State of Oklahoma

State Innovation Model Design Grant

Oklahoma State Health System Innovation Plan

Submitted to CMS on March 31, 2016

Table of Contents

Executive Summary ... 3
A. Introduction ... 24
B. Description of State Healthcare Environment ... 26
C. Report on Stakeholder Engagement and Design Process Deliberations ... 70
D. Health System Design and Performance Objectives ... 101
E. Value-Based Payment and/or Service Delivery Model ... 111
F. Plan for Healthcare Delivery System Transformation ... 145
G. Plan for Improving Population Health ... 159
H. Health Information Technology Plan ... 175
I. Workforce Development Strategy ... 201
J. Financial Analysis ... 210
K. Monitoring and Evaluation Plan ... 218
L. Operational and Sustainability Plan ... 226

Executive Summary

If Oklahoma is to achieve its shared goals of health and prosperity for all citizens, its healthcare system must transform and embrace the shift towards value-based care delivery. The goal of healthcare transformation is the "Triple Aim" - the improvement of health outcomes and quality of care, while simultaneously reducing costs.

Figure A.1: The Triple Aim

The State Innovation Model (SIM) program provides a robust framework for achieving the Triple Aim by driving the adoption of value-based payment and delivery system models. Value-based models are those that expressly link provider reimbursement with improved quality of care and health outcomes. This linkage helps to ensure high-quality, patient-centered care by incentivizing providers to adhere to clinical best practices and to help their patients to navigate the complex healthcare system through enhanced coordination with other providers. As part of the broader effort to reform the healthcare system, the Governor adopted a goal of having 80 percent of all state-based healthcare insurance payments made under a value-based purchasing model by 2020.

To achieve this 80 percent target, the SIM team proposes implementing the Oklahoma Model, a value-based delivery system approach which it developed throughout the course of the SIM initiative. The Oklahoma Model includes three distinct elements:

- The creation of Regional Care Organizations (RCOs) for state-purchased healthcare, which includes the Medicaid program and eligible public employees and their dependents who purchase healthcare from the state;
- Statewide adoption of multi-payer quality measures; and
- Multi-payer "episodes of care" payments.

The Oklahoma Model is a state-based approach to healthcare transformation that accelerates the system-wide shift towards value-based care by moving all state-purchased healthcare into such a model. Through the RCOs, Oklahoma can leverage state purchasing power to drive system-level changes that will influence the way healthcare is delivered to all Oklahomans. The Oklahoma Model also encourages multi-payer adoption of a consistent set of quality measures and reimbursement strategies to advance statewide transformation in a coherent manner across the healthcare system.

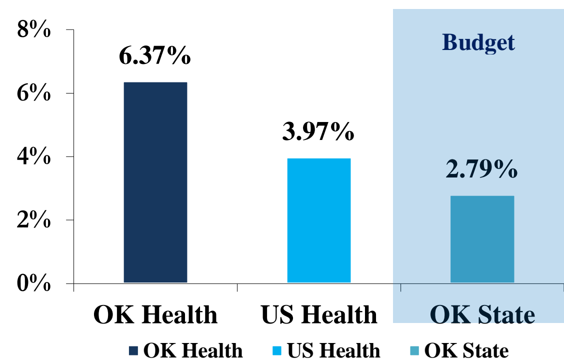
The State Health System Innovation Plan (SHSIP) describes how the Oklahoma Model will achieve the Triple Aim and details the framework necessary to support it. The SIM team developed the SHSIP over the course of a year-long process that incorporated significant stakeholder collaboration, technical assistance, and consultant services. While the SHSIP provides a high-level plan for achieving the goals and objectives of Oklahoma healthcare transformation, it is the beginning, not the end, of the process. Healthcare system stakeholders and policy makers must remain involved and engaged to continue to execute the plan laid out in the SHSIP, with the ultimate goal of improving the lives of all Oklahomans through the achievement of the Triple Aim.

THE CASE FOR CHANGE

Oklahoma has very poor health outcomes, ranking 50th in the nation by the Commonwealth Fund Scorecard on State Health System Performance in 2015. A major component of this ranking is the limited access to primary care and high incidences of hospitalizations for conditions that could have been treated in primary care or outpatient settings, but the drivers for health outcomes in the state go beyond just shortcomings in its healthcare delivery system. These outcomes result from a complex interplay of challenges in the healthcare environment, unaddressed social determinants of health, and poor lifestyle behaviors from many of its residents. Leading healthcare environment challenges include provider shortages, medically underserved regions, and problems accessing care. Housing, food insecurity, and a lack of transportation are foremost among unaddressed social determinants, and impactful behavioral aspects include tobacco use, poor nutrition, and a lack of physical activity, among others.

Poor health outcomes are not the only health-related issue facing the Oklahoma. Low system performance also contributes to excessive and unsustainable costs to taxpayers, businesses, and individuals. State health spending has increased twice as fast as the state budget and one and a half times as fast as the US total health care expenditures (see Figure A.2). Recent state revenue failures put further strain on the ability of the state to pay for healthcare. This situation is unsustainable. If Oklahoma is to bend the cost growth of state-purchased healthcare expenditures, it must address the factors that drive cost, including reducing the rate of potentially preventable hospitalizations and improving the management of chronic conditions.

Figure A.2: Health Spending Average Annual Percentage Increase, 2005-15



Given the complexity of the issues facing healthcare in Oklahomans, improvement efforts will require a comprehensive approach. Many efforts and initiatives are underway across the state to improve Oklahoma's health outcomes and to reduce overall healthcare costs. One of the largest statewide efforts has been the Oklahoma Health Improvement Plan (OHIP). The OHIP Coalition is a public and private partnership of stakeholders that convene on a regular basis to develop a comprehensive state health improvement plan and oversee the state's progress toward improving health outcomes and healthcare system goals. These strategies also include address the social determinants of health to ensure planning efforts take a holistic view of improving health outcomes.

The OHIP Coalition focuses on strategic health topics and priority populations for rapid improvement within flagship issues. The Oklahoma SIM project team adopted many of those OHIP flagship issues and expanded those areas to include other highly prevalent and high-cost conditions: obesity, hypertension, diabetes, tobacco usage, and behavioral health (which includes mental health and substance abuse). Extensive research and stakeholder engagement was conducted around these SIM flagship issues to create a framework for analysis and understanding of the relative costs and impacts these issues have on Oklahoma's health outcomes and healthcare system. This framework was then used, in part, to help the Oklahoma SIM project team create the Oklahoma Model for its SIM proposal.

THE CURRENT STATE OF OKLAHOMA HEALTHCARE

Oklahoma faces serious health challenges for its residents. Oklahoma is burdened by an increasing prevalence of chronic diseases. The high rate of diabetes, hypertension, obesity, and tobacco use correlates to Oklahoma's high mortality rate, the fourth highest in the nation and 23 percent higher than the national average. Mental illness and substance abuse are also more prominent in Oklahoma than in most other states. Often chronic conditions are comorbid and create complex health needs for patients that strain the healthcare system's ability to manage care in an effective manner. Listed below are the SIM flagship issues, their prevalence rates, and key considerations as to how they impact health outcomes.

SIM Flagship Issue	Prevalance	Considerations
Diabetes	12%	The state has the eighth highest rate in the nation. Risk of heart disease and stroke increase for individuals with diabetes. Lifestyle factors, such as physical inactivity, poor diet, obesity, and tobacco use, can exacerbate both the symptoms of diabetes and the risk of acquiring another chronic condition. However, many complications from diabetes can be reduced through proper prevention, timely diagnosis, and disease management programs.
Hypertension	37.5%	High blood pressure increases the risk for heart disease and stroke and can typically be controlled through medications, medical care, and lifestyle management. Uncontrolled hypertension can result in serious health consequences and preventable hospitalizations.
Tobacco Use	21.1%	Smoking and tobacco use increases one's risk for developing diabetes, hypertension, and cancer. Tobacco use alone is responsible for the death of 7,500 Oklahomans each year.[1] Oklahoma is consistently among the highest states for tobacco usage, but focused efforts to reduce and prevent tobacco use have resulted in a 19 percent decrease in the past four years and an all-time low of adult smokers.
Obesity	33%	Oklahoma has one of the top ten highest rates of adult obesity in the nation. Poor nutrition and physical inactivity can be contributing factors to obesity, which can lead to many chronic conditions like hypertension, heart disease, and diabetes. Many factors are also related to the social determinants of health, such as access to healthy foods, safe places to exercise, transportation, and health literacy and education about proper nutrition and exercise.
Mental Health ***&*** ***Substance Abuse***	21.9%* 12%	Oklahoma is ranked 40th nationally for mental illness prevalence among adults.[2] Additionally, data from the 2014 State of the State Health Report ranked Oklahoma 39th in the average number of poor mental health days each month reported by adults. Mental illness and substance abuse has skyrocketed in the state, with an estimated 985,000 Oklahomans in need of either mental health or substance abuse treatment service

* In 2014, 21.9 percent of adults in the state reported having a mental health issue.

Preventable diseases and unmanaged chronic illnesses stress the healthcare system and waste resources because patients often receive treatment at higher cost and higher acuity settings, such as hospitals or emergency departments, rather than seeking primary or preventive care. This impairs the overall performance of the health system and makes care delivery and treatment reactionary in nature rather than preventive.

Reducing preventable hospitalizations, non-emergent emergency department (ED) utilization, and hospital readmissions are key components to improving state health system performance and overall improve population health. Listed below are some of the key indicators of health system performance in Oklahoma.

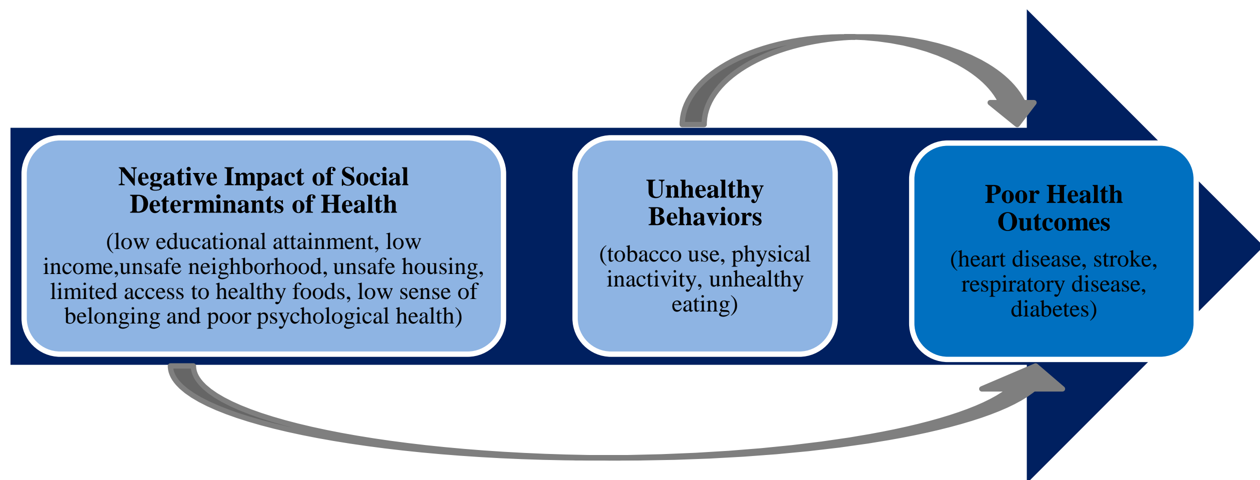
Health System Performance Indicator	Key Characteristic	Considerations
Preventable Hospitalizations	1836.2 preventable hospitalizations per 100,000 hospitalizations[3]	Preventable hospitalizations are defined as stays that might have been avoided with timely and effective outpatient care and appropriate self-management. The most common diseases that were associated with preventable hospitalizations included the SIM flagship issues, such as diabetes and hypertension. Research indicates that, with minimal reductions in preventable hospitalizations, significant avoidable costs are mitigated.
Non-Emergent Emergency Department Utilization	In 2014, the total ED cost for the Medicaid population in Oklahoma was over $151 million, with an average cost of $264 per visit and each member averaging two ED visits per year.[4]	Non-emergent care is generally not considered appropriate to be provided in an emergency setting. ED usage is higher for individuals with serious chronic diseases, like diabetes, hypertension, or COPD, and for those that lack access to primary care. These diagnoses demonstrate that EDs are being used for health problems that could be treated in a primary care setting, resulting in unnecessary costs.
Readmissions	Percent of Adult Discharges Resulting in Readmissions in 2012: • Medicare: 16.7% • Medicaid: 13.1% • Uninsured: 10.9 • Commercial: 9.3%	A readmission is defined as a subsequent admission to a hospital within 30 days of discharge. Readmissions potentially indicate poor care, poor care coordination, and/or incomplete treatment. An important driver of readmissions is a co-morbidity of chronic disease and mental illness.

A confluence of factors results in poorer health outcomes, higher rates of disease, and overall higher total deaths for Oklahoma as compared to the rest of the nation. These factors include the social determinants of health, such as education level, income, and family, social, and community resources and supports. The

social determinants of health are one of the greatest indicators for health outcomes and behaviors. Social circumstances alone account for 15 percent of premature deaths and significantly influence behaviors.[5]

Many Oklahomans lack basic needs such as an adequate income, housing, and nutrition, which not only affect overall health but health behaviors as well. Individuals who are negatively impacted by social determinants of health such as a lack of food, housing, and economic constraints are more likely to engage in unhealthy behaviors, such as the use of tobacco, alcohol, and other drugs. To improve health outcomes, states must begin to look more closely at the social determinants of health and develop preventive health strategies that address both clinical and social needs of patients.

Figure A.3: Relationship between Social Determinants, Health Behaviors, and Health Outcomes



The Oklahoma Model targets the SIM flagship issues since they have the biggest impact on overall health and healthcare costs. The statewide prevention strategies contained in the Oklahoma Model address those factors that lead to high rates of morbidity, including system performance and the social determinants of health. Healthcare transformation can create a sustainable health model capable of delivering optimal care through the prevention of disease, care coordination, and ensuring access to quality care for all Oklahomans.

The SIM conducted financial analysis to assess the relative costs of the SIM flagship issues within Oklahoma's commercial markets and state-purchased healthcare, focusing on the most prevalent and expensive chronic conditions. Figure A.3 illustrates the increased costs that those individuals with chronic conditions incur to the system, parsed by payer.

Condition	Total Cost of Care (PMPM)			
	Commercial	Medicare	EGID	Medicaid
General/Composite	$416	$822	$422	$395
Diabetes	$1,452	$1,291	$929	$1,610
Hypertension	$1,178	$1,044	$740	$1,510
Behavioral Health	$1,302	$1,841	$724	$880
Adult Tobacco*	$1,435	$1,751	$486	$454

*Due to inadequate coding information EGID and Medicaid are based on a generalized 115% from published research, which is likely an underestimate

This table indicates that chronic conditions dramatically increase health expenditures when compared to the general population. As chronic conditions often extend beyond the walls of the current fee for service healthcare system, addressing them adequately in a way that reduces costs will require a more comprehensive approach.

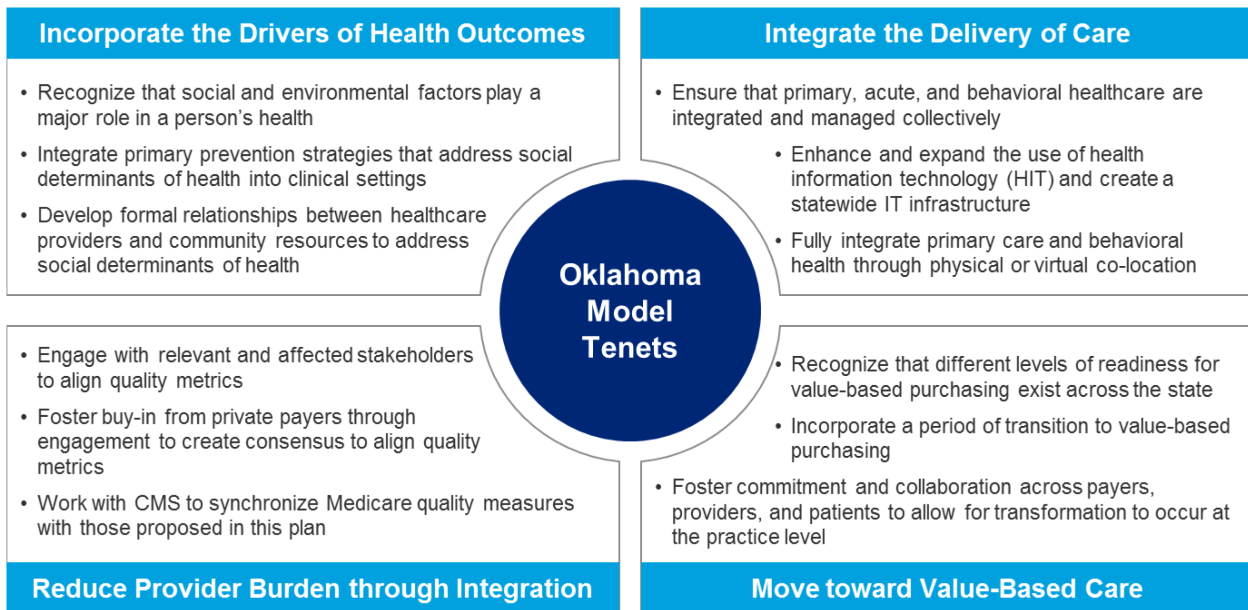
THE FUTURE VISION FOR OKLAHOMA HEALTHCARE – A VALUE-BASED MODEL

To remedy this state of affairs, Oklahoma proposes to transition its current health care system to the RCO model. The flexibility of the RCO approach uniquely positions it to address the complexity of the factors contributing to negative health outcomes in the state. Rather than downplaying patient life circumstances, RCOs emphasize the broader environmental, socio-demographic, and behavioral factors affecting health outcomes. Their flexibility enables them to deliver non-medical services alongside medical benefits, removing the barriers to effective care and ameliorating the root causes of many conditions. This perspective will be critical to developing innovative and personalized solutions to the obstacles that Oklahomans face to leading healthier lives.

Model Tenets

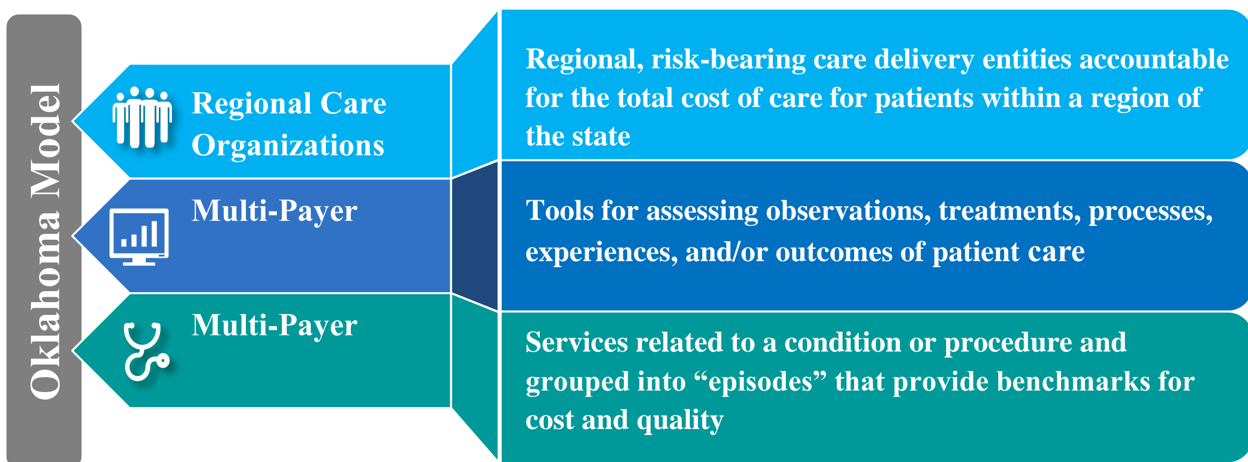
Given the ongoing health challenges of Oklahoma and the regional, environmental, and cultural differences of its population and healthcare system, it was necessary for the Oklahoma SIM project team to highlight a shared set of values and ideas stakeholders believed represented an ideal healthcare system. Feedback and discussions with a variety of diverse stakeholders resulted in a consensus as to the tenets that the model design should incorporate. These tenets are depicted in Figure A.4.

Figure A.4: Oklahoma Healthcare System Transformation Model Design Tenets



Using these tenets as guidelines, the state used a multi-pronged approach to create a model for moving to a value-based, transformed healthcare system that includes the creation of Regional Care Organizations (RCO) for state-purchased healthcare, statewide adoption of multi-payer quality metrics, and multi-payer "episodes of care" payments. These tenets are exemplified throughout the Oklahoma Model and highlight the commitment of the SIM team to incorporating stakeholder feedback into the final design.

Figure A.5: The Oklahoma Model



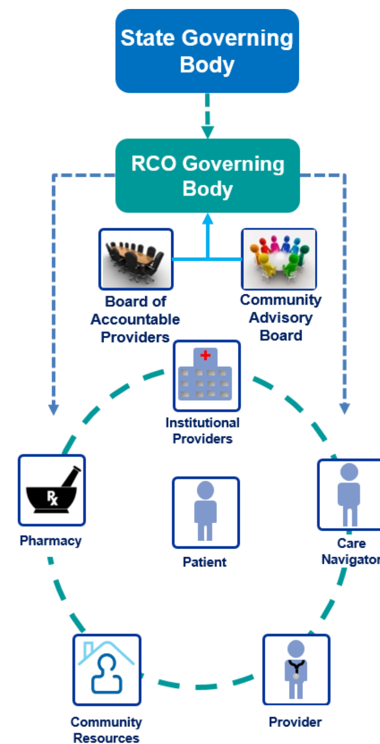
Regional Care Organizations (RCOs)

The first component of the model is the creation of Regional Care Organizations (RCO) for all state-purchased health care. State-purchased healthcare includes both Medicaid beneficiaries and eligible public employees who purchase healthcare through the state, which includes individuals employed by state agencies, school districts, other governmental units of the State of Oklahoma, and their dependents.

Oklahoma is proposing to attribute a majority its Medicaid beneficiaries and eligible public employees and their covered dependents to the RCO model, comprising a quarter of Oklahoma's population.

An RCO is a regionally based care delivery organization that operates under a comprehensive risk contract with the state. Like managed care organizations (MCOs), RCOs bear full financial risk for the cost of care of the assigned population and receive a fully capitated payment for attributed members within their geographic region. Improving upon the MCO model, RCOs must develop a governance structure that reflects the coordination of care delivery and community resources into one integrated model.

Figure A.6: RCO Model



This model design encourages RCOs to address complex factors contributing to the poor health outcomes and high healthcare costs, including environmental, socio-demographic, and behavioral factors. This is accomplished, in part, through formal partnerships with social services and community groups. RCOs may also spend funds on services that are traditionally not "medically necessary," such as housing specialists or mold remediation.

The state will utilize a global budget to pay RCOs for the complete cost of healthcare for all members within their geographic region. The global budget for the RCO will consist of a risk adjusted, capitated per member per month (PMPM) payment for covered services. The PMPM growth rate will be capped by the state to ensure cost targets are met and growth is restrained.

Each RCO must meet standardized quality and cost measures so the state can evaluate their performance. The quality measures will be aligned with the new Medicare payment and delivery reform and Alternative Payment Models (APM) adopted by commercial carriers to reduce provider burden and engender consensus from providers and commercial carriers. Many RCO quality measures will be based on the SIM flagship issues. To incentivize RCO performance on these measures, the state will withhold a percentage of the capitated rate which can be earned back by the RCO upon meeting performance benchmarks and quality measures.

In addition, RCOs must participate in statewide interoperable health information technology (HIT). Interoperable HIT adoption and utilization is critical to helping monitor RCO performance and population health outcomes with a value-based analytics tool.

The RCOs are responsible for creating regional provider networks and implementing value-based alternative payment model (APM) within those networks. The state will establish criteria that RCOs must meet as they implement value-based healthcare delivery, including the following:

- Eighty percent of payments made to providers must be value-based by 2020;
- RCOs must participate with the Multi-Payer Episodes of Care;
- One additional APM (e.g. bundled payments, pay-for-performance, and shared savings and shared risk) must be utilized; and
- APMs must include mechanisms to encourage both cost savings and high quality care.

Outside of these requirements, the decision on how providers within each RCO network are incentivized and held accountable are left largely to the RCOs to determine so that regionally-appropriate, scalable methods to move from volume-based to value-based healthcare delivery system innovations can be aligned with regional readiness and successfully implemented.

RCO Governance and Scope

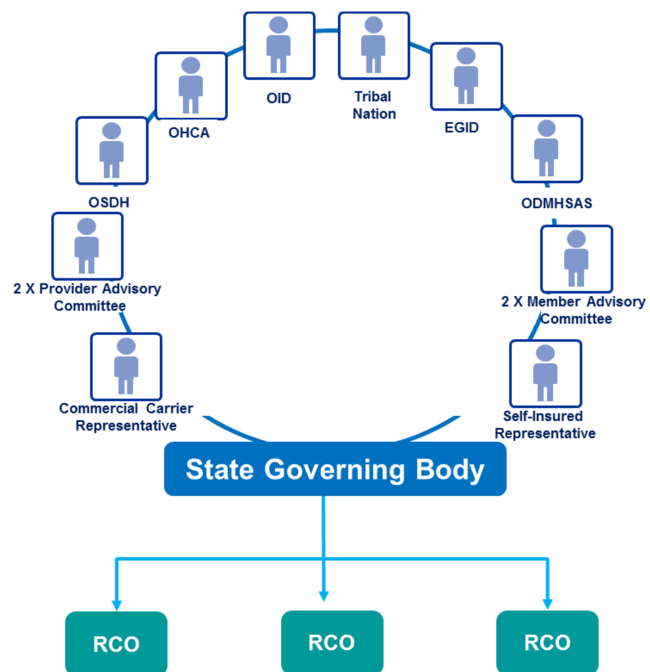
While the state will provide a high degree of oversight of the RCOs, a key characteristic of the Oklahoma Model is flexibility and discretion in the way the RCO organizes to deliver patient-centered care that meet and exceeds outcome targets. Other states that have implemented similar types of models have fostered this by allowing RCOs to develop governance and payment models that match local health needs and account for provider maturity to move towards risk-based care.

The RCO Governing Body is a partnership of those individuals that share in the financial risk of the organization, healthcare providers, community members, and other stakeholders in the health system. The RCOs must also establish two distinct advisory boards, a Board of Accountable Providers and a Community Advisory Board, to advise the RCO Governing Body on evidence-based, locally-tailored practices that promote coordinated care. This governance structure ensures that providers, payers, and patients are committed to achieving the triple aim in a collaborative fashion.

State Oversight of the RCOs: The State Governing Body

Currently, two state agencies are responsible for managing state-purchased healthcare. The Oklahoma Health Care Authority (OHCA) administers and manages healthcare for the Medicaid population through the SoonerCare program; EGID administers and manages healthcare for most public employees and their dependents through self-insured Preferred Provider Organization (PPO) plans, called HealthChoice. State employees may also purchase healthcare through an array of private HMO plans.

Figure A.7: State Governing Body Representatives



Under the Oklahoma Model, Oklahoma will create the State Governing Body to provide oversight of state-purchased healthcare to ensure regulatory and quality compliance. It will be responsible for overseeing the care provided by the RCOs for eligible attributed beneficiaries. The State Governing Body will have a formal charter and governance that will delineate its scope and authority, term limits, and rotation of seats to ensure it is operational and has adequate representation to act authoritatively.

Each RCO will be certified by the State Governing Body to demonstrate their experience and capacity to deliver care; manage financial risks; coordinate and integrate the delivery of physical and behavioral health and community supports; and participate in statewide interoperable HIT.

The leadership for this governing body will

consist of representatives from the following state agencies: the Oklahoma Health Care Authority, the Employee Group Insurance Division, the Department of Mental Health and Substance Abuse Services, and the Oklahoma Insurance Department.

The State Governing Body will also have broad stakeholder representation from across the healthcare system. This includes a representative from tribal nations, a representative from a private healthcare payer association, a representative from a self-insured plan association, and two provider and consumer representatives.

Multi-Payer Quality Measures

Multi-payer involvement is an integral component of the Oklahoma Model. All payers will be asked to use common quality measures to help them improve health outcomes and evaluate quality of care for their covered lives. The SIM flagship issues will be used as the basis for many multi-payer quality measures to ensure consistent goals are used across payers.

Alignment across a set of quality measures is a foundational first step toward healthcare transformation, as it sends powerful market signals to providers as to how their performance will be measured for the quality of care they provide, regardless of the health insurance coverage of the patient. Multi-payer alignment of quality measures also prevents an unnecessary workload from being placed on providers due to multiple measure sets required by various payers in Oklahoma. The Oklahoma SIM project has taken the first step of composing an inventory of quality measures and reached an agreement, in principle, to align these measures across the carriers participating in the Oklahoma Model.

Oklahoma Quality Metrics Committee

Operationalizing the multi-payer quality measures will take additional collaboration and guidance. To help lead this effort, an Oklahoma Quality Measure Committee will be created. This committee will be part of the State Governing Body to ensure alignment with the RCO performance measures. It will be responsible for proposing quality measures sets that can be applicable to the RCO and engaging multi-payer alignment.

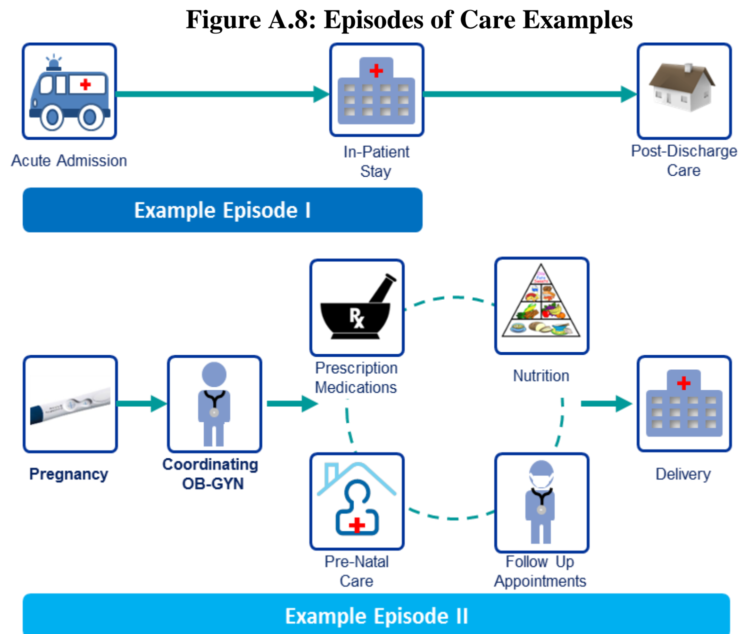
Members of this committee will include multiple provider types from different practice settings and organizations, quality measure experts, HIT reporting specialists, and other relevant stakeholders with the necessary experience and expertise to propose, review, and implement both clinical and population health quality measures.

Multi-Payer Episodes of Care (EOC)

Another important aspect of multi-payer participation in the Oklahoma Model is the implementation of multi-payer Episodes of Care (EOC). Because EOC have modular features that could work in commercial insurance, the Oklahoma SIM project team will work with its Oklahoma SIM participating carriers to have them incorporate EOC within their payment methodologies. The Oklahoma SIM project team also proposes to introduce EOC within state-purchased healthcare to create an onramp to more comprehensive forms of value-based purchasing and move closer to the gubernatorial value-based goal.

EOC is a payment model in which related services that are provided to treat a specific condition over a specific period of time and are grouped into "episodes." The episodes can include acute, chronic, and behavioral health conditions and vary in length depending on the condition. The purpose of EOC as an alternative payment arrangement is to encourage provider collaboration, patient coordination, and service efficiency across various care delivery settings. By establishing clear accountability for both outcomes and the total cost of care for an episode, this model rewards high performing providers and reduces variance in cost and quality.

Figure A.8: Episodes of Care Examples



The model requires that a Principle Accountable Provider (PAP) be designated as the provider responsible for quality outcomes and the total cost of care for a given episode over a given time. Factors for determining an episode of care include agreeing to an episode's time frame and triggering event, the services included within the episode, and situations or conditions that exclude some patients from being included in the episode. Patients who match the episode's criteria will be attributed to the episode, and PAPs will be evaluated on their performance for all patients attributed that episode.

"Acceptable" and "commendable" cost benchmarks will be established for the episode, and quality measures are also used to ensure against the rationing of care. The PAP and all associated providers will be paid on a fee-for services basis and then evaluated retrospectively against those acceptable and commendable benchmarks. PAPs with costs below the commendable level for an episode can share in savings. Conversely, PAPs with costs above the acceptable level receive penalties. To be eligible for any savings, the PAP must also meet the quality measures set out for the episode.

Proposed Multi-Payer Episodes

Using previous research by other states that have implemented EOC, Oklahoma has proposed the following episodes that best align, where possible, with the Oklahoma SIM flagship issues. The Oklahoma SIM project team also considered other factors, such as high cost or high variance services based on available claims data. The state will look to garner support from private payers to adopt the EOC to engender further payment agreement across Oklahoma's insurance market.

Episode of Care Condition	Description
Asthma (Acute)	The purpose of this episode is to cover care for 30 days following an asthma related trigger.
Perinatal	The purpose of this episode is to ensure a healthy pregnancy and follow-up care for mother and baby.
Total Joint Replacement	The purpose of this episode is to cover care 30 days prior to a triggering event – total joint replacement – and 90 days postoperatively.
Chronic Obstructive Pulmonary Disease (COPD)	The purpose of this episode is to cover care for 30 days following a COPD related trigger.
Congestive Heart Failure	The purpose of this episode is to cover care for 30 days following a triggering event – hospitalization for congestive heart failure.

Episodes of Care Task Force

Implementing EOC in Oklahoma will require strategic and collaborative planning to align providers and payers across the delivery system. The state recognizes the need to develop reporting tools and a thorough evaluation process to assure providers they can self-monitor and redirect efforts midstream if they are failing to meet quality measures or cost benchmarks for episodes. By developing these types of tools, the state can engender trust and transparency with stakeholders who will be a part of this model.

Mirroring the work of other states that have implemented EOC, Oklahoma will create an EOC Task Force (Task Force) for each of the episodes proposed in the SHSIP to ensure ongoing stakeholder participation for the episode's design. The Task Force will work collaboratively to institute best practices and

guidelines for developing and implementing the EOC. The Task Force will include stakeholders from participating payers, provider representatives, data reporting specialists, and consumer advocates.

Model Supports

Large system shifts, like the one Oklahoma is proposing, require the state to develop the resources and infrastructure necessary to support providers, payers, and patients throughout the transition to value-based care. The Oklahoma SIM project team is preparing to provide ample guidance and resources to ensure that stakeholders can meet the demands of this transformation. Many of the model supports the project will leverage are pre-existing entities and initiatives within the state. Other infrastructural components, like interoperable HIT and redesigning the healthcare workforce, may require more extensive development from the state.

Stakeholder Engagement

Throughout the SIM project, the Oklahoma SIM project team has encouraged collaboration and discourse to ensure incorporation of stakeholder input, facilitate agreement, and foster the buy-in necessary to shape the design of the state's model. The Oklahoma SIM project will continue its engagement strategy and hold meetings to ensure stakeholders participate in the Oklahoma Model implementation. Stakeholder engagement will ensure that the model is implemented in a feasible and inclusive manner that accounts for the regional, cultural, and environmental differences of the state.

At a high-level, the strategies of this SIM Stakeholder Engagement Plan included:

1. Leveraging the OHIP governance structure and workgroups to ensure representatives with the appropriate subject matter expertise and practical experience facilitate, monitor, and evaluate the various activities and deliverables of the Oklahoma SIM project.

2. Utilizing the Tribal Public Health Advisory Committee to seek feedback and recommendations for the model design from Oklahoma's tribal nations and partners.

3. Deploying Oklahoma SIM staff and a Stakeholder Engagement Facilitator to work together in the field to engage new communities and stakeholders throughout Oklahoma to solicit more interest, support, and subject matter expertise for the Oklahoma SIM project.

The Oklahoma SIM project team also expanded its engagement effort to include additional consumers, businesses, public health coalitions, healthcare associations, the state's top payers, and other healthcare organizations to achieve a broader range of support. The Oklahoma SIM project team disseminated information about project goals and objectives, assembled stakeholders, and hosted regional and community meetings. The Oklahoma SIM project team also met consistently with stakeholders to keep them abreast of the design, impact, and implementation strategy of the model throughout its development.

Health Information Technology

Health Information Technology (HIT) is a vital component to healthcare transformation. Studies have demonstrated the benefits of HIT in improving quality, safety, effectiveness, and efficiency of the delivery of care. Effective use of HIT can also help the state collect, evaluate, and make recommendations for care improvement so providers, payers, and consumers can have access to the right information, at the right time, to make decisions about the way care is delivered.

To accomplish this, the state will need to establish the technology infrastructure to support statewide health information exchange and a state-level value-based analytics (VBA) tool to integrate clinical information and payment information (e.g. encounter data or claims information). By integrating these two types of data, the state can get a better understanding of the cost of clinical services, the clinical outcomes and quality of care provided for those services, and the value of rendered services provided under value-based purchasing models. Thus, the VBA tool is vital to the model as it will inform future payment reform efforts.

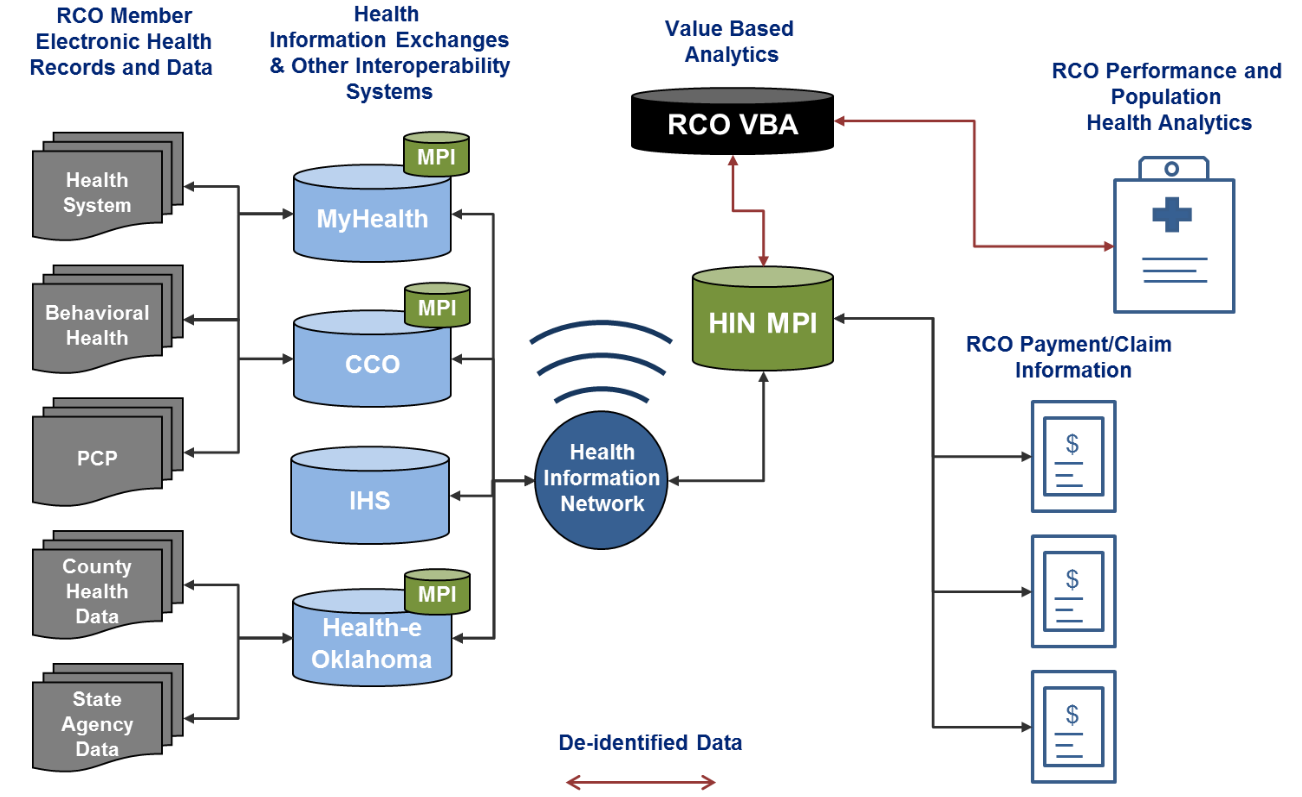
The Oklahoma Health Information Technology (HIT) Plan identifies two major goals with objectives, each related to health information exchange and establishing a VBA tool to support the Oklahoma model.

