the HANs?

HAN access and availability will be evaluated through the following measures:

- Child and adolescent access to PCPs – 12 months to 19 years
- Adult access to preventive/ambulatory health services
- Getting needed care – children and adults
- Rating of health care – children and adults
- Rating of health plan – children and adults
- Rating of personal doctor – children and adults

Evaluation of Health Access Networks – Quality of Care

Hypothesis/Question: Will the implementation and expansion of the HANs improve the quality and coordination of health care services to SoonerCare beneficiaries served by the HANs, including specifically populations at greatest risk (e.g., those with multiple chronic illnesses)?

HAN quality and coordination will be evaluated through the following measures:

- Number of members engaged in care management
- Asthma measures

[9] 2019 Reporting cycle for 2018 values.

    - Use of appropriate medications for people with asthma
    - Medication management for people with asthma – 75 percent
- Cardiovascular (CAD and heart failure) measures
    - Persistence of beta-blocker treatment after a heart attack
    - Cholesterol management for patients with cardiovascular conditions – LDL-C test
- COPD measures
    - Use of spirometry testing in the assessment and diagnosis of COPD
    - Pharmacotherapy management of COPD exacerbation – 14 days
    - Pharmacotherapy management of COPD exacerbation – 30 days
- Diabetes measures
    - Percentage of members who had LDL-C test
    - Percentage of members who had retinal eye exam performed
    - Percentage of members who had Hemoglobin A1c (HbA1c) testing
    - Percentage of members who received medical attention for nephropathy
    - Percentage of members prescribed angiotensin converting enzyme inhibitors or angiotensin receptor blockers (ACE/ARB therapy)
- Hypertension measures
    - Percentage of members who had LDL-C test
    - Percentage of members prescribed ACE/ARB therapy
    - Percentage of members prescribed diuretics
    - Percentage of members prescribed ACE/ARB therapy or diuretics with annual medication monitoring
- Mental Health measures
    - Follow-up after hospitalization for mental illness – 7 days
    - Follow-up after hospitalization for mental illness – 30 days
- Social Determinants of Health
    - Member satisfaction with SDOH assistance (targeted member survey)
    - Impact of assistance on member self-reported health status (targeted member survey)

Hypothesis/Question: Will the implementation and expansion of the HANs enhance the State's Patient Centered Medical Home program by making HAN care management support and practice enhancement available to more providers, as documented through an evaluation of PCP profiles that incorporates a review of utilization, disease guideline compliance and cost?

HAN performance with respect to enhancement of the PCMH program will be evaluated through the following measures:

- Number and percentage of HAN-affiliated PCMH providers who have attained the highest level of OHCA accreditation
- PCMH provider satisfaction with HAN practice support activities
- PCMH provider adoption of chronic care disease guidelines
- Emergency room utilization
- Per member per month costs

PCMH patient compliance with HEDIS chronic disease measures for asthma, CAD, COPD, diabetes and hypertension (measures identified for preceding hypothesis/question) also will be included in the evaluation of this hypothesis/question, as higher compliance rates would be driven by PCMH activities.

Evaluation of Health Access Networks – Cost Effectiveness

Hypothesis/Question: Will the implementation and expansion of the HANs reduce cost associated with provision of health care services to SoonerCare beneficiaries served by the HANs?

HAN cost effectiveness will be evaluated through the following measures:

- Emergency room utilization
- Hospital admissions
- Per member per month costs

Evaluation of Health Management Program – Access to Care

Hypothesis/Question: Will the implementation of the third generation HMP, including health coaches and practice facilitation, result in an increase in enrollment, as compared to baseline?

HMP enrollment will be evaluated through the following measure:

- Number of members engaged in health coaching for a minimum of three months in a 12-month period

Hypothesis/Question: Will incorporating health coaches into primary care practices result in increased contact with HMP beneficiaries by the PCP (measured through claims encounter data), as compared to baseline, when care management occurred (exclusively) via telephonic or face-to-face contact with a nurse care manager?

HMP contacts will be evaluated through the following measure:

- PCMH contacts (total and average number per engaged member)

Evaluation of Health Management Program – Quality of Care

Hypothesis/Question: Will the implementation of the third generation HMP, including health coaches and practice facilitation, result in an increase in the average risk profile of newly-enrolled members (based on the average number of chronic conditions) as the

program becomes available to qualified members who do not currently have access to the HMP?

HMP beneficiary population risk will be evaluated through the following measures:

- Average number of chronic conditions
- Percentage of members with physical/behavioral health co-morbidities

Hypothesis/Question: Will the use of disease registry functions by the health coach (along with other coaching activities) improve the quality of care delivered to beneficiaries, as measured by performance on the initial set of Health Care Quality Measures for Medicaid-Eligible Adults or CHIPRA Core Set of Children's Healthcare Quality Measures?

HMP quality of care will be evaluated through the following measures:

- Asthma measures
  - Use of appropriate medications for people with asthma
  - Medication management for people with asthma – 75 percent
  - COPD or asthma in older adults admission rate
  - Asthma in younger adults admission rate
- Cardiovascular (CAD and heart failure) measures
  - Persistence of beta-blocker treatment after a heart attack
  - Cholesterol management for patients with cardiovascular conditions – LDL-C test
  - Heart failure admission rate
- COPD measures
  - Use of spirometry testing in the assessment and diagnosis of COPD
  - Pharmacotherapy management of COPD exacerbation – 14 days
  - Pharmacotherapy management of COPD exacerbation – 30 days
- Diabetes measures
  - Percentage of members who had LDL-C test
  - Percentage of members who had retinal eye exam performed
  - Percentage of members who had Hemoglobin A1c (HbA1c) testing
  - Percentage of members who received medical attention for nephropathy
  - Percentage of members prescribed angiotensin converting enzyme inhibitors or angiotensin receptor blockers (ACE/ARB therapy)
  - Diabetes short-term complications admission rate
- Hypertension measures
  - Percentage of members who had LDL-C test
  - Percentage of members prescribed ACE/ARB therapy
  - Percentage of members prescribed diuretics
  - Percentage of members prescribed ACE/ARB therapy or diuretics with annual medication monitoring
- Mental Health measures
  - Follow-up after hospitalization for mental illness – 7 days
  - Follow-up after hospitalization for mental illness – 30 days

- Opioid measures
  - Use of opioids at high dosage in persons without cancer
  - Concurrent use of opioids and benzodiazepines
- Social Determinants of Health
  - Member awareness and use of available SDOH assistance (targeted member survey)
  - Member satisfaction with SDOH assistance (targeted member survey)

Hypothesis/Question: Will beneficiaries using HMP services have higher satisfaction compared to beneficiaries not receiving HMP services (as measured through survey data employing CAHPS questions)?

HMP performance with respect to member (beneficiary) satisfaction will be evaluated through the following measures:

- Getting needed care – children and adults
- Rating of health care – children and adults
- Rating of health plan – children and adults
- Rating of personal doctor – children and adults

Evaluation of Health Management Program – Cost Effectiveness

Hypothesis/Question: Will beneficiaries using HMP services have fewer ER visits compared to beneficiaries not receiving HMP services and compared to beneficiaries enrolled in the predecessor (second generation) HMP (as measured through claims data)?

HMP effectiveness in reducing ER utilization will be evaluated through the following measure:

- Emergency room utilization – HMP members versus comparison group
- Emergency room utilization – second versus third generation HMP members

Hypothesis/Question: Will beneficiaries using HMP services have fewer (admissions and) readmissions compared to beneficiaries not receiving HMP services and compared to beneficiaries enrolled in the predecessor (second generation) HMP (as measured through claims data)?

HMP effectiveness in reducing hospital utilization will be evaluated through the following measures:

- Hospital admissions and readmissions – HMP members versus comparison group
- Hospital admissions and readmissions – second versus third generation HMP members

Hypothesis/Question: Will total and per member per month expenditures for members enrolled in HMP be lower than would have occurred absent their participation?

HMP cost effectiveness will be evaluated through the following measures:

- Per member per month costs – HMP members versus comparison group
- Per member per month costs – second versus third generation HMP members

Evaluation of Insure Oklahoma – Access to Care

Hypothesis/Question: Will the evaluation support the hypothesis that Insure Oklahoma is improving access to care for low-income Oklahomans not eligible for Medicaid?

Insure Oklahoma will be evaluated through the following measures:

- The number of individuals enrolled in Insure Oklahoma
- The number of employers participating in the ESI portion of Insure Oklahoma
- The number of primary care providers participating in the Individual Plan portion of Insure Oklahoma

Evaluation of Retroactive Eligibility Waiver – Access to Care

Hypothesis/Question: Will eligible people subject to retroactive eligibility waivers enroll in Medicaid at the same rates as other eligible people who have access to retroactive eligibility?

The impact of the waiver of retroactivity eligibility on enrollment rates will be evaluated through the following measures:

- The number of individuals enrolled in Medicaid by eligibility group, by quarter
- The number of new enrollees in Medicaid by eligibility group, by quarter

Hypothesis/Question: Will the presence or absence of retroactive eligibility affect enrollment continuity, as measured by Medicaid enrollment rates?

The impact of the waiver of retroactivity eligibility on enrollment continuity will be evaluated through the following measures:

- Probability of completing the renewal (recertification) process, by eligibility group
- Probability of remaining enrolled in Medicaid for 12-, 18-, 24- consecutive months, by eligibility group
- Number of months with Medicaid coverage (average tenure) (1-12)

Hypothesis/Question: Will beneficiaries subject to retroactive eligibility waivers who disenroll from Medicaid have shorter enrollment gaps than other beneficiaries who have access to retroactive eligibility?

The impact of the waiver of retroactivity eligibility on enrollment on enrollment gaps will be evaluated through the following measures:

- Probability of re-enrolling in Medicaid after a gap in coverage of six months
- Number of months without Medicaid coverage, up to six months

Evaluation of Retroactive Eligibility Waiver – Quality of Care

Hypothesis/Question: Will the presence or absence of retroactive eligibility affect enrollment of eligible people when they are healthy?

The impact of the waiver of retroactivity eligibility on enrollment of healthy people will be evaluated through the following measures:

- Beneficiary self-reported health status (through beneficiary survey)
- Beneficiary self-reported prior year utilization (through beneficiary survey)

Hypothesis/Question: Will health outcomes, through greater continuity of coverage, be better for those subject to retroactive eligibility waivers compared to other Medicaid beneficiaries who have access to retroactive eligibility?

The impact of the waiver of retroactivity eligibility on health outcomes will be evaluated through the following measures:

- Beneficiary self-reported health status; healthy days (beneficiary survey)
- Change in physical and mental health status, measured at baseline and at 12, 18, 24 months (beneficiary survey)

Exhibit 5 – Evaluation Measures

Ref	Research Question	Measure	Population	Numerator/ Denominator	Comparison Group	Data Source & Measure Steward	Analytic Methods
Evaluation of Health Access Networks – Access to Care							
1	Will the implementation and expansion of the HANs improve access to and the availability of health care services to SoonerCare beneficiaries served by the HANs?	Child and adolescent access to PCPs – 12 months to 19 years	Members within age cohort enrolled with a HAN-affiliated PCMH	In accordance with HEDIS specifications (administrative data only)	SoonerCare Choice members within age cohort not enrolled with a HAN-affiliated PCMH and not enrolled in the HMP	Source - MMIS Steward - NCQA	T-tests Regression with propensity score matching
2		Adult access to preventive/ ambulatory health services	Members within age cohort enrolled with a HAN-affiliated PCMH	In accordance with HEDIS specifications (administrative data only)	SoonerCare Choice members within age cohort not enrolled with a HAN-affiliated PCMH and not enrolled in the HMP	Source - MMIS Steward - NCQA	T-tests Regression with propensity score matching
3		Getting needed care – children and adults	Adult members enrolled with a HAN-affiliated PCMH Child members enrolled with a HAN-affiliated PCMH	In accordance with CAHPS specifications	SoonerCare Choice adult members not enrolled with a HAN-affiliated PCMH SoonerCare Choice child members not enrolled with a HAN-affiliated PCMH	Source - CAHPS survey data file Steward – CAHPS	T-tests Regression with propensity score matching

Ref	Research Question	Measure	Population	Numerator/ Denominator	Comparison Group	Data Source & Measure Steward	Analytic Methods
4		Rating of health plan – children and adults	Adult members enrolled with a HAN-affiliated PCMH Child members enrolled with a HAN-affiliated PCMH	In accordance with CAHPS specifications	SoonerCare Choice adult members not enrolled with a HAN-affiliated PCMH SoonerCare Choice child members not enrolled with a HAN-affiliated PCMH	Source - CAHPS survey data file Steward – CAHPS	T-tests Regression with propensity score matching
5		Rating of personal doctor – children and adults	Adult members enrolled with a HAN-affiliated PCMH Child members enrolled with a HAN-affiliated PCMH	In accordance with CAHPS specifications	SoonerCare Choice adult members not enrolled with a HAN-affiliated PCMH SoonerCare Choice child members not enrolled with a HAN-affiliated PCMH	Source - CAHPS survey data file Steward – CAHPS	T-tests Regression with propensity score matching
Evaluation of Health Access Networks – Quality of Care							
6	Will the implementation and expansion of the HANs improve the quality and coordination of health care services to SoonerCare beneficiaries served by the HANs, including specifically populations at greatest risk (e.g.,	Number of members engaged in care management	Total unduplicated members engaged in care management at any point during year Unduplicated members with multiple chronic illnesses engaged in care management at any point during the year	Numerators – members engaged in care management (total and population with multiple chronic conditions Denominators – all members (total and population with multiple chronic conditions)	N/A	Source - HAN care management databases Steward - HANs	Time series

Ref	Research Question	Measure	Population	Numerator/ Denominator	Comparison Group	Data Source & Measure Steward	Analytic Methods
7	those with multiple chronic illnesses)?	Asthma – use of appropriate medications for people with asthma	HAN members with asthma	In accordance with HEDIS specifications	SoonerCare Choice members with asthma not enrolled with a HAN-affiliated PCMH and not enrolled in the HMP	Source - MMIS Steward - NCQA	T-tests Regression with propensity score matching
8		Asthma – Medication management for people with asthma – 75 percent	HAN members with asthma	In accordance with HEDIS specifications	SoonerCare Choice members with asthma not enrolled with a HAN-affiliated PCMH and not enrolled in the HMP	Source - MMIS Steward - NCQA	T-tests Regression with propensity score matching
9		CAD – Persistent beta-blocker treatment after a heart attack	HAN members with CAD and heart failure	In accordance with HEDIS specifications	SoonerCare Choice members with CAD/heart failure not enrolled with a HAN-affiliated PCMH and not enrolled in the HMP	Source - MMIS Steward - NCQA	T-tests Regression with propensity score matching
10		CAD – Cholesterol management for patients with cardiovascular conditions – LDL-C test	HAN members with CAD and heart failure	In accordance with HEDIS specifications	SoonerCare Choice members with CAD/heart failure not enrolled with a HAN-affiliated PCMH and not enrolled in the HMP	Source - MMIS Steward - NCQA	T-tests Regression with propensity score matching