- **Goal 1: Establish a statewide health information exchange**
    - Establish governance to ensure transparency and collaboration
    - Increase certified EHR adoption and utilization
    - Increase adoption and utilization of Health Information Exchanges (HIEs)
    - Identify technology supports for interoperability and integration of data for retention, aggregation, reporting, and analysis
    - Facilitate statewide information exchange through a Health Information Network (HIN) for HIEs and other interoperability systems, including Health-e Oklahoma and Indian Health Services

- **Goal 2: Develop a state-level solution for integrated clinical, claims, and social determinants of health data to support a value-based analytics (VBA) tool.**
    - Establish governance to ensure transparency and collaboration
    - Identify technology supports
    - Identify and develop staff resources to support the VBA tool

These goals and objectives are critical for the success of the Oklahoma SIM model, particularly for the RCO model. Without the interoperability provided by the HIN and a VBA tool, the state will not have the necessary information to report, collect, and evaluate the efficacy of the Oklahoma model. The VBA tool, in conjunction with the HIEs, will provide data to support model participation and performance metrics. The Oklahoma SIM project team has created a conceptual diagram for how it will use HIT to support the model.

Figure A.9: Proposed Oklahoma HIT Design



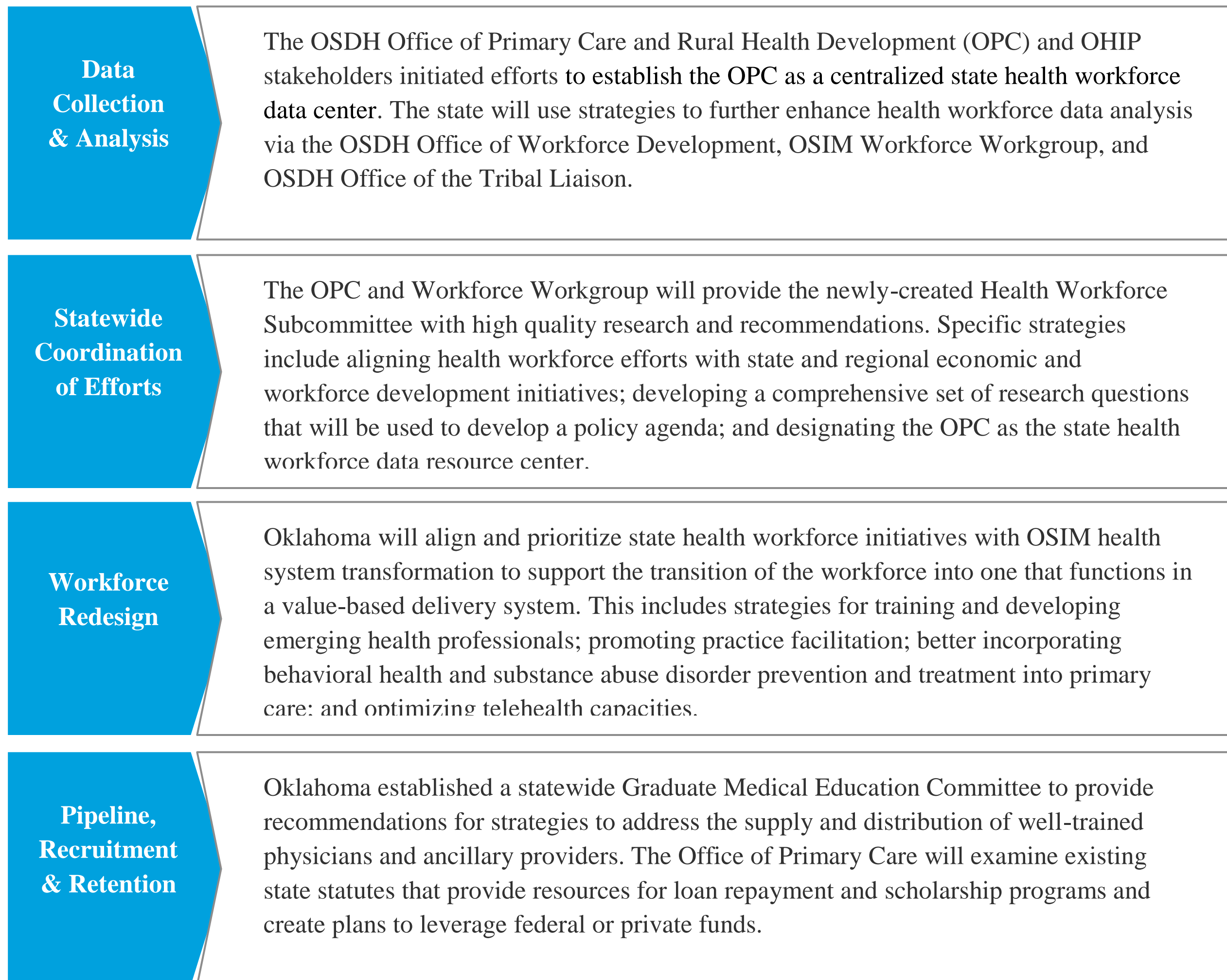
To help operationalize the HIN and VBA, the state will continue to partner with and support the existing private, nonprofit HIEs. The state is also developing the Oklahoma Health and Human Services (HHS) interoperability system, Health-e Oklahoma. The purposes of Health-e Oklahoma are to share data within and across state health agencies, enable the consumption of health information from the two nonprofit HIEs, and providers to submit public health data. This type of health information exchange across both HIEs and state agencies will require multiple levels of governance to ensure transparency, balance, and public/private stakeholder input regarding to the transfer, collection, and use of patient health information. The state will create governing bodies that can help support those efforts and ensure HIT activities, including health information exchange and VBA functionality, align with the Oklahoma model.

Health Workforce

Healthcare transformation requires a well-trained, flexible, and appropriately distributed health workforce. The state created a strategic plan to identify the policies, programs, and resources needed to create a workforce that can support healthcare transformation. Technical assistance and support from numerous stakeholders, including the OHIP Coalition, the National Governors Association (NGA) Policy Academy, and a core team of industry leaders and decision makers, collaborated with the Oklahoma SIM project team to develop the "Health Workforce Action Plan and the SIM Workforce Development Strategy," both designed to support a transformed system of care.

Central to the plan, the state will launch the initiation and implementation of the four core areas of the health workforce strategy: Health Workforce Data Collection and Analysis; Statewide Coordination of Workforce Development Efforts; Health Workforce Redesign; and Pipeline, Recruitment, and Retention. Those strategies and objectives are detailed in Figure A.10.

Figure A.10: Oklahoma Health Workforce Development Initiative Core Focus Areas



Oklahoma SIM project team will continue to convene stakeholders to implement the core strategies outlined in the Health Workforce Action Plan and the SIM Workforce Development Strategy. The Oklahoma SIM project team will ensure other aspects of model implementation complement and coincide with these workforce strategies to redesign and support its health workforce for healthcare transformation.

Practice Transformation

Healthcare transformation is also likely to affect providers in disparate ways. Independent primary care providers, for example, particularly those in more rural regions of the state, may be less ready for, and more negatively impacted by, rapid system change than those providers who are supported by hospitals or large health systems in urban areas. Since the state is seeking statewide improvement across its entire system, the state recognizes the need for different strategies and supports for providers as the various aspects of the Oklahoma Model are implemented.

To accommodate disparities in provider readiness and to create the environment - both infrastructural and cultural - needed for healthcare transformation, Oklahoma proposes to create a Practice Transformation Center (The Center) to support providers as they move to new value-based payment models. Ideally, practice transformation would be a multi-payer effort that supports all payers as they move to value-based purchasing and implement the multi-payer quality measures and EOC proposed in the Oklahoma Model. The Center will serve as a hub for disseminating evidence-based practices, preventive care strategies, and best practices for incorporating Health Information Technology (HIT) into care delivery to advance all transformation phases. Practice transformation is a critical success component for all value-based purchasing efforts in Oklahoma.

There are already many practice transformation efforts underway in Oklahoma, including the Agency for Healthcare Research and Quality (AHRQ) grant, Healthy Hearts for Oklahoma (H2O), and the Comprehensive Primary Care Initiative (CPCI), that are providing practice transformation resources and personnel. The state will leverage the best practices and information learned through those initiatives to ensure The Center sustains and advances all statewide efforts to achieve the triple aim.

Financial Forecast of the Oklahoma Model

A financial forecast of the Oklahoma Model was provided by an actuarial consultant, Milliman, to estimate the potential savings produced by the proposed innovations in the Oklahoma Model. The forecast analyzed the different programs and populations targeted by SIM, developed projections of future expenditures under the current baseline scenario, and projected future expenditures under the proposed Oklahoma Model to calculate the potential savings between the baseline and the Oklahoma Model scenarios.

Oklahoma is proposing to roll these changes out on a statewide basis beginning calendar year 2018, with RCO implementation in calendar year 2019. The Milliman analysis attempts to capture savings reasonably achievable under all three model elements proposed in the Oklahoma Model, but projected savings from the analysis are heavily dependent upon the impact the RCO model will be able to make on the Medicaid and EGID populations in the state of Oklahoma.

The following table provides a summary of the Projection Year 0 and Projection Year 6 baseline costs for each of the noted population groupings across the Medicaid population.

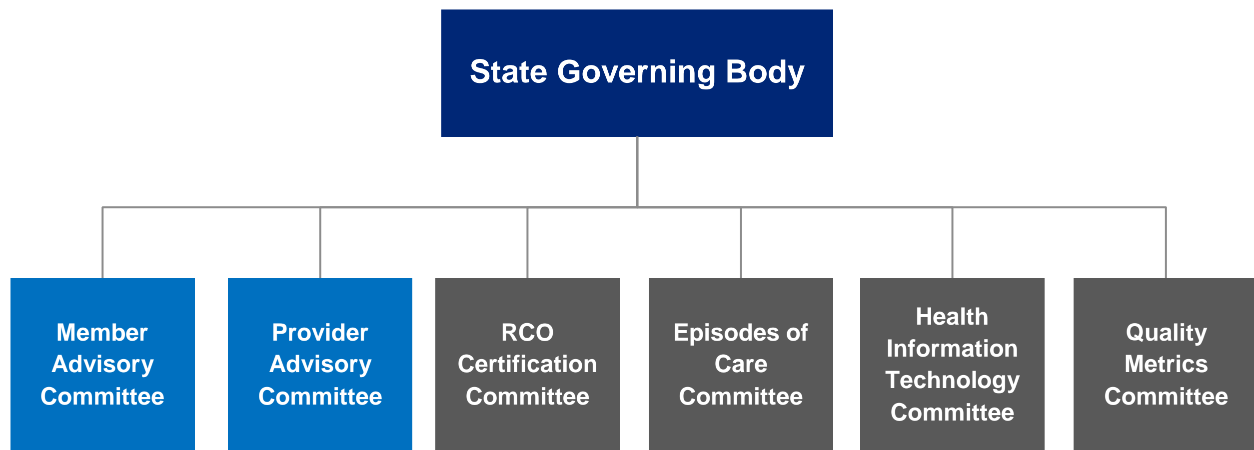
Potential Medicaid Savings (in Millions) Calendar Year 2018 to Calendar Year 2024			
Population	Baseline Projected Spend	OSIM Plan Projected Spend	Potential Savings
Insure Oklahoma	$450	$440	$10
Aged	3,560	3,540	20
Blind/Disabled	11,750	11,720	30
TANF	12,050	11,780	270
Pregnant Women	1,150	1,130	20
All Other	270	270	0
Total Spend	$29,230	$28,880	$350

Overall the implementation of The Oklahoma Plan will generate a net savings of $350 million dollars by 2024, with an estimated 1.8% annual savings thereafter. This return on investment alone makes health transformation attractive for the state, especially so considering the improved health outcomes and superior care that the revised system will provide for all Oklahomans.

SIM OPERATIONAL PLAN

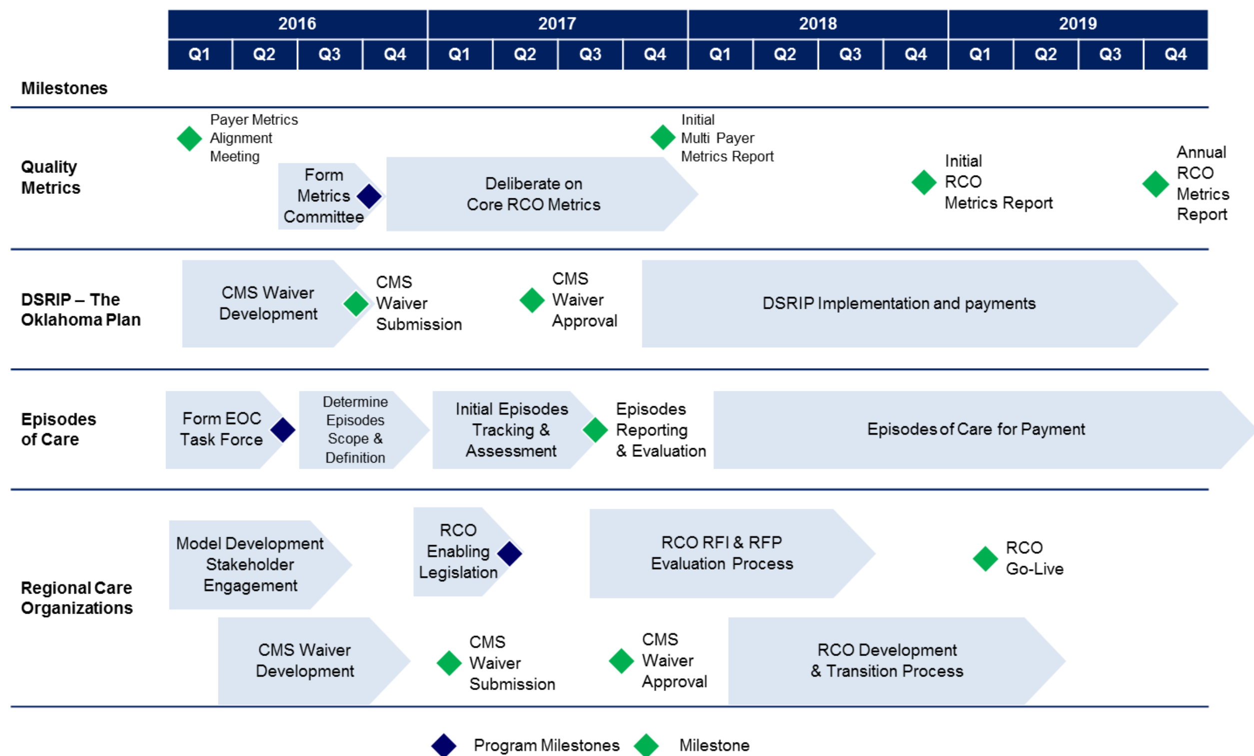
The Oklahoma SIM project team has developed a high-level operational plan and timeline that describes the various implementation activities. Once the governance structure for each proposed initiative (RCOs, multi-payer quality measures, and multi-payer EOCs) is established, the project team will develop a more detailed operational plan that describes specific resources, tasks, and milestones. This will include budgetary items, performance targets, and resource allocation. The governing bodies will include an array of stakeholders from across the health system in order to achieve inclusivity and drive broader consensus in Oklahoma. Figure A.11 shows a diagram of the State Governing Body advisory committees for the Oklahoma Model that will help implement the model.

Figure A.11: State Governing Body Advisory Committees



To support this governance structure, the SIM team has developed a detailed operational plan for operationalizing The Oklahoma Plan. The roadmap in Figure A.12 provides high level overview of the activities that will be required to implement the three SIM initiatives within a six-year period. The Oklahoma SIM team drew on the successful examples of healthcare transformation efforts of other states to develop this roadmap and its supporting, detailed operational plan.

Figure A.12: SIM Operational Roadmap



CONCLUSION

Oklahoma's health system transformation has a high likelihood of success and sustainability. The estimated 1.8% annual savings of the Oklahoma Model warrants investment and participation from providers, payers public and private, and consumers to help the state implement the various components of the model. The state also plans to invest the necessary time and resources to lay the groundwork for a strong foundation to advance the new model for state-purchased healthcare. The state will do so by working with key stakeholders at the state level, including legislators, beneficiaries, health plans, providers, advocacy organizations, and partners at the federal level through CMS.

Foundational changes are needed to transform the healthcare system Oklahoma to a value and outcomes based model. These changes include: infrastructure, workforce, culture, and education. All of these efforts will require significant federal investment that can be used to support hospitals and other entities in changing how they provide care to Medicaid beneficiaries and public employees. The state will need the ability to pursue projects that address these changes and enhance health care programs for Medicaid and public employee health coverage while maintaining current delivery capacity and access. The Oklahoma Model provides the framework to redress the poor health outcomes and excessive health expenditures that affect the current system, and its successful execution should improve the lives of all Oklahomans.

Health System Design and Performance Objectives
Value-Based Payment and Service Delivery Plan
Healthcare Delivery System Transformation Plan
Health Information Technology Plan
Workforce Development Strategy
Financial Analysis
Monitoring and Evaluation Plan
Operational And Sustainability Plan
State Healthcare Environment
Stakeholder Engagement Report
Population Health Improvement Plan
OKLAHOMA STATE HEALTH SYSTEM INNOVATION PLAN

A. Introduction

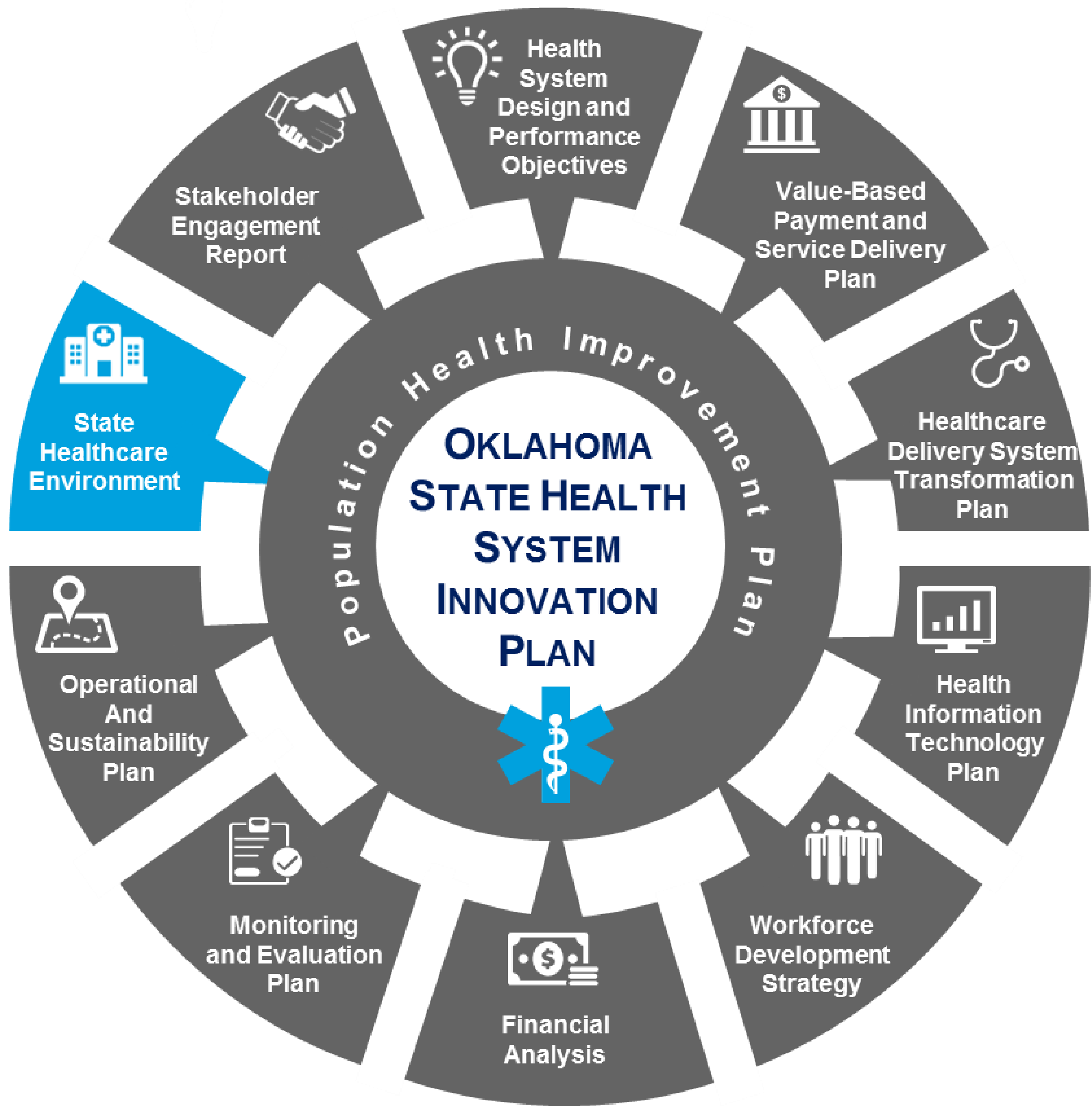
The state of Oklahoma applied for the State Innovation Model (SIM) grant through the Oklahoma Health Improvement Plan (OHIP) Coalition as a way to advance the state's health improvement initiatives and drive the triple aim. Oklahoma was awarded a one year, two million dollar SIM planning grant in December 2014. The grant year formally began on February 1, 2015 and was extended until March 31, 2016 to allow the state to continue the stakeholder engagement process and refine the State Health System Innovation Plan (SHSIP).

Prior to applying for the SIM grant, Oklahoma developed the Healthy Oklahoma 2020: Oklahoma Health Improvement Plan (OHIP 2020). This five year plan builds a strategic vision to help Oklahoma achieve dramatic and demonstrable improvement in its overall population health. OHIP 2020 outlined healthcare delivery transformation as an integral part of Oklahoma's overall strategic vision to build a healthcare system that improves health, provides better care, and reduces health expenditures.

The Oklahoma SIM project team built upon prior successful OHIP stakeholder collaborations and leveraged partnerships established over the last OHIP planning period to further integrate the Oklahoma SIM project into the OHIP structure. These partnerships were formalized through four workgroups: Health Information Technology; Health Workforce; Health Efficiency and Effectiveness; and Health Finance. Experienced individuals from the public, private, and academic sectors were selected by the OSDH leadership to serve as Vice-Chairs for the OHIP workgroups. Workgroup leaders continued this role into the SIM grant performance period for the OSIM project.

Utilizing the Oklahoma Health Improvement Plan governance and workgroup structure, the SIM project team engaged partners from around the state to help create a vision for transforming Oklahoma's healthcare system. This included meeting with numerous other stakeholders who had not been part of the OHIP planning process. Meetings were open to the public and available via webinar to allow participants from around the state to participate in the SIM initiative. Through this engagement, technical assistance, and consultant services, Oklahoma designed the Oklahoma Model and developed the framework necessary to support it through the creation of the SHSIP. The SHSIP reflects more than a year of work towards creating a vision for how to help Oklahoma achieve the triple aim and its population health goals through the value-based purchasing of healthcare.

The Oklahoma Model proposed in the SHSIP articulates how the state will transform its healthcare system, create the infrastructure and environment necessary for transformation, and monitor and evaluate the various aspects, activities, and interventions of healthcare transformation.


Health System Design and Performance Objectives
Value-Based Payment and Service Delivery Plan
Healthcare Delivery System Transformation Plan
Health Information Technology Plan
Workforce Development Strategy
Financial Analysis
Monitoring and Evaluation Plan
Operational And Sustainability Plan
State Healthcare Environment
Stakeholder Engagement Report
Population Health Improvement Plan
OKLAHOMA STATE HEALTH SYSTEM INNOVATION PLAN

B. Description of State Healthcare Environment

INTRODUCTION

The Oklahoma healthcare environment is complex. While major gains in critical health policies and initiatives have been achieved in recent years, the strong influence of adverse social determinants in combination with unhealthy personal behaviors surpasses these victories and perpetuates inequalities in health across the lifespan.

Many initiatives are underway across the state to address the primary contributors to chronic disease, premature deaths, and disability by delivering care that is more preventive and patient-centered. Numerous state agencies and healthcare stakeholders have mobilized and organized around targeted prevention efforts to improve population health, and as a result, healthcare delivery and public health systems are undergoing significant transformation.

With great prudence, public health and healthcare in Oklahoma is positioning itself to transition to a health system that bends the healthcare cost curve, increases healthcare quality, and improves population health outcomes A complimentary initiative is the Oklahoma State Innovation Model, which seeks to accelerate and reinforce the healthcare triple aim and catalyze health system transformation.

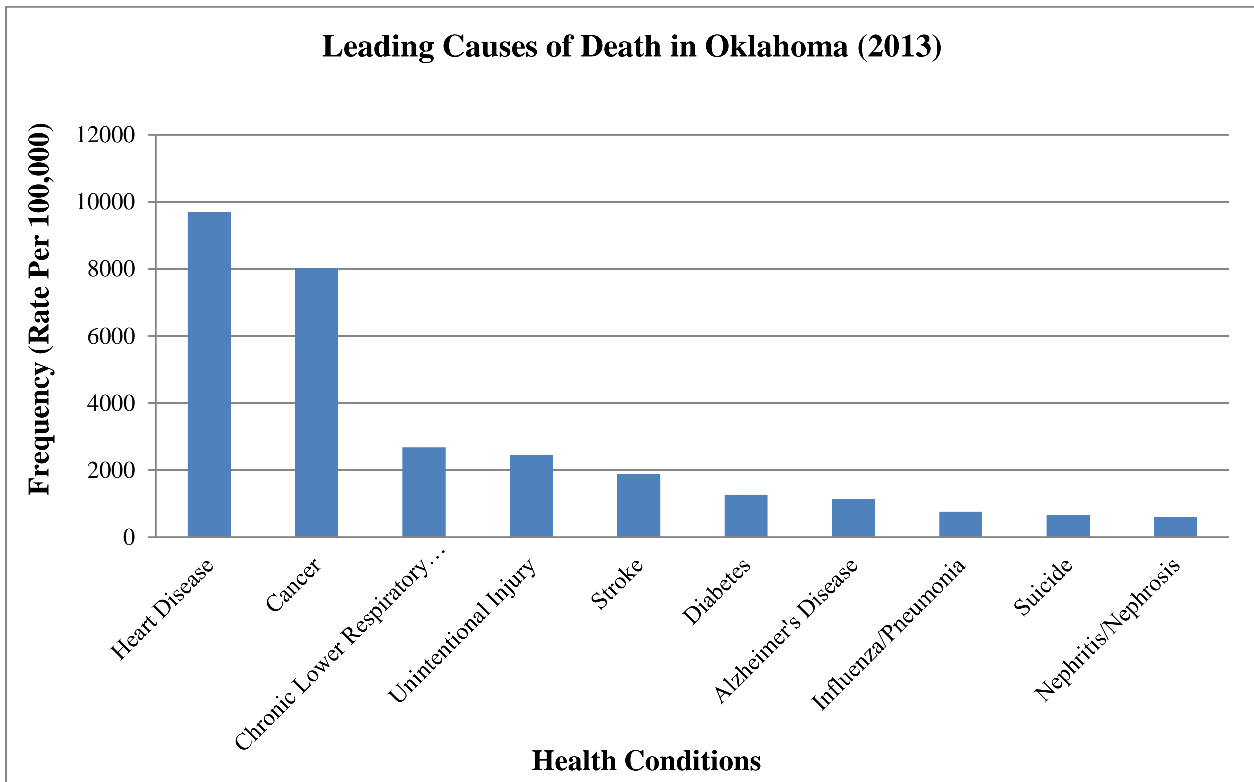
This section will cover the following topics:

- Oklahoma Population Health Outcomes;
- Current Environment for Health;
- Current Initiatives for Health Improvement; and
- Current Demonstration Projects and Waiver Efforts.

OKLAHOMA POPULATION HEALTH OUTCOMES

Oklahomans are more likely to be afflicted with chronic diseases and die at higher rates than the national average. Oklahoma had the fourth highest mortality rate in the nation in 2014, a rate 23 percent higher than the national average.[6] In 2013, the leading cause of death in Oklahoma was heart disease, followed by cancer, chronic lower respiratory disease, and unintentional injury. The leading causes of death and frequencies are outlined in B.1.

Figure B.1: Leading Causes of Death in Oklahoma (2013)



Oklahomans fare poorly when compared to residents of other states in terms of length and quality of life.Mental illness and substance abuse are more prominent in Oklahoma than in most other states. These facets are not mutually exclusive, but reinforce one another in that poor health in one aspect often leads to poor health in another. The integration of behavioral health into primary care settings will be a critical piece of improving population health.

Chronic Disease in Oklahoma

Diabetes

Although many complications from diabetes can be reduced through proper prevention, timely diagnosis, and disease management programs, diabetes is the sixth leading cause of death in Oklahoma.There are currently 320,537 adults in the state that have diabetes, a rate which has continued to increase for the past 10 years and is the eighth highest rate in the nation.[7] It is projected that 100,000 residents have undiagnosed diabetes, and that almost 37 percent of the state's adult population has prediabetes.[8] Between 90 to 95 percent of all diabetes cases is Type II diabetes, which can be prevented through weight loss, diet, and exercise.[9]

Diabetes increases the risk of heart attack and stroke by two- to four-fold. Over 78 percent of Oklahomans with diabetes also reported having high blood pressure.[10] Oklahomans with diabetes were also much more likely to report having high cholesterol levels and a higher prevalence of kidney disease than Oklahomans without diabetes.

In 2012, 7,007 inpatient hospital discharges were attributed to diabetes diagnoses at a total cost of over $206.6 million ($206,662,251).**Error! Bookmark not defined.**

Future health system plans need to address the state's high diabetes rate and work to reduce the number of individuals with diabetes or those with prediabetes from progressing to Type II diabetes. Special populations to target would be Native American and African-American Oklahomans, as evidence reveals that these groups are more likely to experience diabetes than those of other races.

Heart Disease

Oklahoma has the third highest death rate in the nation from heart disease (289.1:100,000)[11], which is the leading cause of death in Oklahoma, accounting for 25 percent of alldeaths in the state. Heart disease deaths include deaths from coronary heart disease, congestive heart failure, heart valve disease, arrhythmias, and other types of heart disease.

Many of the prevalent health conditions (diabetes, high cholesterol, and hypertension) and lifestyle factors (smoking, physical inactivity, and poor diet) affecting the state's population are the leading causes of heart disease.**Error! Bookmark not defined.** More than 25 percent of Oklahomans are physically inactive and 21.1 percent smoke, both of which play a significant role in premature death and health complications related to heart disease.[Error! Bookmark not defined.] Changing the behavior of Oklahomans to improve health requires an understanding of the causal underpinnings of poor health behaviors.

Hypertension

Hypertension, or high blood pressure, increases the risk for heart attacks, stroke, heart failure, and kidney disease.Over one-third of adults in Oklahoma have a diagnosis of hypertension, with mMore than half of this population concentrated in six counties in southeast Oklahoma: Bryan, Marshall, Greer, Jefferson, McIntosh, and Pushmataha counties. In 2013, hypertension resulted in an estimated 1,275 preventable hospitalizations in the state. If a 20 percent reduction in preventable hospitalizations for hypertension were achieved, there would be a healthcare cost savings of $1.8 million.**Error! Bookmark not defined.**

Tobacco Use

Oklahoma is consistently among the highest states for tobacco usage, which is responsible for the death of 7,500 Oklahomans each year.[12] Fifteen percent of high school students in Oklahoma and 4.8 percent of middle school students use tobacco. Nationally, these rates are significantly lower, at 12.7 percent and 2.9 percent, respectively.[13]

Smoking and tobacco use increases one's risk for developing diabetes, hypertension, and cancer,, but focused efforts to reduce and prevent tobacco use have resulted in a 19 percent decrease in the past four years and an all-time low of adult smokers of 21.1 percent.[14] This decrease has moved Oklahoma's ranking to 40th in the nation, up from 47th at the start of this decade. Tobacco cessation services offer Oklahomans resources such as the Oklahoma Tobacco Helpline and free nicotine-replacement therapies to quit tobacco. While the program has yielded some success, it also experienced a 29 percent decline in services in 2013, suggesting fewer individuals are seeking the program in an attempt to become tobacco free, which could be the result of fewer smokers in the state.[15]

Obesity

Similar to the state's smoking rate, Oklahoma also has one of the top ten highest rates of adult obesity in the nation, with 33 percent[Error! Bookmark not defined.] of the adult population being obese in 2014.[16] Along with adults, children in Oklahoma also have high rates of obesity, with 17.2 percent of high school students being obese.[12] Poor nutrition and physical inactivity can be contributing factors to obesity. The State of the State Health Report ranked Oklahoma 44th in the nation for leisure time physical activity, 50th for fruit consumption, and 44th for vegetable consumption.[117] Many factors can contribute to lack of physical

activity and low consumption of healthy foods. Many of them are related to the social determinants of health, such as access to healthy foods and safe places to exercise.

Cancer

Oklahoma has the sixth[18] highest rate of death due to cancer and the sixth highest cancer incidence rate[19] in the nation. The burden of cancer in the state is significant: one in three women and one in two men in Oklahoma will be diagnosed with cancer at some point in their lifetime.[20] Annually, there are 8,100 cancer-related deaths and 19,280 new diagnoses of cancer. The leading cause of cancer deaths (30 percent of deaths) in the state is from lung and bronchus cancers. In 2012, there were 11,300 hospital inpatient discharges for cancer (malignant neoplasm) for all insurance payers at a total cost of $714 million. Cancer was also the primary driver of average healthcare costs at $61,094 per discharge.**Error! Bookmark not defined.**

The rate of cancer deaths is strongly influenced by the progression of the disease at the time of diagnosis. Having access to medical services and participating in routine preventive care and screenings increases one's ability to treat and survive the disease.[21]

Chronic Lower Respiratory Disease

In 2013, Chronic Lower Respiratory Disease, which includes both chronic obstructive pulmonary disorder (COPD) and asthma, was the third leading cause of death and the fifth leading cause of 30-day hospital readmissions in Oklahoma , with a COPD prevalence of eight percent among adults.[22] Oklahoma tied with West Virginia for the fourth highest COPD prevalence in the nation.[23] Like heart disease, smoking is strongly correlated with respiratory disease; smokers are more likely to have asthma and an estimated 85 to 90 percent of COPD deaths can be attributed to smoking.**Error! Bookmark not defined.**

In 2013, an estimated 10,817 hospitalizations for COPD could have been prevented through outpatient care and community services. If even 10 percent of these hospitalizations had been prevented, an estimated $9,019,282 could have been saved.[**Error! Bookmark not defined.**]

Other Chronic Conditions

In 2013, Oklahoma had the sixth highest rate of stroke deaths in the nation[24], and strokes were the fifth most common cause of death in the state. Stroke – or cerebrovascular disease – is a prevalent condition among Oklahomans that is impacted by other chronic conditions and factors, some of which one cannot control, like heredity, age, gender, and ethnicity. Pre-existing medical conditions, such as high blood pressure, high cholesterol, heart disease, diabetes, and being overweight or obese can also raise one's risk of having a stroke. In 2012, there were 12,068 hospital inpatient discharges for cerebrovascular diseases (all payers) at a total cost of over $437.7 million ($437,740,360).[**Error! Bookmark not defined.**]

The likelihood of suffering a stroke can be decreased by reducing one's tobacco and alcohol intake,maintaining a balanced diet, and exercising regularly

Mental Health and Substance Abuse

Mental illness and substance abuse has skyrocketed in the state, with an estimated 985,000 Oklahomans in need of either mental health or substance abuse treatment services. Oklahoma is ranked 40th nationally for mental illness prevalence among adults.[25] In 2014, 21.9 percent of adults in the state reported a mental health issue and 12 percent reported having a substance abuse issue.**Error! Bookmark not defined.** Recent trends suggest mental health outcomes in Oklahoma are not improving. Six of 10 Oklahoma adults and at least four of 10 youth are not receiving needed treatment.[25]

Individuals with mental illness are much more likely to have chronic health conditions and less likely to be physically active.[26] When mental illnesses are left untreated, affected individuals live on average 25 to 30 fewer years than non-affected individuals.[27] By 2023, it is projected that there will be a 53 percent increase in the number of people in Oklahoma with a mental illness, higher than the projected growth percentage in heart disease (41 percent) and stroke (29 percent).

Unintentional poisoning (UP) deaths have risen dramatically over the past decade, and Oklahoma now ranks eighth in the nation for drug overdose death rates, 49 percent higher than the national rate.[28] Drug overdoses are the leading cause of injury death in Oklahoma, surpassing motor vehicle crashes.UP mortality increased more than 500 percent from 1999 to 2013, with 127 deaths in 1999 and 730 deaths in 2013. Of the more than 4,600 UP deaths from 2007 to 2013, 78 percent involved prescription drugs and 87 percent of those deaths involved opioid analgesics.

Suicide is the ninth leading cause of death in Oklahoma and the suicide rate is 36 percent higher than the national rate. Suicides have increased from 13.63 deaths per 100,000 persons in 2003 to 17.28 deaths per 100,000 persons in 2013.[29] Over the last ten years, men have committed 79 percent of suicides, and more than half of those were by firearm. Depression is cited as the primary reason, followed by partner problems, mental health, and physical health issues. For each suicide prevented, Oklahoma could save an average of $1,097,763 total in medical expenses ($3,545) and lost productivity ($1,094,218).**Error! Bookmark not defined.**

The need for accessible and affordable behavioral health services in Oklahoma is critical, especially in the southeastern and northeastern portions of the state. Whilethese areas have a higher incidence of mental health issues and substance abuse, they also suffer from a shortage of behavioral health providers. Currently 69 of the state's 77 counties are federally designated as mental health professional shortage areas. Increasing the behavioral health workforce in these underserved areas and co-locating these services inprimary care practices will be crucial in addressing and reducing mental illness and substance abuse in Oklahoma.