Ref	Research Question	Measure	Population	Numerator/ Denominator	Comparison Group	Data Source & Measure Steward	Analytic Methods
11		COPD – Use of spirometry testing in the assessment and diagnosis of COPD	HAN members with COPD	In accordance with HEDIS specifications	SoonerCare Choice members with CAD/heart failure not enrolled with a HAN-affiliated PCMH and not enrolled in the HMP	Source - MMIS Steward - NCQA	T-tests Regression with propensity score matching
12		COPD – pharmacotherapy management of COPD exacerbation – 14 days	HAN members with COPD	In accordance with HEDIS specifications	SoonerCare Choice members with COPD not enrolled with a HAN-affiliated PCMH and not enrolled in the HMP	Source - MMIS Steward - NCQA	T-tests Regression with propensity score matching
13		COPD – pharmacotherapy management of COPD exacerbation – 30 days	HAN members with COPD	In accordance with HEDIS specifications	SoonerCare Choice members with COPD not enrolled with a HAN-affiliated PCMH and not enrolled in the HMP	Source - MMIS Steward - NCQA	T-tests Regression with propensity score matching
14		Diabetes – Percentage of members who had LDL-C test	HAN members with diabetes	In accordance with HEDIS specifications	SoonerCare Choice members with diabetes not enrolled with a HAN-affiliated PCMH and not enrolled in the HMP	Source - MMIS Steward - NCQA	T-tests Regression with propensity score matching

Ref	Research Question	Measure	Population	Numerator/ Denominator	Comparison Group	Data Source & Measure Steward	Analytic Methods
15		Diabetes – percentage of members who had retinal eye exam performed	HAN members with diabetes	In accordance with HEDIS specifications	SoonerCare Choice members with diabetes not enrolled with a HAN-affiliated PCMH and not enrolled in the HMP	Source - MMIS Steward - NCQA	T-tests Regression with propensity score matching
16		Diabetes – percentage of members who had HbA1c testing	HAN members with diabetes	In accordance with HEDIS specifications	SoonerCare Choice members with diabetes not enrolled with a HAN-affiliated PCMH and not enrolled in the HMP	Source - MMIS Steward - NCQA	T-tests Regression with propensity score matching
17		Diabetes - Percentage of members who received medical attention for nephropathy	HAN members with diabetes	In accordance with HEDIS specifications	SoonerCare Choice members with diabetes not enrolled with a HAN-affiliated PCMH and not enrolled in the HMP	Source - MMIS Steward - NCQA	T-tests Regression with propensity score matching
18		Diabetes - Percentage of members prescribed ACE/ARB therapy	HAN members with diabetes	In accordance with HEDIS specifications	SoonerCare Choice members with diabetes not enrolled with a HAN-affiliated PCMH and not enrolled in the HMP	Source - MMIS Steward - NCQA	T-tests Regression with propensity score matching

Ref	Research Question	Measure	Population	Numerator/ Denominator	Comparison Group	Data Source & Measure Steward	Analytic Methods
19		Hypertension – Percentage of members who had LDL-C test	HAN members with hypertension	In accordance with HEDIS specifications	SoonerCare Choice members with hypertension not enrolled with a HAN-affiliated PCMH and not enrolled in the HMP	Source - MMIS Steward - NCQA	T-tests Regression with propensity score matching
20		Hypertension – Percentage of members prescribed ACE/ARB therapy	HAN members with hypertension	In accordance with HEDIS specifications	SoonerCare Choice members with hypertension not enrolled with a HAN-affiliated PCMH and not enrolled in the HMP	Source - MMIS Steward - NCQA	T-tests Regression with propensity score matching
21		Hypertension – Percentage of members prescribed diuretics	HAN members with hypertension	In accordance with HEDIS specifications	SoonerCare Choice members with hypertension not enrolled with a HAN-affiliated PCMH and not enrolled in the HMP	Source - MMIS Steward - NCQA	T-tests Regression with propensity score matching
22		Hypertension – Percentage of members prescribed ACE/ARB therapy or diuretics with annual medication monitoring	HAN members with hypertension	In accordance with HEDIS specifications	SoonerCare Choice members with hypertension not enrolled with a HAN-affiliated PCMH and not enrolled in the HMP	Source - MMIS Steward - NCQA	T-tests Regression with propensity score matching

Ref	Research Question	Measure	Population	Numerator/ Denominator	Comparison Group	Data Source & Measure Steward	Analytic Methods
23		Mental Health – Follow-up after hospitalization for mental illness – 7 days	HAN members hospitalized for mental illness	In accordance with HEDIS specifications	SoonerCare Choice members hospitalized for mental illness not enrolled with a HAN-affiliated PCMH and not enrolled in the HMP	Source - MMIS Steward - NCQA	T-tests Regression with propensity score matching
24		Mental Health – Follow-up after hospitalization for mental illness – 30 days	HAN members hospitalized for mental illness	In accordance with HEDIS specifications	SoonerCare Choice members hospitalized for mental illness not enrolled with a HAN-affiliated PCMH and not enrolled in the HMP	Source - MMIS Steward - NCQA	T-tests Regression with propensity score matching
25		SDOH – Member satisfaction	Randomly selected sample of HAN members receiving assistance with SDOH as part of care management	Numerator – Members reporting satisfaction Denominator – All respondents	N/A	Source - HAN care management databases for sample Steward - SoonerCare Independent Evaluator for survey data	Descriptive statistics

Ref	Research Question	Measure	Population	Numerator/ Denominator	Comparison Group	Data Source & Measure Steward	Analytic Methods
26	Will the implementation and expansion of the HANs enhance the State's PCMH program by making HAN care management and support available to more providers, as documented through an evaluation of PCP profiles that incorporates a review of utilization, disease guideline compliance and cost? *(Note: HEDIS chronic disease measures from preceding hypothesis/question also will be included in evaluation of this hypothesis/question, as PCMH providers drive member compliance.)*	Number and percentage of HAN-affiliated PCMH providers who have attained the highest level of OHCA accreditation	HAN-affiliated PCMH providers	Numerator – PCMH providers with Tier 3 accreditation (or highest level under any future redesign of PCMH tiers) Denominator – All HAN-aligned PCMH providers	PCMH providers not aligned with a HAN	Source – MMIS Steward – OHCA	Time series
27		PCMH provider satisfaction with HAN practice support activities	Randomly selected sample of HAN-affiliated PCMH providers	Numerator – Providers reporting satisfaction Denominator – All respondents	N/A	Source – MMIS for provider sample Steward – SoonerCare Independent Evaluator for survey data	Descriptive statistics
28		PCMH provider adoption of chronic care disease guidelines (self-reported)	Randomly selected sample of HAN-affiliated PCMH providers	Numerator – Providers reporting compliance by disease state Denominator – All respondents	N/A	Source – MMIS for provider sample Steward – SoonerCare Independent Evaluator for survey data	Descriptive statistics