Dental Health

Oral health is a key component to overall health and improved quality of life, yet many Oklahomans do not receive consistent, adequate dental care. In 2015, Oklahoma ranked 48th worst in the nation for the number of adults who had a recent dental visit.[30] Rural, low-income Oklahomans were less likely to receive dental care than Oklahomans living in urban areas that had a higher income. Of the state's 77 counties, 56 are federally designated as dental health professional shortage areas.[31]

Maternal and Child Health

While Oklahoma continues to improve in its maternal and child health outcomes, the state continues to rank in the lower quartile when compared to other states. Although the state infant mortality rate has decreased by more than seven (7) percent in the past three years, Oklahoma's 2015 ranking for the severity of infant mortality was the 41st worst in the nation, with 6.8 infant deaths per 1,000 live births.[32] The infant mortality rate in Oklahoma is higher for infants of teenage mothers than infants of mothers between the ages of 25 to 34. While close to three-quarters (73.1 percent) of expecting mothers in the United States received prenatal care in the first trimester of their pregnancies in 2010, only 65.5 percent of expecting mothers in Oklahoma received such care in that period.[33] In 2012, the proportion improved; 68.2 percent of expecting women in Oklahoma received prenatal care in their first trimester.

Metric	Oklahoma	United States	2020 State Target
Children's Health			
Infant Mortality	6.8 per 1,000 live births (2013)	6.0 per 1000 live births (2013)	6.4 per 1,000 live births
Maternal Mortality	29.9 per 100,000 live births (2013)	17.8 per 100,000 live births (2011)	26.2 per 100,000 live births
Injury Deaths Among 0-17 years	14.4 per 100,000 (2013)	7.4 per 100,000 (2013)	13.9 per 100,000

Another disturbing trend in the United States is the increase in the maternal-mortality rate, which was fewer than eight (8) women for every 100,000 live births in 1987, but by 2013 has more than doubled to 18.5 women for every 100,000 live births. Oklahoma's maternal-mortality rate is 62% higher than this national average.

Health System Performance Trends – The Burden of Disease

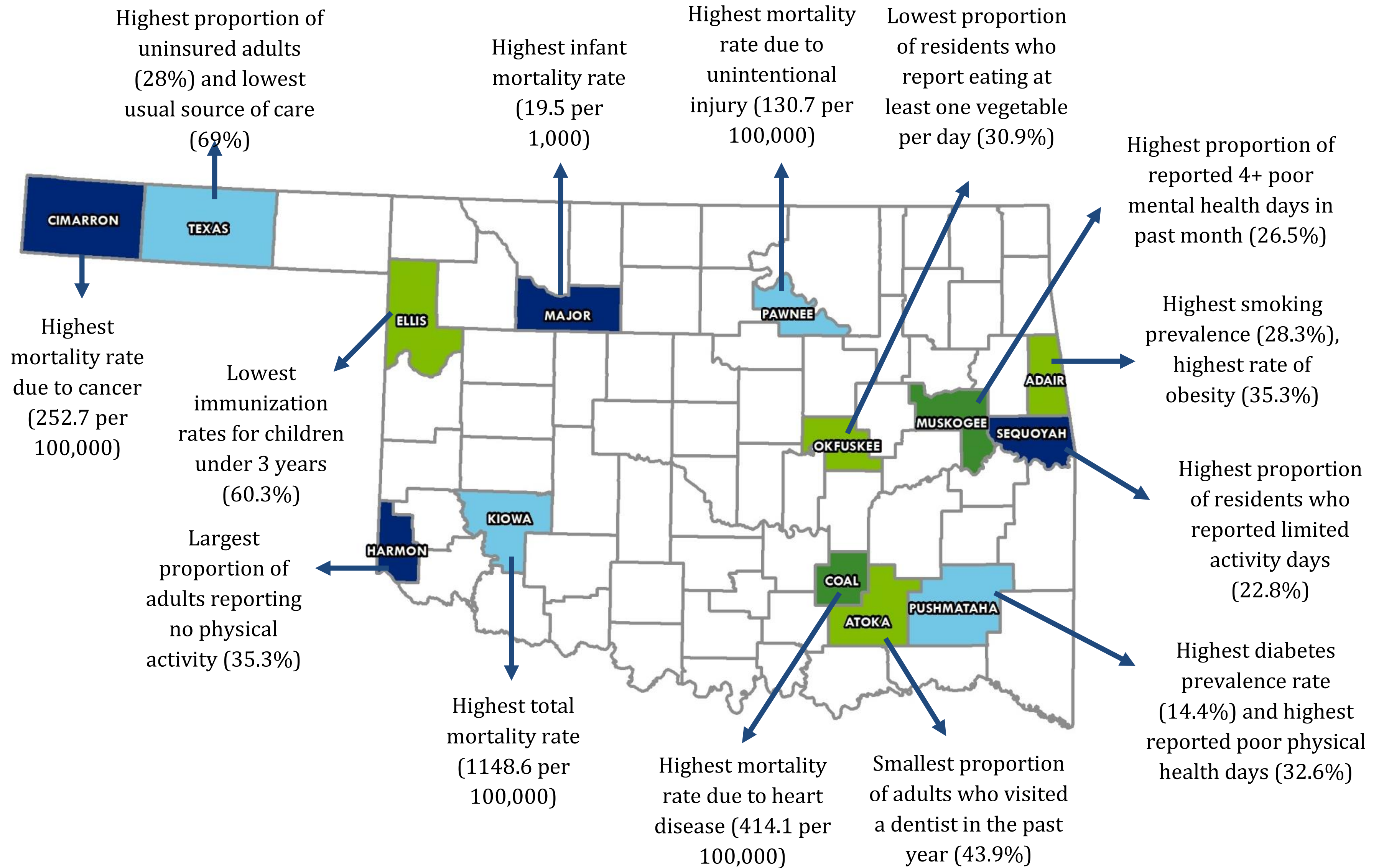
Oklahoma's health system performance mirrors many of the populations poor health outcomes, and in large part has perpetuated a reactive form of care that lacks an emphasis on prevention and control. These problems are exacerbated by a complex health system that is difficult for patients to navigate due to the fragmentation between providers and care settings. According to the 2015 Scorecard on State Health System Performance released by the Commonwealth Fund, Oklahoma dropped from 49th to 50th worst (out of 51 states and the District of Columbia) from 2014 to 2015, trailed only by Mississippi. The states were measured against five dimensions of performance:

- Access and affordability;
- Prevention and treatment;
- Avoidable hospital use and cost;
- Healthy lives; and
- Equity.

Though Oklahoma improved on 14 health indicators, the greatest number of indicators among the states, Oklahoma remained in the bottom quartile for all five dimensions of health system performance.

The figure below shows some of Oklahoma's health outcomes and challenges by county location.

Figure B.2: Oklahoma's Worst Health Outcomes by County Location



Quality Performance Indicators

Reducing preventable hospitalizations, hospital readmissions, and non-emergent emergency department (ED) utilization are key components to improving the state's health system performance. These three metrics – hospitalizations, ED utilization, and readmissions – may be addressed through cultural and behavioral modifications by both providers and patients by treating illnesses more efficiently before they become severe. Treating patients in the proper care environment, such as primary care provider offices and urgent care centers for non-emergent acute care, improve access and affordability of care. On average, urgent care settings have extended office hours, a walk-in policy, and lower treatment costs. Nationally, it is estimated that between 13.7 percent and 27.1 percent of emergency admissions could be managed in a lower acuity setting. [34]

Preventable Hospitalizations

Preventable hospitalizations,defined as stays that might have been avoided with timely and effective outpatient care and appropriate self-management. , costs Oklahoma over $1 billion annually for more than 52,000 avoidable inpatient admissions. In 2015, there were 1836.2 per 100,000 population preventable hospitalizations in Oklahoma.[35] The southeast region of the state had the highest rate of preventable hospitalizations at 2,145.1 per 100,000 compared to the national rate of 1,562.1 per 100,000. The most common diseases that were associated with preventable hospitalizations included both chronic and acute diseases, such as heart failure, angina, asthma, dehydration, diabetes, hypertension, and urinary infections.[36] These preventable diseases and unmanaged chronic illnesses stress the healthcare system, treat patients at a higher acuity level than necessary, and wastes resources. Research indicates that, with minimal reductions in preventable hospitalizations, significant avoidable costs are mitigated. For example, with only a 10 percent decrease in hospital stays for acute and chronic-related preventable hospitalizations, nearly $43 million could be saved in Oklahoma each year.[37]

Non-Emergent Emergency Department Utilization

Emergency care is appropriate for health problems that pose an immediate danger to one's life, or that have a high risk of a grave disability, or for the purposes of childbirth. Non-emergent care can be classified as all other medical care, which is generally considered inappropriate for an emergency setting. The Oklahoma Health Care Authority (OHCA) indicates that one percent of their total annual budget pays for non-emergent ED utilizations.[38] ED usage is higher for individuals with serious chronic diseases, like diabetes, hypertension, or COPD, and for those that lack access to primary care. According to OHCA's Emrgency Room Utilization Study, the most common diagnoses for adult utilizers are abdominal pain, headaches, and urinary infections. For children, the most common complaints are ear infections, fever, and upper respiratory infections.[39] These diagnoses demonstrate that EDs are being used for health problems that could be treated in a lower acuity setting.

ED utilization is often used as a way to measure a lack of access to primary care. It can be reduced through improved care coordination and medication management. Social determinants of health also play a large role in ED utilization. People that work non-traditional hours or those that cannot receive time off from work often find themselves resorting to EDs due to a lack of alternative options. For the Medicaid population, improving the integration of physical and mental servicesis an important strategy for addressing ED utilization as well as leveraging care coordination efforts.

Figure 2: SoonerCare Emergency Department Utilization per 1,000 Persons

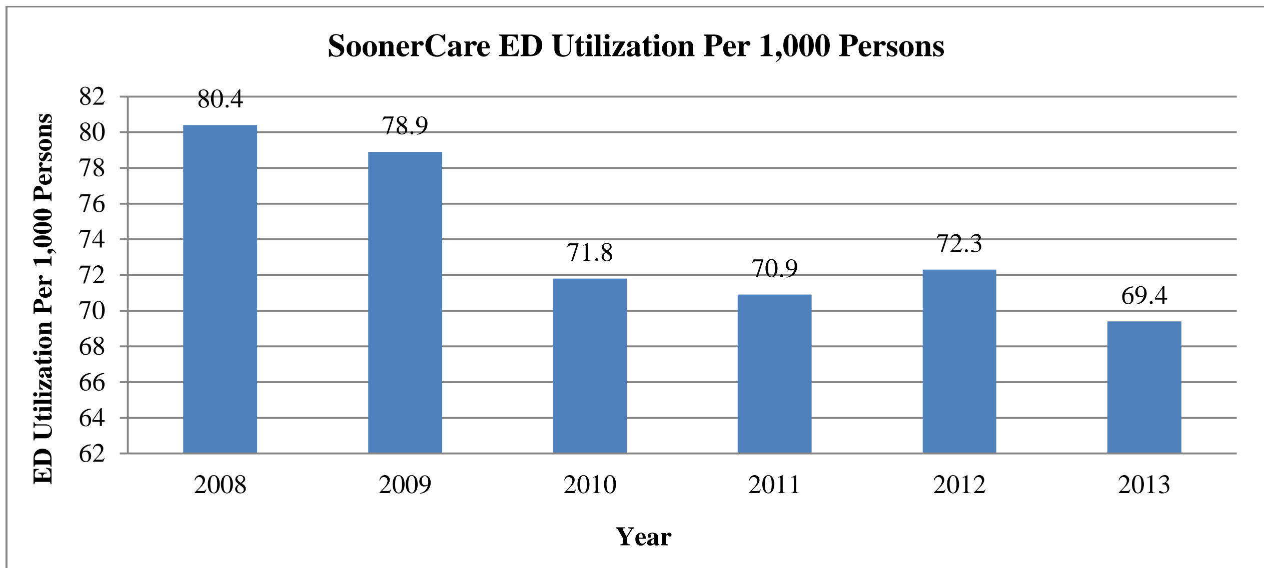
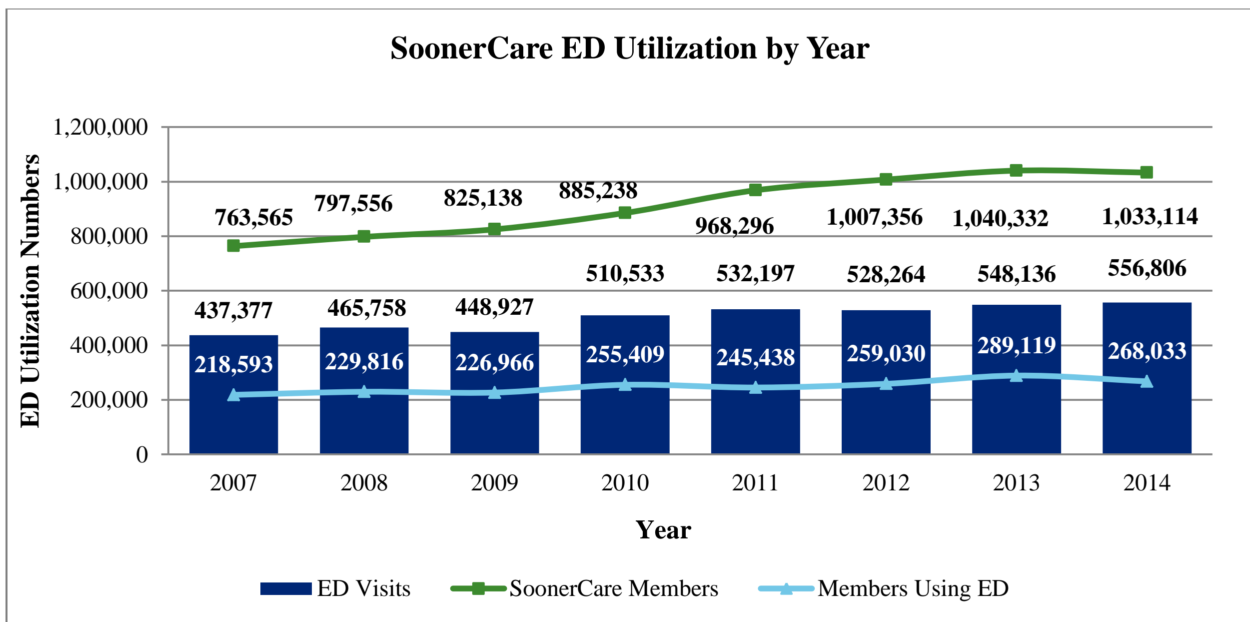


Figure B.4: SoonerCare Emergency Department Utilization by Year

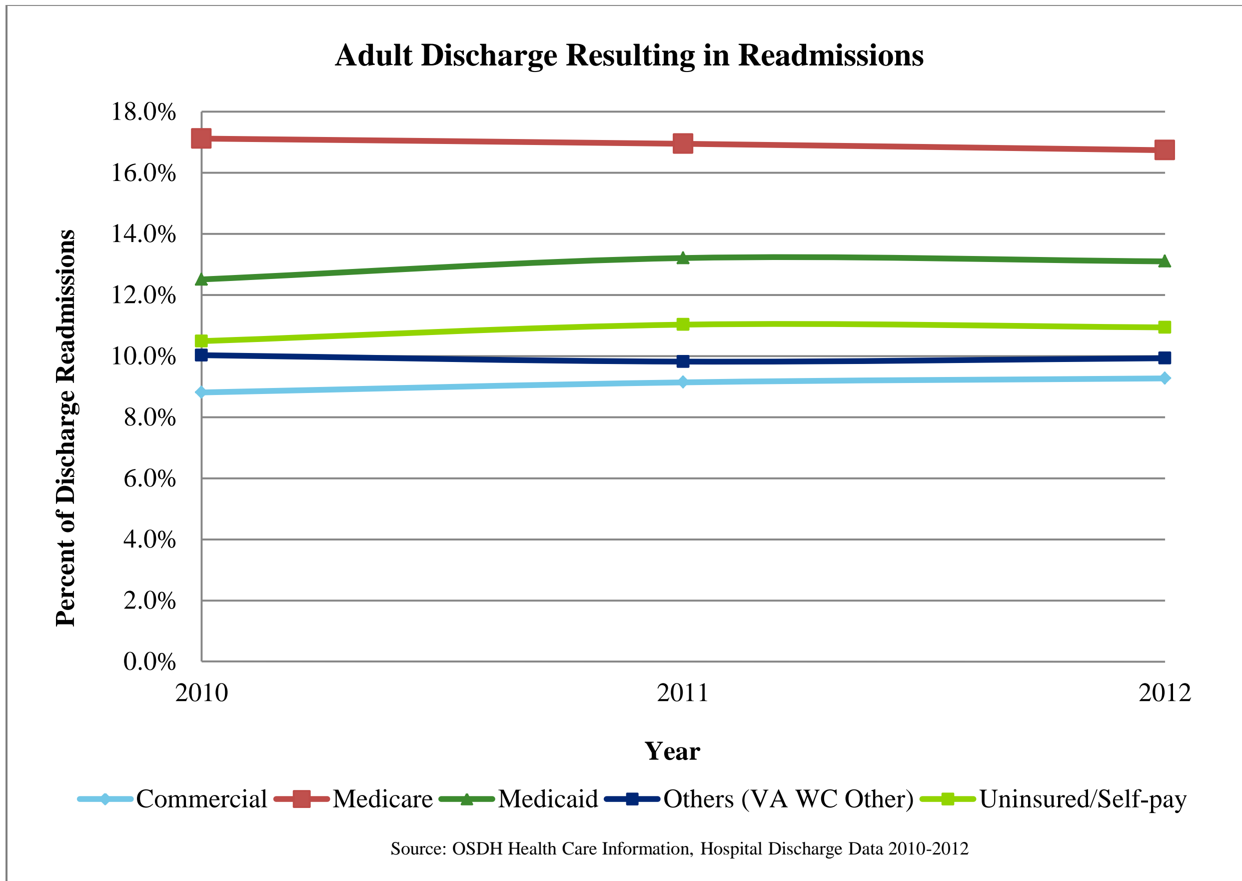


Hospital Readmissions

A readmission is defined as a subsequent admission to a hospital within 30 days of discharge. Readmissions potentially indicate poor care, poor care coordination, and/or incomplete treatment. The percent of discharges that resulted in readmissions had mixed results between 2010 and 2012, depending on the payer and age group. Overall, the percent of discharges that resulted in readmissions from 2010 to 2012 for adults remained the same, at 13.6 percent. Figure B.5 illustrates the percent of readmissions by payer over a three year period in Oklahoma. Medicare had the highest readmission rate, but has a decreasing trend, whereas Commercial payers had the lowest rate, but with an increasing trend. Nationally, it is estimated that readmissions for Medicare patients alone cost $26 billion.[40]

An important driver of readmissions that often presents itself as co-morbidity is mental illness. Mental health issues can have a substantial effect on the efficacy of treatment for physical health problems. For example, chronic conditions may be exceptionally susceptible to readmissions due to the need for continued care that may be more difficult to coordinate when mental illness is present. Although only accounting for between two percent to eight percent of adult readmissions, the proper treatment of mental health co-morbidities could be a focus area that would reap quick dividends.[41]

Figure B.5: Percent of Adult Discharges Resulting in Readmissions



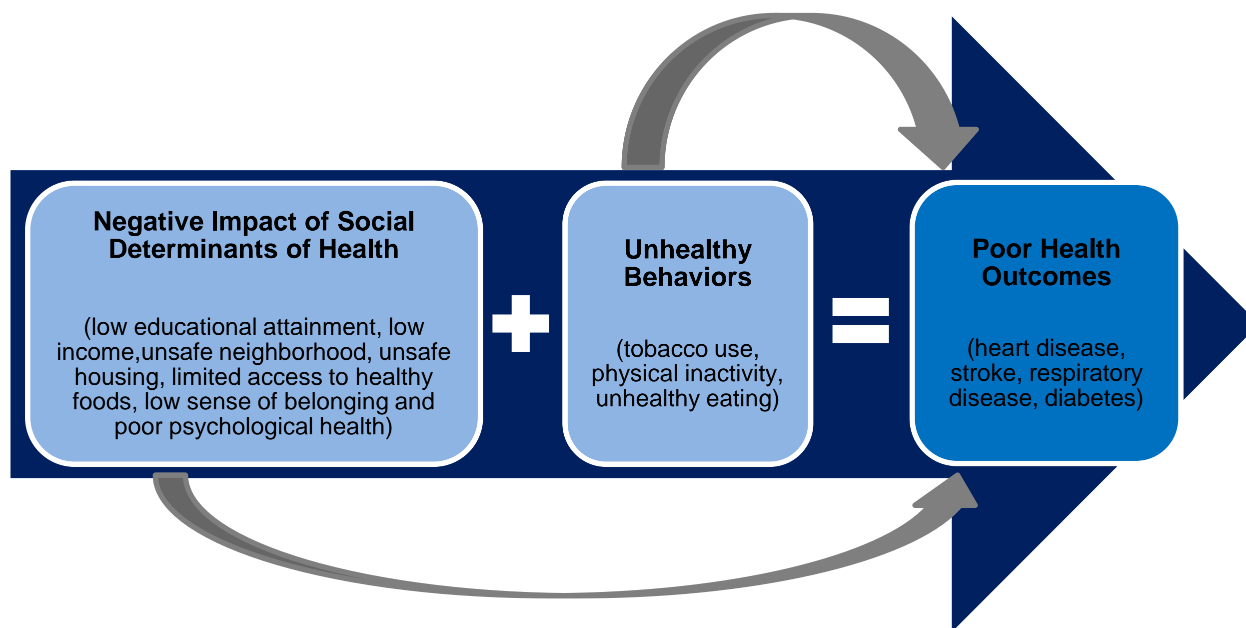
CURRENT ENVIRONMENT FOR HEALTH

In order to better understand underlying causes of Oklahoma's poor population health outcomes, it is important to consider the current environment for health. This section describes some characteristics of the environment that may drive health outcomes beyond the disease state.

Social and Economic Determinants of Health

Social circumstances significantly influence health behaviors and account for 15 percent of premature deaths in the state.[42] Many Oklahomans lack basic needs such as adequate housing, a steady or livable income, and nutrition. The figure below details the relationship between social determinants, personal behaviors, and health outcomes. Individuals who are negatively impacted by social determinants of health are more likely to engage in unhealthy behaviors, such as the use of tobacco, alcohol, and other drugs.[43]

Figure B.6: Relationship between Social Determinants, Health Behaviors, and Health Outcomes



Population Demographics

The current demographics in Oklahoma illustrate the need for a health system that is culturally sensitive to all Oklahomans. More than 3.8 million people reside within the 68,595 square miles of the state.[44] Over 80 percent of Oklahomans identify as white, 13.3 percent identify as Native American, and 8.9 percent identify as African-American. Approximately 9.4 percent of residents identify as Hispanic.[45]

Oklahoma is home to the second highest number of Native American people, second only to California.[46] Native Americans in the state on average are less healthy and more socially and economically disadvantaged than other Oklahomans. Over one-fourth of Native Americans lack health insurance.[47] With this population and the growing number of non-native English speaking Latino residents, (currently 6.37 percent of the state's population[48]), cultural competency training as well as the availability of bilingual services is a crucial component in communicating health needs and resources.

Rural and Urban Distribution

Almost 36 percent of Oklahomans live in the 59 counties that are federally-defined as "rural".[49] Of the state's 77 counties, 40 counties have a population of less than 25,000 residents. The geographic distribution averages 54.7 people per square mile in Oklahoma, but the population density fluctuates significantly by county, with an average of 1.3 residents per square mile in Cimarron County to an average of 1,058 residents per square mile in Tulsa County.[50]

Oklahoma continues to witness the movement of people from rural and small towns to more urban areas. From 2010 to 2014, the rural population of Oklahoma declined with 37 counties losing population, primarily from the rural and frontier areas of southwestern and southeastern Oklahoma.[51] Rural

Oklahomans demonstrate increased levels of health risk factors when compared to their urban counterparts.

Income and Employment

Oklahoma's median annual household income is $45,339, which is 14.5 percent lower than the national average of $53,046.[52] Seventeen percent of Oklahomans earned wages below the federal poverty level (FPL), slightly worse than the national average of 16 percent. Almost one-quarter of the children of Oklahoma live in poverty; the state's ranking in terms of childhood poverty from 2014 to 2015 regressed from 26th to 40th highest in the nation.[53] Overall, poverty-stricken individuals in Oklahoma are significantly less likely to have health insurance. An estimated 23 percent of the 918,400 Oklahomans living below the FPL in 2015 were uninsured.[54]

Although the poverty rate in Oklahoma is higher than the national average, Oklahoma's unemployment rate of 4.3 percent is lower than the national average of 4.9 percent.[55]

The current state of Oklahoma's energy sector creates rippling effects across other sectors of the economy. One of the most influential sectors of Oklahoma's economy, energy, has experienced declines in revenue due to decreases in the price of oil. Many companies have had to downsize their workforce, which directly affected close to 12,000 oil and gas employees in 2015, while the number of indirect job losses in the state is as of yet unknown.[56] The state faces up to a $1 billion dollar budget shortfall in 2016, a deficit largely attributed to low oil prices.[57]

Education

Oklahomans receive fewer years of education on average compared to the rest of the United States. Fifteen percent of Oklahomans over the age of 25 have less than a high school education. Of the 85 percent of Oklahomans with a high school diploma, 36.5 percent never attended college. For those that attended post-secondary education institutions 32.5 percent did not earn a degree,[58] seven percent of Oklahomans earned an associate's degree, 16 percent earned a bachelor's degree, and eight percent earned a graduate or professional degree. One in four Oklahomans without a high school education lived in poverty, compared to one in 20 with a college degree.

Oklahoma is one of the most affordable states for public higher education. However, retention rates continue to decrease for freshmen enrolled in research, regional, and community colleges and universities.[59] Though Oklahomans are employed at higher rates than residents of other states, it is projected that 500,000 high-skilled jobs in Oklahoma will remain unoccupied due to a lack of highly trained workers.[60] Addressing Oklahoma's health issues by confronting social determinants of health, such as education, including alignment with state job needs, could improve both health and educational outcomes, two forces that are closely intertwined.

Access to Care

Inadequate access to healthcare contributes to 10 percent of premature deaths each year in the United States.[61] In Oklahoma, shortages of primary care physicians, dentists, and psychiatrists are widespread. The majority of the state's 77 counties are classified by the Health Resources and Services Administration as Health Professional Shortage Areas (HPSAs). Geographic HPSAs are classified when an area has too few providers per population (shown in blue on the map below). Population Group HPSAs have too few providers who serve a specific population in the area, most commonly low-income individuals (shown in green on the map below).

Seventy-one counties in Oklahoma are classified as Primary Care HPSAs, 56 counties are classified as Dental HPSAs (7 are still pending approval), and 69 counties are classified as Mental HPSAs.[62]

Oklahoma ranks 44th in the nation for the number of primary care physicians per population.[63] The United Health Foundation Health Care Rankings lists Oklahoma as third worst among rural states in the maldistribution of doctors among the population.[64] Almost 30 percent of the state's physician workforce is age 60 or older and on average, rural physicians are older than urban physicians, potentially exacerbating the lack of primary care physicians in rural areas in the future. Ensuring that Oklahoma has an adequate health workforce to meet the state's future needs is critical. Pipeline, recruitment, and retention efforts are being elevated in order to reverse the growth of HPSAs in the state. Below are data around the overall number of provider types and healthcare facilities in the state[65]. More information and maps of provider and provider organization locations can be found in Appendix A and B.

Figure B.7: Physician Count in Oklahoma

Physician Type	No.
Physicians (D.O. and M.D.)	7,838
Rate per 10,000 population	20.36
Osteopathic Physicians (D.O.)	1,619
Allopathic Physicians (M.D.)	6,219
Primary Care Physicians	3,642
Rate per 10,000 population	9.46
Family / Gen. Practice Physicians	1,684
Internal Medicine Physicians	1,116
Pediatric Physicians	490
OB-GYN Physicians	352
General Surgeons	295
Physician Assistants (PA-C)	1,193
Rate per 10,000 population	3.10

Figure B.8: Nurse Count in Oklahoma

Nurse Type	No.
Registered Nurses	32,351
Rate per 10,000 population	84.02
Licensed Practical Nurses	12,810
Rate per 10,000 population	33.27
Advanced Practice RN's	2,005
Rate per 10,000 population	5.21
Nurse Practitioners	1,299
Rate per 10,000 population	3.37

Nurse Midwives	52
Clinical Nurse Specialists	216
Nurse Anesthetists	438

Figure B.9: Dental Health Professional Count in Oklahoma

Dental Health Professionals Type	No.
Dentists	1,756
Rate per 10,000 population	4.56

Figure B.10: Mental and Behavioral Health Professional Count in Oklahoma

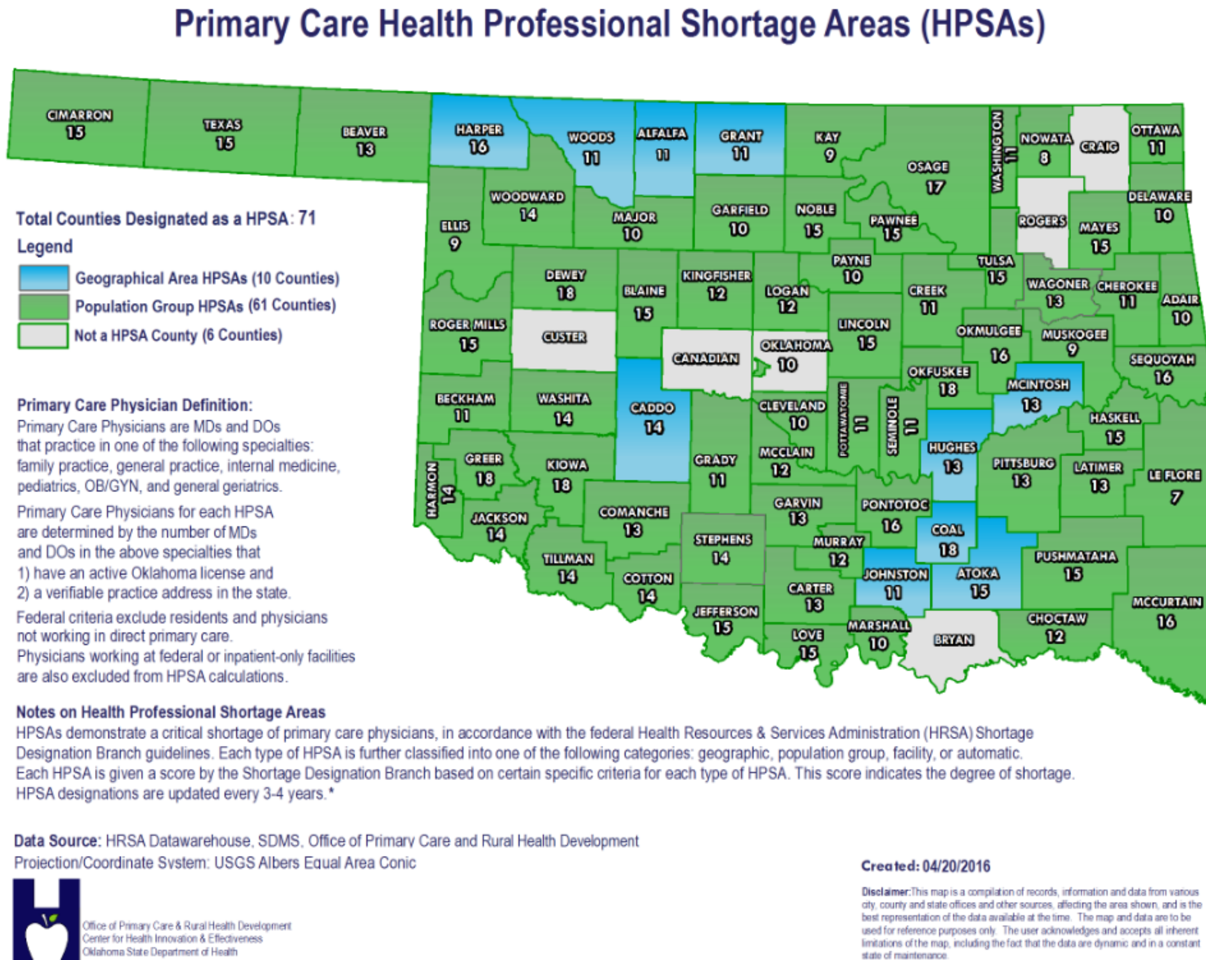
Mental and Behavioral Health Professionals	No.
Psychiatrists (D.O. and M.D.)	341
Rate per 10,000 population	0.89
Child and Adolescent Psychiatrists	26
Clinical/Counseling Psychologists	512
Rate Per 10,000 Population	1.33

Figure B.11: Health Care Facility Count in Oklahoma

Facility Type	No.
General Medical / Surgical Hospitals	99
Critical Access Hospitals	34
Rural Health Clinics	47
Federally Qualified Health Center Sites	75
Free Clinics	86
Indian Health Services (Federal)	8
Indian Health Services (Tribal)	38
Veterans Affairs Facilities	19
Urgent Care Centers	108
Inpatient mental health facilities	32
Community Mental Health Centers	68
Adult Crisis Centers	12

Retail Pharmacies	950
Number of Hospital Beds	13,687
Number of Nursing Home Beds	26,534

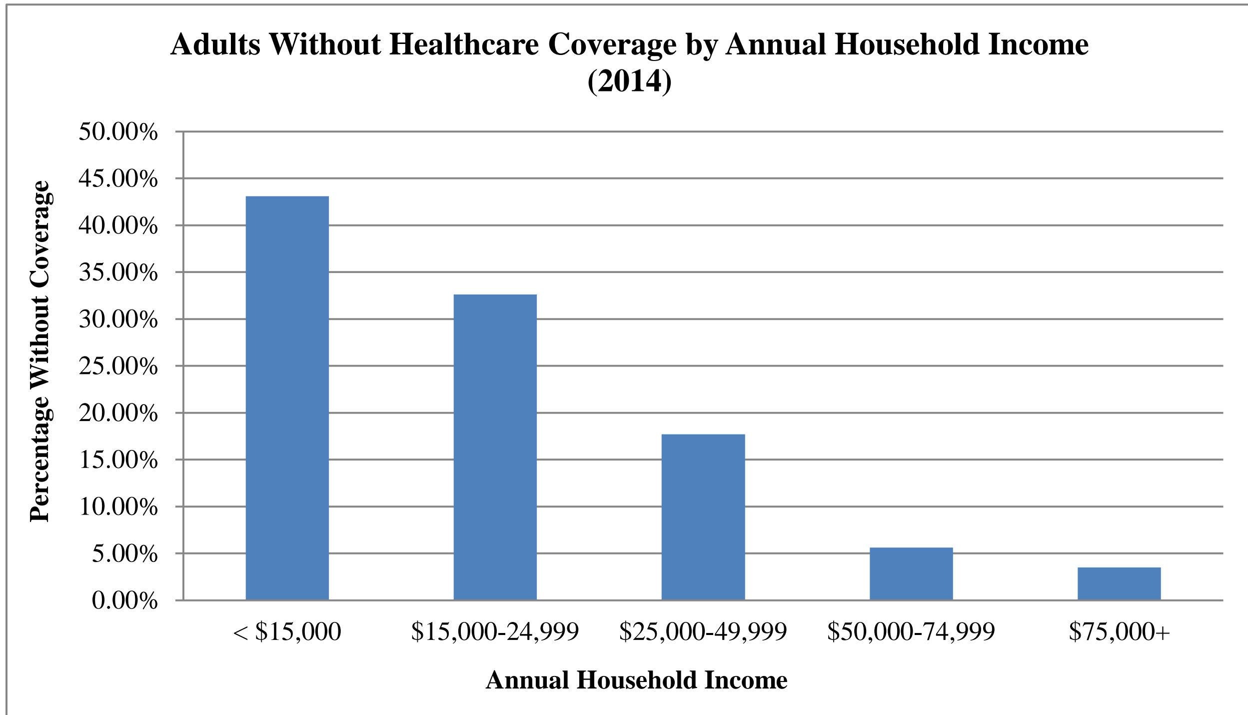
Figure B.12 Oklahoma Primary Care HPSAs



Uninsured Population

The uninsured population experiences significant barriers to care which negatively affect overall health. The primary reason individuals reported being uninsured was due to the high cost of coverage and/or being unemployed.[66] A strong correlation exists between household income and the uninsured rate; higher uninsured rates were associated with lower household incomes. As of 2015, it is estimated that 15.6 percent (543,800) of the state's population remains without health insurance, including 21.4 percent of non-elderly adults. The southeast region of the state has the highest uninsured rate (15.3 percent), while Tulsa has the lowest uninsured rate (12.4 percent).[67] The uninsured rate is disproportionately higher for individuals between the ages of 19 and 34, accounting for 44 percent (241,100) of the total uninsured population.

Figure B.13 Uninsured Adults by Annual Household Income



Housing

Many Oklahomans experience barriers to affordable and adequate housing. Generally, housing is considered affordable when individuals pay less than 30 percent of their monthly income on housing costs.[68] Nearly one-quarter (24.4 percent) of Oklahomans pay home mortgages that are more than 30 percent of their income, and an estimated 45 percent of Oklahomans pay rents that are at or above 30 percent of their income. Thus, a significant proportion of Oklahomans have less disposable income for other necessities, such as healthcare. In addition, individuals with housing insecurity are more likely to use tobacco, less likely to visit a doctor, more likely to be in fair or poor physical health, and are more likely to have more poor mental health days.[69]

Access to Food

Nutrition serves as the foundational basis for health and quality of life, yet many Oklahomans encounter barriers to obtaining a healthy diet. In 2013, an estimated 17 percent of adults and 26 percent of children in Oklahoma experienced a lack of access to food and uncertain availability of nutritious foods.[70] More than one in five (21.1 percent) of Oklahomans across 43 counties, compared to 13 percent of Americans overall, lived in a food desert, meaning they lived more than 10 miles from a grocery store that sold produce, or more than a mile from such a store in urban areas.[71] According to a 2014 study by Feeding America, 16.5 percent of Oklahoma households were food insecure in 2014 compared to average of 14 percent of households in the country.[72]

High-Risk Communities

High-risk communities are found in all regions of the state. High-risk communities are plagued with combinations of poor social and health outcomes. Southeastern counties in Oklahoma, in particular, have high concentrations of chronic disease, poverty, and a lack of access to primary care, dental care, and

mental healthcare services due to their high uninsured rate and low proportion of providers to population.[73,74] In addition, Southwest Oklahoma ranks at the bottom on several health outcomes compared to other regions of the state. Oklahomans living in these areas fare consistently worse on several key health indicators, including chronic disease and mortality.