Ref	Research Question	Measure	Population	Numerator/ Denominator	Comparison Group	Data Source & Measure Steward	Analytic Methods
Evaluation of Health Access Networks – Cost Effectiveness							
29	Will the implementation and expansion of the HANs reduce cost associated with provision of health care services to SoonerCare beneficiaries served by the HANs?	Emergency room utilization	SoonerCare Choice HAN members	Numerator – ED visits Denominator – total member months	SoonerCare Choice members not enrolled with a HAN-affiliated PCMH and not enrolled in the HMP	Source – MMIS Steward – OHCA	T-tests Regression with propensity score matching
30		Hospital admissions	SoonerCare Choice HAN members	Numerator – IP admissions Denominator – total member months	SoonerCare Choice members not enrolled with a HAN-affiliated PCMH and not enrolled in the HMP PCMH and not enrolled in the HMP	Source – MMIS Steward – OHCA	T-tests Regression with propensity score matching
31		Evaluation of Health Access Networks – PMPM Expenditures	SoonerCare Choice HAN members	Numerator – total expenditures (paid claims and PCMH case management fees) Denominator – total member months	SoonerCare Choice members not enrolled with a HAN-affiliated PCMH and not enrolled in the HMP	Source – MMIS Steward – OHCA	T-tests Regression with propensity score matching

Ref	Research Question	Measure	Population	Numerator/ Denominator	Comparison Group	Data Source & Measure Steward	Analytic Methods
Evaluation of Health Management Program – Access to Care							
32	Will implementation of the third generation HMP, including health coaches and practice facilitation, result in an increase in enrollment, as compared to baseline?	Number of members engaged in health coaching	SoonerCare HMP members engaged in health coaching (minimum of three months), by coaching method	N/A	HMP beneficiaries enrolled in second generation HMP	Source – HMP contractor database Steward – HMP contractor	Interrupted time series
33	Will incorporating health coaches into primary care practices result in increased contact with HMP beneficiaries by the PCP (measured through claims encounter data), as compared to baseline, when care management occurred (exclusively) via telephonic or face-to-face contact with a nurse care manager?	Number of PCP contacts (total and per member engaged in health coaching)	SoonerCare HMP members engaged in health coaching (minimum of three months), by coaching method	Numerator - Member contacts (visits) with PCMH, by coaching method Denominator – Member months, by coaching method	Members receiving health coaching in PCMH offices will be compared to members receiving field-based and telephonic health coaching	Source – MMIS; HMP contractor database Steward – OHCA for claims; HMP contractor for member assignments	T-tests Regression with propensity score matching

Ref	Research Question	Measure	Population	Numerator/ Denominator	Comparison Group	Data Source & Measure Steward	Analytic Methods
Evaluation of Health Management Program – Quality of Care							
34	Will implementation of the third generation HMP result in an increase in the average risk profile of newly-enrolled members (based on the average number of chronic conditions) as the program becomes available to qualified members who do not currently have access to the HMP?	Average number of chronic conditions	SoonerCare members enrolled in the HMP, by coaching method	Numerator – Number of chronic conditions Denominator – Number of members	HMP beneficiaries enrolled in second generation HMP	Source – MMIS; HMP contractor database Steward – OHCA for claims; HMP contractor for member assignments	Interrupted time series
35		Percentage of members with physical/behavioral health co-morbidities	SoonerCare members enrolled in the HMP, by coaching method	Numerator – Number of members with at least one chronic physical and one behavioral health condition Denominator – Number of members	HMP beneficiaries enrolled in second generation HMP	Source – MMIS; HMP contractor database Steward – OHCA for claims; HMP contractor for member assignments	Interrupted time series
36	Will the use of disease registry functions by the health coach (along with other coaching activities) improve the quality of care delivered to beneficiaries, as measured by changes in performance on the	Asthma – use of appropriate medications for people with asthma	HMP members with asthma	In accordance with HEDIS specifications	SoonerCare Choice members with asthma not enrolled with a HAN-affiliated PCMH and not enrolled in the HMP HMP beneficiaries enrolled in second generation HMP	Source - MMIS Steward - NCQA	T-tests Regression with propensity score matching Interrupted time series

Ref	Research Question	Measure	Population	Numerator/ Denominator	Comparison Group	Data Source & Measure Steward	Analytic Methods
37	initial set of Health Care Quality Measures for Medicaid-Eligible Adults or CHIPRA Core Set of Children's Healthcare Quality Measures?	Asthma – Medication management for people with asthma – 75 percent	HMP members with asthma	In accordance with HEDIS specifications	SoonerCare Choice members with asthma not enrolled with a HAN-affiliated PCMH and not enrolled in the HMP HMP beneficiaries enrolled in second generation HMP	Source - MMIS Steward - NCQA	T-tests Regression with propensity score matching Interrupted time series
38		Asthma - COPD or asthma in older adults admission rate	HMP members with asthma or COPD	In accordance with AHRQ specifications	SoonerCare Choice members with COPD or asthma not enrolled with a HAN-affiliated PCMH and not enrolled in the HMP HMP beneficiaries enrolled in second generation HMP	Source - MMIS Steward - AHRQ	T-tests Regression with propensity score matching Interrupted time series
39		Asthma – Asthma in younger adults admission rate	HMP members with asthma	In accordance with AHRQ specifications	SoonerCare Choice members with COPD or asthma not enrolled with a HAN-affiliated PCMH and not enrolled in the HMP HMP beneficiaries enrolled in second generation HMP	Source - MMIS Steward - AHRQ	T-tests Regression with propensity score matching Interrupted time series

Ref	Research Question	Measure	Population	Numerator/ Denominator	Comparison Group	Data Source & Measure Steward	Analytic Methods
40		CAD – Persistent beta-blocker treatment after a heart attack	HMP members with CAD and heart failure	In accordance with HEDIS specifications	SoonerCare Choice members with COPD or asthma not enrolled with a HAN-affiliated PCMH and not enrolled in the HMP HMP beneficiaries enrolled in second generation HMP	Source - MMIS Steward - NCQA	T-tests Regression with propensity score matching Interrupted time series
41		CAD – Cholesterol management for patients with cardiovascular conditions – LDL-C test	HMP members with CAD and heart failure	In accordance with HEDIS specifications	SoonerCare Choice members with COPD or asthma not enrolled with a HAN-affiliated PCMH and not enrolled in the HMP HMP beneficiaries enrolled in second generation HMP	Source - MMIS Steward - NCQA	T-tests Regression with propensity score matching Interrupted time series
42		CAD – Heart failure admission rate	HMP members with heart failure	In accordance with AHRQ specifications	SoonerCare Choice members with COPD or asthma not enrolled with a HAN-affiliated PCMH and not enrolled in the HMP HMP beneficiaries enrolled in second generation HMP	Source - MMIS Steward - AHRQ	T-tests Regression with propensity score matching Interrupted time series

Ref	Research Question	Measure	Population	Numerator/ Denominator	Comparison Group	Data Source & Measure Steward	Analytic Methods
43		COPD – Use of spirometry testing in the assessment and diagnosis of COPD	HMP members with COPD	In accordance with HEDIS specifications	SoonerCare Choice members with COPD or asthma not enrolled with a HAN-affiliated PCMH and not enrolled in the HMP HMP beneficiaries enrolled in second generation HMP	Source - MMIS Steward - NCQA	T-tests Regression with propensity score matching Interrupted time series
44		COPD – pharmacotherapy management of COPD exacerbation – 14 days	HMP members with COPD	In accordance with HEDIS specifications	SoonerCare Choice members with COPD or asthma not enrolled with a HAN-affiliated PCMH and not enrolled in the HMP HMP beneficiaries enrolled in second generation HMP	Source - MMIS Steward - NCQA	T-tests Regression with propensity score matching Interrupted time series
45		COPD – pharmacotherapy management of COPD exacerbation – 30 days	HMP members with COPD	In accordance with HEDIS specifications	SoonerCare Choice members with COPD or asthma not enrolled with a HAN-affiliated PCMH and not enrolled in the HMP HMP beneficiaries enrolled in second generation HMP	Source - MMIS Steward - NCQA	T-tests Regression with propensity score matching Interrupted time series