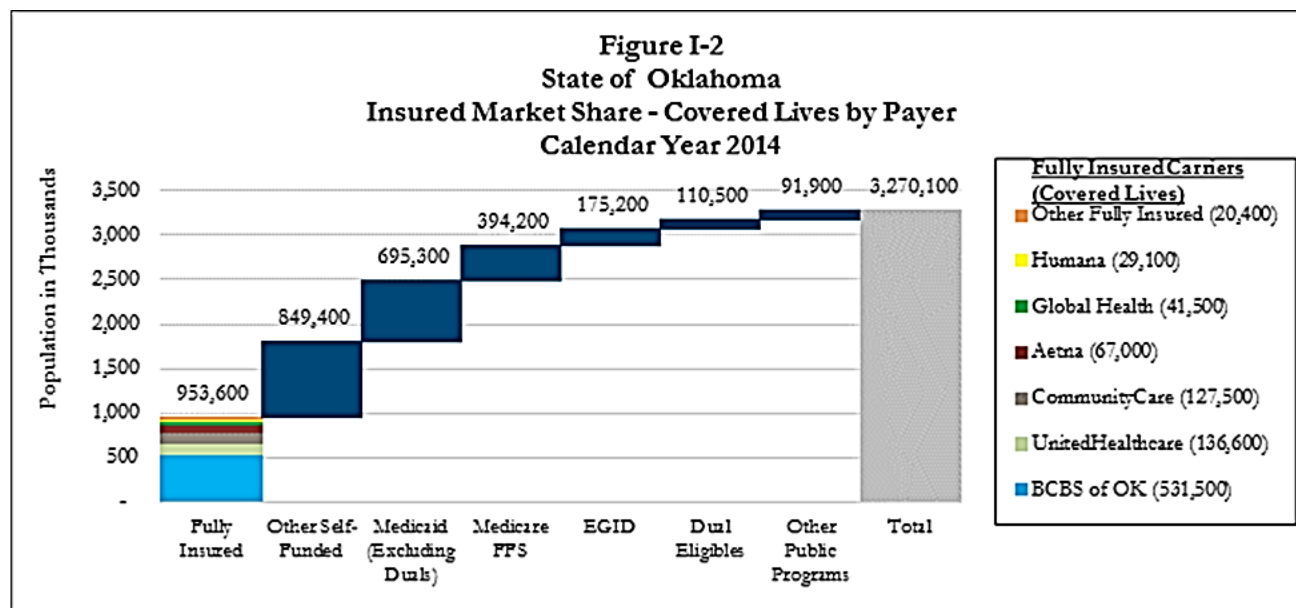
The Oklahoma Health Insurance Environment

In 2015, 43 percent of Oklahomans were insured through employer-sponsored insurance plans, 36 percent through governmental plans (Medicaid, Children's Health Insurance Program, Medicare), and six percent through individual insurance. The remaining 14 percent of Oklahomans were uninsured.[75]

More Oklahomans had individual health insurance plans in 2015 than in prior years (223,500 Oklahomans as compared to 2013, when only 122,100 Oklahomans had individual insurance).**Error! Bookmark not defined.** Both Medicaid and Medicare enrollment increased between 2013 and 2015. In addition, fewer Oklahomans were uninsured in 2015 (543,800) than in 2013 (657,200), resulting in an estimated decrease in Oklahoma's non-elderly uninsured rate from 25.4 percent to 21.4 percent.

Additionally, as shown in the following table individuals and families are covered by all different health insurance types with 43.8 percent of the lives covered through employer subsidized insurance, 36.5 percent covered through public programs and 5.7 percent individuals paying for their own coverage.

Figure B.14: State of Oklahoma Insured Market Share (Covered Lives by Payer, CY 2014)



Note:

1. Fully insured values include enrollment in the individual and group health insurance markets, as well as Medicare Advantage.
2. Please see Section VII, Methodology and Assumptions, of the *Oklahoma State Innovation Model Insurance Market Analysis* for an explanation of the process and data sources used to develop the above values.

Figure B.15: State of Oklahoma Estimated Enrollment by Insurance Source (2015)

Insurance Source	2015
Individual	223,500
Small Group	177,300
Large Group	493,200
Self-Funded	854,500
Employees Group Insurance Division (EGID)	184,500
Medicaid/CHIP (with Duals)	826,700
Medicare (without Duals)	504,200
Other Public Programs	92,500
Uninsured	543,800
Note: Numbers are rounded. ***Source: Oklahoma State Innovation Model Insurance Market Analysis (2015)***	

Among the insured market in 2014, the top five payers of the insured market share in terms of covered lives were Medicaid (excluding dually eligible beneficiaries Medicare/Medicaid Dual Eligibles), Blue Cross Blue Shield of Oklahoma, Medicare Fee-for-Service (FFS), other self-funded employee sponsored health plans, and the Employee Group Insurance Division (EGID).[76] Together, these five payers comprise more than 80 percent of the insured market share. United Healthcare, CommunityCare, Dual Eligibles, other public programs, and Aetna hold the sixth through tenth largest shares of the insured market. The figure below shows the major payers in Oklahoma in terms of covered lives and percentage of the insured market share.

Premiums and Deductibles

In the past decade, deductibles for single person and family healthcare plans have significantly increased. Nationally, there has been a 117 percent increase for single plans and a 106 percent increase for family deductibles between 2003 and 2011, respectively. Oklahoma fared worse than the average national increase; the state had a 141 percent increase for single person plans and a 124 percent increase for family plans during the same period.[77]

Figure B.16: Average Health Insurance Premiums as a Percent of Median Household Income

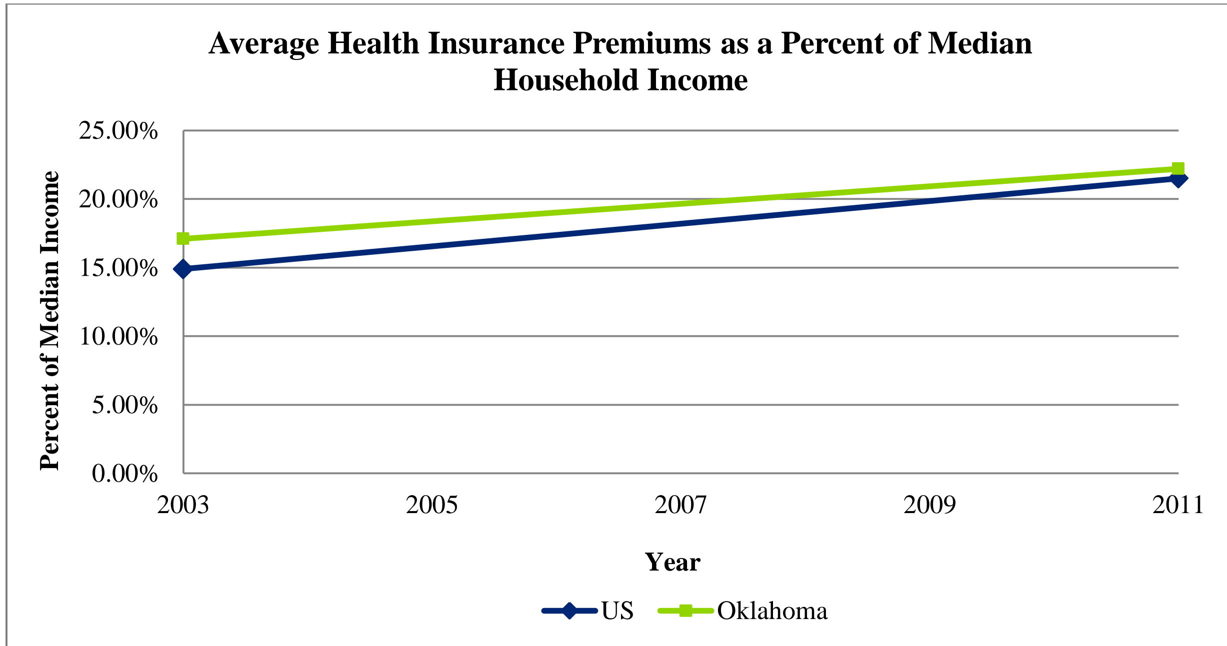
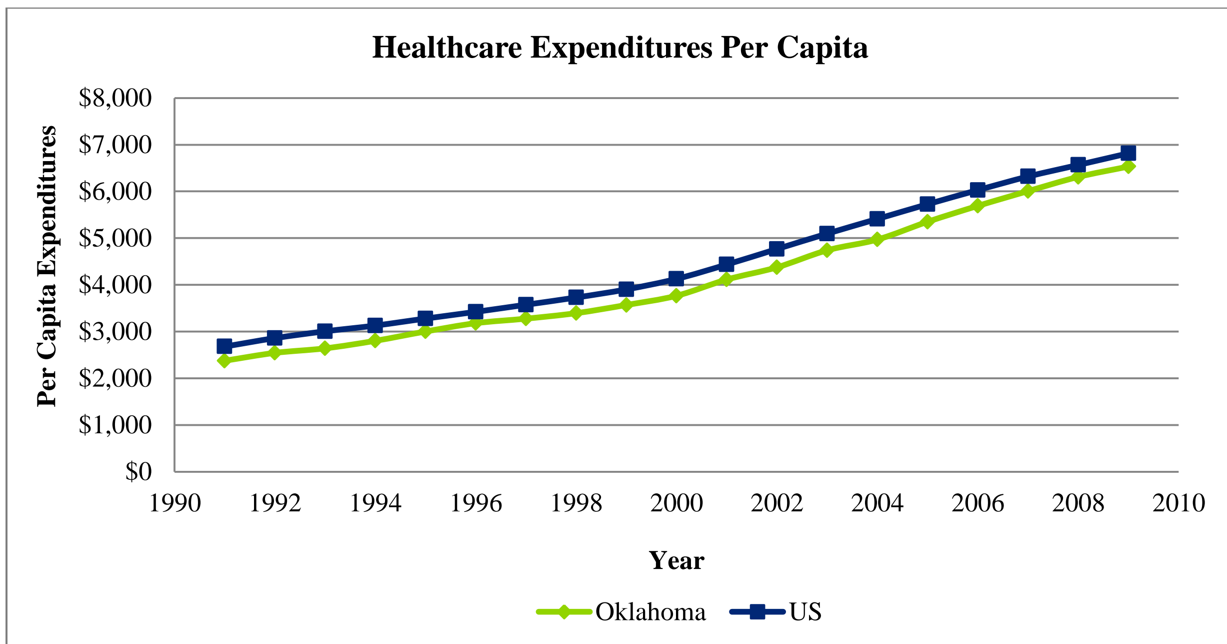


Figure B.17: Healthcare Expenditures Per Capita



Costs as a Proportion of Income

Health insurance premiums continue to take an increasingly larger proportion of income, as shown in the figure above. For the US, premiums as a percentage of a single person median household income increased from 14.3 percent in 2003 to 20.1 percent in 2011. Premiums as a percentage of a family's

median income also increased from 15.2 percent in 2003 to 22.1 percent in 2011. Similarly, in Oklahoma, premiums as a percentage of a single person median household income increased from 15.4 percent in 2003 to 20.2 percent in 2011. Premium as a percent of a family's median income also increased from 15.4 percent in 2003 to 21.5 percent in 2011.[78] These numbers illustrate that the burden of cost growth is being shifted to the consumer concurrently as coverage benefits decline and deductibles increase. This is particularly troubling in Oklahoma, where the increases in healthcare costs are eroding a significantly larger proportion of income as compared to other, higher income states.

Payer-Specific Populations

Medicaid

Low socio-economic status and physical and/or mental disabilities often qualify Oklahomans for SoonerCare or Medicaid, based on income and other eligibility guidelines. In general, the following groups of individuals may qualify for SoonerCare services in Oklahoma:

- Adults with children under age 19
- Children under age 19 and pregnant women
- Individuals age 65 and older
- Individuals who are blind and who have disabilities
- Women under 65 in need of breast or cervical cancer treatment
- Men and women age 19 and older with family planning needs (for the SoonerPlan program)

The higher rates of health impairments in the Medicaid-eligible population compared to the population covered by commercial or Medicare coverage often drive up healthcare costs. For example, compared to the population covered by commercial insurance or Medicare, the Medicaid population has a higher prevalence of mental health diagnoses. This significantly higher prevalence in mental health diagnoses compounded with physical health problems leads to higher healthcare utilization by members.

Medicare

The Medicare population possesses particular obstacles that are unique due to age (age 65 and older), which leads to a higher risk of chronic conditions and poorer health. As the "baby boomer" generation ages, there will be a significant increase to the Medicare-eligible population as well as usage of the healthcare system. The Medicare population has a significantly higher rate of hypertension (70.6 percent) and diabetes (25.9 percent) rates than any other payers.

Dual Eligibles

Dual eligibles are individuals that are covered by both Medicare and Medicaid. Close coordination between the two programs as it relates to providing care in a manner that meets the Triple Aim is now increasingly possible through demonstrations and other processes enabled by the ACA. Dual eligible individuals may include low-income seniors or younger individuals that possess a disability. The size of the dual eligible population has remained relatively steady over the past few years, with 109,200 beneficiaries in 2013 and 110,900 beneficiaries in 2015. This follows other Medicaid enrollment trends, with the exception of SoonerCare Children, which had a significant increase in the beneficiary population.[79] Given the unique demographics of the dual eligible population, there has been an effort to increase care coordination and payment between Medicare and Medicaid to streamline the process of

healthcare delivery. Dual eligible individuals tend to have more complex and costly conditions than in other member populations.

Employer Sponsored Insurance

Employer Sponsored Insurance (ESI), or group insurance membership, has generally increased from 2012 to 2014 throughout different wage quartiles by about 4.5 percent. There is a positive correlation between wage quartile and the percent of full-time employees enrolled. ESI enrollment may be perceived to be more affordable for individuals that are in higher wage categories compared to individuals in lower wage categories. Additionally, individuals in lower wage categories may be less likely to enroll in ESI plans due to eligibility for subsidies through the ACA, or plans not being offered through the workplace. Premiums in Oklahoma for all tiers of ESI have increased between 2012 and 2014, with annualized increases ranging between six percent and 10 percent depending on the member category.[80] As premiums increase, employers are more likely to increase the share of contributions from employees.

Pre-Medicare

Pre-Medicare members, older adults who do not yet qualify for Medicare but have retired, were the most costly group for the Employee Group Insurance Division. The per-member-per-year cost for these members outpaced the cost for active and Medicare members by almost double, at $8,252 per year or $688 per month. This could be attributed to the reason they accepted early retirement, perhaps disability or other health factors. Further, pre-Medicare member premiums fell short of covering incurred claims by $26.3 million, whereas both Medicare and active member claims were able to cover incurred claims.[81]

Disabled Populations

An estimated 15.6 percent of Oklahoma's total population is living with a disability. Of those Oklahomans that are under the age of 18, 4.9 percent (46,066) are disabled. Of individuals between the ages of 18 and 64 years old, 14.1 percent (319,463) are disabled. Of individuals that are 65 years old or older, 42.4 percent (212,800) possess a disability. Individuals that possess a debilitating physical, mental, or emotional problem (29.6 percent) were more likely than those without a disability (12.9 percent) to delay a doctor's visit, citing costs. Similarly, those that required special equipment (23.6 percent) were also more likely to delay a doctor's visit than those that did not require any special equipment (16.5 percent).[82] As previously mentioned, delaying care may subsequently lead to more serious, expensive, and higher acuity health problems. It is important to stress and encourage to be actively involved in their own care to improve health outcomes.

Figure B.18: Percentage of Population by Age Group with Disability, Oklahoma, 2009-13

	Under 18 Years	18 to 64 Years	65 Years and Older
Population with Disability	4.8% (N = 44,819)	14.1% (N = 319,463)	42.3% (N = 212,800)

According to the American Community Survey, of the non-institutionalized population in Oklahoma that possesses a disability between 21 and 64 years of age, 77.4 percent are insured, 25.9 percent are on Medicaid, and 24.2 percent are on Medicare. Nationally, it is estimated that 83 percent of the population with a disability are insured and 17 percent are uninsured. Individuals that possessed a cognitive disability were more likely to live in poverty than individuals that had a visual, hearing, ambulatory, self-care, or independent living disability. The most likely to be uninsured are those with visual disabilities in Oklahoma (27.9 percent) compared to the nation (21.2 percent).[83]

Demographics and Health Factors by Payer Type

The distribution of insurance source enrollment varies by key demographic and health factors of enrollees, such as geography, age, income, and reported health status. These demographic and health factors are not evenly represented across the various payer types, a fact that needs to considered when evaluating payers, cost, and planning health system reforms.

Urban versus Rural Location

A larger proportion of rural Oklahomans are enrolled in government health programs (i.e. Medicare, Medicaid, and other government programs) than urban Oklahomans. Forty-one percent of rural Oklahomans are insured through governmental health programs compared to 36 percent of Oklahomans living in urban areas.[84] Oklahomans from rural counties are also less likely to be insured through employer-based health insurance coverage. Employer-based health insurance represents 39 percent of Oklahomans in rural areas, yet 45 percent of Oklahomans in urban areas. The proportion of uninsured Oklahomans did not vary significantly by geographic location. Urban and rural residents were equally likely to be uninsured. The following table shows estimates of enrollment by insurance source for urban and rural residents in 2015.

Figure B.19: Estimated Enrollment by Insurance Source and Geography (2015)

Insurance Source	Geography	
	Rural	Urban
Individual	66,600	156,900
Small Group	45,300	132,000
Large Group	126,100	367,100
Self-Funded (with EGID)	256,100	743,500
Medicaid/CHIP (with Duals)	257,300	569,400
Medicare (without Duals)	172,200	371,500
Other Public Programs	24,200	68,300
Uninsured	160,200	383,600
TOTAL	**1,107,800**	**2,792,300**

Age

In 2015, over half (52 percent) of Oklahomans under the age of 19 were insured through Medicaid or CHIP, which is a much greater proportion than other age groups.[85] Twenty-seven percent of Oklahomans between the ages of 19 and 34 were uninsured, which is a much higher proportion than any other age group. The majority of Oklahomans in the 35 to 49 and 50 to 64 age groups was insured and received coverage through commercial insurance plans. Oklahomans over the age of 64 were most likely insured through Medicare. Only 2.7 percent of those over the age of 64 were uninsured, which is the second lowest uninsured age group after those under 19. Of note, the state has the seventh highest child uninsured rate with 9.7 percent uninsured in 2014.[86]

Figure B.20: Estimated Enrolment by Insurance Source and Age (2015)

Insurance Source	Age Group					
	Under 19	**19 to 34**	**35 to 49**	**50 to 64**	**Over 64**	**Total**
Individual	45,700	59,200	49,000	69,300	300	223,500
Small Group	42,100	45,600	43,200	45,200	1,100	177,300
Large Group	116,400	127,700	120,300	125,600	3,200	493,200
Self-Funded	204,900	228,700	209,100	205,200	6,600	854,500
EGID	28,900	32,300	35,400	48,600	39,300	184,500
Medicaid/CHIP (with Duals)	532.200	113,300	63,600	59,600	58,000	826,700
Medicare (without Duals)	8,000	11,100	14,500	47,500	423,100	504,200
Other Public Programs	21,800	25,500	15,200	28,600	1,500	92,500
Uninsured	22,900	241,100	167,400	97,400	14,900	543,800
TOTAL	**1,022,900**	**884,500**	**717,700**	**727,000**	**548,000**	**3,900,200**

Health Status

Health factors or morbidity vary by insurance source in several ways. Oklahomans with Medicare have a higher morbidity than the average for the state of Oklahoma, regardless of their reported health status.[87] Age is likely a moderator that reduces the effect of health status on morbidity, as Medicare enrollees are older than other insurance populations. Medicaid enrollees also experience higher morbidity than average. Oklahomans with employer-sponsored insurance have a lower morbidity than average Oklahomans.

Regardless of insurance, morbidity increases as health status decreases. The following table estimates the composite health factor by self-reported health status and insurance coverage source. A composite score of 1.0 represents the average health status for Oklahoma. Scores above 1.0 represent a higher morbidity compared to the state average, and scores below 1.0 signify a lower morbidity compared to the state average.

Figure B.21: Estimated Health Status by Insurance Source (2015)

Insurance Source	Health Status				
	Excellent	Very Good	Good	Fair / Poor	Composite
Individual	.29	.44	.97	3.08	.80
Employer-Sponsored Insurance	.29	.43	.98	3.05	.64
Medicaid/CHIP (with Duals)	.22	.34	.79	3.28	.92
Medicare (without Duals)	.84	1.08	1.87	4.25	2.44
Other Public Programs	.28	.41	1.01	3.24	.89

Uninsured	.30	.41	.96	3.02	.87
COMPOSITE	**.30**	**.47**	**1.11**	**3.55**	**1.00**

The tables below detail the prevalence of major health conditions by insurance payer as well as the costliest conditions on a national level.

Figure B.22: Condition Prevalence by Insurance Payer in Oklahoma[88]

Condition	Commercial Insurance	Medicare	Medicaid
Obesity	29.9%	28.9%	28.9%
Diabetes	5.2%	25.9%	4.5%
Hypertension	14.2%	70.6%	9.8%
Tobacco Use (based on published research)	21.1%	9.9%	36.7%

Figure B.23: National Costliest Conditions, 2010

Condition	Cost (in millions)	Highest Cost Service
Heart Disease	$107,186.40	In-patient hospital
Trauma	$82,303.57	Out-patient hospital
Cancer	$81,734.62	Out-patient hospital
Mental Health Disorders	$73,060.24	Prescription Medication
COPD/Asthma	$63,782.99	Prescription Medication
Osteoarthritis	$62,362.98	Out-patient hospital
Diabetes	$51,310.57	Prescription Medication
Hypertension	$42,943.38	Prescription Medication
Source: Agency for Healthcare Research and Quality, 2010 Medical Expenditure Panel Survey		

Health Status and Income by Health Insurance Source

On average, individuals who earn less than 138 percent of the FPL and individuals who earn more than 400 percent of the FPL have a slightly higher morbidity than individuals with incomes between these two categories.[89] It is inferred that the reason individuals in the highest category of income have higher morbidity is due to being older, on average, than lower-income individuals.

Regardless of income, Medicare enrollees have a morbidity rate 229 percent to 256 percent higher than the average Oklahoman. This too can be likely attributed to Medicare enrollees being older then individuals with other insurance sources.

The following table estimates the composite health factor by household income level as a percent of FPL and insurance coverage source. A composite score of 1.0 represents the average health status for Oklahoma. Scores above 1.0 represent higher morbidity compared to the state average, and scores below 1.0 signify lower morbidity compared to the state average.

Figure B.24: Estimated Health Status by Income Level and Insurance Source

Insurance Source	Household Income Level as Percent of the Federal Poverty Line				
	<138%	139% - 250%	251% - 400%	400%+	Composite
Individual	.89	.84	.70	.77	.80
Employer-Sponsored Insurance	.55	.57	.62	.73	.64
Medicaid (with Duals)	1.00	.69	---*	---*	.92
Medicare (without Duals)	2.29	2.43	2.51	2.56	2.44
Other Public Programs	.85	.70	.96	1.10	.89
Uninsured	.89	.81	.89	.98	.87
COMPOSITE	**1.04**	**.99**	**.95**	**1.02**	**1.00**
**Note: No one enrolled in Medicaid has a household incomes between 251-400% and 400%+ of FPL*					

High Cost Services by Payer

High-cost services and patients are generally the result of poorly managed and inefficient care. There is no clear definition of what constitutes a high-cost patient; however, certain aspects among each population may delineate some commonalities. Seriousness of an illness, prevalence, and costs associated with each patient can be used to help identify high cost conditions. These conditions tend to be chronic and are generally preventable, but may cause serious complications or death if they are not treated appropriately. For instance, hypertensive patients tend to pay 283 percent more than the average patient for commercial payers, 127 percent more than the average for Medicare Patients, and 217 percent more than the average Medicaid patients per year.[90]

Figure B.25: High Cost Condition Relative to Average Member by Payer in Oklahoma

Condition	Commercial Insurance	Medicare	Medicaid
Obesity (based on coding)	343%	229%	*Information Unavailable*
Adult Obesity (based on published research)	*Information Unavailable*	122%	*Information Unavailable*
Diabetes	349%	157%	232%
Hypertension	283%	127%	217%
Tobacco Use (based on coding)	345%	213%	N/A

Adult Tobacco Usage (based on published research)	*Information Unavailable*	115%	*Information Unavailable*
Behavioral Health Conditions	313%	224%	N/A
Top 20% of Population	490%	413%	N/A
AVERAGE ANNUAL COST	**$4,993**	**$9,865**	**$4,746**

Healthcare transformation in Oklahoma must be particularly focused on highly prevalent, high-cost conditions and behaviors, which include obesity, diabetes, hypertension, tobacco usage, and behavioral health. According to the Employees Group Insurance Division (EGID), these conditions account for an estimated 63.5 percent of all health-related costs in 2013. For commercial payers, obesity has the highest prevalence at 29.9 percent. In the Medicaid population, the prevalence of tobacco usage is 36.7 percent; obesity prevalence is 28.9 percent. Medicare had the highest potential high cost service prevalence in hypertension at 70.6 percent. Diabetes and hypertension are diagnosed in a higher proportion in the Medicare market than compared to the Medicaid and commercial market, likely attributed to the average age of Medicare patients being 74.2 years old while commercial enrollee average age was 33.7 years old.[91] For EGID enrollees the highest number of claims and costs were associated with hypertension. In 2013, there were almost 600,000 claims at a cost of over $116 million, which was the most expensive chronic condition, accounting for 15 percent of all claims. Additionally, if all heart-related diagnoses were combined, they would account for $274 million or approximately 35 percent of all healthcare-related expenditures for EGID in 2013.[92]

Healthcare transformation in Oklahoma aims to support improved management and outcomes related to these conditions, as they represent both significant costs and a large number of individuals.

Healthcare Cost Trends

Oklahoma payer data indicates that in 2010 and 2012, the top 25 principal diagnosis had total costs of $12.9 billion and $14.2 billion (increase of 10.1 percent), respectively.[93] Total personal healthcare expenditures, amounting to $7.5 billion in 1991, has steadily increased to top $24 billion in 2009 in Oklahoma[94]

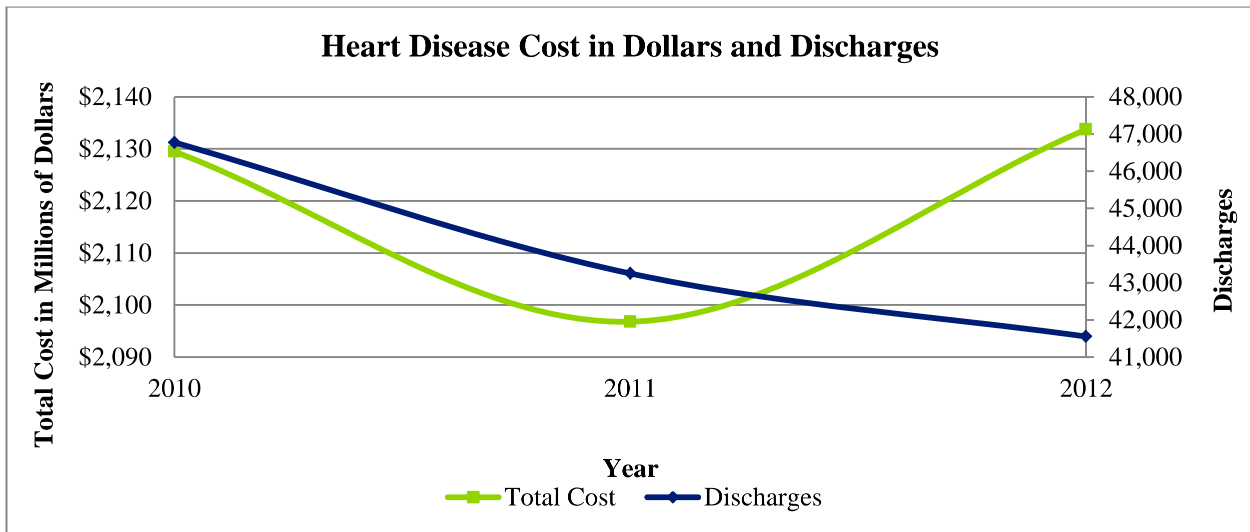
In 2009, the nation spent over $2 trillion annually on personal healthcare expenditures, compared to $677 billion in 1991. The average annual percent growth of total personal healthcare expenditures in Oklahoma was 6.7 percent, slightly above the national average of 6.5 percent.[95]

Oklahoma ranks third highest in the nation for its mortality rates related to heart disease, which was consistently the most costly diagnosis to treat in the state. The cost to treat heart disease has resulted in over $2 billion in total costs statewide every year between 2010 and 2012. The average cost per discharge increased annually from $45,526 in 2010 to $51,348 in 2012, a 12.8 percent increase.[96]

Heart disease-related inpatient hospital costs were the highest cost condition among patients covered by Medicare, commercial insurance, Veterans Affairs and military insurance, and other payers, as well as patients that were uninsured/self-pay.**Error! Bookmark not defined.** Congestive heart failure was the second leading cause of all 30-day hospital readmissions in 2012. Combined with coronary atherosclerosis and other heart disease, this made up 6.8 percent of all 30-day readmissions.**Error! Bookmark not defined.** It should be noted, however, that the driver of marked increases in both the total and average costs per hospital inpatient discharge is not necessarily due to increased patient utilization. Rather, there are a declining number of discharges per year and increasing average costs, which appears to be related to the increased

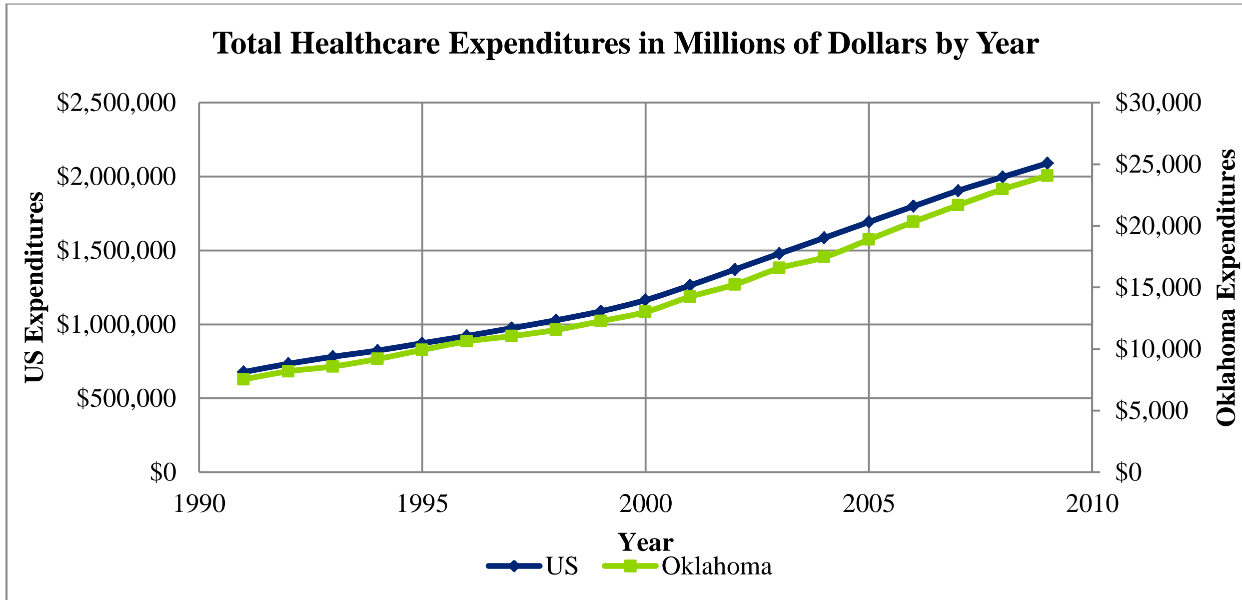
cost of services that are rendered from year to year. For example, the average cost of heart disease at discharge increased 12.8 percent between 2010 and 2012 but discharges decreased 11.2 percent from 46,774 in 2010 to 41,554 in 2012, as seen in the figure below.[97] These types of healthcare trends are present in other diseases as well and can be attributed to many different causes. From the delivery side this could be due to new procedures, pharmaceuticals, or intensity of services, and from the payment side, this could be a result of methodologies changing over time to include more services and increases in the total cost of care.

Figure B.26: Heart Disease Total Cost in Millions of Dollars and Number of Discharges by Year



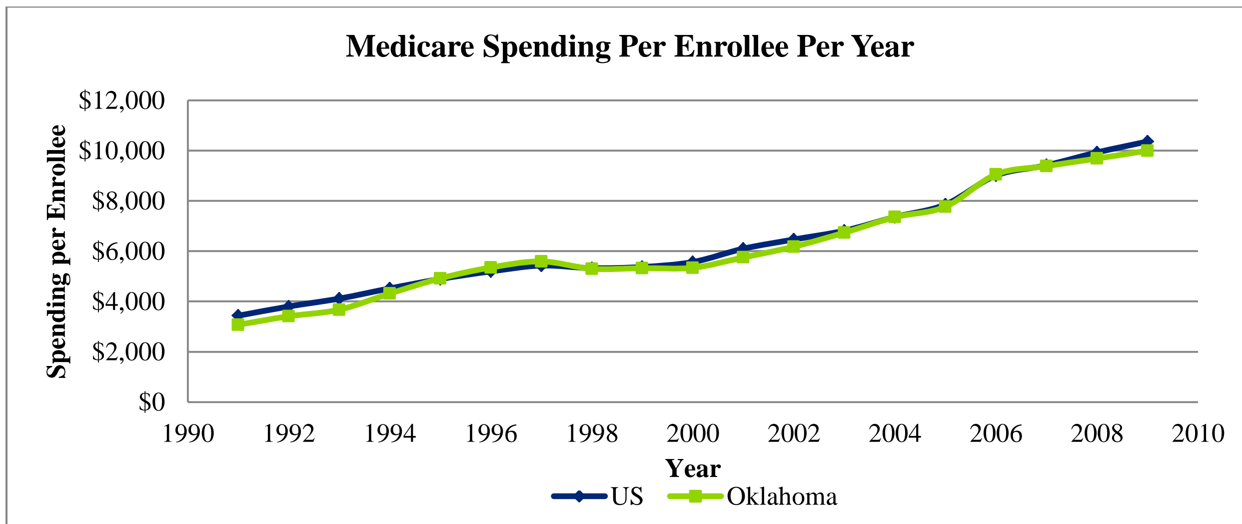
The most common principal diagnosis for all payers was complications from pregnancy, childbirth, and puerperium residual, which accounted for 52,582 discharges in 2012. Medicaid was the most common payer, accounting for 58.03 percent of all discharges in 2010, 56.77 percent of all discharges in 2011, and 55.97 percent of all discharges in 2012, indicating a decreasing proportion over a three-year period. Although average costs at discharge were relatively low at $13,178, the volume of patients brought the Medicaid total annual charges to just under $388 million or 57.7 percent of the total annual costs for complications from pregnancy, childbirth, and puerperium residual. The number of discharges has been decreasing, while average and total costs have been increasing between 2010 and 2012.

Figure B.27: Total Healthcare Expenditures in Millions of Dollars by Year



The Medicare population represents a large portion of the US healthcare expenditures and is unique in that it is an overall unhealthier population compared to other payers, as it caters specifically to older Americans, individuals with particular diseases, and people with a disability. Heart disease was the most costly diagnosis for the Medicare population accounting for over $1.3 billion in total charges or 62 percent of the total heart disease charges for all payers in 2012. The second most costly diagnosis (obstructive lung disease) for the Medicare population had less than half the total charges for heart disease ($1.3 billion compared to $620 million respectively). Additionally, Medicare spending per enrollee has been steadily increasing. Oklahoma's expenditures tend to be slightly lower than the national average. Average Medicare expenditures per enrollee are currently only 3.65 percent higher for the nation than the state.[98]

Figure B.28: Medicare Spending Per Enrollee by Year



Per capita health spending is an important metric to determine the overall population health expenditure burden and general cost trends. The total aggregate health spending costs of public, private, net hospital revenues, and product costs are divided by the total state population to determine per capita health spending. Per capita spending on healthcare services in Oklahoma has steadily risen from $2,375 in 1991 to $6,531 as of 2009. The state's per capita spending has historically been slightly lower than the national average and maintained a similar gap over time. Current per capita spending is 4.3 percent higher for the nation when compared to the state's spending.[99]

Current Federally-Supported Program Initiatives

The landscape of healthcare initiatives in Oklahoma is dynamic. Oklahoma has many worthwhile ongoing healthcare initiatives, the effects of which could be magnified through effectively coordinating resources.

If cross-collaboration is to succeed, a process or infrastructure will need to be implemented to coordinate and facilitate these varied, but related, initiatives.

Federally-funded initiatives currently support numerous health transformation initiatives to improve health outcomes for the state's population. Research conducted for the Oklahoma SIM project assessed current initiatives that align with the five flagship population health issues (tobacco use, obesity, diabetes, hypertension, and behavioral health). This research also identified federal agencies as the primary funders of initiatives, funding 93 percent of initiatives.[100] The research found that 68 percent of initiatives were funded for less than $200,000 and that over half of the initiatives were funded for three years or less.

The table below lists ongoing initiatives to advance the health of the state, where funding sources could be identified. Following the table are examples of federally-funded projects described in greater detail.

Figure B.29: Identifiable Primary Payers / Federal Funding Agencies among Health Initiatives

Payers / Funding Agencies	Type of Funding	No. Initiatives	Percent (%)
Centers for Disease Control and Prevention	Federal	52	32%
National Institutes of Health	Federal	36	22%
Health Resources and Services Administration	Federal	19	12%
Substance Abuse and Mental Health Services Administration	Federal	17	10%
Centers for Medicaid and Medicare Services	Federal	9	5%
Medicaid – Unspecified	Federal	4	1%
Family & Youth Services Bureau	Federal	4	2%
Administration for Community Living	Federal	3	2%
U.S. Department of Health & Human Services – Unspecified	Federal	3	2%
Indian Health Services	Federal	2	1%
Children's Bureau	Federal	1	1%
Office of Justice Programs	Federal	1	1%

Total Identified Health Initiatives with Primary Federal Payer	153	93%
Total Identified Initiatives	**164**	**100%**

Oklahoma Health Care Authority Initiatives

The Oklahoma Health Care Authority (OHCA), the state Medicaid Agency, is the state's largest public payer for healthcare and serves over 811,000 adults and children.[13] Medicaid typically serves higher cost populations with more medical needs than the general population. In order to curb spending, OHCA has implemented several initiatives aimed at improving the health of their member population to decrease costs. The most notable efforts at improving health and decreasing costs are explained below.

Electronic Health Record (EHR) Incentive Program

The Oklahoma Medicaid EHR Incentive program, which began January 3, 2011, was one of the first in the nation to launch. The purpose of the program is to provide a financial incentive to assist eligible providers in adopting (acquire and install), implementing (train staff, deploy tools, exchange data), and upgrading (expand functionality or interoperability) meaningfully use certified EHR technology. In addition, Oklahoma had the first community mental health center (CMHC) to register eligible professionals for the EHR Incentive Program.

Patient-Centered Medical Homes

Oklahoma's largest primary care case management program under the 1115 waiver, known as SoonerCare Choice, has an estimated enrollment of 528,847 members.

At the request of OHCA's provider community and in collaboration with the OHCA Medical Advisory Task Force, in 2009 the OHCA implemented a patient-centered medical home primary care delivery system for most Medicaid beneficiaries through SoonerCare Choice. OHCA contracts directly with primary care physicians, physician assistants, and nurse practitioners throughout Oklahoma to provide primary care, care coordination, and specialty care referrals. Over 2,400 primary care providers are eligible to receive three types of reimbursement under the SoonerCare Choice model:

- A monthly, per-member-per-month (PMPM) care coordination payment that can increase according to a 3-tiered system;
- A fee for service schedule for services provided; and
- A set of performance-based payments based on quality-of-care benchmarks (SoonerExcel)

SoonerCare Choice members are designated a primary care provider (PCP) that provides basic health services. Members can change their PCP as they deem necessary and may see a provider who is not their designated PCP for services. To become a certified patient-centered medical home, practices must meet national quality standards related to patient access to care, care coordination and support, population health management, team-based care, and quality improvement.

Health Access Networks

n 2010 the SoonerCare Health Access Network (HAN) model was launched as part of the SoonerCare Choice program. Like the SoonerCare Choice PCMH, the HAN serves Medicaid members under Oklahoma's 1115 waiver. The Oklahoma HANs are non-profit administrative entities representing a collection of providers which may include hospitals, public health departments, providers, RHCs, FQHCs, or other recognized safety net providers that is organized for the purpose of restructuring and

improving the access, quality, and continuity of care to SoonerCare members, the uninsured and the underinsured. HANs offer patients access to all levels of care, including primary, outpatient, specialty, certain ancillary services, and acute inpatient care, within a community or across a broad spectrum of providers across a service region.

HANs are primarily focused on providing education and care management to high-risk members. HANs are also encouraged to offer practice enhancement to their affiliated PCMH providers, including assistance in demonstrating compliance with Tier 3 PCMH requirements. Currently there are three HAN contractors in Oklahoma: Partnership for Healthy Central Communities, Oklahoma State University Center for Health Sciences (OSU), and Oklahoma University (OU) Sooner HAN. These three contractors operate in 23 counties and encompass 754 HAN-affiliated PCMH providers practicing at 90 sites throughout the state.

The Oklahoma HANs receive a flat PMPM for agreeing to provide practice enhancement and care management coordination for the HAN-affiliated SoonerCare Choice providers and members. The care management activities are targeted for high-risk SoonerCare Choice members.

Health Management Program

The Health Management Program was started to help SoonerCare Choice members who have, or are at risk for developing a chronic disease. Telligen was chosen by the OHCA to provide services to HMP members.

HMP Services Available:

- Health Coaching**:** Health coaches are registered nurses located in selected PCP offices that provide education, support, and self-management tools aimed at improving the member's health.
- Behavioral Health Screening**:** HMP members are asked to complete a behavioral health screening to identify areas they may need help with managing.
- Pharmacy Review**:** Each HMP member fills out a medication list with the help of their Health Coach. The nurse can ask for this list to be reviewed by a pharmacist if any problems are identified, which also serves to lessen the chance of a medication error.
- Community Resources**:** All Health Coaches are in contact with a resource specialist to help members locate appropriate resources.
- Primary Care Provider Involvement**:** As health coaches are located in selected PCP offices, they work with providers to help improve health outcomes.

SoonerExcel Program

SoonerExcel is a performance-based reimbursement component of SoonerCare Choice where providers are eligible for incentive payments if they meet certain quality-of-care benchmarks related to: [8]

- Breast and cervical cancer screenings**:** Providers are incented to meet or exceed compliance rates for recommended screenings services.
- Behavioral health screenings**:** The goal of this measure is to meet the national and local trends to integrate behavioral health into physical health delivery. Providers perform annual behavioral health screenings for patients age five and older.

- Well-child checks and 4th Diphtheria, Tetanus, and Pertussis (DTaP) Vaccine Administration**:** These measures are targeted to improve the health of children covered under SoonerCare by recording well-child visits and encouraging the completion of the DTaP immunization series before age two.

- Emergency department (ED) utilization**:** Under this measure, providers are incented to reduce ED utilization by their patient panel and educate patients about proper ED use.

- Inpatient admissions**:** The incentive's purpose is to supply further payment (beyond the rate) to PCPs that provide inpatient admitting and care as well as to incent PCPs to admit and visit their panel member while in an inpatient setting.

SoonerCare Practice Facilitators

The OHCA currently employs practice facilitators that are available to any SoonerCare provider. These facilitators are available to assist with any quality improvement initiative that the practice may desire to implement.

SoonerCare Health Home Initiative

The SoonerCare Health Home Initiative was implemented in January 2015 to build a patient-centered system of care that improves outcomes and services for children with serious emotional disturbance (SED) and adults with serious mental illness (SMI). Health Homes are an optional Medicaid State Plan benefit through a collaboration of the Oklahoma Department of Mental Health and Substance Abuse Services (ODMHSAS) and the OHCA. It is intended to be a place where SED and SMI individuals can come throughout their lifetimes to have their health care needs identified and to receive the medical, behavioral, and social supports they need, coordinated in a way that recognizes all of their needs as an individual, not just patients. The expectation is that behavioral health homes will result in improved quality of care and more cost efficiencies; improved experience with care on the part of members; and reductions in the use of hospitals, emergency departments, and other expensive facility-based care, such as Psychiatric Residential treatment for children. Health Homes are responsible for reporting on HEDIS measures related to hospital admission rates, emergency department visits, and skilled nursing facility admissions.

The ODMHSAS has established 130 Health Homes across the state to offer holistic care by providers, social services, and behavioral healthcare specialists.

Care Coordination Models for the Soonercare Programs' Aged, Blind, and Disabled Members

The OHCA is developing a Request for Proposal aimed at contracting for a fully capitated, statewide model of care coordination for Oklahoma Medicaid's Aged, Blind and Disabled (ABD) populations. The intent of this initiative is to provide better access to care, improve quality and health outcomes, and control costs.

Primary Care and Behavioral Healthcare Integration[101]

The Substance Abuse and Mental Health Services Administration (SAMHSA) distributed grants to support key behavioral health initiatives in Oklahoma. For FY 2014 to 2015, Oklahoma received a total of $55 million from SAMHSA, with approximately $32 million allocated to various behavioral health initiatives. As the recipient of SAMHSA grant funding for the Primary and Behavioral Health Care Integration program, the ODMHSAS reviews and issues sub-grants to implement collaborative, evidence-based partnerships between community mental health centers and primary care delivery sites, such as federallyqualified health centers. Key goals of the program include improving the physical health status

and access to care for people with mental illness and substance abuse disorders. Selected organizations jointly conduct activities in this program, such as facilitating screening and referral for conditions such as depression and substance abuse, and develop follow-up processes and metrics for specialized physical health services, depending on the needs of the patient.

State and Local Public Health Actions to Prevent Obesity, Diabetes, Heart Disease and Stroke (Centers for Disease Control and Prevention 1422 Grant)

As part of the 1422 grant from the Centers for Disease Control and Prevention (CDC), the Chronic Disease Service and Center for the Advancement of Wellness in the OSDH are collaborating with local county health departments to develop and implement evidence-based interventions to promote health, support and reinforce healthful behaviors, build support for lifestyle improvements, and improve health outcomes by leveraging system and policy changes at the community level and in healthcare settings. These interventions focus on combatting obesity, diabetes, health disease, and stroke. This multi-year project is being advanced in Carter County, Comanche County, Le Flore County, Lincoln County, McCurtain County, Muskogee County, Pittsburg County, Seminole County, and Sequoyah County. Criteria for being selected include factors such as size of the adult population, disease specific mortality and morbidity, and the previously demonstrated ability of the selected county to implement health improving strategies. No monetary commitment is required of communities and agencies involved in the project partnership.

Statewide Goals for Health Information Technology

The OSDH's five-year strategic plan (Healthy Oklahoma 2020: OHIP) sets statewide goals, objectives, and strategies for the adoption and use of health information technology (HIT). The goals listed below were selected through consultation with experts in the state. The goals are consistent with the state's overall goals of a transformed health system that achieves the Triple Aim of improved quality of care, increased population health, and lower healthcare costs growth.[102] The state's goals for HIT align closely with the major national objectives established by the Office of the National Coordinator for Health Information Technology (ONC).[103]

Health Information Technology Utilization

Health information technology is a critical component of achieving the Triple Aim of improved quality of care, increased population health, and lower healthcare cost growths. It enables patient-centered care and the integration of clinical, claims, and social determinants of health data.

In 2009, the ONC developed a certification program for EHR systems and offered supplemental Medicaid and Medicare "incentive payments" to eligible providers and hospitals to offset the cost of implementing, upgrading or transitioning to certified EHR systems. The OHCA was the first Medicaid program in the nation to issue Medicaid incentive payments to providers, with the first payment disbursed in January 2011.[104]

According to CMS data from February 2016, more than $493 million has been paid in Medicare and Medicaid EHR Incentive payments to hospitals and individual providers in the state of Oklahoma, making EHR incentive payments one of the single largest sources of funds dedicated to assisting providers with HIT system investments.[105] Organizations participate in the program voluntarily. Additionally, some providers have pursued and invested in systems independent of the incentive program.

The most recent monthly report from the OHCA identifies a total of 107 out of an eligible 150 hospitals (72.0 percent) that received Medicaid incentive payments as of July 2015. For individual providers, 2,947 providers out of 11,983 eligible physicians, nurse practitioners, physician assistants, and dentists received Medicaid EHR incentive funding (22.7 percent.)[106] A survey conducted in July 2015 of healthcare

practice locations across the state found that 86 percent (n = 1,277) of respondents reported utilization of an EHR system, while 14 percent (n = 211) of the practices at the time of the survey did not have systems.[107] Gaining a complete assessment of the landscape of HIT remains an ongoing challenge at the state level. This is in part due to barriers in collecting adequate information. For example, the SIM EHR survey had a low response rate (25.5 percent). This low response rate contributes to the persistent gap in our knowledge about the nature of statewide HIT use, particularly for rural and independent providers not affiliated with larger health systems and hospitals.

Four broad practice types were classified in the study design:

1. Physician offices and ambulatory clinics;
2. Hospitals;
3. Behavioral and mental health centers, and
4. Long-term or post-acute care facilities, such as nursing homes.

Overall, physician offices/ambulatory clinics indicated the highest rate of adoption of EHRs (92 percent and 94 percent, respectively), while behavioral health centers and long-term and post-acute care centers reported using EHR systems at the lowest rates of the four categories of healthcare facilities (75 percent and 64 percent, respectively).[108] Among the 181 practices that did not currently have an EHR and responded to the inquiry, respondents indicated if they "never" planned to implement an EHR system (27 percent of respondents), planned to implement systems in six to 12 months (11 percent of respondents), planned to implement systems in 12 to 24 months (18 percent of respondents), or planned to implement systems over a greater time period than 24 months. Additionally, some practices did not specify a time frame but stated that they were "in the process" of adopting an EHR system (10 percent of respondents).

Practices that did not have EHR systems were given the opportunity to identify reasons for the lack of an EHR system at their location, with the ability to choose multiple applicable answers. Responses were categorized by survey analysts, as shown in the figures below.[109]

Figure B.30: Responses Selected for Having "No EHR" (N = 209)

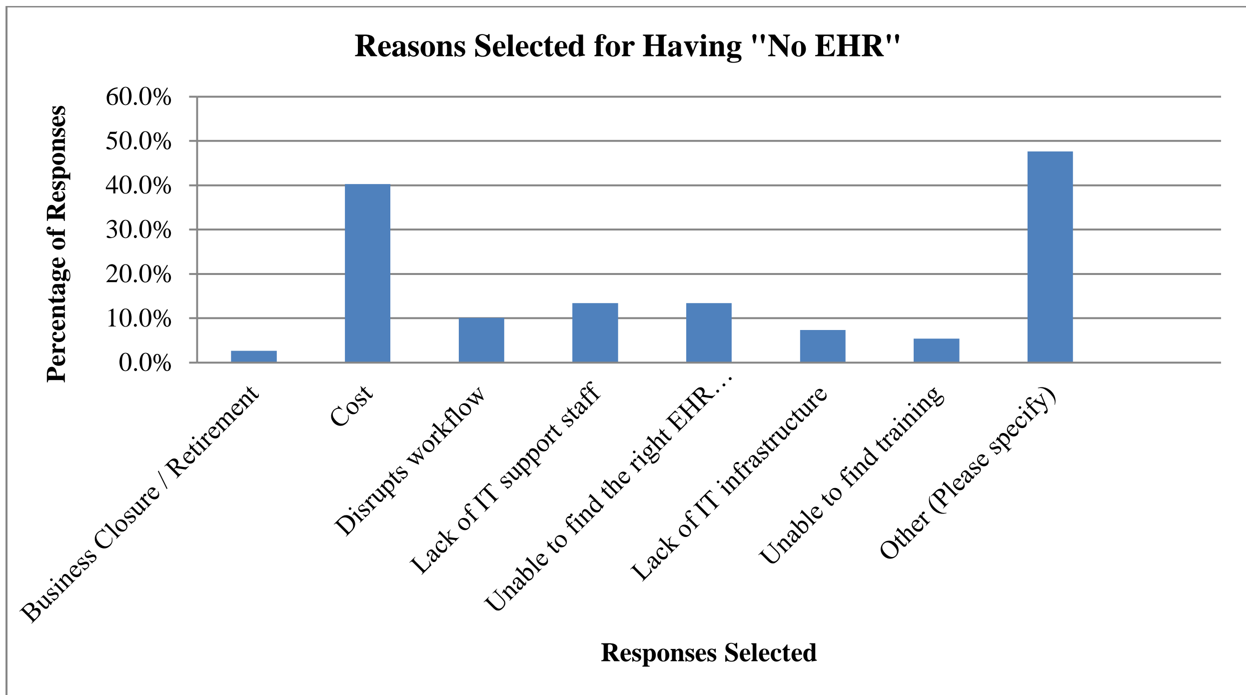
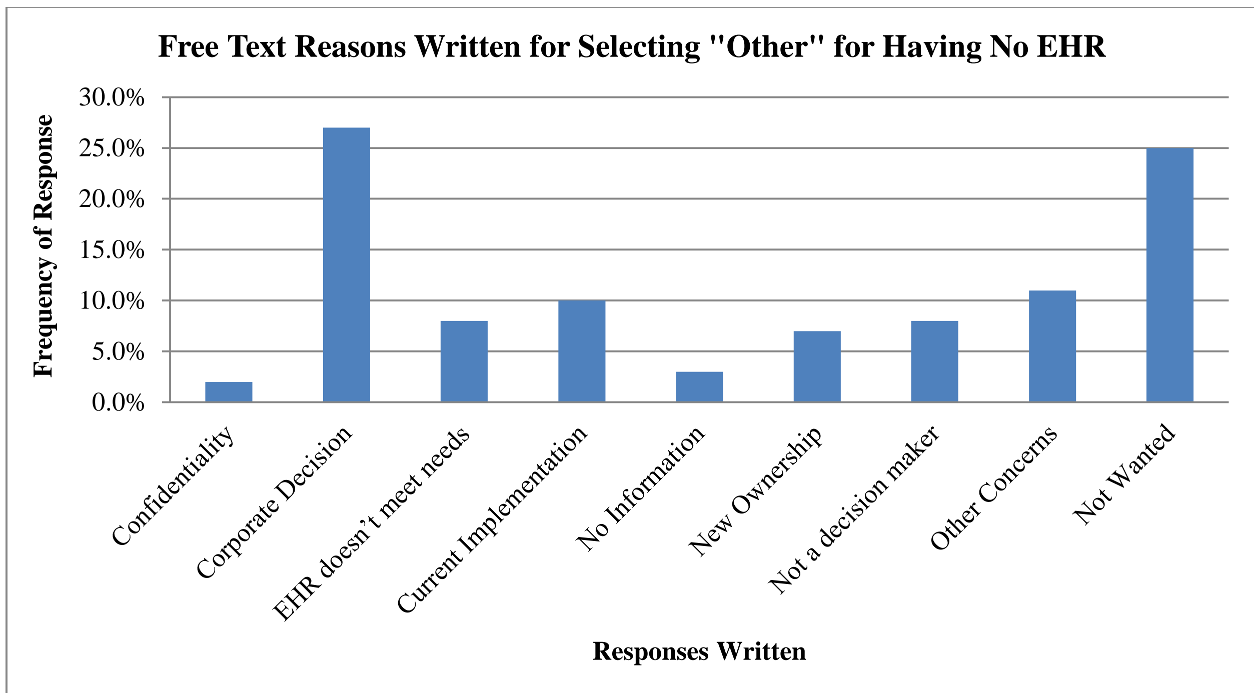


Figure B.31: Free-Text Reasons Written for Selecting "Other" for Having "No EHR" (N = 71)



Responses to the EHR survey, while limited, provide information that can be used to assess barriers to greater HIT adoption. Recent national studies of EHR adoption, such as the Robert Wood Johnson

Foundation's (RWJF) *Health Information Technology in the United States* (2014), have described evidence of a "digital divide'" in which disparities in the speed of adoption and use of EHRs can exist among hospitals and physicians serving different demographics. Hospitals that had not yet adopted an EHR at the time of the RWJF study were more likely to be rural, smaller in size, or have critical access or public hospital designations. Similar characteristics were observed for hospitals and providers that were not "early" adopters, such as those that had plans to adopt EHRs within a time frame beyond six to 12 months from the time they completed the survey. Hospitals or providers with these characteristics typically face greater financial constraints, often due to the disproportionate share of vulnerable or uninsured patients that they serve. EHR implementation also involves extensive staff re-training and workflow redesign, which is especially difficult to perform with shortages of health professionals or HIT experts.

CURRENT DEMONSTRATION PROJECTS AND WAIVER EFFORTS

Federal Health and Human Services Initiatives

Comprehensive Primary Care Initiative[110]

The Comprehensive Primary Care (CPC) Initiative is a four-year demonstration project that was launched in October 2012 in seven regions across the U.S. The goal of the initiative is to test approaches that improve primary care coordination and delivery. The initiative supports primary care practices in testing, on a broader scale, innovative payment models that incorporate five comprehensive primary care functions identified by CMS and stakeholders. These five functions include: access and continuity of care; planned care and chronic conditions; risk-stratified care management; patient and caregiver engagement; and coordination of care across a medical neighborhood.

Based in the Greater Tulsa Region and encompassing 25 of the state's 77 counties, Blue Cross and Blue Shield of Oklahoma, Community Care Oklahoma, and the OHCA is working with a network of 74 primary care practices, including 264 individual primary care providers, that together care for over 316,000 patients. Approximately 45,000 patients are Medicare and Medicaid beneficiaries. Clinical data from electronic health records and claims information are used to risk-stratify patients, identify gaps in care, and bring employers, insurers, and providers to work together to review the quality and cost of care. All of the practices share their cost and performance data, which creates a culture of collaboration and a focus on outcomes.

The CPC Initiative also requires reporting on quality and performance measures include preventive screenings (cancer, hypertension, and obesity), depression screenings, tobacco screening and cessation, and diabetes management.

Eligibility for provider participation in the program is based on multiple factors, such as the size and previous experience of a practice with PCMH models. This is a multi-payer effort including Medicare, Medicaid, Blue Cross Blue Shield of Oklahoma, and Community Care of Oklahoma. Medicare offers risk-adjusted care management payments in addition to traditional FFS components and will offer a shared savings component in Year 2 of the project. Care management fees are designed to allow providers to make investments in transformative primary care practice changes, including workflow redesigns, increased utilization of HIT, and proactive identification of higher-risk populations. The median practice

received $227,849 in additional revenues (equivalent to 19 percent of the median 2012 total practice revenue) over the first year of implementation.[111]

Figure B.32: Primary Care Functions for Comprehensive Primary Care Initiative

Primary Care Function	Function Description
Access and Continuity	Extended hours, continued follow-up services for patients
Planned Care & Chronic Conditions	Proactive assessment, including medication management and review of services and behavioral health referrals
Risk-Stratified Care Management	After identification of highest risk patients, care planning and monitoring is implemented, leveraging health IT to measure improvements
Patient and Caregiver Engagement	Decision making involves patients at all levels of care, with attention paid to patient and caregiver satisfaction and cultural competency
Coordination of Care Across the Medical Neighborhood	Primary Care Providers integrate and manage care transitions and health information exchange

The main driver identified for the overall reduction in healthcare expenditures was reduced spending on inpatient hospitalizations. Oklahoma's Greater Tulsa region reduced inpatient facility expenditures by approximately 12 percent, while the national sample reduced inpatient facility expenditures by approximately three percent. The CPC Initiative will continue through December 2016, with annual evaluations for the remaining three years of the four-year program. Overall, the CPC Initiative in the greater Tulsa region showed substantial improvement on cost of care. The initiative generated a net savings of $10.8 million and earned more than $500,000 in shared savings payments.[112] Sustainability of the findings of the first year evaluation will be confirmed by the analyses conducted by evaluators.

Federally Qualified Health Center Advanced Primary Care Practice Demonstration

Federally Qualified Health Centers (FHQCs) are an integral part of the care delivery system, particularly for lower-income patients. FQHCs are designated by the Center for Medicare and Medicaid Services. Community Health Centers (CHCs) are FQHCs that receive funds from the Health Resources and Services Administration (HRSA) to provide healthcare services to medically underserved populations, regardless of the ability to pay. Oklahoma has 20 primary FQHCs with 76 direct sites across the state that offer a variety of primary, preventive, dental, and behavioral health services.

Beginning in 2011, CMS selected 500 FQHCs nationwide to participate in a three-year demonstration project, the FQHC Advanced Primary Care Practice Demonstration. FQHCs received Section 330 grants under the Public Health Service Act to deliver comprehensive healthcare to patients in underserved areas or populations. The goal of the project was to assist participating organizations with transforming the delivery of care for Medicare beneficiaries. The demonstration project tested the effectiveness of doctors and other health professionals working in teams to coordinate and improve care for their Medicare patients. The project aimed to show the PCMH model could improve quality of care, promote better health, and lower costs. Provider and patient satisfaction is measured by surveys conducted by the FQHCs on an ongoing basis.[5] A key goal of the project was to increase the number of FQHCs achieving Level 3 recognition from the National Committee on Quality Assurance (NCQA). Level 3 Recognition represents a significant achievement, as it is the highest level of care delivery recognized by NCQA, demonstrating high-quality, continuous, comprehensive patient-centered care delivery.

Three FQHC organizations in Oklahoma participated in the project from 2011 to 2014, including Great Salt Plains Medical Center, Pushmataha Family Medical Center, and Variety Care, Inc. CMS and other stakeholders provided support to FQHCs through monthly care management fees, issued for each Medicare beneficiary, to assist in the enhanced infrastructure and care coordination. Extensive technical assistance was provided to FQHCs through trainings and consultation opportunities to increase organizational knowledge of the NCQA recognition process.

Healthy Hearts for Oklahoma (H2O)[113]

The Healthy Hearts for Oklahoma (H2O) initiative is a four-year statewide cooperative established in 2015 through a $15 million grant from the Agency for Healthcare Research and Quality (AHRQ). H2O focuses on improving the infrastructure and use of evidence-based monitoring and treatment of cardiovascular disease. The goal is to support over 300 primary care practices that have 10 providers or less with practice facilitators who give each practice performance feedback and information technology support. Practice facilitators provide in-practice assistance with process improvements; connect practices and communities for health; prepare practices for value-based payment; assist with maximizing electronic medical records (EMR) and health information exchange (HIE) systems use; and assist with practice change to achieve peak performance on the ABCS (Aspirin Use when appropriate, Blood Pressure Control, Cholesterol Management and Smoking Cessation) of cardiovascular disease risk reduction. Furthermore, the initiative seeks to include an independent national evaluation to determine if quality improvement support can accelerate implementation of evidence-based treatment and prevention in primary care.

Oklahoma's regional cooperative consists of key primary care providers, academic institutions, hospitals, and information technology specialists that are working together from 2015 to 2019 to provide innovative primary care to a population of 1.23 to 1.35 million patients. Central to the strategy of the cooperative is deploying and sustaining an infrastructure of provider coaches, information technology advisors, and practice facilitators through the broader Oklahoma Primary Healthcare Extension System.

Practice Transformation Networks (PTN)

CMS recently announced the Transforming Clinical Practice Initiative award to 29 participants that will serve as Practice Transformation Networks (PTNs). PTNs are peer-based learning networks designed to coach, mentor, and assist clinicians in developing core competencies specific to practice transformation. The Iowa Healthcare Collaborative received an award to implement a six-state PTN in Iowa, Nebraska, South Dakota, Oklahoma, Kansas, and Georgia. Telligen, an Iowa-based organization, will partner with the Iowa Healthcare Collaborative to serve as the centralized data vendor. Telligen will provide consulting support for program management, data analysis and measures and serve as quality improvement advisers providing direct technical assistance to practices in all aspects including HIT. Oklahoma will leverage its participation in the PTN as part of the Oklahoma SIM practice transformation effort.

Medicare Initiatives in Oklahoma

Accountable Care Organizations

Accountable Care Organizations were established through Section 3022 of the Affordable Care Act. Under the Medicare Shared Savings program, CMS established overall cost of care benchmarks and 33 individual domains for quality of care that are adjusted for a number of factors related to patient population composition and regional variations in costs of care.[114] Groups of physicians, hospitals and other healthcare providers voluntarily collaborate to ensure patients enrolled in Medicare FFS receive care that meets the set of quality benchmarks and that providers can achieve shared savings over a multi-

year period if they are able to successfully contain the overall cost of care. All ACOs are required to report on both patient satisfaction measures (CAHPS) and quality/performance measures (NQF) to determine the degree to which care meets the needs of patients. ACO quality and performance measures include preventive screenings for cancer, hypertension, and depression; diabetes, hypertension, and high blood pressure management; and tobacco use screening and cessation. Oklahoma currently has three major health systems leading ACOs: Mercy Health ACO (Oklahoma City), SSMOK ACO - St. Anthony (Oklahoma City), and SJFI Oklahoma Initiatives - St. John (Tulsa). Each of the three ACOs consists of a major non-profit health system with multiple hospitals and provider specialty groups. In addition to hospitals and specialty groups, other partners, such as skilled nursing facilities and long-term care providers collaborate under a shared governance board with representatives for each entity and for Medicare beneficiaries.

Bundled Payments for Care Improvement Initiative

Bundled payments are a reimbursement methodology in which providers receive payment for the expected costs of an episode of care, rather than the actual costs for any specific instance. All episodes begin with an acute hospitalization by a patient but then vary by: (1) initiation and duration of episode, (2) applicable Diagnosis-Related Groups (DRG), and (3) timing of patients.

In Oklahoma, 39 sites are currently participating in the Bundled Payments for Care Improvement (BPCI) Initiative. Eighteen sites are in Model 2 (retrospective calculation, episode of care includes both acute and post-acute care) and 21 sites are in Model 3 (retrospective calculation, episode of care includes post-acute care only. The BPCI Initiative aims to improve the individual experience of care, improve the health of populations, and reduce the per capita costs of care for populations. The initiative allows providers to enter into payment arrangements that include performance accountability for episodes of care and share gains accrued from the delivery of coordinated care across care settings for Medicare FFS beneficiaries.[115]

Comprehensive Care for Joint Replacement

CMS has a new program starting in 2016 that will mandatorily require the Oklahoma City Metro hospitals to participate in the hip and knee bundled payment program. This will no longer be an optional program for those affected hospitals in Oklahoma City and selected cities across the United States.

Medicaid 1115 Waivers

Patient-Centered Medical Homes (SoonerCare Choice)

OHCA operates significant Medicaid programs under a waiver in accordance with Section 1115 of the Social Security Act, which grants the CMS the authority to accept innovative or alternative designs to state Medicaid programs, provided that they demonstrate comparable levels of access to health services for those in need.

SoonerCare Choice is a Primary Care Case Management (PCCM) model in which the OHCA contracts directly with primary care physicians, physician assistants, and nurse practitioners throughout Oklahoma to provide primary care, care coordination, and specialty care referrals. A total of 2,454 primary care providers are eligible to receive three types of reimbursement under the SoonerCare Choice model:

- A monthly, per-member-per-month care coordination payment;
- A fee schedule for services provided; and
- A set of performance-based payments based on quality-of-care benchmarks (SoonerExcel).

Contingent on the characteristics of the practice, which includes the level of services offered, PCPs can receive increasing per-member per-month payments under a 3-tiered system.

Figure B.33: Section 1115 Waiver Programs

Waiver Programs	Waiver Program Description
SoonerCare Choice **FY 2015 Total Expenditures: $1,837,714,512** **FY 2014 Provider Network:2,454 PCPs** **FY 2014 Total Enrollment: 548,162** **FY 2014 Children: 443,990** **FY 2014 Adults: 104,172**	Enrollees receive basic health services from their primary care provider (PCP), while PCPs are eligible to be reimbursed in three ways: monthly care coordination fees, visit-based fee-for-service reimbursement, and SoonerExcel incentive payments. Care coordination fees are awarded in a three tier system, with increasing per-member-per month funds based on populations served and other factors. SoonerCare Health Access Networks are providers affiliated with networks, allowing for broader coordination of care for patients with high-risk conditions. SoonerCare Health Management Program ensures practice facilitators and health coaches are available to support enhanced disease management services for enrollees with chronic conditions (i.e., asthma, hypertension, cardiovascular illness, etc.).
Insure Oklahoma **Employer Plan** FY 2015: Expenditures: $41,487,483 FY 2014: Participating Employers: 3,796 FY 2014: Employer Coverage Plan Enrollment: 13,527 **Individual Plan** FY 2015: Expenditures: $25,661,420 FY 2014: Individual Plan Enrollment: 4,396 **Combined** FY 2014: Total Enrollment; 17,923 FY 2014: Expenditures: $94,609,661	Insure Oklahoma extends healthcare coverage to Oklahomans under two models: a Premium Assistance Employer Coverage Plan and a Premium Assistance Individual Plan. The Employer Coverage Plan assists qualifying businesses to provide private health insurance plans. Employers may offer private health insurance to employees and their families, with premium costs shared between the Insure Oklahoma program (60%), employers (25%) and employees (15%).The Individual Plan allows qualifying adults at 100% of the FPL that do not qualify for the ESI program the ability to receive certain Medicaid services by paying a monthly premium.

Medicaid 1915(c) Waivers

The OHCA's Long-Term Care Waiver Operations Division and the Oklahoma DHS operate programs to serve populations with unique, long-term needs in a home or community-based setting. Under the authority of Section 1915 of the Social Security Act, CMS has approved eight 'Home and Community-Based Services' (HCBS) waivers designed to provide a variety of in-home and community support services to children and adults as an alternative to long-term institutionalization. Overall, approximately 23,000[116] individuals are served through the HCBS Waiver authority. Four of the eight waivers are currently designed to implement programs supporting adults with physical disabilities, while the remaining four waivers offer services to citizens with cognitive disabilities.[117] Services provided in home

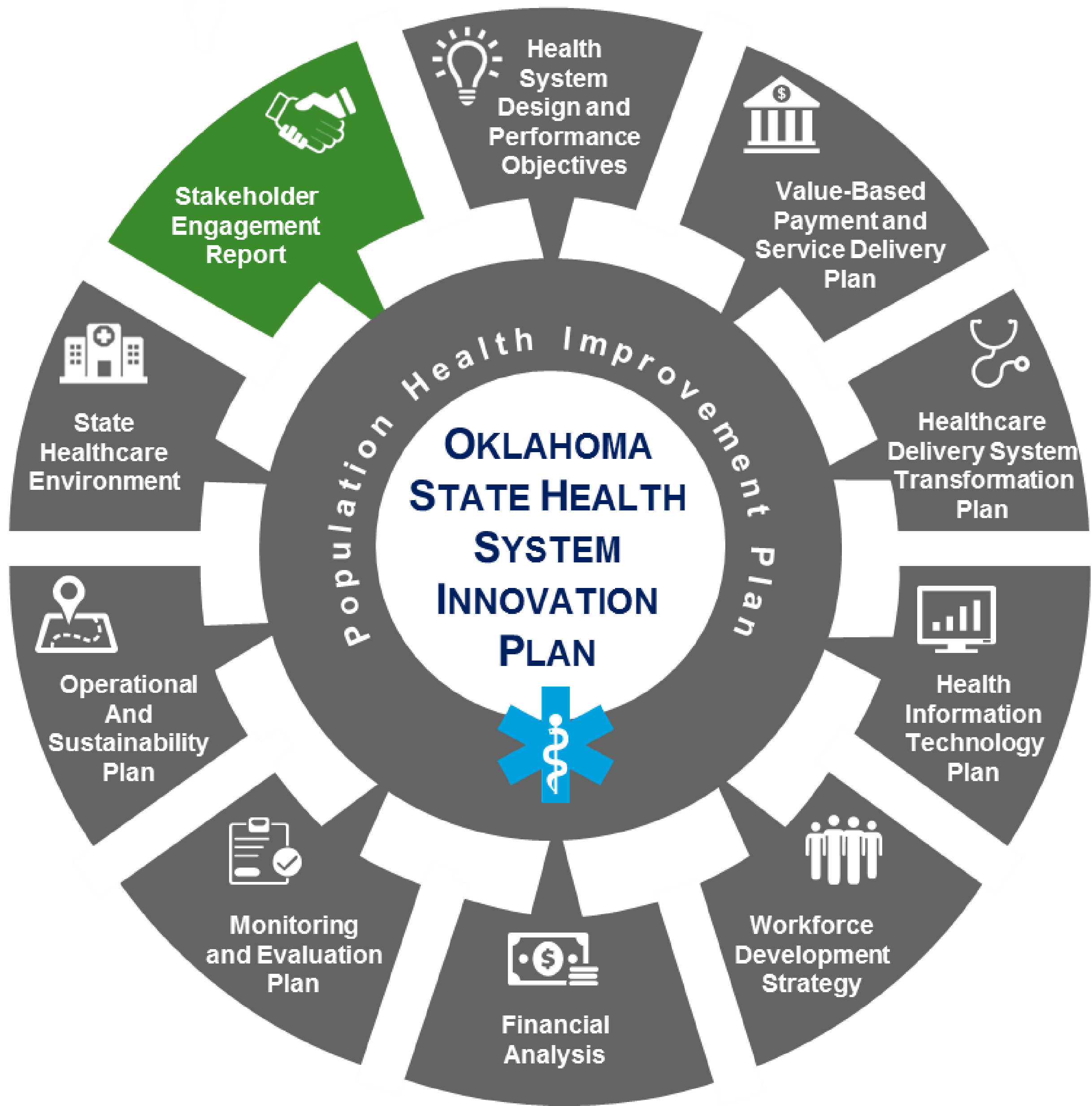
and community-based settings offer individuals alternatives and supports that may not otherwise exist in a traditional long-term institutional setting. Additionally, such programs have been documented to generate significant cost-savings, with the OHCA estimating an annual cost of care of $28,342 for enrollees at skilled nursing facilities, compared with an estimated annual cost of $8,565 for participants in the SoonerSeniors Waiver program, or $10,927 for the My Life My Choice program, which involves the provision of services in residential or home settings.[118]

Figure B.34: Section 1915(c) Waiver Programs (Total Enrollees, All Programs: 27,208)

Waiver Programs	Waiver Program Description
OK Advantage Waiver Program Number: 0256.R04.00 FY 2014 Expenditures: $191,057,419 FY 2014 Members Served: 21,299	Provides in-home supports, including home health, case management, personal care, and adult day services to elderly adults (age 65 and over) and adults with physical disabilities
OK Community Waiver Program Number: 0179.R05.00 FY 2014 Expenditures: $173,890,688 FY 2014 Members Served 2,879	Provides intensive daily supports in the home, including extended-hour nursing and psychiatric services, daily living services, and transportation services to children or adults above the age of 3 with conditions that would otherwise require care in facilities for individuals with intellectual impairment
OK Homeward Bound Program Number: 0399.R02.00 FY 2014 Expenditures: $90,178,069 FY 2014 Members Served: 697	Provides intensive daily supports, including extended-hour nursing and psychiatric services, daily living services, and transportation services to adults (age 18 and over) with conditions that would otherwise require care in intensive care facilities.
OK In-Home Supports Waiver for Children and Adults Program Number: 0351.R03.00 and 0343.R03.00 Combined Programs FY 2014 Total Expenditures: $23,896,415 FY 2014 Members Served 1,828	Adults: Provides support services in the home or DHS foster home, including daily living supports, psychological services, and occupational, speech, and physical therapy services to adults above the age of 18 with conditions that would otherwise require care in intensive care facilities. Beneficiaries' critical support needs must be met within an annual cap. Children: Provides support services in the home or DHS foster home, including daily living supports, psychological services, and occupational, speech, and physical therapy services to children between the ages of 3 to 17 with conditions that would otherwise require care in intensive care facilities. Beneficiaries' critical support needs must be met within an annual cap.
OK Medically Fragile Program Number: 0811.R01.00 FY 2014 Expenditures: $3,236,144 FY 2014 Members Served: 57	Provides services to Medicaid eligible adults (age 19 and over) that experience a chronic disease that requires prolonged specialized treatments that are medically necessary, such as continuous oxygen or dialysis. Beneficiaries may receive care in their homes, but would otherwise be required to receive care in a hospital and/or skilled nursing facility.

CONCLUSION

As detailed in this section, though major gains have been attained in critical health outcomes in Oklahoma, the state has many ongoing challenges in relation to population health and health system performance. The OSIM project has enabled the state to perform a comprehensive scan of these ongoing challenges as well as current healthcare initiatives across the state that aim to address these challenges. Going forward, this scan of the state healthcare environment will be used as a baseline for the state's healthcare environment needs as the state moves forward with the planning and implementation of the proposed Oklahoma Model.


Health System Design and Performance Objectives
Value-Based Payment and Service Delivery Plan
Healthcare Delivery System Transformation Plan
Health Information Technology Plan
Workforce Development Strategy
Financial Analysis
Monitoring and Evaluation Plan
Operational And Sustainability Plan
State Healthcare Environment
Stakeholder Engagement Report
Population Health Improvement Plan
OKLAHOMA STATE HEALTH SYSTEM INNOVATION PLAN

C. Report on Stakeholder Engagement and Design Process Deliberations

INTRODUCTION

This section of the State Health System Innovation Plan (SHSIP) describes the stakeholder engagement and design deliberations for the Oklahoma State Innovation Model (SIM) project. This report reviews all stakeholder activities as of the close of the project on March 31, 2016. The purpose of this section is to present details of the SIM stakeholder engagement activities, including collaborative efforts between the Oklahoma SIM project team and stakeholders, identification of relevant aspects of the 2014 Oklahoma State Department of Health (OSDH) Wellness Business Survey Report, and analysis and interpretation of key findings on collected data. Stakeholder engagement aimed at bringing subject matter experts together to facilitate discourse and consensus on critical areas of the SIM design.