Ref	Research Question	Measure	Population	Numerator/ Denominator	Comparison Group	Data Source & Measure Steward	Analytic Methods
46		Diabetes – Percentage of members who had LDL-C test	HMP members with diabetes	In accordance with HEDIS specifications	SoonerCare Choice members with COPD or asthma not enrolled with a HAN-affiliated PCMH and not enrolled in the HMP HMP beneficiaries enrolled in second generation HMP	Source - MMIS Steward - NCQA	T-tests Regression with propensity score matching Interrupted time series
47		Diabetes – percentage of members who had retinal eye exam performed	HMP members with diabetes	In accordance with HEDIS specifications	SoonerCare Choice members with COPD or asthma not enrolled with a HAN-affiliated PCMH and not enrolled in the HMP HMP beneficiaries enrolled in second generation HMP	Source - MMIS Steward - NCQA	T-tests Regression with propensity score matching Interrupted time series
48		Diabetes – percentage of members who had HbA1c testing	HMP members with diabetes	In accordance with HEDIS specifications	SoonerCare Choice members with COPD or asthma not enrolled with a HAN-affiliated PCMH and not enrolled in the HMP HMP beneficiaries enrolled in second generation HMP	Source - MMIS Steward - NCQA	T-tests Regression with propensity score matching Interrupted time series

Ref	Research Question	Measure	Population	Numerator/ Denominator	Comparison Group	Data Source & Measure Steward	Analytic Methods
49		Diabetes - Percentage of members who received medical attention for nephropathy	HMP members with diabetes	In accordance with HEDIS specifications	SoonerCare Choice members with COPD or asthma not enrolled with a HAN-affiliated PCMH and not enrolled in the HMP HMP beneficiaries enrolled in second generation HMP	Source - MMIS Steward - NCQA	T-tests Regression with propensity score matching Interrupted time series
50		Diabetes - Percentage of members prescribed ACE/ARB therapy	HMP members with diabetes	In accordance with HEDIS specifications	SoonerCare Choice members with COPD or asthma not enrolled with a HAN-affiliated PCMH and not enrolled in the HMP HMP beneficiaries enrolled in second generation HMP	Source - MMIS Steward - NCQA	T-tests Regression with propensity score matching Interrupted time series
51		Diabetes – Diabetes short-term complications admission rate	HMP members with diabetes	In accordance with AHRQ specifications	SoonerCare Choice members with COPD or asthma not enrolled with a HAN-affiliated PCMH and not enrolled in the HMP HMP beneficiaries enrolled in second generation HMP	Source - MMIS Steward - AHRQ	T-tests Regression with propensity score matching Interrupted time series

Ref	Research Question	Measure	Population	Numerator/ Denominator	Comparison Group	Data Source & Measure Steward	Analytic Methods
52		Hypertension – Percentage of members who had LDL-C test	HMP members with hypertension	In accordance with HEDIS specifications	SoonerCare Choice members with COPD or asthma not enrolled with a HAN-affiliated PCMH and not enrolled in the HMP HMP beneficiaries enrolled in second generation HMP	Source - MMIS Steward - NCQA	T-tests Regression with propensity score matching Interrupted time series
53		Hypertension – Percentage of members prescribed ACE/ARB therapy	HMP members with hypertension	In accordance with HEDIS specifications	SoonerCare Choice members with COPD or asthma not enrolled with a HAN-affiliated PCMH and not enrolled in the HMP HMP beneficiaries enrolled in second generation HMP	Source - MMIS Steward - NCQA	T-tests Regression with propensity score matching Interrupted time series
54		Hypertension – Percentage of members prescribed diuretics	HMP members with hypertension	In accordance with HEDIS specifications	SoonerCare Choice members with COPD or asthma not enrolled with a HAN-affiliated PCMH and not enrolled in the HMP HMP beneficiaries enrolled in second generation HMP	Source - MMIS Steward - NCQA	T-tests Regression with propensity score matching Interrupted time series

Ref	Research Question	Measure	Population	Numerator/ Denominator	Comparison Group	Data Source & Measure Steward	Analytic Methods
55		Hypertension – Percentage of members prescribed ACE/ARB therapy or diuretics with annual medication monitoring	HMP members with hypertension	In accordance with HEDIS specifications	SoonerCare Choice members with COPD or asthma not enrolled with a HAN-affiliated PCMH and not enrolled in the HMP HMP beneficiaries enrolled in second generation HMP	Source - MMIS Steward - NCQA	T-tests Regression with propensity score matching Interrupted time series
56		Mental Health – Follow-up after hospitalization for mental illness – 7 days	HMP members hospitalized for mental illness	In accordance with HEDIS specifications	SoonerCare Choice members with COPD or asthma not enrolled with a HAN-affiliated PCMH and not enrolled in the HMP HMP beneficiaries enrolled in second generation HMP	Source - MMIS Steward - NCQA	T-tests Regression with propensity score matching Interrupted time series
57		Mental Health – Follow-up after hospitalization for mental illness – 30 days	HMP members hospitalized for mental illness	In accordance with HEDIS specifications	SoonerCare Choice members with COPD or asthma not enrolled with a HAN-affiliated PCMH and not enrolled in the HMP HMP beneficiaries enrolled in second generation HMP	Source - MMIS Steward - NCQA	T-tests Regression with propensity score matching Interrupted time series

Ref	Research Question	Measure	Population	Numerator/ Denominator	Comparison Group	Data Source & Measure Steward	Analytic Methods
58		Opioid – Use of opioids at high dosage in persons without cancer	HMP members prescribed opioids (through Medicaid)	In accordance with PQA specifications	SoonerCare Choice members with COPD or asthma not enrolled with a HAN-affiliated PCMH and not enrolled in the HMP HMP beneficiaries enrolled in second generation HMP	Source - MMIS Steward - PQA	T-tests Regression with propensity score matching Interrupted time series
59		Opioid – Concurrent use of opioids and benzodiazepines	HMP members prescribed opioids (through Medicaid)	In accordance with PQA specifications	SoonerCare Choice members with COPD or asthma not enrolled with a HAN-affiliated PCMH and not enrolled in the HMP HMP beneficiaries enrolled in second generation HMP	Source - MMIS Steward - PQA	T-tests Regression with propensity score matching Interrupted time series
60		SDOH – Member awareness of SDOH available assistance	Randomly selected sample of HMP members enrolled in HMP	Numerators – Members reporting awareness and use of SDOH assistance available through HMP Denominator – All respondents	N/A	Source – SoonerCare Independent Evaluator survey data file Steward - SoonerCare Independent Evaluator for survey data	Descriptive statistics