Stakeholder Engagement Foundation

The OSDH, the fiduciary agent of the Oklahoma SIM grant, understands that broad stakeholder engagement is essential for effective and sustainable health system transformation. In 2008, five years prior to the SIM design and testing opportunities provided by federal law, the state convened a broad-based group of stakeholders, called the Oklahoma Health Improvement Planning (OHIP) Coalition. The goal of this coalition was to develop a comprehensive health improvement plan for Oklahoma. The OHIP Coalition consisted of influential stakeholders representing providers, payers, state and local governments, tribal sovereign nations, academic institutions, private institutions, businesses, and community organizations. Under the OHIP Coalition’s leadership, the state produced two state health improvement plans: the Oklahoma Health Care Improvement Plan (OHIP) 2014, for 2010 to 2014, and the OHIP Plan 2020, for 2015 to 2020. OHIP 2014 and OHIP 2020 identified the state’s flagship population health issues (tobacco use, obesity, children’s health, behavioral health); infrastructure goals (public health finance, workforce development, access to care, health systems effectiveness); and societal and policy integration goals (social determinants of health and health equity)..

Oklahoma SIM and OHIP Alignment

The OHIP Coalition also identified health transformation as a critical component to achieving statewide health improvement within the flagship issues . Workgroups were created around four distinct focus areas of healthcare transformation: Health Efficiency and Effectiveness; Health Workforce; Health Finance; and Health Information Technology (IT). The state used the governance structure and stakeholder base created under the OHIPto lead the Oklahoma SIM project. The Oklahoma SIM project team also incorporated key objectives, measures, and strategies of the OHIP health transformation component to ensure the Oklahom Model design complemented existing state priorities. As with OHIP 2014 and OHIP 2020, the SHSIP will be a product of collaboration across diverse stakeholder groups.

While the OHIP Coalition created a comprehensive assessment of Oklahoma’s population health successes, challenges, and improvement strategies, the Oklahoma SIM project takes the OHIP to the next level by designing a feasible and sustainable model for healthcare delivery and payment reform to advance the population health improvement goals identified by the OHIP Coalition. Furthermore, the Oklahoma SIM project team has expanded OHIP’s stakeholder base to include additional consumers,

businesses, public health coalitions, healthcare associations, and the state's top payers and organizations at the forefront of healthcare innovation.

STAKEHOLDER ENGAGEMENT PLAN UPDATE

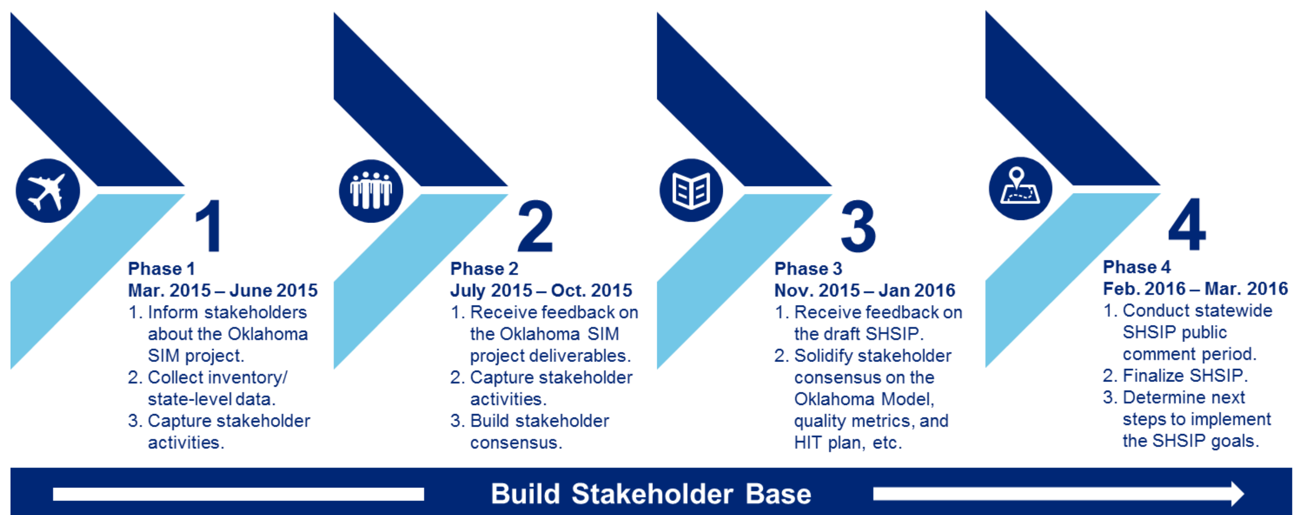
The Oklahoma SIM project team devised a Stakeholder Engagement Plan to address the value of healthcare delivery and payment reform. The aim of the stakeholder engagement plan was to encourage collaboration and discourse to ensure stakeholder input and feedbackshaped the design of the state's model. The project team has utilized a multi-pronged approach to ensure broad and diverse stakeholder engagement across the state.

At a high-level, the strategies to this Oklahoma SIM Stakeholder Engagement Plan include:

- Leveraging the OHIP governance structure and workgroups to ensure representatives with the appropriate subject matter expertise and practical experience facilitate, monitor, and evaluate the various activities and deliverables of the Oklahoma SIM project.
- Utilizing the Tribal Public Health Advisory Committee to seek feedback and recommendations for the model design from Oklahoma's tribal nations and partners.
- Deploying Oklahoma SIM staff and a Stakeholder Engagement Facilitator to work together in the field to engage new communities and stakeholders throughout Oklahoma to solicit more interest, support, and subject matter expertise for the Oklahoma SIM project.

Below is a diagram of the four phases of Oklahoma SIM Stakeholder Engagement Plan. Using extensive stakeholder input, the Oklahoma SIM project team created the conceptual design of the Oklahoma Model, and drafted the SHSIP, the final product of the Oklahoma project. The project team conducted a statewide public comment period on the SHSIP from February 2016 to March 2016. Now at the end of March 2016, the project team has completed all four phases of the plan and is submitting the SHSIP.

Figure C.1: Phases of the Engagement Plan



The Oklahoma SIM project team has implemented the strategies contained in the Stakeholder Engagement Plan. The table below details successes and future opportunities for each strategy.

Figure C.2: Stakeholder Engagement Plan High-Level Strategies

Strategy	Successes	Opportunities
Leverage the OHIP governance structure and workgroups to ensure representatives with the appropriate subject matter expertise and practical experience facilitate, monitor, and evaluate the various activities and deliverables of the Oklahoma SIM project.	• Held 5 Executive Steering Committee Meetings • Held regular leadership calls to discuss and refine Stakeholder Engagement Plan strategies • Held 37 workgroup meetings, including 4 All Workgroup meetings • Drafted, reviewed, and completed 15 workgroup deliverables • Completed 9 technical assistance deliverables	• Encourage further focused stakeholder input on workgroup deliverables via the workgroup online public comment boxes • Recruit additional members from underrepresented communities to serve as workgroup members
Utilize the Tribal Public Health Advisory Committee (incorporated as part of the OKLAHOMA SIM governance structure) to seek feedback and recommendations for the model design from Oklahoma's Tribal nations and partners.	• Had active participation from various tribal nations and associations on the workgroups • Had representation of an industry expert and hospital executive from the Cherokee Nation in the Executive Steering Committee • Presented twice to the Tribal Public Health Advisory Committee • Held two tribal consultations	• Continue working with the Tribal Liaison to establish and coordinate meetings between the committee, workgroups, staff, and leadership to keep the committee apprised of the project's status and seek their input into the SHSIP
Deploy Oklahoma SIM staff and a Stakeholder Engagement Facilitator to work together in the field to engage new communities and stakeholders throughout Oklahoma to solicit more interest, support, and subject matter expertise for Oklahoma SIM.	• Held 99 stakeholder meetings and presentations, 2 Statewide Webinars, and 1 All Payer Meeting to inform and engage stakeholders • Held meetings in 14 cities and counties across urban and rural Oklahoma, representing all four quadrants • Prepared agendas, scalable educational materials, supporting documents, and summary notes	• Secure buy-in and consensus from the state's top payers on the proposed model design • Continue reaching out to the business community to align vision for health system transformation, recruit new workgroup members, and secure buy-in for the model design

The Oklahoma SIM project team leveraged OSDH's existing outreach network of community coalitions, educators, and specialists embedded throughout Oklahoma to disseminate information about project goals and objectives, assemble stakeholders, and provide regional and community logistics and support to host stakeholder meetings. In particular, the project team leveraged the Turning Point program and Partnerships for Health Improvement Program. The project team incorporated information about community-based health initiatives into the SHSIP.

Stakeholder Type

The Oklahoma SIM project engaged with a diverse group of stakeholders as shown in the list below:

A. Advisory Group/Committee

B. Academic/Research Institution

C. Business/Business Association

D. Community Organization/Consumer Advocate

E. Healthcare Association

F. Payer (State-Funded, Commercial, Non-Profit)

G. Provider

H. Public Health Association/Coalition

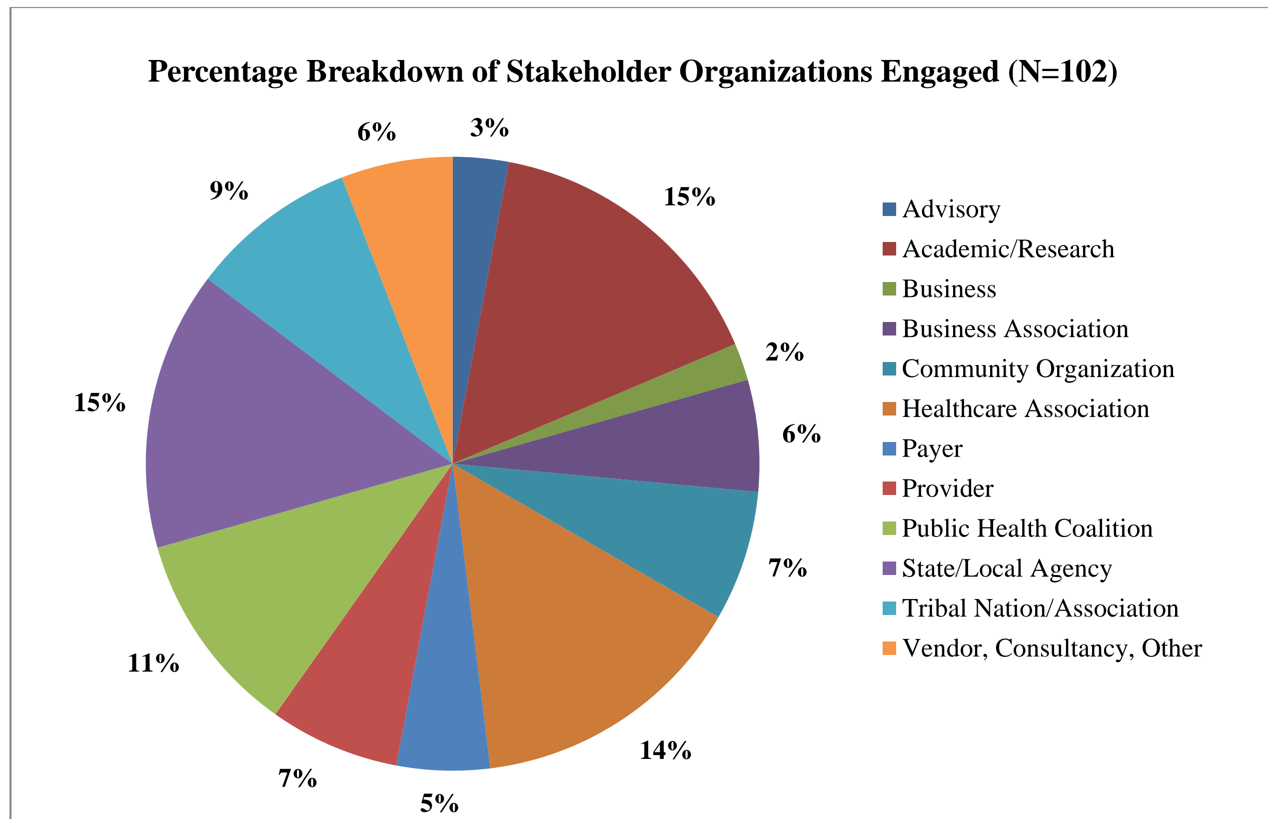
I. State/Local Agency

J. Tribal Nation/Association

K. Vendor, Consultancy, Other

The pie chart below depicts a breakdown of stakeholder organizations, per stakeholder type, with whom the Oklahoma SIM project team has engaged, out of a total of 102 stakeholder organizations.

Figure C.3: Percentage Breakdown of Stakeholder Organizations Engaged



Stakeholder Meetings

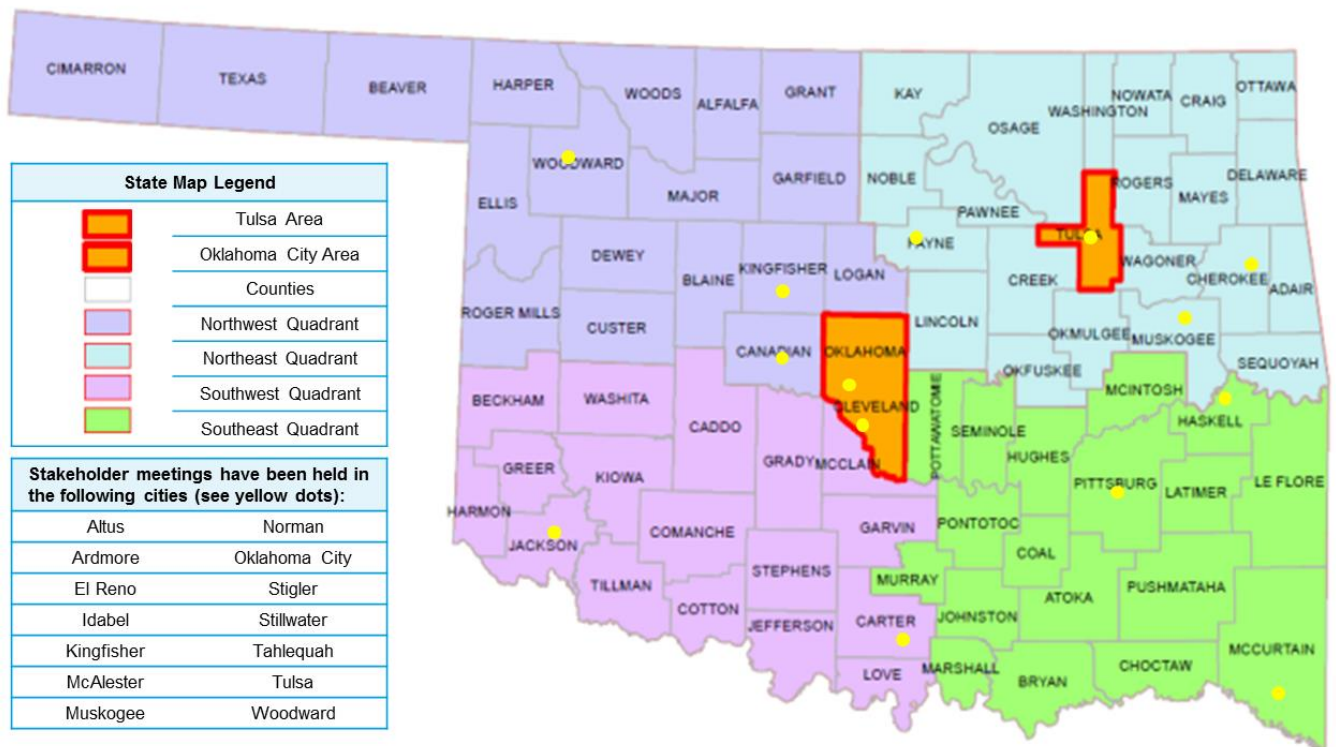
The table and map below show the locations of meetings in 14 cities and counties across the state. The Oklahoma SIM leadership divided Oklahoma into four geographic quadrants (Northwest, Northeast, Southwest, and Southeast) and two metropolitan areas (Oklahoma City and Tulsa). The Oklahoma SIM project team has engaged local communities in all of the four quadrants. The majority of meetings outside the Oklahoma City and Tulsa Metropolitan Areas represent meetings with Turning Point Coalitions to learn about community-based initiatives. The project team used OSDH's Turning Point program to help schedule these meetings.

Figure C.4: Stakeholder Engagement Meeting Locations

City	County	Quadrant
Altus	Jackson County	Southwest
Ardmore	Carter County	Southwest
El Reno	Canadian County	Northwest
Idabel	McCurtain County	Southeast

Kingfisher	Kingfisher County	Northwest
McAlester	Pittsburg County	Southeast
Muskogee	Muskogee County	Northeast
Norman	Cleveland County	Oklahoma City Area
Oklahoma City	Oklahoma County	Oklahoma City Area
Stigler	Haskell County	Southeast
Stillwater	Payne County	Northeast
Tahlequah	Cherokee County	Northeast
Tulsa	Tulsa County	Tulsa Area
Woodward	Woodward County	Northwest

Figure C.5: Stakeholder Meeting Map

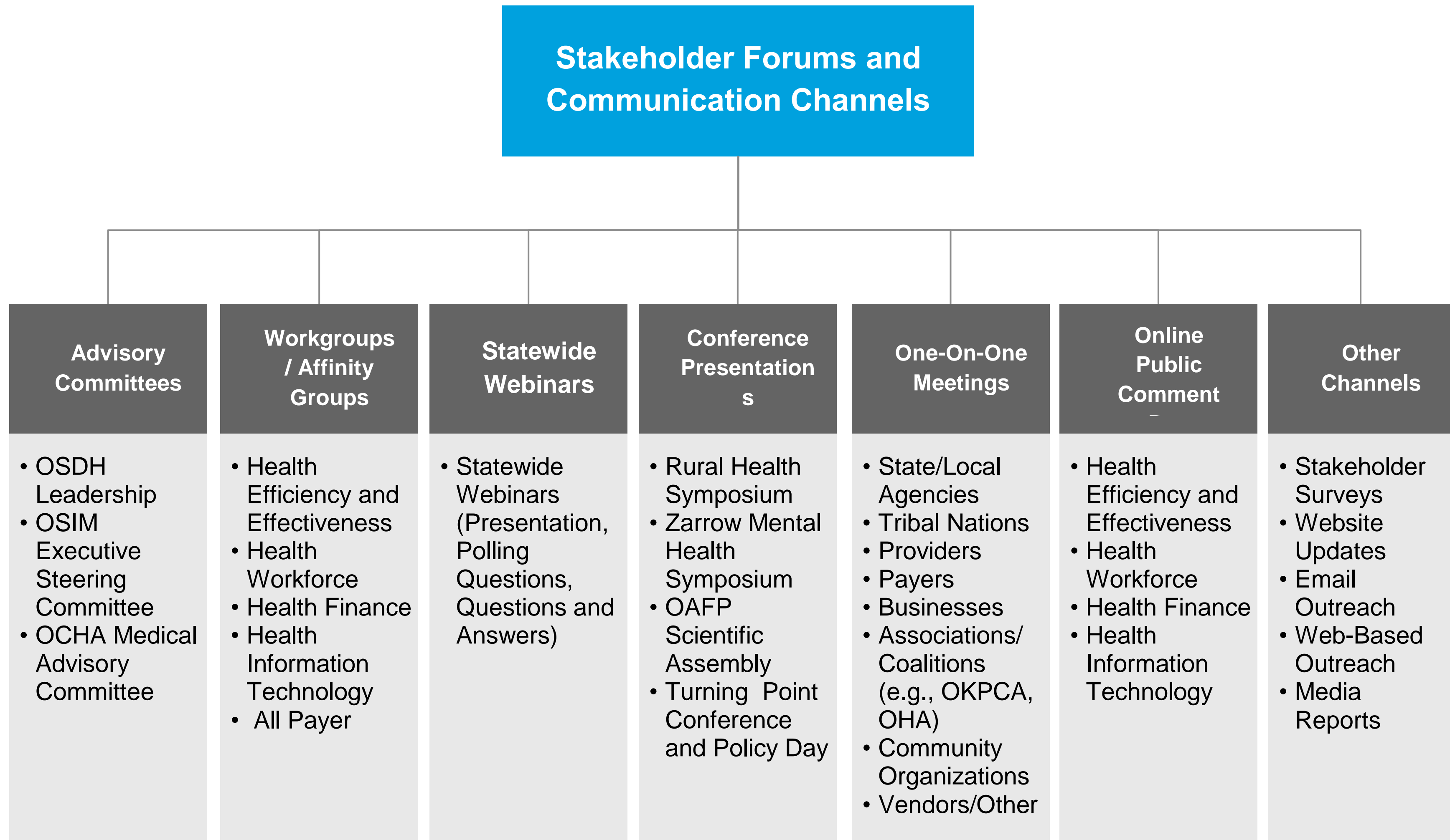


NARRATIVE OF STAKEHOLDER ENGAGEMENT ACTIVITIES

The Oklahoma SIM project team has benefited from the use of multiple forums and communication channels for stakeholder engagement. Executive Steering Committee meetings focused on providing project leadership with high-level updates to the project and driving critical decision-making on key aspects of the SHSIP development. This was coupled with meetings of the OSDH leadership and Oklahoma Health Care Authority (OHCA) Medicaid Advisory Committee to provide advisory guidance for the project. Workgroup meetings allowed stakeholders to offer focused feedback on Oklahoma SIM deliverables and various aspects of SHSIP . Statewide Webinars focused on providing quarterly updates on project meetings, activities, and deliverables. Affinity group based meetings, in this case the All Payer Meeting, focused on determining areas of alignment between these similar entities and building consensus on a model for the state. One-on-one meetings focused on conducting key informant interviews and informing stakeholders about the project and stakeholder opportunities, determining areas of alignment between the project and stakeholder organizations, and collecting data on organizational activities, particularly with regards to healthcare innovation. These meetings also enabled the project team to receive focused feedback on the model for the state. Presentations at stakeholder board meetings and conferences focused on informing potential stakeholders about the project, leading discussions, providing answers to questions from the public, and soliciting participation in workgroups. Additionally, the Oklahoma SIM project team used a public comment box located on the Oklahoma SIM website and other channels, including stakeholder surveys, website updates, and direct email outreach, to engage stakeholders virtually.

The figure below displays the various forums and communication channels used throughout the Oklahoma SIM project period to engage stakeholders in developing project deliverables and the SHSIP.

Figure C.6: Oklahoma SIM Stakeholder Forums and Communication Channels



As a representation of the frequency of meeting activity during the Oklahoma SIM project period, the graphs below show a breakdown of Executive Steering Committee meetings, workgroup meetings, statewide webinars, affinity group meetings, and general stakeholder meetings as of the close of the project period. In total, the project team held five Executive Steering Committee meetings, 37 workgroup meetings, two statewide webinars, and a range of other stakeholder meetings and presentations.

Figure C.7: Executive Steering Committee and Workgroup Meetings

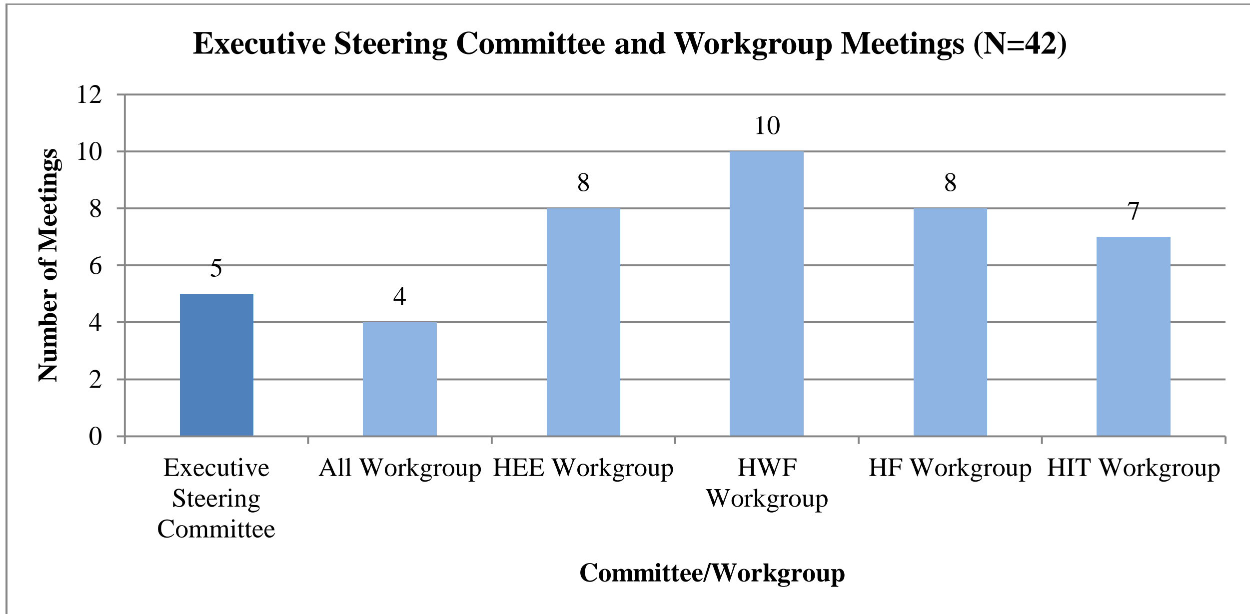
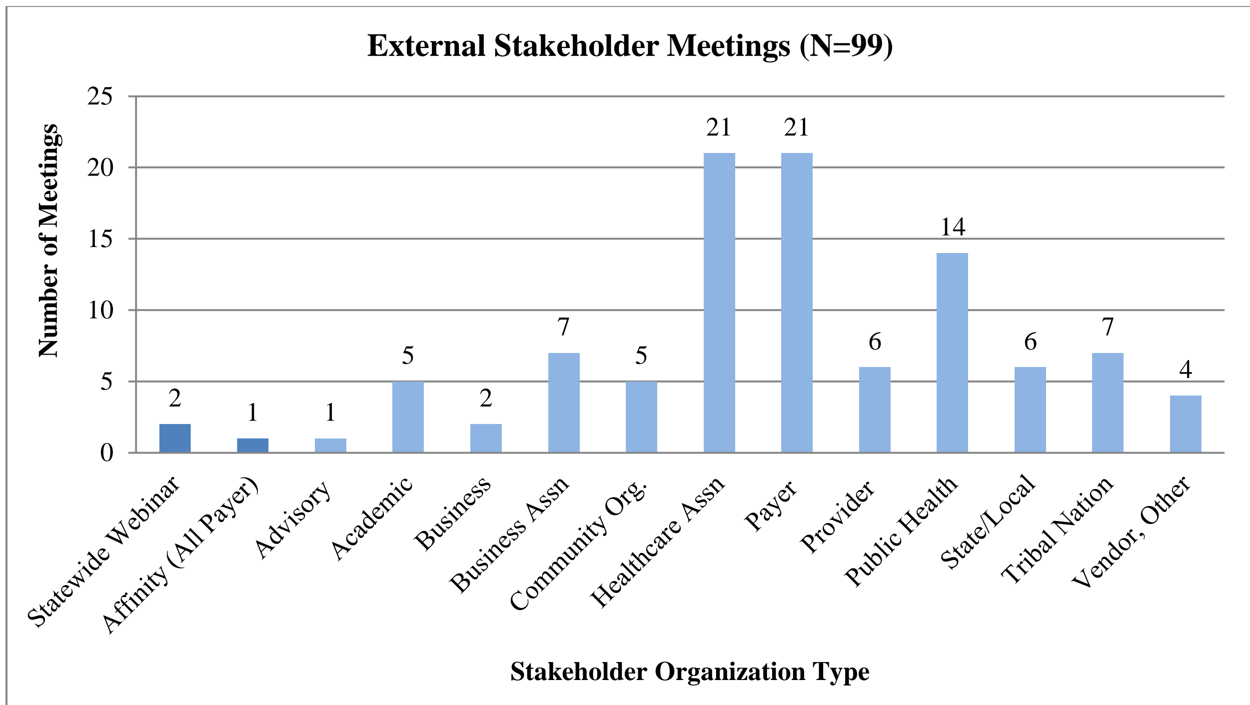


Figure C.8: External Stakeholder Meetings



Executive Steering Committee Meetings

The SIM Executive Steering Committte are Oklahoma healthcare leaders best able to leverage the state's significant knowledge, experience, and resources in healthcare and workforce development. The Oklahoma SIM project team held four Executive Steering Committee Meetings on June 11, 2015; September 16, 2015; January 13, 2016; February 23, 2016; and March 21, 2016. The following table**Error! Reference source not found.** shows the list of the 12 committee members.

Figure C.9: Executive Steering Committee Membership

Name	Title and Organization	Committee Role
Julie Cox-Kain	Deputy Secretary for Health and Human Services, OSDH	Leadership Chair
Rebecca Pasternik-Ikard	State Medicaid Director, OHCA	Health Efficiency and Effectiveness Workgroup Vice Chair
Deidre Meyers	Deputy Secretary of Workforce Development, Office of Workforce Development	Health Workforce Workgroup Vice Chair
Joseph Cunningham	Vice President of Health Care Management and Chief Medical Officer, Blue Cross Blue Shield (BCBS) of Oklahoma	Health Finance Workgroup Vice Chair
Bo Reese	State Chief Information Officer, Office of Management and Enterprise Services (OMES)	HIT Workgroup Vice Chair
Mitchell Thornbrugh	Chief Operating Officer, Cherokee Nation W.W. Hastings Hospital	Tribal Leadership Advisor
David Kendrick	Chair of Medical Informatics, University of Oklahoma (OU) College of Medicine; Founder and Chief Executive Officer (CEO), MyHealth Access Network	Committee Member
Brian Yeaman	Chief Administrative Officer, Coordinated Care Oklahoma	Committee Member
Bill Hancock	Vice President, CommunityCare of Oklahoma Health Insurance Plans	Committee Member
David Hadley	Managing Director and Chief Financial Officer, INTEGRIS Health	Committee Member
Debby Hampton	President and CEO, United Way of Central Oklahoma	Committee Member
Michael Brose	Executive Director, Mental Health Association Oklahoma	Committee Member

Executive Steering Committee meetings solicited critical feedback from committee members on the development of the Oklahoma SIM project, the model design, and the SHSIP sections. The first meeting focused on the following objectives: 1) Increasing committee membership to reflect the business community, health systems, behavioral health providers, and safety net providers; and 2) strategies to conduct research and evaluation on alternative payment models in Arkansas, Ohio, Colorado, Oregon and Tennessee with the aim of identifying practices that could be replicated in Oklahoma's model design.

The second meeting allowed the committee to review all stakeholder feedback and considerations on options for the state's model design. After deliberation, the committee directed the Oklahoma SIM project

team to draft a model similar to the Oregon Care Coordination Organization (CCO) model, with a focus on integrating the social determinants of health and mental health and substance abuse. The committee also deliberated on the HIT plan to support the state's model and statewide interoperability.

The third meeting allowed the committee to review an update on the model design and the working assumptions for the financial analysis of the model. The committee suggested ideas for strengthening the governance of the model and achieved agreement on the working assumptions for the financial analysis.

The fourth meeting allowed the committee to review feedback on the model design and an executive summary of the SHSIP.

The fifth meeting allowed the committee to review the financial analysis for the model design and provide feedback on any needed modifications.

Workgroup Meetings

The Oklahoma SIM project had four workgroups that were responsible for producing, reviewing, and finalizing a range of deliverables that were used to produce the SHSIP, as outlined in the table below.

Figure C.10: Oklahoma SIM Workgroups

Workgroup	Function
Health Efficiency and Effectiveness	Provide guidance in the design of an evaluation plan that identifies specific quality metrics in coordination with healthcare delivery models identified for Oklahoma with a focus on three key outcomes: (1) strengthening population health; (2) transforming the health care delivery system; and (3) decreasing per capita healthcare spending
Health Workforce	Develop a health workforce data catalog, identify data gaps, and assess state capacity for meeting current and future healthcare demands; provide a policy prospectus for health workforce redesign and training, recruitment, and retention
Health Information Technology	Increase the adoption of Electronic Health Records (EHR) and attainment of meaningful use (MU), incentivize adoption among non-EHR providers and connect them to existing Health Information Exchanges (HIEs), foster interoperable health systems, and plan the development of a value-based analytics (VBA) tool
Health Finance	Work with the actuarial contractor to integrate a new value based payment model based on pay-for-success and perform actuarial analysis of Oklahoma interventions and evaluations

The Oklahoma SIM project team held 42 workgroup meetings. At meetings, workgroup leaders and members reviewed and vetted contractor deliverables for inclusion in the SHSIP. Once deliverables were fully vetted and finalized, they were posted on the Oklahoma SIM website so that stakeholders could review and deliver feedback through the public comment box for each workgroup. Members were able to join meetings in person or virtually. Workgroups successfully vetted and completed 15 deliverables.

Four All Workgroup meetings brought stakeholders from all workgroups together on September 9 and 11, 2015; January 13, 2016; and March 16, 2016. The purpose of the All Workgroup Meetings was to review and discuss pivotal aspects of the Oklahoma SIM project to move the entire project forward based on overall stakeholder consensus at the conclusion of these meetings.

At the September meetings, the workgroups discussed the Value-Based Analytics Roadmap and evaluated three conceptual model design options for the state. Workgroup members evaluated the strengths and weaknesses of conceptual models for patient-centered medical homes, accountable care organizations, and care coordination organizations, based on a pre-determined set of criteria that aligned to the objectives of the Oklahoma SIM project and the Triple Aim. Based on feedback from these meetings, the project team devised the key conceptual model tenets for the Oklahoma Model. Model tenets are a shared set of values and ideas stakeholders believe represent an ideal healthcare system. Tenets were refined throughout the SIM project to ensure tenets accurately reflected the views of stakeholders and were included in the model design.

At the January meeting, the Oklahoma SIM actuarial contractor reviewed the process of creating the working assumptions for the state's model based on standard actuarial analysis, the model components, and experiences in other states with similar models. Workgroup members discussed assumptions used to estimate enrollment into the RCOs and the use of models from other states as a baseline for Oklahoma. Concerns were addressed and the plan design was modified accordingly.

At the March meeting, the actuarial contractor reviewed the financial analysis for the Oklahoma Model focused on state-purchased healthcare for the Medicaid program. Workgroup members discussed the population focus, goals, financial forecast overview, cost model approach, baseline projections, estimated savings, and assumptions behind these savings. Concerns were addressed and incorporated into the analysis. The actuarial contractor included the financial analyses for both the Medicaid program and the state Employees Insurance Division (EGID) program into the final deliverable used for the SHSIP.

The section below details the activities conducted by each workgroup during the project period.

Health Efficiency and Effectiveness Workgroup

At Health Efficiency and Effectiveness Workgroup meetings, members reviewed and provided comments on the following deliverables:

- Population Health Needs Assessment
- Population Health Driver Diagrams
- Current Healthcare Transformation Initiatives
- Care Delivery Model Analysis
- High Cost Delivery Services

Additionally, members discussed funding opportunities and the sustainability of provider organizations such as federally-qualified health centers.

Health Workforce Workgroup

At Health Workforce Workgroup meetings, members reviewed and provided comments on the following deliverables:

- Health Workforce Data Catalog
- Health Workforce Assessment: Provider Organizations
- Health Workforce Assessment: Providers
- Health Workforce Assessment: Gap Analysis
- Health Workforce Assessment: Environmental Scan
- Health Workforce Assessment: Emerging Trends

Additionally, members reviewed and discussed a list of 25 critical health occupations and the Governor's Health Workforce Action Plan.

Health Finance Workgroup

At the Health Finance Meetings, members reviewed and provided comments on the following deliverables:

- Market Effects on Healthcare Transformation
- Oklahoma Care Delivery Model Analysis
- High-Cost Delivery Services

Additionally, members discussed guidelines for the financial analysis of the state's model.

Health Information Technology Workgroup

At HIT Workgroup Meetings, members reviewed and provided comments on the following deliverables:

- Health Information Exchange Environmental Scan
- Electronic Health Records Adoption Analysis Survey Report
- Value-Based Analytics Tool Roadmap and Discussion

Additionally, members discussed funding opportunities such as the Office of the National Coordinator's grant for interoperability, which the workgroup applied for but was not awarded. Members also discussed the outline of the HIT plan and delivery and payment models.

Statewide Webinars

The Oklahoma SIM project team held two statewide webinars on June 11, 2015 and August 13, 2015. The first webinar was an introduction to the project, including goals and objectives, timeline, workgroups, and stakeholder engagement opportunities. The second webinar presented a comprehensive review of deliverables from each workgroup, presented by the workgroup project managers. The first webinar had twice as many attendees as the second webinar (110 attendees compared to 55 attendees). The majority of webinar attendees represented state and local agencies, providers, healthcare associations, and payers.

The following characteristics about stakeholders were determined from webinar polling questions:

- Stakeholders reported that the Oklahoma SIM goal of improving population health outcomes most aligns with their organization's priorities (61.8 percent of respondents, Webinar 1).

- Stakeholders reported that a shared vision across payers is the greatest barrier to participating in multi-payer value-based purchasing (41.9 percent of respondents, Webinar 1).
- Stakeholders reported that behavioral health was the population health issue that was the most difficult to tackle (56 percent of respondents, Webinar 2). The majority of respondents stated that this was due to insufficient resources (58 percent of respondents, Webinar 2).
- Stakeholders reported that the greatest barrier to ensuring a well-trained health workforce was difficulty with recruitment and retention of providers (60 percent of respondents, Webinar 2).

Below are stakeholder evaluations of the two webinars.

Figure C.11: Statewide Webinar Evaluation Answer Key

Rating Category	Rating Value
Strongly Agree	5
Agree	4
Neutral	3
Disagree	2
Strongly Disagree	1
Did Not Attend	N/A

Figure C.12: Statewide Webinar Evaluation Responses (Average)

Meeting Evaluation Statement	Webinar 1	Webinar 2
The meeting leaders effectively moderated the meeting.	4.0	3.9
The meeting content was useful for my organization's goals.	3.3	3.9
The meeting was the appropriate length of time.	4.1	3.9
The speakers were easily heard.	4.3	3.4
The presentation was easily seen.	3.8	3.8
I feel comfortable asking questions during a statewide meeting.	3.7	4.3

Affinity Group Meetings

The Oklahoma SIM project team held an All Payer Meeting on August 5, 2015. Payer organization stakeholders include the OHCA, EGID, BCBS of Oklahoma, CommunityCare of Oklahoma Health Insurance Plans, and GlobalHealth, Inc. HMO.

Prior to the meeting, the project team conducted a survey to capture insight from the payer organizations into alternative payment models, including models currently in use, models of interest, and barriers to

implementation of new models. The project team also captured responses on the population health issues that had the greatest impact on payer organizations and beneficiaries.

The table below details responses from payers.