Ref	Research Question	Measure	Population	Numerator/ Denominator	Comparison Group	Data Source & Measure Steward	Analytic Methods
61		SDOH – Member satisfaction with SDOH available assistance	Randomly selected sample of HMP members enrolled in HMP	Numerator – Members reporting satisfaction with SDOH assistance Denominator – All respondents reporting use of assistance	N/A	Source – SoonerCare Independent Evaluator survey data file Steward - SoonerCare Independent Evaluator for survey data	Descriptive statistics
62	Will beneficiaries using HMP services have higher satisfaction compared to beneficiaries not receiving HMP services (as measured through CAHPS survey questions)?	Rating of health care – children and adults	Adult HMP members Child HMP members	In accordance with CAHPS specifications	SoonerCare Choice adult members not enrolled with a HAN-affiliated PCMH SoonerCare Choice child members not enrolled with a HAN-affiliated PCMH	Source – SoonerCare Independent Evaluator survey data file Steward – CAHPS	T-tests Regression with propensity score matching
63		Getting needed care – children and adults	Adult HMP members Child HMP members	In accordance with CAHPS specifications	SoonerCare Choice adult members not enrolled with a HAN-affiliated PCMH SoonerCare Choice child members not enrolled with a HAN-affiliated PCMH	Source – SoonerCare Independent Evaluator survey data file Steward – CAHPS	T-tests Regression with propensity score matching

Ref	Research Question	Measure	Population	Numerator/ Denominator	Comparison Group	Data Source & Measure Steward	Analytic Methods
64		Rating of health plan – children and adults	Adult HMP members Child HMP members	In accordance with CAHPS specifications	SoonerCare Choice adult members not enrolled with a HAN-affiliated PCMH SoonerCare Choice child members not enrolled with a HAN-affiliated PCMH	Source - SoonerCare Independent Evaluator Steward – CAHPS	T-tests Regression with propensity score matching
65		Rating of personal doctor – children and adults	Adult HMP members Child HMP members	In accordance with CAHPS specifications	SoonerCare Choice adult members not enrolled with a HAN-affiliated PCMH SoonerCare Choice child members not enrolled with a HAN-affiliated PCMH	Source - SoonerCare Independent Evaluator data file Steward – CAHPS	T-tests Regression with propensity score matching
Evaluation of Health Management Program – Cost Effectiveness							
66	Will beneficiaries using HMP services have fewer ER visits as compared to beneficiaries not receiving HMP services (as measured through claims data)?	ER utilization – HMP members versus comparison group	SoonerCare HMP members (minimum of three months)	Numerator – ED visits Denominator – total participants	SoonerCare Choice members not enrolled with a HAN-affiliated PCMH and not enrolled in the HMP HMP beneficiaries enrolled in second generation HMP	Source – MMIS Steward – Independent Evaluator	T-tests Regression with propensity score matching Interrupted time series

Ref	Research Question	Measure	Population	Numerator/ Denominator	Comparison Group	Data Source & Measure Steward	Analytic Methods
67	Will beneficiaries using HMP services have fewer (admissions and) readmissions as compared to beneficiaries not receiving HMP services (as measured through claims data)?	Hospital admissions – HMP members versus comparison group Hospital readmissions (30 days) – HMP members versus comparison group	SoonerCare HMP members (minimum of three months) SoonerCare HMP members with at least one hospitalization	Numerator – Admissions Denominator – total participants Numerator – Unique members with readmissions within 30 days following an admission Denominator- total members with admissions in 30-day period	SoonerCare Choice members not enrolled with a HAN-affiliated PCMH and not enrolled in the HMP HMP beneficiaries enrolled in second generation HMP	Source – MMIS Steward – SoonerCare Independent Evaluator	T-tests Regression with propensity score matching Interrupted time series
68	Will total and per member per month expenditures for members enrolled in HMP be lower than would have occurred absent their participation?	PMPM costs – HMP members versus comparison group	SoonerCare HMP members (minimum of three months)	Numerator – total expenditures (paid claims) and program administrative costs (vendor payments and agency direct/overhead expenses) Denominator – member months	SoonerCare Choice members not enrolled with a HAN-affiliated PCMH and not enrolled in the HMP HMP beneficiaries enrolled in second generation HMP	Source – MMIS Steward – SoonerCare Independent Evaluator	T-tests Regression with propensity score matching Interrupted time series

Ref	Research Question	Measure	Population	Numerator/ Denominator	Comparison Group	Data Source & Measure Steward	Analytic Methods
Evaluation of Insure Oklahoma – Access to Care							
69	Will the evaluation support the hypothesis that Insure Oklahoma is improving access to care for low-income Oklahomans not eligible for Medicaid?	The number of individuals enrolled in Insure Oklahoma	Insure Oklahoma beneficiaries, both ESI and Individual Plan	N/A	N/A	Source – OHCA eligibility system Steward – OHCA	Descriptive statistics
70		The number of employers participating in the ESI portion of Insure Oklahoma	Employers participating in the ESI portion of the program	N/A	N/A	Source – Insure Oklahoma Steward – OHCA	Descriptive statistics
71		The number of primary care providers participating in the Individual Plan portion of Insure Oklahoma	Primary care providers (PCMH providers) participating in the Individual Plan network	N/A	N/A	Source – MMIS Steward – OHCA	Descriptive statistics

Ref	Research Question	Measure	Population	Numerator/ Denominator	Comparison Group	Data Source & Measure Steward	Analytic Methods
Evaluation of Retroactive Eligibility – Access to Care							
72	Do eligible people subject to retroactive eligibility waivers enroll in Medicaid at the same rate as other eligible people who have access to retroactive eligibility?	The number of individuals enrolled in Medicaid by eligibility group, by quarter	Beneficiaries subject to retroactive eligibility waiver Beneficiaries newly covered by retroactive eligibility (non-disabled children under age 19 and pregnant women)	N/A	Non-pregnant adults covered by retroactive eligibility waiver Beneficiaries previously subject to retroactive eligibility waiver	Source – OHCA eligibility system Steward - OHCA	Regression with propensity score matching Interrupted time series
73		The number of new enrollees in Medicaid by eligibility group, by quarter	Beneficiaries subject to retroactive eligibility waiver Beneficiaries newly covered by retroactive eligibility (non-disabled children under age 19 and pregnant women)	N/A	Non-pregnant adults covered by retroactive eligibility waiver Beneficiaries previously subject to retroactive eligibility waiver	Source – OHCA eligibility system Steward - OHCA	Regression with propensity score matching Interrupted time series

Ref	Research Question	Measure	Population	Numerator/ Denominator	Comparison Group	Data Source & Measure Steward	Analytic Methods
74	What is the likelihood of enrollment continuity for those subject to a retroactive eligibility waiver compared to other Medicaid beneficiaries who have access to retroactive eligibility?	Probability of completing the renewal (recertification) process, by eligibility group	Beneficiaries subject to retroactive eligibility waiver Beneficiaries newly covered by retroactive eligibility (non-disabled children under age 19 and pregnant women)	N/A	Non-pregnant adults covered by retroactive eligibility waiver Beneficiaries previously subject to retroactive eligibility waiver	Source – OHCA eligibility system Steward - OHCA	Regression with propensity score matching Interrupted time series
75		Probability of remaining enrolled in Medicaid for 12-, 18-24- consecutive months, by eligibility group	Beneficiaries subject to retroactive eligibility waiver Beneficiaries newly covered by retroactive eligibility (non-disabled children under age 19 and pregnant women)	N/A	Non-pregnant adults covered by retroactive eligibility waiver Beneficiaries previously subject to retroactive eligibility waiver	Source – OHCA eligibility system Steward - OHCA	Regression with propensity score matching Interrupted time series