Figure C.13: Alternative Payment Arrangements

APAs Currently In Use	APAs Interested In Using	Greatest Barrier to APAs
• **Bundled Payments** • **Capitation** • **Pay for Coordination** • **Pay for Performance** • **Shared Savings**	• Bundled Payments • Capitation • Comprehensive Care/ Total Cost of Care Payment • Pay for Coordination • Pay for Performance • Shared Savings (Shared Risk)	• Market Readiness ○ Insurance Market ○ Health Workforce ○ Providers ○ Patients

Figure C.14: Population Health Target Issues in Order of Greatest Impact

Population Health Flagship Issue	Ranking
Behavioral Health	1
Diabetes	2
Obesity	3
Hypertension	4
Tobacco Use	5

The outcomes of the meeting included several useful recommendations on the model design with regards to quality measures, data and analytics, health information technology, and implementation. The project team followed-up with payers to receive one-on-one feedback and present a draft of the healthcare delivery and payment model for the state.

One-On-One Meetings and Presentations

The Oklahoma SIM project team held over 90 one-on-one meetings and presentations with stakeholders from March 2015 to March 2016. These meetings reflect engagement with academic and research institutions, businesses, business associations, community organizations and consumer advocates, healthcare associations, payers, providers, public health coalitions, state and local agencies, and vendors and consultancies.

From March 2015 to November 2015, the meetings focused on an overview of the Oklahoma SIM project and opportunities for stakeholder engagement and discussion. From December 2015 to March 2016, the meetings focused on an overview of the Oklahoma Model. These meetings were an opportunity to educate stakeholders about the Oklahoma SIM project and Oklahoma Model, answer clarifying questions, and at times, clear up misunderstandings.

Stakeholders expressed varying levels of support for the model, from strong enthusiasm and support, to acceptance with reservations, to non-acceptance with strong concerns. Overall, the model received strong

support from academic institutions, the business community, community organizations, public health coalitions, and state public health agencies. The model received some support but overall mixed reactions from healthcare associations, payers, providers, and health information exchange vendors. The meetings provided the opportunity for dialogue aimed at gathering input and useful information on strategies to strengthen aspects of the Oklahoma Model, align the model with pre-existing initiatives and resources in the state, or otherwise better engage stakeholders in the initiative.

A complete list of stakeholder organizations engaged for the OHIP and Oklahoma SIM initiatives, including one-on-one meetings, presentations, and workgroup meetings, can be found in Appendix C.

Academic and Research Institutions

The project team met with the following stakeholder entities:

- Oklahoma State University, Center for Health Systems Innovation
- University of Oklahoma College of Medicine, Department of Family and Preventive Medicine
- University of Oklahoma College of Pharmacy, Pharmacy Management Consultants
- University of Oklahoma College of Medicine, OU Physicians
- University of Oklahoma, Oklahoma Tobacco Research Center

Advisory Boards and Committees

The project team met with the following stakeholder entity:

- OHCA Medical Advisory Committee

Businesses

The project team met with the following stakeholder entities:

- Dewberry Architects
- QuikTrip

Business Associations

The project team met with the following stakeholder entities:

- Greater Oklahoma City Chamber
- State Chamber of Oklahoma
- Oklahoma Association of Health Underwriters
- Oklahoma Restaurant Association

- Tulsa City Chamber of Commerce
- WellOK (Northeastern Business Coalition on Health)

Community Organizations and Patient and Consumer Advocates

The project team met with the following stakeholder entities:

- Homeless Alliance
- Health Alliance for the Uninsured
- Hospitality House
- Oklahoma Healthy Aging Initiative
- Tobacco Settlement Endowment Trust
- United Way of Central Oklahoma

Healthcare Associations

The project team met with the following stakeholder entities:

- Central Communities Health Access Network
- Healthcare Financial Management Association
- Mental Health Association Oklahoma
- Oklahoma Academy of Family Physicians
- Oklahoma Association of Health Plans
- Oklahoma Care Coordination Alliance
- Oklahoma Hospital Association
- Oklahoma Primary Care Association
- Oklahoma Medical Association
- Oklahoma Nursing Association
- Oklahoma Primary Care Association
- Oklahoma Osteopathic Association
- SoonerCare Rural Health Association
- Health Access Network

Payers

The project team met with the following payers:

- Oklahoma Health Care Authority
- State Employees Group Insurance Division
- Blue Cross Blue Shield of Oklahoma
- CommunityCare of Oklahoma Health Insurance Plans
- GlobalHealth, Inc. HMO

Providers

The project team met with the following providers:

- Hillcrest Healthcare System
- INTEGRIS Health
- St. Anthony's Health System
- St. John's Health System
- Variety Care FQHC (Federally-Qualified Health Center)

Public Health Coalitions and Associations

The project team met with the following coalitions:

- Turning Point Regional Consultants
- Turning Point Conference and Policy Day
- North Dyad of Regional Health Educators
- South Dyad of Regional Health Educators
- Cherokee County Community Health Coalition
- Cleveland County Coalition
- Haskell County Turning Point
- Jackson County Community Health Action Team
- Kingfisher Turning Point
- McCurtain County Coalition for Change

- Muskogee Turning Point
- Pittsburgh County Local Services Coalition

State and local Agencies

The project team met with the following state agencies:

- Oklahoma Department of Mental Health and Substance Abuse Services
- Oklahoma Health Care Authority
- Oklahoma Employees Group Insurance Division
- Oklahoma State Department of Health
- Oklahoma City County Health Department
- Tulsa City County Health Department
- Oregon Health Authority
- Arkansas Health Care Payment Improvement Initiative

Tribal Nations and Associations

The project team met with the following tribal nation entities:

- Absentee Shawnee Nation
- Cherokee Nation
- Chickasaw Nation
- Choctaw Nation
- Muscogee (Creek) Nation
- Tribal Public Health Advisory Council
- Tribal Consultations (multiple tribal entities)

Vendors and Consultancies

The project team met with the following stakeholder entities:

- Coordinated Care Oklahoma
- MyHealth Access Network

- National Committee for Quality Assurance
- Oklahoma Foundation for Medical Quality

OSDH WELLNESS BUSINESS SURVEY REPORT (2014) FINDINGS

Businesses play a vital role in healthcare transformation. As employers and major sponsors of health plans, businesses have a direct stake in the expansion of value-based initiatives in healthcare.

For businesses, value-based initiatives and population health improvement mean:

- A healthier, more productive workforce
- Less healthcare spending from a decreased burden of chronic diseases and cost of medical care
- Greater value from health plans through innovation and health information technology
- Greater transparency about employee health information to guide healthcare decision-making

The Oklahoma State Department of Health, in cooperation with Governor Mary Fallin, the Oklahoma Department of Commerce, the State Chamber of Oklahoma Research Foundation, Insure Oklahoma, and the Oklahoma Employment Security Commission, enlisted a contractor to conduct a survey to inform the state on how to partner with businesses on strategies for improving workforce readiness and productivity. Study findings were used to support preparation of OHIP 2020 and inform policy makers. Oklahoma SIM Stakeholders were asked to review and provide input on how to incorporate findings from the survey into the Oklahoma Model.

Research Objectives

This project gathered Oklahoma employer perspectives on health insurance and wellness programs as they relate to workforce costs, productivity, and returning value on investment. The project sought to answer three research questions:

1. How does the health of the Oklahoma workforce affect business?
2. What impact does access or lack of access to healthcare have on the bottom line?
3. What barriers and challenges do employers face in providing health and wellness benefits?

Research Methods

The information collection campaign for the project included an online survey, phone polling, and in-depth interviews. Data collection began July 28, 2014 and ended August 21, 2014. The survey and phone polling questions often allowed Oklahoma employers to select more than one option if they were applicable.

Below are the aspects of each research method:

1. An online survey sent through multiple channels was completed by 665 employers from 20 industries, across 63 counties.
2. A phone poll was conducted with 78 employees from a randomized list of Oklahoma employers.

3. In-depth, face-to-face interviews were conducted with eight employers who sponsor worksite wellness programs.

Key Findings

Findings reflect the importance of healthcare improvement for the business community. Key findings include stakeholder feedback on the effect of health status on business, health insurance, wellness programs and activities, and advice regarding health-related programs for employees.

Effect of Employee Health Status on Business

Nearly half of survey respondents reported that employee health affects their business. High medical costs and frequent leave requests represent top challenges. Most respondents had 10 percent or less, on average, lost productive work days due to employee health issues. Polled employers, who answered an open-ended question about health-related challenges, did not articulate issues regarding employee health status.

Figure C.15: Employee Health Challenges Reported by Survey Respondents

Challenge	Percentage
Making positive healthy lifestyle choices	82%
Losing weight	69%
Seeing doctor for preventive car	48%
Quitting tobacco	46%
Reducing stress	46%
Access to healthcare	30%
Caring for sick children/spouse	24%
Substance abuse and addiction	22%
Caring for elderly or sick parents	21%
Mental health issues	14%
Prenatal care	2%

Health Insurance

The majority of study participants (85 percent of survey participants and 91 percent of phone poll participants) offer health insurance coverage to employees. More than half (64 percent) of survey respondents who provided employee health insurance offered coverage to eligible family members – though this was less common for small business employers with fewer than 50 full-time workers. When responding to why they offer health insurance, the majority of respondents (over 80 percent) say they do it because it is the right thing to do. Additionally, most survey respondents believed that health insurance was very important in recruiting and retaining top-quality employees. Still, cost of health insurance was a significant concern.

Figure C.16: Impact of Healthcare Costs on Survey Respondents

Impact	Percentage
Less profit available for general business growth	43%
Held off on salary increases for employees	39%
Increased medical plan deductibles	31%
Increased employee share of medical premiums	26%
Held off on hiring new employees	22%
Increased prices	17%
Hired more part-time vs. full-time employees	17%
Switched health insurance carriers	17%
Delayed purchase of new equipment	17%
Held off on implementing growth strategies	13%
Reduced employee benefits	12%
Reduced hours of existing employees	6%
Reduced workforce/laid off employees	3%

Figure C.17: Response to Rising Healthcare Costs Reported by Survey Respondents

Impact	Percentage
Increased employee cost-sharing	38%
Added a high deductible health plan	37%
Started wellness programs or activities	33%
Changed insurance companies	23%
Reduced benefits	23%
Tightened pharmacy benefit design	12%
Put in a narrow provider network	8%
Introduced disease and/or care management programs	7%
Dropped coverage and gave money directly to employees to purchase insurance themselves	1%

Wellness

Almost all survey respondents with 500 or more full-time employees offer some kind of wellness program or activity. In contrast, at least half of small business employers from this group do not currently offer wellness programs. The most common wellness initiative was a tobacco-free workplace. The most prevalent reason for providing wellness initiatives was an altruistic desire for employees to be healthy and

happy but also increase worker productivity. Other reasons included controlling rising healthcare costs; managing sick leave, reducing absenteeism, and reducing workers' compensation claims and costs, and positively impacting on recruitment and retention.

During the in-depth interviews, some participants noted the dire state of Oklahoma's health as a motivating factor. Among survey respondents who promote wellness, about half report healthier behaviors and positive impact on the business. This includes: a reduction in tobacco use, weight loss, increased productivity, increased morale, and stronger recruitment.

Figure C.18: Top 10 Wellness Programs/Activities Offered by Survey Respondents

Impact	Percentage
Tobacco-free workplace	47%
Smoking/tobacco cessation programs	28%
Employee Assistance programs	27%
Biometric screenings	22%
Company participation in charity walks/runs	20%
Health education	20%
Gym membership subsidies	18%
Stress management	16%
Health coaching	16%
Healthy snacks at company meetings	14%

Businesses that promoted wellness activities and initiatives saw other positive outcomes, including:

- Favorable image in the community for marketing
- Attractive company culture for recruiting
- More productive, focused employees
- Healthier lifestyle choices and more informed healthcare decisions for benefits.

Summary

Findings from this survey demonstrate that most Oklahoma businesses, regardless of size, view offering health insurance as a key component of employee recruitment and retention and as "the right thing to do" for employees and their families. Aligned with this feedback, almost all large employers that responded to the survey (96 percent) sponsor some kind of wellness project or activity for their employees.

Businesses can take advantage of their role as key stakeholders in health system transformation by:

- Encouraging a "value agenda" in health plans by endorsing value-based plans that align to the Triple Aim of better heath, better care, and lower costs

- Going beyond their traditional role as sponsors of health plans to spearhead initiatives that increase quality and affordability of healthcare
- Championing prevention and wellness programs to encourage employees to play a more active role in their health and wellness
- Working with their local chambers of commerce to endorse legislation that supports members' business interests aligned to higher quality health plans at lower costs

ANALYSIS AND INTERPRETATION OF KEY FINDINGS ON COLLECTED DATA

The Oklahoma SIM project team has used various channels to collect input from stakeholders on the best formation of a healthcare delivery and payment model for Oklahoma. This included polling questions during statewide webinars, post-webinar stakeholder surveys, and All Workgroup Meeting activities. Statewide webinar polling questions identified likely priority areas for the state's model, including population health improvement, behavioral healthcare, and multi-payer alignment. Post-webinar stakeholder surveys identified suggested components and characteristics of the model, including enhanced primary care services, behavioral healthcare services, and health education and prevention services; as well as social determinants of health and a variance of the model based on urban or rural locations. The All Workgroup Meetings further helped to narrow down a model selection for the state. Ultimately, based on this collective stakeholder feedback, in particular consensus drawn from the All Workgroup Meetings, the Oklahoma SIM project team proposed a care coordination model design for the state, which was then affirmed by the Executive Steering Committee, as aforementioned.

Statewide Webinar Polling Questions

From early in the project period, the project team saw that stakeholders were strongly aligned to population health improvement being a major part of the state's focus on health system transformation. During the first statewide webinar, when asked "what Oklahoma SIM goal most aligns with your organization's priorities?" stakeholders primarily selected "improve population health outcomes".

Figure C.19: "What Oklahoma SIM goal most aligns with your organization's priorities?"

Multiple Choice Selections	Respondents
Improve population health outcomes	61.8%
Achieve health equity (rural, socioeconomic, race/ethnicity, behavioral health)	17.6%
Coordinate public health and healthcare services and goals	14.7%
Achieve savings from multi-payer value-based purchasing	5.9%
Align clinical population health measures	0%

Furthermore, the project team received insight that aligning payers would be a major barrier and needed to be prioritized to achieve multi-payer value-based purchasing. During the first statewide webinar, when

asked "what is your organization's greatest barrier to participating in multi-payer value-based purchasing?" stakeholders primarily selected "shared vision across payers".

Figure C.20: "What is your organization's greatest barrier to participating in multi-payer value-based purchasing?"

Multiple Choice Selections	Respondents
Shared vision across payers	41.9%
Adequate HIT infrastructure	22.6%
Financial resources	12.9%
Workforce resources (staff and/or time)	9.7%
Leadership buy-in	9.7%
Cultural attitudes	3.2%

The project team also found that the model would need to focus heavily on addressing challenges related to behavioral healthcare. During the second statewide webinar, when asked "which of the following population health issues have you found the most difficult to tackle", selecting among the five Oklahoma SIM flagship issues, stakeholders primarily selected behavioral health. When asked as a follow-up question why this issue was the most difficult to tackle, stakeholders primarily selected "insufficient resources (financial, personal, time)".

Figure C.21: "Which of the following population health issues have you found the most difficult to tackle?"

Multiple Choice Selections	Respondents
Behavioral Health	56%
Obesity	22%
Diabetes	11%
Tobacco Use	11%
Hypertension	0%

Post-Webinar Stakeholder Surveys

The project team also conducted two stakeholder surveys to capture feedback on the first and second statewide webinars as well as stakeholder perspectives on a model for the state. Stakeholders responded to various survey questions, including:

- What role do you play in the healthcare industry?
- What initiatives are making an impact in population health improvement in Oklahoma?

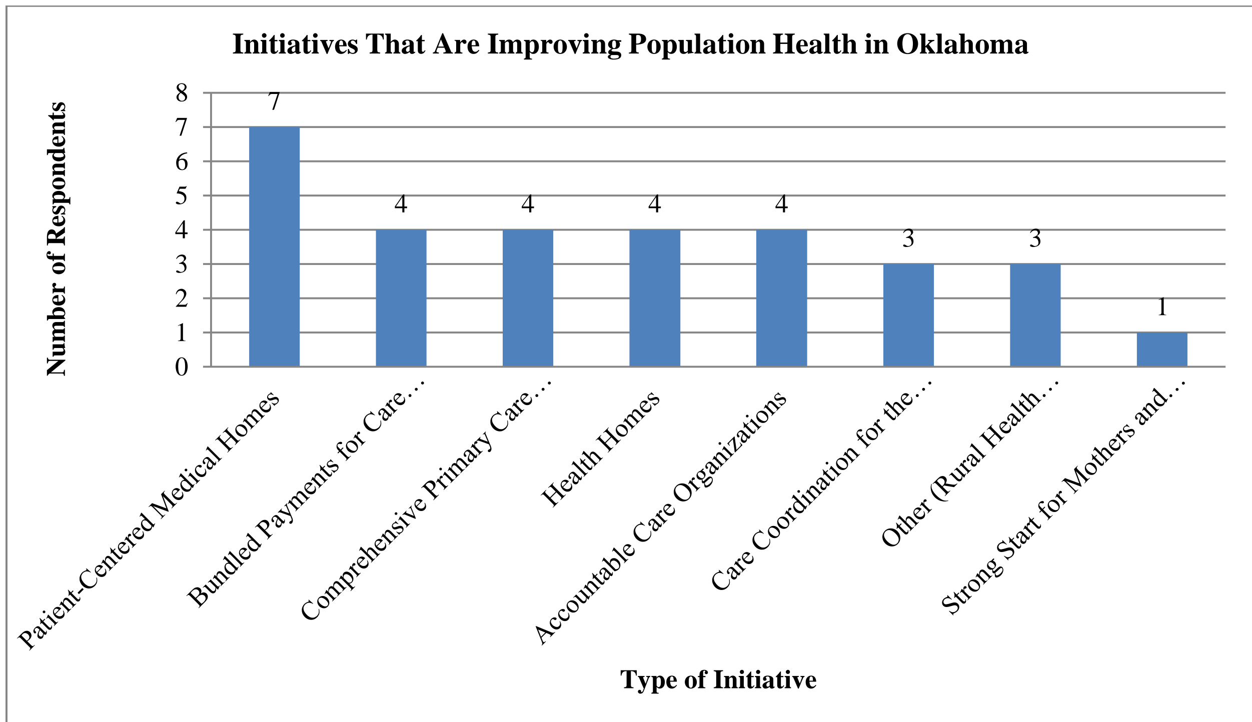
- What care delivery models are addressing your population health improvement goals?
- What social determinant of health has the greatest impact on your organization?
- Should the model vary based on an urban vs. rural context?

Overall, stakeholder respondents reported that an ideal model for the state would address primary care services, behavioral health services, and health education and prevention services; and would also vary based on an urban versus rural context. The tables below display results from these two surveys.

Figure C.22: Stakeholder Surveys

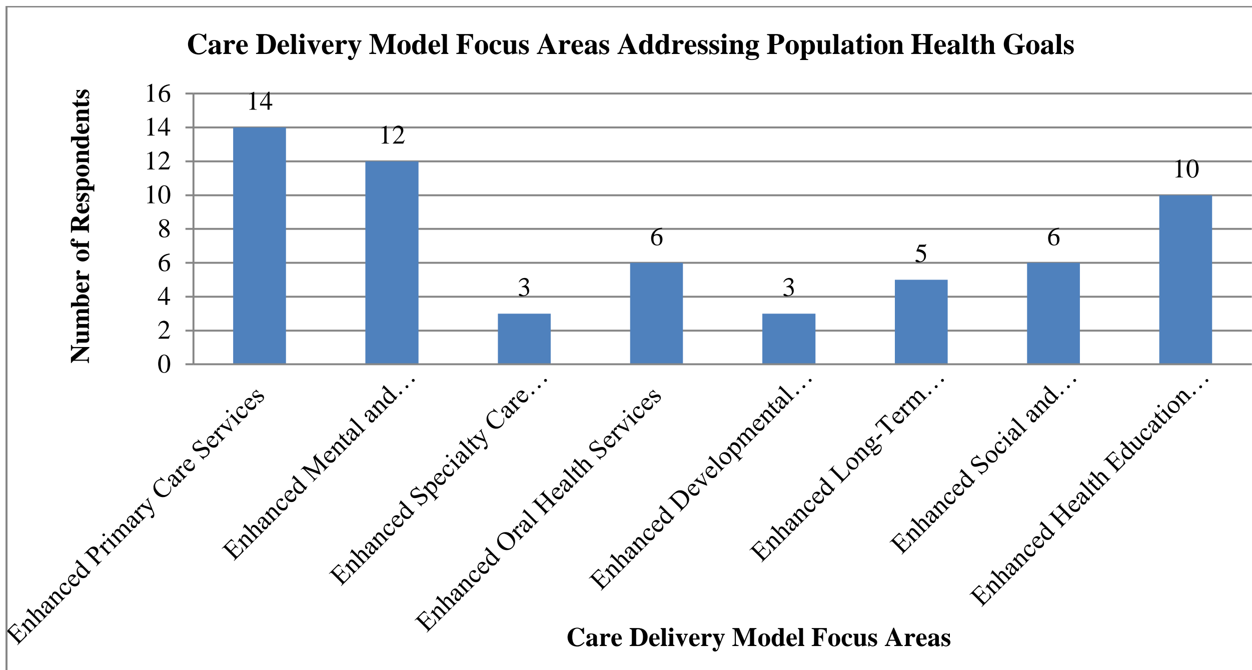
Survey Name	Open Date	Close Date	Respondents (#)
First Stakeholder Survey	6/23/2015	7/11/2015	13
Second Stakeholder Survey	8/28/2015	9/3/2015	17

Figure C.23: What Initiatives Are Improving Population Health in Oklahoma?



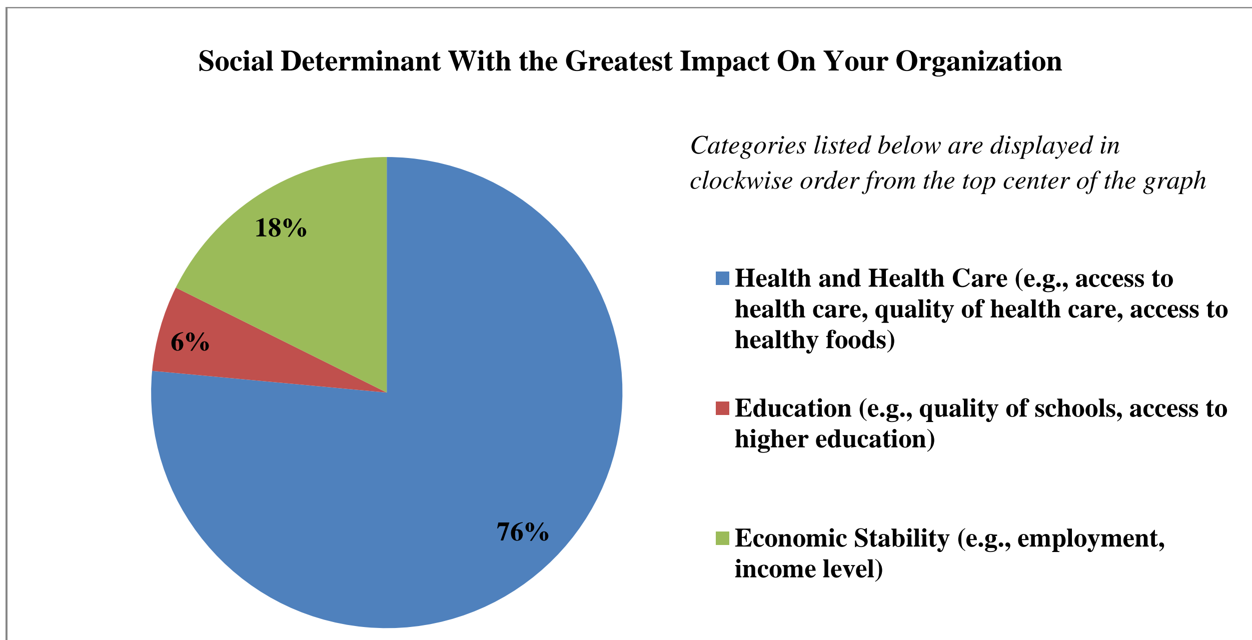
Stakeholders reported that a number of initiatives are making an impact on population health improvement, including patient-centered medical homes, bundled payments, health homes, accountable care organizations, and the Comprehensive Primary Care Initiative.

Figure C.24: What Delivery Model Focus Areas Are Addressing Your Population Health Goals?



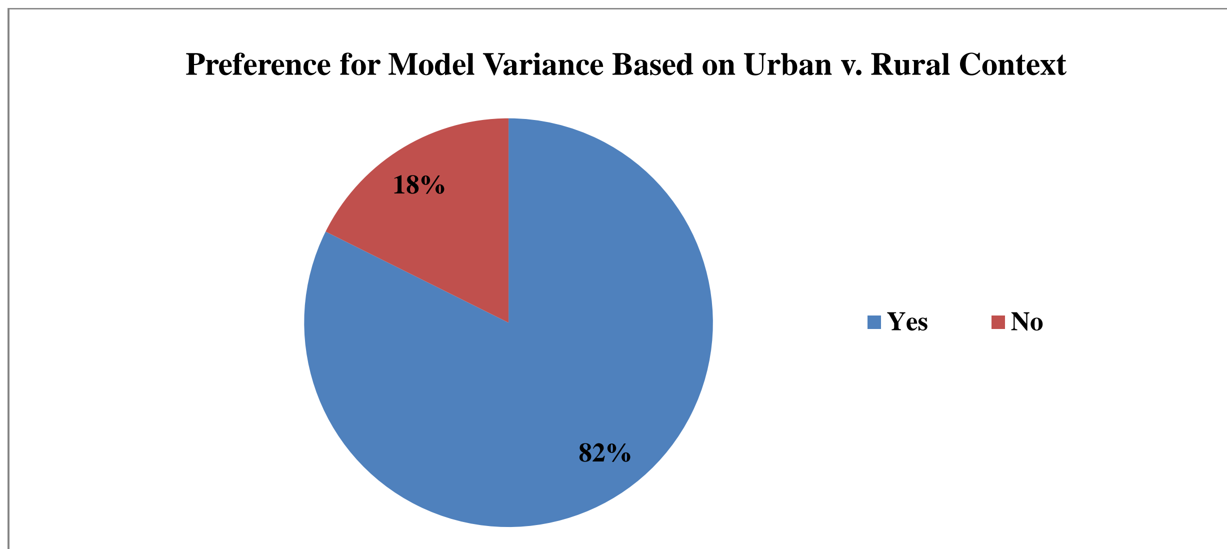
Stakeholders reported that enhanced primary care services, mental and behavioral health services, and health education and prevention services will best address their population health goals.

Figure C.25: What Social Determinant of Health Has the Greatest Impact on Your Organization?



Stakeholders overwhelmingly reported that health and healthcare has the greatest impact on their beneficiary population.

Figure C.26: Should the Model Vary Based on an Urban vs. Rural Context?



Stakeholders overwhelming reported that a model for Oklahoma should vary based on an urban or rural context.

All Workgroup Meeting Activities

At the All Workgroup Meetings in September 2015, the project team led an interactive activity with workgroup members to rate the effectiveness of three conceptual model designs based on the aims of the Oklahoma SIM project and Triple Aim. The aim of the activity was to generate and report on stakeholder discussions on the model components that best serve the needs of the state. Based on previous stakeholder survey findings regarding initiatives that were improving population health in the state, as well as model designs being currently employed in other states with a similar healthcare landscape as Oklahoma, the project team used the following conceptual model designs for the workgroup activity: patient-centered medical home, accountable care organization, and care coordination organization.

Criteria for the model design discussions included the following:

- Improves the patient experience of care
- Improve population health
- Reduces the per capita cost of care
- Addresses the social determinants of health
- Has the workforce resources needed for implementation
- Has the technological resources needed for implementation
- Has the political will to support implementation
- Has the cultural will to support implementation

Based on cumulative stakeholder feedback, the project team determined the following:

- The model needs to address urban and rural scalability, which can be addressed over time through a multi-phased rollout
- The model needs to acknowledge patient choice
- The model needs to incorporate a direct connection between clinical care and social determinants
- The model needs to incorporate telehealth as a way to augment the existing workforce
- The model needs to incorporate a diverse workforce, including non-traditional healthcare workers such as community health workers
- The model needs to address potential roadblocks with HIT infrastructure in the state

Figure C.27: Stakeholder Feedback on Pros and Cons of Conceptual Model Designs

Model Design	Pros of Model Design	Cons of Model Design
Patient-Centered Medical Homes	• Would integrate behavioral health within primary care • Would not need extensive HIT to be effective • Could leverage telehealth for co-location of services • Has infrastructure needed for implementation	• Does not have a strong enough linkage to social determinants of health; would need to expand healthcare team • Does not have workforce resources for implementation • Does not have HIT infrastructure for implementation
Accountable Care Organization	• Would be able to address all aspects of a patient's health needs • Creates opportunity for potential savings • Supported by current workforce availability in urban areas	• Has the potential to limit patient choice • Is not feasible in rural areas • Is politically unfeasible as the model would require too much centralization • Would need a strong value-based insurance design
Care Coordination Organization	• Has a direct link to social determinants of health • Would be scalable in rural and urban environments • Has preexisting resources at the community level to aid implementation (e.g., public health, social services)	• Would need to strengthen the linkage to providers • Would need to enhance HIT infrastructure • Would need to implement workforce training and standards • Would require extensive education on the model structure

Based on this stakeholder feedback, the project team recommended creating a model for the state akin to a care coordination organization that had a robust primary care environment, integrated physical and behavioral healthcare, and a linkage between clinical care and social determinants of health. Furthermore, this model would use multi-payer engagement, quality measures, and a value-based purchasing strategy.

CONCLUSION

The Oklahoma SIM project team has now completed all four phases of the Stakeholder Engagement Plan.

In Phase One (March to June 2015), the project team began holding regular workgroup meetings to begin producing project deliverables and introducing stakeholders to the project in order to solicit their ideas and feedback and secure their buy-in on a new model for the state. The project team also held the first Executive Steering Committee Meeting and Statewide Webinar.

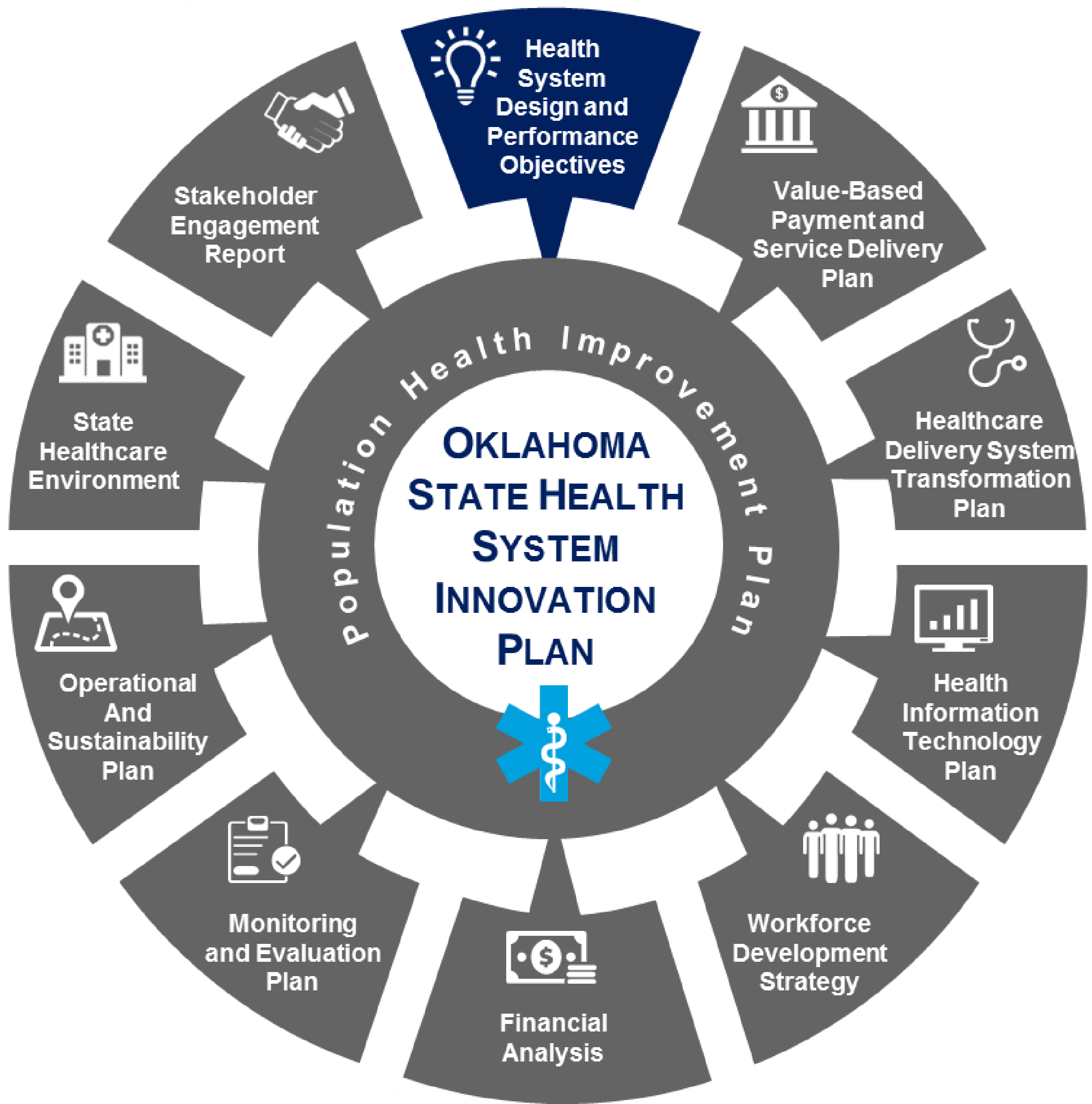
In Phase Two (July to October 2015), the project team continued engaging stakeholders and held the Second Statewide Webinar. Workgroups completed the review of the majority of project deliverables. The project team also developed the conceptual tenets of the Oklahoma Model and received buy-in from the Executive Steering Committee to create a new model for the state based on the care coordination model, called Regional Care Organizations.

In Phase Three (November 2015 to January 2016), the project team engaged key stakeholders and workgroups to receive focused feedback on the proposed Oklahoma Model. The project team also completed drafting the SHSIP.

In Phase Four (February to March 2016), the project team held a statewide public comment period for the SHSIP and finalized the plan, which is now being submitted.

With advice and input from the SIM Executive Steering Committee, the Grantee Project Director for SIM and Deputy Secretary of Health and Human Services has authorized the Oklahoma SHSIP. Each of the stakeholder meetings that have occurred have been directly used to influence the design of the final Oklahoma Model and SHSIP, including consensus gained and disagreement remaining. Disagreements have been taken to the Executive Steering Committee and resolved by the committee chair, the Deputy Secretary of Health and Human Services. As the initiative continues, stakeholders will continue to meet in workgroups to operationalize each component of the SIM. As the Oklahoma Model is formed, stakeholders and workgroups may reorganize to serve in the necessary governing functions of the state's new model.

Each section of the SHSIP will continue to highlight how stakeholder engagement contributed to the development of each aspect of the Oklahoma SIM project and Oklahoma Model. The next section describes the Health System Design and Performance Objectives that the Oklahoma SIM project team used to guide the development of the new model for the state.


Health System Design and Performance Objectives
Value-Based Payment and Service Delivery Plan
Healthcare Delivery System Transformation Plan
Health Information Technology Plan
Workforce Development Strategy
Financial Analysis
Monitoring and Evaluation Plan
Operational And Sustainability Plan
State Healthcare Environment
Stakeholder Engagement Report
Population Health Improvement Plan
OKLAHOMA STATE HEALTH SYSTEM INNOVATION PLAN

D. Health System Design and Performance Objectives

INTRODUCTION

The state developed performance goals, objectives, and complementary strategies for the Oklahoma State Innovation Model (SIM) proposal to help achieve significant and measurable improvements within each element of the Triple Aim. Many system-level goals and objectives had been developed by the Oklahoma Health Improvement Planning (OHIP) Coalition prior to the Oklahoma SIM grant application, and health transformation is a component of OHIP. theThe Oklahoma SIM grant incorporated many of the OHIP health transformation goals and objectives of the OHIP and its population health flagship issues to design healthcare value-based payment and delivery strategies . The OHIP/Oklahoma SIM Workgroups, the Center for the Advancement of Wellness, and the Chronic Disease Unit at the State Department of Health were engaged to develop strategies to reach OHIP population health goals. Those strategies were used in the model design process to align state goals that would enable a model capable of deploying the strategies and meet the system and population goals discussed here.

HEALTH SYSTEM GOALS

Bend the Healthcare Cost Curve

The Oklahoma Health Care Authority (OHCA) and Employees Group Insurance Division (EGID) together cover over a quarter of insured Oklahomans. State-purchased healthcare accounts for over 19 percent of Oklahoma's state budget. This represents a 5.6 percent increase since 2005.[3] Together, the healthcare coverage administered by these two payers provide ample ground for increased efficiencies in order to slow the growth rate of healthcare expenditures. Additionally, to help the state tie in 80 percent of all payments to value-based purchasing, multi-payer strategies were developed to align payment strategies across Oklahoma's healthcare market. Some strategies are multi-purpose and crosscut goals and objectives.

Goal: By 2020, limit annual state-purchased healthcare cost growth through both Medicaid and EGID to two percent less than the average annual percentage growth rate of the projected national health expenditures, as set by CMS.

Objective 1: Promote payment for value over volume.

Strategies:

1. Execute provider contracts that include alternative payment arrangements (APAs) that are value-based.
2. Require that 80 percent of all provider payments are value-based APAs by 2020.
3. Implement state-identified multi-payer episodes of care that reduce care and cost variances.

4. Establish a common set of quality measures across payers, with a focus on the Oklahoma SIM flagship issues (tobacco use, behavioral health, diabetes, obesity, and hypertension) and integrated care delivery.

5. Align multi-payer quality measures, with a focus on the Oklahoma SIM flagship issues (tobacco use, behavioral health, diabetes, obesity, and hypertension) and integrated care delivery.

6. Establish quality measure benchmarks related to all performance objectives, such as reduced preventable hospital admissions and readmissions, that support the Oklahoma SIM objectives and the Triple Aim.

Objective 2: Increase monitoring and evaluation to ensure that the state is meeting cost benchmarks.

Strategies:

1. Utilize health information technology (HIT) to monitor and evaluate the performance outcomes of value-based purchasing models, clinical interventions, and targeted case management.

2. Create and utilize a value-based analytics tool to inform payment strategies that improve overall quality of care, population health, and reduce the cost of care.

Improving Quality of Care

Quality of care improvements will focus on reducing the number of potentially preventable hospitalizations and hospital emergency room visits. In Oklahoma, an estimated 45,000 hospital stays could have been avoided in 2013,[1] and emergency room (ER) utilization rates are higher than the national average.[4] These data points indicate considerable opportunities to improve the overall performance and quality of the current health system, including how well the current system addresses access to primary care and preventive service, care coordination, and patient education. Similar tactics can be used to achieve health system goals for reducing both preventable hospitalizations and ER utilization. Therefore, the objectives and strategies are cross-aimed at making improvements in both of those areas.