Ref	Research Question	Measure	Population	Numerator/ Denominator	Comparison Group	Data Source & Measure Steward	Analytic Methods
76		Number of months with Medicaid coverage (average tenure) (1-12)	Beneficiaries subject to retroactive eligibility waiver Beneficiaries newly covered by retroactive eligibility (non-disabled children under age 19 and pregnant women)	N/A	Non-pregnant adults covered by retroactive eligibility waiver Beneficiaries previously subject to retroactive eligibility waiver	Source – OHCA eligibility system Steward - OHCA	Regression with propensity score matching Interrupted time series
77	Do beneficiaries subject to retroactive eligibility waivers who disenroll from Medicaid have shorter enrollment gaps than other beneficiaries who have access to retroactive eligibility?	Probability of re-enrolling in Medicaid after a gap in coverage of six months	Beneficiaries subject to retroactive eligibility waiver Beneficiaries newly covered by retroactive eligibility (non-disabled children under age 19 and pregnant women)	N/A	Non-pregnant adults covered by retroactive eligibility waiver Beneficiaries previously subject to retroactive eligibility waiver	Source – OHCA eligibility system Steward - OHCA	Regression with propensity score matching Interrupted time series

Ref	Research Question	Measure	Population	Numerator/ Denominator	Comparison Group	Data Source & Measure Steward	Analytic Methods
78		Number of months without Medicaid coverage, up to six months	Beneficiaries subject to retroactive eligibility waiver Beneficiaries newly covered by retroactive eligibility (non-disabled children under age 19 and pregnant women)	N/A	Non-pregnant adults covered by retroactive eligibility waiver Beneficiaries previously subject to retroactive eligibility waiver	Source – OHCA eligibility system Steward - OHCA	Regression with propensity score matching Interrupted time series
Evaluation of Retroactive Eligibility – Quality of Care							
79	Do newly-enrolled beneficiaries subject to a waiver of retroactive eligibility have higher self-assessed health status than other newly enrolled beneficiaries who have access to retroactive eligibility?	Beneficiary self-reported health status; reported prior year utilization	Beneficiaries subject to retroactive eligibility waiver	N/A	Non-pregnant adults covered by retroactive eligibility waiver	Source – SoonerCare Independent Evaluator survey data file Steward - SoonerCare Independent Evaluator for survey data	Descriptive regression model (due to lack of baseline data; waiver is ongoing from prior period)

Ref	Research Question	Measure	Population	Numerator/ Denominator	Comparison Group	Data Source & Measure Steward	Analytic Methods
80	Do beneficiaries subject to the retroactive eligibility waiver have better health outcomes than other beneficiaries who have access to retroactive eligibility?	Beneficiary self-reported health status; healthy days	Beneficiaries subject to retroactive eligibility waiver	N/A	Non-pregnant adults covered by retroactive eligibility waiver	Source – SoonerCare Independent Evaluator survey data file Steward - SoonerCare Independent Evaluator for survey data	Regression with propensity score matching
81		Change in physical and mental health status, measured at baseline and at 12, 18 and 24 months	Beneficiaries subject to retroactive eligibility waiver	N/A	Non-pregnant adults covered by retroactive eligibility waiver	Source – SoonerCare Independent Evaluator survey data file Steward - SoonerCare Independent Evaluator for survey data	Regression model of change in self-reported health status among Medicaid beneficiaries initially enrolled and subject to waiver

Evaluation Measures – Additional Considerations

The OHCA has taken into account the additional considerations for evaluation measures outlined in Attachment A of the Special Terms and Conditions. Specifically:

- *Process and Outcome Measures* – The proposed measure list contains assessments of both process (e.g., HEDIS measures) and outcomes (e.g., utilization and cost measures) to evaluate the effectiveness of the demonstration.

- *Qualitative Analysis* – The evaluation will include qualitative findings in the form of beneficiary and PCMH provider survey data. The beneficiary surveys will include CAHPS-validated questions and will be conducted on a randomly-selected sample of the target population(s). PCMH provider surveys also will be conducted on a randomly-selected sample of the target population. Survey questions will be tested on a small number of providers for clarity and reliability before the survey is finalized and fielded on a larger scale.

- *Benchmarking and Comparisons to National and State Standards* – HEDIS, AHRQ, PQA and CAHPS measures will be compared to national Medicaid managed care benchmarks, where available.

- *Use of CMS Core Set Measures* – Core set measures are included in the evaluation.

- *Use of Nationally-Recognized Metrics* – Nationally-recognized metrics are included in the evaluation.

- *Opportunities for Improving Quality of Care, Health Outcomes and Cost Effectiveness* – The evaluation measure set addresses quality, outcomes and cost effectiveness, consistent with demonstration goals and areas identified for improvement through the OHCA's Quality Improvement Program and CMS scorecard data.

5. Data Sources

The evaluation will include primary data collection by the Independent Evaluator in the form of targeted beneficiary and provider surveys. CAHPS-validated questions will be used for targeted beneficiary surveys, where applicable. Draft survey instruments will be shared with CMS for approval prior to use.

Beneficiary and provider surveys will be conducted by telephone, although providers will be given the option of completing and returning hard copies of the surveys. The OHCA's Independent Evaluator has conducted beneficiary and provider surveys for over a decade using this methodology and has attained high response rates (in excess of 50 percent) with

both survey groups. The high response rates have been achieved by conducting surveys both during and after business hours and on weekends. Beneficiaries and providers also are given the option of calling an 800-number to complete a survey at a time of their choosing.

Targeted beneficiary surveys for HAN and HMP members receiving care management will be scheduled using the engagement date as the anchor point, with surveys occurring six months post-engagement.

Beneficiary surveys for evaluation of the retroactive eligibility waiver will be scheduled to occur at time of enrollment and at 12-, 18-, and 24-months post-enrollment, as applicable.

Provider surveys will be conducted on a rolling basis throughout the year.

6. Analytic Methods

Statistical Tests

Exhibit 5 presents the statistical tests to be undertaken for each measure.

Both t-tests and regression models with propensity score matching will be used for evaluating care managed and comparison group populations.

To assess change over time, the regression analysis will use Poisson or negative binomial regression models for the utilization measures, generalized linear models for the cost measures, and logistic regression for the quality measures. Age and gender will be controlled for in the models examining cost and utilization measures. Statistically significant results will be reported based on $p \leq 0.05$. The specific method used will be determined by the evaluator after reviewing the available claims and encounter data.

If t-test and propensity score matching results yield the same findings, the former will be favored for public reporting purposes, to make the results accessible to a broader audience, including state policy makers. (Both sets of data will be shared with CMS.)

In addition, descriptive statistics will be used to describe the basic features of the data along with the measures that do not have a comparison group, measurement across time, or forecasted data (e.g., satisfaction).

Survey Samples

For all non-CAHPS beneficiary surveys, a repeated measures power analysis will be utilized to determine the appropriate sample size. Effect size estimates used in the power calculation will be based on the effect size of prior surveys of a similar nature conducted in the State by the outside evaluator. The attrition rate of the same prior surveys also will be used to estimate the necessary sample size.

Similar methods will be employed to identify the target sample size for provider surveys. However, actual sample size will likely be determined by feasibility.

Isolating Effects of the Demonstration

The SoonerCare Choice program operates under managed care principles, with PCMH providers, Health Access Networks and the Health Management Program performing key managed care functions. SoonerCare Choice members are not co-enrolled in the HAN and HMP, making these programs unique in their composition.

The evaluation is designed to isolate the effects of the HANs and HMP from other activities through creation of a comparison group comprised of members not enrolled in either program (but still enrolled with a non-HAN affiliated PCMH). As presented in Exhibit 5, results for the comparison group will be generated wherever applicable.

The demographics of the HAN and comparison group populations are very similar, reflecting the large number of beneficiaries (200,000 HAN members and 300,000 or more comparison group members). The HANs also are well-represented in both urban and rural portions of the State.

The demographics of the HMP population skew older than the comparison group and include more ABD beneficiaries as a percentage of the total enrollment. The specifications for HEDIS measures should minimize differences in the evaluation populations but other measures will be stratified by age and aid category, as appropriate, to achieve greater accuracy in findings.

Sensitivity Testing

The data analytics used for predictive modeling is expected to provide a standard error along with the forecast values. The Independent Evaluator will explore using the standard error output to perform sensitivity analyses for predictive model measures.

D. METHODOLOGICAL LIMITATIONS

The SoonerCare Choice evaluation has been designed to yield accurate and actionable findings but does have methodological limitations, most of which are inherent to the Section 1115 demonstrations. These include:

- *Lack of true experimental control groups* – The evaluation design includes a comparison group that serves as a reasonable proxy for the two target populations. However, it is not a true experimental control group.

- *Reliance on administrative data* – HEDIS measures account for a significant portion of the evaluation measure set. The OHCA calculates HEDIS rates using administrative data, which limits the accuracy of measures that require a hybrid method to capture fully beneficiary/provider activity. The OHCA has accounted for this limitation by selecting measures that can be calculated accurately using administrative data.

E. SPECIAL METHODOLOGICAL CONSIDERATIONS

The SoonerCare Demonstration meets many of the "special methodological considerations" criteria outlined by CMS in Attachment A. The demonstration is long-standing (2019 is DY 24) and has demonstrated its success in prior evaluations.

However, the Special Terms and Conditions addressed this limitation by focusing on two program components that are changing. The HAN and HMP both are expanding and adopting enhanced care management processes, with the intent of improving access, quality and cost-effectiveness. The evaluation will examine the performance of the programs across all three domains, while treating the remainder of the program as a statewide comparison group.

ATTACHMENTS

1. Independent Evaluator

The OHCA procures evaluation services through a qualification RFP process, in which potential contractors furnish information on their qualifications, along with references through which the OHCA can verify past performance. The OHCA has signed a task order with one of these contractors, The Pacific Health Policy Group (PHPG), to perform the independent evaluation.

The OHCA selected PHPG because the firm has performed multiple independent evaluations of SoonerCare Choice program components over the past decade, including the first and second generation SoonerCare HMP and the Health Access Networks. PHPG's evaluations included use of comparison groups where applicable, consistent with the methodology outlined for the SoonerCare Choice evaluation.

PHPG also serves as the OHCA's contractor for calculation of core measures for reporting to CMS. The firm therefore is knowledgeable about the OHCA MMIS and the process for generating HEDIS rates using OHCA administrative data.

In addition to its evaluation work in Oklahoma, PHPG serves as the Independent Evaluator of the Vermont Global Commitment to Health Section 1115 demonstration and the New Mexico Centennial Care Section 1115 demonstration (the latter under a subcontract to, and in partnership with, Deloitte Consulting).

The OHCA's Policy and Quality Improvement functions will oversee PHPG activities throughout the evaluation, to ensure it is conducted in accordance with the evaluation design. The OHCA will schedule regular meetings with PHPG's Project Manager/Principal Investigator to receive updates on the evaluation and address any issues that arise with respect to data collection and clarity/accuracy of findings.

PHPG has signed a "No Conflict of Interest" declaration covering the evaluation. A scanned image of the document is included on the next page.

PHPG

The Pacific Health Policy Group

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December 18, 2018

Catina Baker
Senior Research Analyst
Oklahoma Health Care Authority
4345 North Lincoln Boulevard
Oklahoma City, Oklahoma 73105

Dear Ms. Baker:

The purpose of this letter is to affirm that the Pacific Health Policy Group (PHPG) has no conflict of interest with respect to serving as a independent evaluator of the SoonerCare Choice Section 1115a waiver program.

Very truly yours,

The Pacific Health Policy Group

Andrew Cohen, Director

2. Evaluation Budget

The proposed evaluation budget is presented below.

EVALUATION AREA/TASK	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
HAN Evaluation					
CAHPS survey					
Analysis of HAN beneficiary responses	$ 7,500	$ 7,500	$ 7,500	$ 7,500	$ 7,500
SDOH beneficiary targeted survey					
Creation of survey instrument	$ 3,000	$ -	$ -	$ -	$ -
Data collection	$ 22,500	$ 22,500	$ 22,500	$ 22,500	$ 22,500
Analysis of HAN SDOH beneficiary responses	$ 7,500	$ 7,500	$ 7,500	$ 7,500	$ 7,500
HAN PCMH targeted survey					
Creation of survey instrument	$ 6,000	$ -	$ -	$ -	$ -
Data collection	$ 30,000	$ 30,000	$ 30,000	$ 30,000	$ 30,000
Analysis of HAN PCMH responses	$ 7,500	$ 7,500	$ 7,500	$ 7,500	$ 7,500
Claims/utilization analysis					
Creation and testing of paid claims extract	$ 30,000	$ 30,000	$ 30,000	$ 30,000	$ 30,000
Creation of eligibility file, stratified by HAN, HMP and other	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000
Analysis of paid claims for HEDIS/utilization measures	$ 105,000	$ 105,000	$ 105,000	$ 105,000	$ 105,000
HMP Evaluation					
HMP beneficiary targeted survey					
Creation of survey instrument	$ 3,000	$ -	$ -	$ -	$ -
Data collection	$ 45,000	$ 45,000	$ 45,000	$ 45,000	$ 45,000
Analysis of HMP beneficiary responses	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000
Claims/utilization analysis					
Creation and testing of paid claims extract	$ 30,000	$ 30,000	$ 30,000	$ 30,000	$ 30,000
Creation of eligibility file, stratified by HAN, HMP and other	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000
Analysis of paid claims for HEDIS/utilization measures	$ 105,000	$ 105,000	$ 105,000	$ 105,000	$ 105,000
Waiver of Retroactive Eligibility Evaluation					
Creation of monthly eligibility file extracts	$ 9,000	$ 9,000	$ 9,000	$ 9,000	$ 9,000
Analysis of eligibility measures	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000
Evaluation Reports					
Annual/Interim Reports (Interim in Year 4, in lieu of Annual)	$ -	$ 37,500	$ 37,500	$ 37,500	$ 52,500
Final Summative Report (included in Year 5)	$ -	$ -	$ -	$ -	$ -
TOTAL	**$ 471,000**	**$ 496,500**	**$ 496,500**	**$ 496,500**	**$ 511,500**

3. Timeline and Major Milestones (Calendar Years)

ACTIVITY/MILESTONE	2019 (DY 24)				2020 (DY 25)				2021 (DY 26)				2022 (DY 27)				2023 (DY 28)				2024				2025			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Health Access Network Evaluation																												
Development of targeted surveys (for CMS review)																												
Targeted survey data collection																												
CAHPS survey data collection																												
Survey data analysis																												
Paid claims data collection and prep for non-HEDIS measures																												
Paid claims analysis - non-HEDIS measures																												
Paid claims data collection and prep for HEDIS measures																												
Paid claims analysis - HEDIS measures																												
Health Management Program Evaluation																												
Development of targeted surveys (for CMS review)																												
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Paid claims analysis - non-HEDIS measures																												
Paid claims data collection and prep for HEDIS measures																												
Paid claims analysis - HEDIS measures																												
Retroactive Eligibility Waiver Evaluation																												
Collection and prep of eligibility data																												
Eligibility data analysis																												
Reporting																												
Submission of draft semi-annual reports for CMS review																												
Submission of draft annual reports for CMS review																												
Submission of draft interim report for CMS review																												
Submission of draft summative report for CMS review																												