Goal 1: Reduce the rate of potentially preventable hospitalizations per 100,000 Oklahomans by 20 percent, from 1656 (2013) to 1324.8, by 2020.

Goal 2: Reduce the rate of hospital emergency room visits per 1,000 population by 20 percent, from 500 (2012) to 400 visits, by 2020.

Objective 1: Increase care coordination efforts to drive at-risk patients to preventive care and community-based services and resources.

Strategies:

1. Implement multi-payer episodes of care across major payers that incent providers to better coordinate care for patients with specific conditions.

2. Provide care coordination and targeted case management to assist at-risk beneficiaries to access preventive services and community-based resources.

3. Develop Community Health Improvement Plans (CHIPs) and Community Health Needs Assessments.

4. Identify options to pay for non-clinical services to promote whole-person care and address social determinants of health.

5. Allow for the reimbursement of telemedicine by OHCA and EGID, especially as it relates to integrating behavioral health services in rural areas.

6. Encourage primary care providers to have 24-hour call access.

Objective 2: Improve the monitoring of at-risk patients to ensure that patients have access to preventive care and community-based services and resources.

Strategies:

1. Establish a common set of multi-payer quality measures that address improving care coordination, access to preventive services, and better disease management.

2. Utilize EHR so that providers and care coordinators can better monitor inpatient stays, ER visits, and preventive visits.

3. Connect in-network providers to interoperable HIEs to ensure that providers and care coordinators have access to a more complete clinical view of the patient.

4. Monitor the number and expenditures related to potentially preventable hospitalizations (admissions and readmissions) and non-emergent use of ERs.

5. Encourage and facilitate the use of predictive modeling to assess baseline costs, risk stratify, and design interventions for at-risk beneficiaries.

6. Monitor Ambulatory Care Sensitive Conditions (ACSC) through the use of standardized quality measures adapted from the Prevention Quality Indicators (PQIs).

7. Monitor hospital admissions, readmissions, ER utilization, and follow-up care through the use of standardized quality measures that measure patient access and post-discharge planning and care.

Objective 3: Increase patient education efforts.

Strategies:

1. Provide on-going, targeted outreach efforts to at-risk beneficiaries, such as frequent ER utilizers or beneficiaries with chronic conditions.

2. Provide informational materials to all individuals related to the appropriate use of the ER and urgent care facilities.

3. Ensure that all at-risk beneficiaries are linked to a care coordinator.

Objective 4: Encourage patient disease self-management.

Strategies:

1. Provide home visits by licensed professionals or community health workers to educate members and reduce home triggers that exacerbate disease.

2. Demonstrate the use of evidence-based disease self-management programs.

3. Encourage the adoption of patient portals to help patients monitor disease progression, track appointments, and access electronic records.

4. Enhance screening tools and referrals to disease treatment programs.
5. Encourage payment strategies that support disease self-management, including paying for disease self-management programs, disease monitoring resources, or implementing value-based payment programs.

Improving Population Health Goals

Essential to any healthcare transformation effort is a reduction in chronic disease and high-cost conditions. Goals for the Oklahoma SIM flagship issues of tobacco use, behavioral health, diabetes, obesity, and hypertension have been developed to address the primary challenges of population health in Oklahoma. Achievement of these goals will lead to reductions in key risk factors contributing to negative health outcomes and a reduction in chronic disease, and in turn, improve health, reduce costs, and improve patient satisfaction with care. It is acknowledged that no condition occurs in a silo and many of the flagship issues are co-morbid, creating complex needs and leading to higher healthcare costs.

Each Oklahoma SIM flagship issue goal is described below. Heart disease goals encompass those of hypertension; therefore hypertension is not outlined separately.

Tobacco Use

With tobacco use a significant driver of healthcare costs, tobacco use reduction is an essential part of population health improvement. Smoking, Oklahoma's leading cause of preventable death, accounted for a total of $1.16 billion a year[2] in healthcare costs. As tobacco use contributes to the prevalence of high-cost conditions such as cancer, hypertension and diabetes,[1] tobacco use reduction strategies will also help achieve targets in other Oklahoma SIM improvement areas. To achieve a reduction in the adult smoking prevalence rate, Oklahoma SIM will utilize a multi-pronged approach that will pursue the following objectives:

Goal: Reduce the adult smoking prevalence from 23.7 percent to 18.0 percent by 2020.

Objective 1: Increase insurance coverage and utilization of evidence-based tobacco cessation treatments.

Strategies:

1. Remove patient copay for tobacco treatment counseling.
2. Provide FDA-approved tobacco cessation medications at no cost.
3. Incent providers, including pharmacists, to follow clinical practice guidelines for treatment of tobacco use.

Objective 2: Increase quit attempts among current tobacco users.

Strategies:

1. Embed best practice tobacco screening tools in electronic health records.
2. Incentivize e-referrals to the Oklahoma Tobacco Helpline.
3. Increase the price point of tobacco products.
4. Increase the use of 24/7 tobacco free policies, such as schools, playgrounds, and athletic facilities.

Objective 3: Increase the implementation of evidence-based interventions and strategies that address vulnerable and underserved populations.

Strategies:

1. Increase the implementation of interventions that support quitting, reduce exposure to second-hand smoke, and decrease access to and availability of tobacco products.
2. Increase health communication interventions to reach populations disproportionately affected by tobacco use, exposure to second-hand smoke, and tobacco-related disparities.
3. Increase the price point of tobacco products.
4. Increase the use of 24/7 tobacco-free policies at public facilities, such as schools, playgrounds, and athletic facilities.

Behavioral Health

Oklahoma faces significant challenges in treating mental illness, as demonstrated by a treatment gap of 86 percent and nearly 22 percent of adults reporting a mental health issue.[1] Untreated mental illness contributes to and exacerbates negative health outcomes. As such, healthcare transformation efforts will need to include strategies to improve the rates at which mental illness is treated. By including strategies related to insurance coverage, public education, workforce, and treatment, Oklahoma SIM will work to reduce the treatment gap in a comprehensive manner.

Goal: Reduce the prevalence of untreated mental illness from 86 percent to 76 percent by 2020.

Objective 1: Improve healthcare benefit design (referring the way health in which benefits are structured and utilized by employees) and increase insurance coverage rates for mental health services.

Strategies:

1. Work with insurers to expand scope of covered mental health services.
2. Increase reimbursement rates to encourage growth in the number of mental health services provided.

Objective 2: Increase public education regarding mental health.

Strategies:

1. Expand public awareness of mental health illnesses and treatment options.
2. Conduct public information campaigns to reduce the stigma of mental illness.

Objective 3: Develop the mental health workforce in both capacity and relevant competencies.

Strategies:

1. Work with universities to increase the number of available mental health professional graduates.
2. Strengthen mental health education programs to better equip health professionals in addressing behavioral health.

3. Enhance and expand the use of telehealth for behavioral health treatment.

Objective 4: Improve diagnosis and treatment of mental illness.

Strategies:

1. Enhance provider adoption of best-practice treatment approaches.
2. Ensure mental health patients receive appropriate service for appropriate length of time, including during transitions of care.
3. Increase screening and early intervention in primary care audiences for children and adults.

Diabetes

Diabetes can cause a wide range of short- and long-term complications, leading to hospitalization and life-threatening conditions such as cardiovascular disease. In Oklahoma, diabetes was the sixth leading cause of death in 2013.[1] By increasing access, accountability, and awareness, the Oklahoma SIM will strive to reduce the prevalence of diabetes. Additionally, positive behaviors related to nutrition, physical activity, and weight loss that can prevent diabetes are addressed within the obesity objectives and strategies.

Goal: Decrease the prevalence of diabetes from 11.2 percent (2014) to 10.1 percent by 2019.

Objective 1: Increase provider awareness of pre-diabetes and metabolic syndrome diagnoses.

Strategies:

1. Expand provider education on screening and identifying patients at high-risk for type 2 diabetes.
2. Increase the use of EHRs for clinical decision support or panel management tools.
3. Encourage insurance reimbursement for pre-diabetes and diabetes prevention services.

Objective 2: Enhance access to and sustainability of diabetes prevention programs (DPP) in high prevalence areas.

Strategies:

1. Encourage insurers to offer DPP as a covered benefit to high-risk members.
2. Increase referrals to DPP due to increased diagnosis of pre-diabetes.
3. Ensure DPP program meets national standards for recognition or certification.

Objective 3: Increase patient accountability associated with diabetes prevention.

Strategies:

1. Educate providers to enable patient participation in medical decision making (i.e. "shared decision making") by including the use of motivational interview approaches.
2. Increase patient awareness of screening and risk factors for type 2 diabetes.

3. Emphasize patient readiness and responsibility to change behaviors.

Obesity

Ranked the sixth most obese state in the nation[1] Oklahoma needs to reduce habits associated with unhealthy weight and body mass index. These habits include increasing vegetable consumption, fruit consumption, and physical activity, all areas in which Oklahoma is ranked poorly. Strategies to support improved eating habits, increased physical activity, and increased awareness among both providers and individuals are a part of the Oklahoma SIM's goals for population health improvement. While these strategies are targeted to reduce the prevalence of obesity, they are particularly important because they help address obesity-related complications, including early mortality, heart disease, stroke, diabetes, and some cancers.[2]

Goal: Reduce the prevalence of obesity from 32.5 percent (2013) to 29.5 percent by 2020.

Objective 1: Increase access to affordable, healthy foods, especially fruits and vegetables.

Strategies:

1. Increase utilization of summer food programs.
2. Incentivize retailers to carry healthy food.
3. Optimize licensing regulations to allow and encourage healthy food.
4. Increase number of retailers that accept Supplemental Nutrition Assistance Program (SNAP) benefits, Women, Infants, and Children (WIC) benefits, and Electronic Benefit Transfer (EBT) cards

Objective 2: Increase access to places for physical fitness activities.

Strategies:

1. Pursue federal funds that would allow communities to develop infrastructures that encourage bike and pedestrian travel.
2. Educate and train local community development planners and engineers to plan and build bike and pedestrian projects.
3. Increase the number of shared-use agreements with schools, churches, tribes, and other entities to allow community members to access existing facilities for physical fitness.

Objective 3: Increase the awareness of benefits and opportunities for healthy living.

Strategies:

1. Encourage communities to assess and develop opportunities to participate in healthy activities.
2. Provide training and education regarding healthy eating and healthy food options.
3. Develop and execute health education campaigns.

Objective 4: Increase provider involvement in screening, diagnosis, and counseling of obesity.

Strategies:

1. Provide Continuing Medical Education (CME) credits for providers for obesity training.
2. Increase utilization of EHRs for documentation of obesity.
3. Foster mechanisms that encourage providers to screen for, diagnosis and develop plans to reduce obesity.

Hypertension

The leading cause of death in Oklahoma[2] is heart disease, representing an area in which significant improvements are needed. To align with the OHIP 2020 goal to reduce deaths from heart disease by 13 percent by 2020, the Oklahoma SIM project adopted hypertension as one of its flagship issues for overall system transformation. Since hypertension is one of the leading indicators and causes of heart disease, early identification and effective management of hypertension are focus areas for providers to decrease heart disease deaths. The strategies outlined below also take into account the importance integrating community and social supports to improve patient accountability and choice to reduce hypertension and heart disease.

Goal: Reduce deaths from heart disease by 13 percent from 9703 in 2013 to 8441 in 2020.

Objective 1: Increase patient accountability.

Strategies:

1. Improve patient awareness of risk factors and screening tools.
2. Encourage patient participation in medical decision making (shared decision making) and the use of motivational interviewing.
3. Improve patient compliance with medical regimen: medication adherence and adoption of lifestyle change behaviors.

Objective 2: Foster team-based care coordination.

Strategies:

1. Increase recognition of “undiagnosed” hypertension.
2. Incent participation in multi-disciplinary care models, which address a range of professionals and commonly include medical, nursing, pharmacists, and allied health professionals; and has been demonstrated to improve outcomes especially for patients with chronic illnesses.
3. Increase the use of EHR clinical decision support or panel management tools.

Objective 3: Increase community involvement.

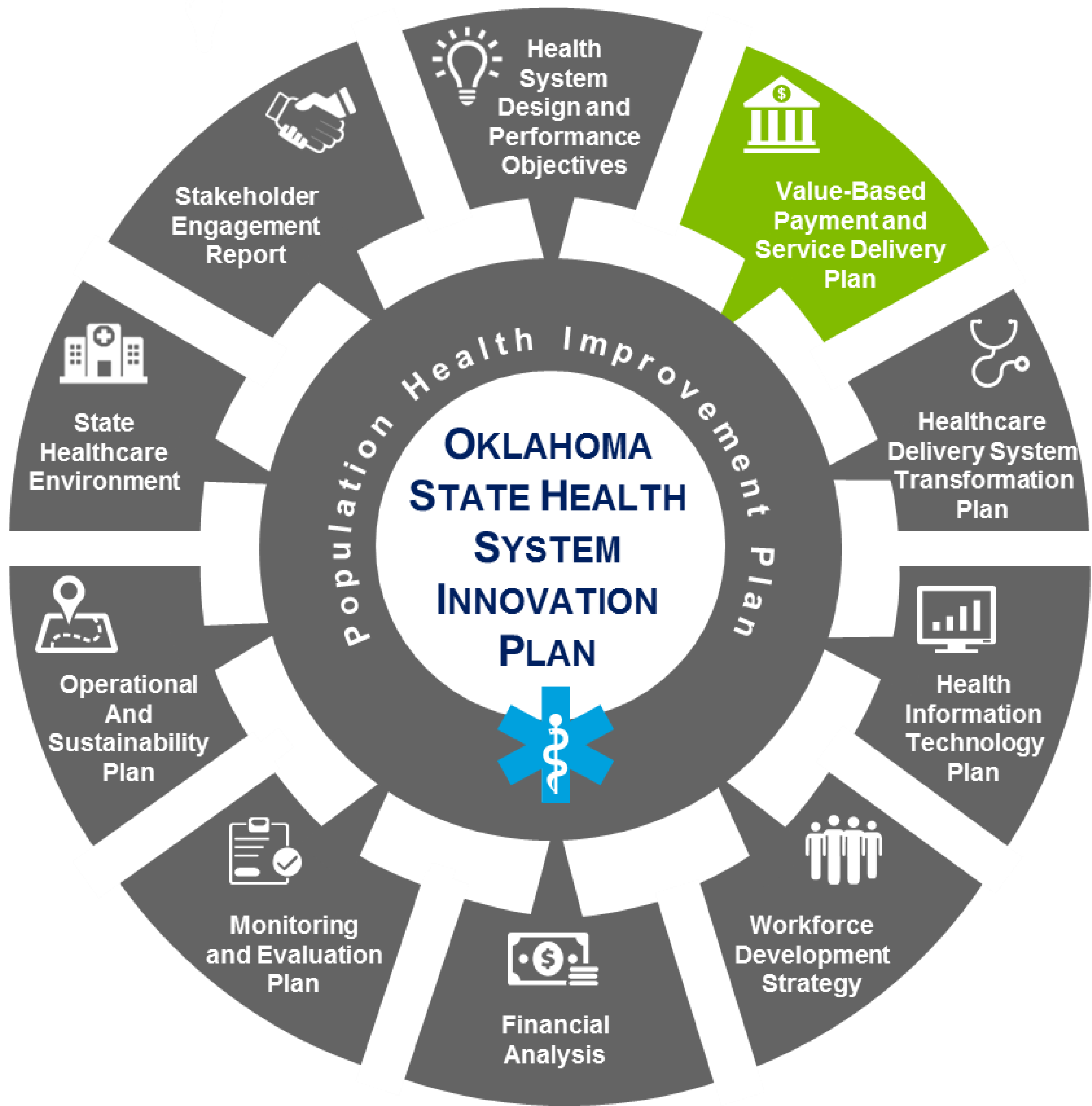
Strategies:

1. Encourage payers to coordinate and direct use of social services and community resources and interventions targeting lifestyle, navigational assistance, and behavior factors.
2. Encourage payers to adopt strategiesthat connect clinical care to social services and community resources.

3. Foster improvements in social and physical environment through policy and system change to make healthy behaviors easier.

CONCLUSION

The Oklahoma SIM project team adopted the OHIP health system and population health performance objectives into the SIM model design initiative. These goals will be utilized in the Oklahoma Model to create a concerted effort towards impacting the health of all Oklahomans and designing a health delivery and payment system capable of supporting these goals.


Health System Design and Performance Objectives
Value-Based Payment and Service Delivery Plan
Healthcare Delivery System Transformation Plan
Health Information Technology Plan
Workforce Development Strategy
Financial Analysis
Monitoring and Evaluation Plan
Operational And Sustainability Plan
State Healthcare Environment
Stakeholder Engagement Report
Population Health Improvement Plan
OKLAHOMA STATE HEALTH SYSTEM INNOVATION PLAN

E. Value-Based Payment and/or Service Delivery Model

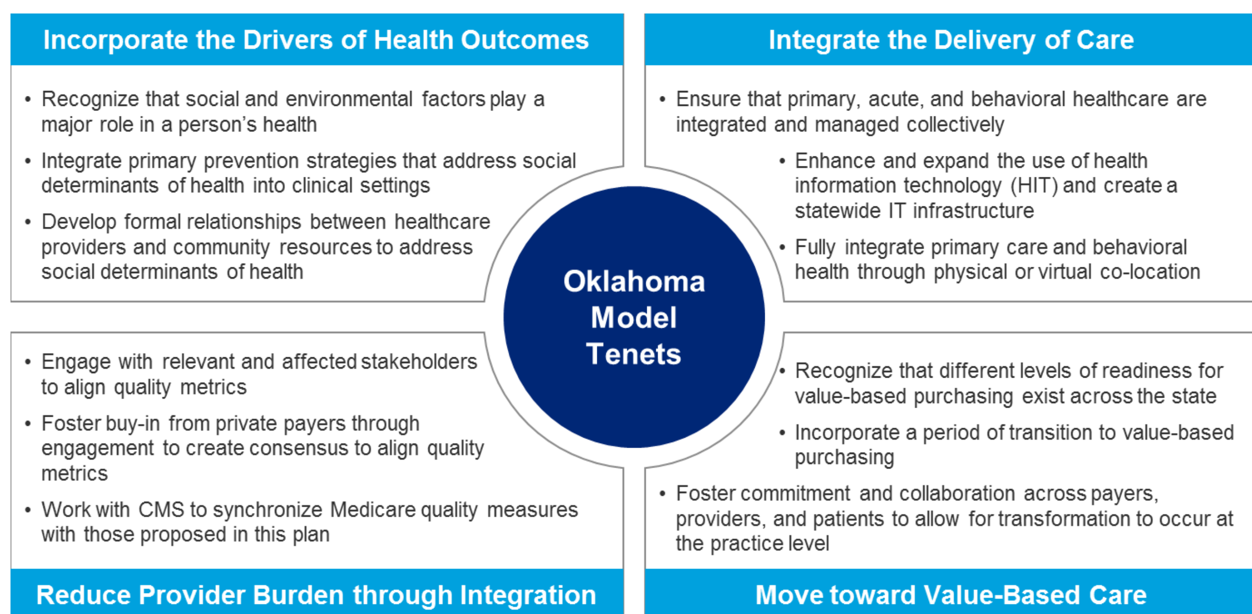
INTRODUCTION

This section of the State Health System Innovation Plan (SHSIP) presents a proposed value-based purchasing model and details its relevant attributes and functions. It represents the state's vision for creating changes in healthcare payment and delivery that will positively impact the health of Oklahomans, improve the quality of care they receive, and reduce the overall growth rate in healthcare spending. The model design is part of a broader gubernatorial effort to reform Oklahoma's healthcare system, which strives to have at least 80 percent of all state healthcare payments made in a value-based model by 2020.

The Health Care Payment and Learning Action Network continuum of payment informed the basic structure of our model design process and will continue to serve as a guide as the state develops direct links to population health outcomes and alternative payment arrangements. Consistent with other efforts across the state and the nation, Oklahoma will move state-purchased healthcare further along this continuum in the years to come, moving from process measures to outcome measures as it becomes increasingly feasible.

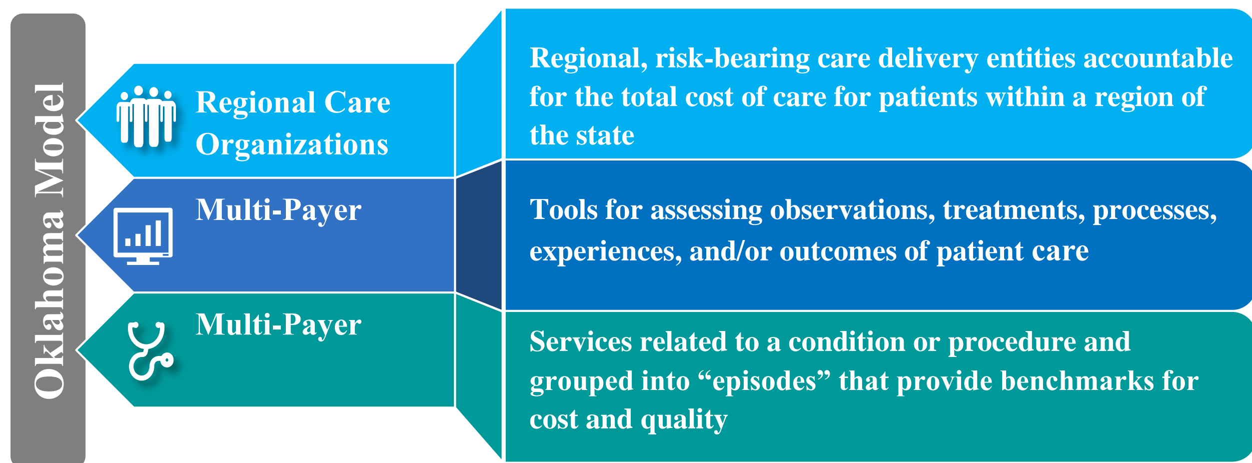
The model was developed utilizing a robust stakeholder engagement and consultation process. This engagement and the in depth discussions with subject matter experts were crucial to developing a model design that can be scaled statewide while simultaneously accounting for regional and community-level differences in health system needs. As part of the engagement and deliberations process, an array of delivery and payment models were presented to stakeholders to obtain their analysis. Their feedback and follow-up discussions resulted in a consensus as to the tenets that should drive the creation of an ideal care delivery model for Oklahoma:

Figure E.1: Oklahoma Healthcare System Transformation Model Design Tenets



Using these key tenets as guidelines, the state used a multi-pronged approach to create a proposed model for moving to a value-based, transformed healthcare system that includes the creation of Regional Care Organizations (RCO) for state-purchased healthcare, statewide adoption of multi-payer quality metrics, and multi-payer "episodes of care" payments.

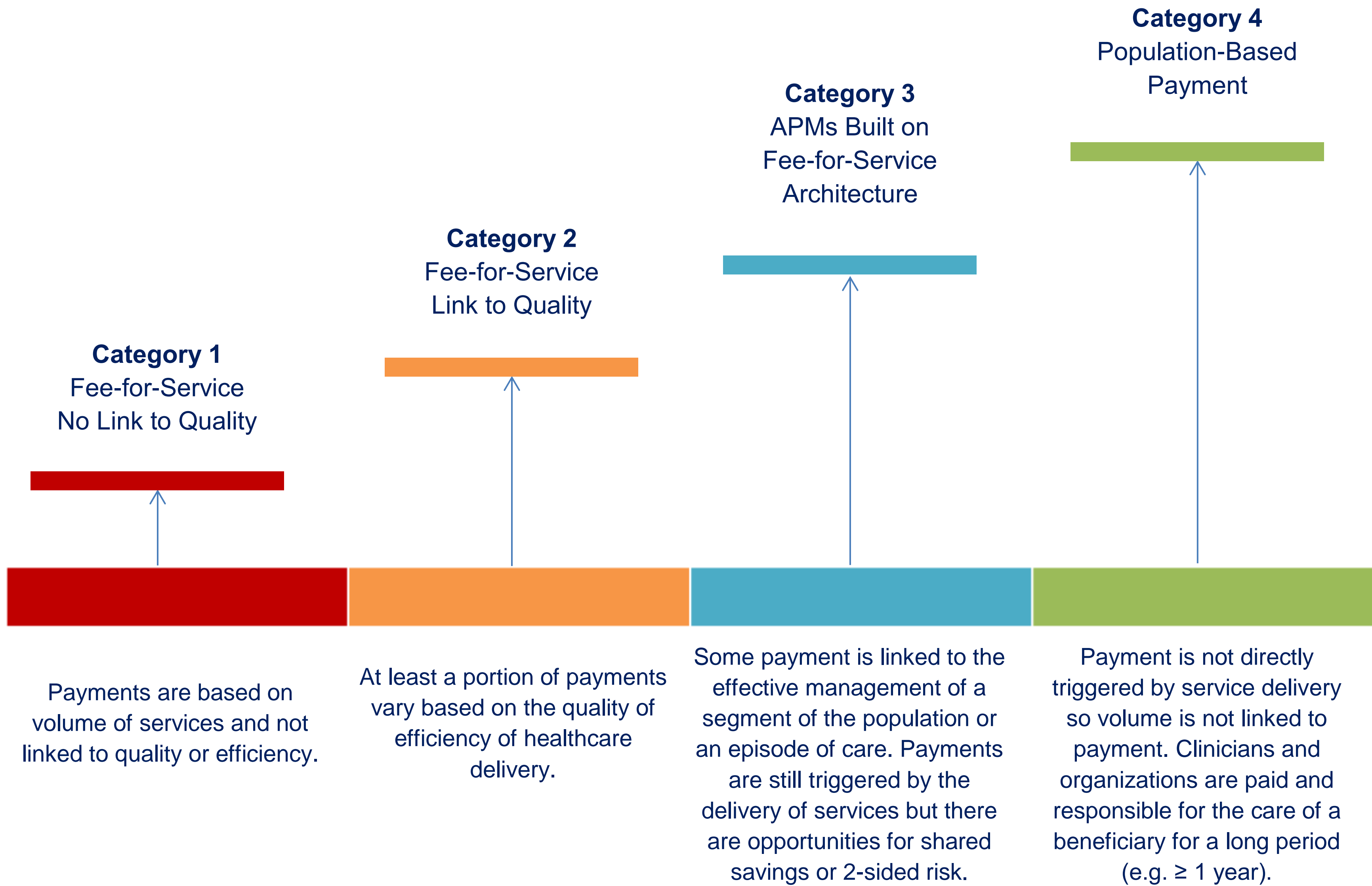
Figure E.2: The Oklahoma Model



This model fundamentally relies on coordination and collaboration among community healthcare providers and partners. It encourages the delivery of patient-centered care, while enabling investments in personnel and systems that improve health and assists local health systems in meeting high standards for cost and quality outcomes. It is necessarily flexible to account for the different readiness levels and resources across the state and integrates social determinants of health to attack the key drivers of costs.

This is an ambitious payment model, yet it is consistent with current industry efforts and should serve to assist Oklahoma's healthcare providers prepare for changes in private sector payment models.

Figure E.3: Health Care Payment Learning & Action Network Alternate Payment Methodology Framework



REGIONAL CARE ORGANIZATIONS

The first component of the model is the creation of Regional Care Organizations (RCO) for all state-purchased health care, which includes Medicaid members and eligible public employees and their covered dependents. Combined, these covered lives represent nearly a quarter of the state's total population.

An RCO is a regionally-based care delivery organization that operates under a comprehensive risk contract with the state. RCOs will receive a fully capitated payment for attributed members within their geographic region and are accountable for the provision of integrated and coordinated health care services. Because of their regional nature, the RCO is better able to develop the best care delivery strategy that meets local community needs.

RCOs are governed by a partnership of payers, healthcare providers, community members, and other stakeholders in the health system in order to create a shared responsibility for the health of the community. Each RCO will have a Board of Accountable Providers and a Community Advisory Board that will identify evidence-based, locally-tailored practices to promote coordinated care. A State Governing Body provides oversight of the RCOs to ensure federal and state regulatory and quality compliance.

RCOs incorporate the use of health information technology (HIT) within their operations and provider networks. Each RCO is expected to develop a HIT plan for their providers to use HIT meaningfully as they deliver care. This HIT plan should address how the RCOs will ensure their provider networks adopt Electronic Health Record (EHR) technology, connect to interoperable Health Information Exchanges (HIEs), and accurately report actionable data to their provider network. While the state will still encourage providers to meet meaningful use requirements for Medicaid, the RCOs will also coordinate with its networks to ensure HIT use. The RCO will also be asked to incorporate a consumer-friendly patient portal to engage members in the direction of their healthcare. The State Governing Body will use current information within the Health Information Network (HIN) to actively monitor RCO performance and population health outcomes with a value-based analytics tool described in more detail within the HIT Plan.[1]

To foster provider buy-in, reduce administrative burden, and ensure quality of care, each RCO must meet standardized quality and cost measures that will ultimately be reported through a statewide HIT platform to evaluate the performance of RCOs. The quality metrics will be aligned with the new Medicare payment and delivery reform through MACRA and the Merit-Based Incentive Payment System (MIPS) and Alternative Payment Models (APM) programs.

Each RCO will be certified by the State Governing Body to demonstrate their experience and capacity to deliver care as required by this model, including an ability to manage financial risks, coordinate and integrate the delivery of physical and mental health and substance abuse services, and participate in statewide interoperable healthcare technology. RCOs will have policies and procedures to protect members' rights, including developing mechanisms to monitor and protect against underutilization of services and perform grievance and appeals processes.

---

[1] The HIT platform will be partially supported by a fixed fee assessed to each RCO. A further description of this platform is described in Section H, the HIT Plan, and the financing of the platform is discussed in Section L, the Operational and Sustainability Plan.

RCO VALUE-BASED PAYMENT

State Payment to the RCO

The state will utilize a global budget to pay RCOs for the complete cost of health care for all members within their geographic region. The global budget for the RCO will consist of a risk adjusted, capitated per member per month (PMPM) payment for covered services. The PMPM growth rate will be capped by the state to ensure cost targets are met and growth is restrained. To account for the different health needs and funding formulas between the Medicaid population and public employees, the state will develop two separate methodologies for each covered population.

There will be two withholds from the capitated payment. The first will be a withhold of 3.0 percent to be retained until the RCO has met required quality metric benchmarks. This withheld percentage will be reviewed annually to determine if an increase in the withholding rate creates a greater incentive to meet quality benchmarks. The second, smaller withhold will be passed through to the health information network to maintain statewide HIT interoperability. Additional HIT requirements for RCOs are discussed later in this section.

RCOs are also eligible for performance bonus payments from a state quality incentive pool. To qualify for bonus payments, the RCO selects additional quality metrics to meet from the incentive pool list. These metrics include performance measures on cancer screenings, immunization rates, and behavioral health and substance abuse screenings and interventions. If the RCO achieves regionally-tailored benchmarks on these measures, the RCO receives an additional incentive payment from the quality incentive pool at the end of the year.

Understanding that the healthcare system is dynamic, continued payment innovation based on provider engagement and feedback will be utilized to incent RCOs to continue to deliver improved, cost-effective care to their beneficiaries.

RCO Payments to Networked Providers

The RCOs are responsible for implementing value-based alternative payment arrangements (APA) with their provider networks. The state will establish criteria RCOs must meet as they implement value-based healthcare delivery, including the following:

- Eighty percent of payments made to providers must be value-based by 2020;
- RCOs must participate with the Multi-Payer Episodes of Care;
- One additional APA, as described below, must be utilized; and
- APAs must include mechanisms to encourage both cost savings and high quality care

Outside of these requirements, the decision on how providers within each RCO network are incented and held accountable are left largely to the RCOs to determine so that regionally-appropriate, scalable methods to move from volume-based to value-based healthcare delivery system innovations can be aligned with regional readiness and successfully implemented.

RCOs are responsible for implementing APAs with aligned quality measures within their network. In addition to Episodes of Care, which are described later in this section, the following APAs are potential options for RCOs to utilize:

Bundled Payments

Bundled payments are a modification to the fee-for-service (FFS) structure in which payers reimburse providers for a set of services related to a procedure or health condition rather than reimbursing providers for each service separately. Bundled payments typically focus more on services provided in a hospital or post-acute care setting. A bundled payment often is used to reimburse multiple providers, including hospitals, physicians, and other practitioners. Bundled payments may be retrospective or prospective. The former involves reconciling target and actual costs after care is provided on a FFS basis, while the latter refers to payers providing a predetermined payment amount for services as one sum. If costs are less than the target or predetermined payment amount, providers experience savings. Conversely, providers lose money in instances when their costs exceed the payment amount.

<u>Provider risk</u>: Cost of services delivered may exceed the amount of the bundled payment.

Pay-for-Performance

In pay-for-performance models, providers are rewarded for meeting certain goals, which are generally defined by quality of care or patient outcome measures. Pay-for-performance systems are often focused on creating long-term savings through the improvement of primary healthcare, use of preventive health services, care coordination across providers, and/or physician practice improvements. Pay-for-performance measures are designed to reward providers for focusing on quality of care rather than quantity. This payment model typically involves bonus payments, but may also assess penalties on providers who do not meet benchmarks.

<u>Provider risk</u>: May be upside only or two-sided, depending on whether penalties are included.

Payment Penalties

Under a payment model that includes payment penalties, provider payment may be withheld for failure to meet quality or outcomes goals, provider deviation from evidence-based practice standards, or when provider care is connected to sub-standard outcomes (e.g., certain healthcare acquired conditions, or never events). Payment penalties are designed to create motivation to improve quality of care and to enhance provider accountability for patient outcomes.

<u>Provider risk</u>: Providers are assessed penalties for failing to meet goals or other requirements.

Shared Savings

In a shared savings model, the payer sets a cost target, and if providers meet or exceed those targets while caring for patients, they share in the savings of avoided costs. Shared savings plans usually include quality of care and/or health outcome measures. A provider's eligibility to share in savings usually depends on achieving acceptable scores on identified measures. Shared savings plans are intended to create an incentive for providers to deliver high-value care rather than a high volume of services.

<u>Provider risk</u>: Providers receive a portion of savings they achieve, but have no risk if savings are not realized.

Shared Risk

The shared risk model enhances the shared savings model by also putting the provider at risk if costs exceed the defined target threshold. Under shared savings, providers earn more if they reduce costs below the threshold, but have no downside risk. In shared risk models if costs exceed the threshold providers may pay a penalty or share in the costs exceeding the target.

Provider risk: Providers share in both cost savings and costs that exceed targets (penalties).

Global Capitation

Under capitation, a payer gives a provider, provider group, or health system a single per-patient payment with the intention that the provider or health system will provide all necessary services to that patient during the contract period (usually a year). Capitation models create strong financial incentives for providers to manage patient care efficiently and avoid costly complications or expensive services such as emergency department or inpatient admissions. Capitation contracts almost always include quality of care and patient health outcome measures to ensure that providers are not under serving patients to contain costs. By capitating provider payments, however, services provided under an EOC model will need to be carved out to ensure providers are incented to reduce costs. There is also an option for partial capitation arrangements. These could be beneficial for services that are standardized across the RCO such as primary care and behavioral health. RCOs will have to describe how capitation could be implemented with other models.

Provider risk: Providers are not reimbursed for any costs that exceed the capitated payment. Providers can be at full or partial risk.

RCO Care Delivery

The RCO will be held accountable for high care delivery standards. Delivery standards such as network adequacy, patient wait time, accessible clinic hours, and appointment availability will be set by the State Governing Body and its committees. The benchmark for these standards will vary based upon regional needs. Similarly, the quality metrics that the RCO will be required to report and the targets set to earn back withheld dollars or as incentives will cover clinical, quality, and population health attainment and will be determined through the deliberations of the State Governing Body and Quality Metrics Committee.

To account for regional variation, each RCO will be asked to describe how it will meet standards given the resources that are available or may need to be created. While a single delivery system model will not be prescribed, each RCO will need to describe and demonstrate how they will accomplish the following:

- Deliver comprehensive acute and primary care through a Primary Care Prevention Strategy.
- Encourage the use of preventive services.
- Integrate behavioral health and primary care.
- Integrate Federally Qualified Health Centers, County Health Departments, I/T/U health care facilities and other existing entities to create a medical neighborhood
- Use non-traditional healthcare workers to address individual and community social determinants of health and unmet needs.
- Use a centralized multi-specialty care coordinator (among providers) to manage transitions between healthcare settings, connect patients to resources, and perform aftercare follow-ups.
- Integrate telemedicine to increase access to behavioral health and specialty providers, especially in those RCOs serving rural, underserved areas.

Transition to RCO from Primary Care Case Management (PCCM) and other Current Programs

There are many existing programs within the state purchased healthcare environment. These will be leveraged and enhanced to transition RCOs in an effective manner. The best practices and guidelines will help shape those of the RCO.

OHCA Programs

Oklahoma currently operates a Primary Care Case Management (PCCM) 1115 Waiver called SoonerCare Choice for most of the Medicaid population. With the exception of certain populations, most Medicaid beneficiaries are eligible to enroll in the PCCM and choose a primary care provider (PCP) who then serves as the patient's medical home. The PCP is paid a monthly care coordination fee on a PMPM basis to help coordinate the patient's care; the fees are based on three tiers and vary depending upon the type of panel the provider wishes to serve, as described in Section B, Description of State Healthcare Environment. The RCO will look to adopt the best practices of this model into the standards of care carried into the new model proposed here.

Other current efforts in the state include the Health Access Networks (HAN) and the SoonerExcel program. The HAN programs take on care management services for Medicaid members and are paid a flat PMPM care-coordination fee. These networks of care coordinators work directly with providers to receive patients and centrally manage the care of attributed patients across the care continuum. These are described in more detail in Section B. As with the PCMH program, the RCO will look to incorporate the best practices of the HANs as benchmarks to be met. These programs may also be continued by the RCO.

Employees Group Insurance Division Programs

Public employees can choose from a variety of insurance plan options, ranging from a self-insured Preferred Provider Organization (PPO) plan to private Health Maintenance Organization (HMO) plans. The PPO plan, called HealthChoice, is administered by the Employee Group Insurance Division (EGID). EGID has implemented various programs to address cost and quality. EGID has championed programs focused on member education. This includes wellness screenings, education campaigns, and cost sharing programs that help direct members to more cost effective insurance plan options.

Covered Services

The array of services covered by the RCO will include traditional physical, mental health, and chemical dependency services, as seen in the table below, for both Medicaid and public-employee beneficiaries as mandated by applicable regulation. This includes essential health benefits, services currently required under Oklahoma statute and, for Medicaid, services provided under Oklahoma's Medicaid State Plan and any relevant waiver services remaining in effect. Given the difference in health needs and status, there may be differing benefit plans for Medicaid and public employees.

In addition to meeting federal regulations set out for Medicaid and federal guidelines for group insurance regarding covered services, the RCOs will also have to meet minimum essential coverage mandates and the applicable state-specific guidelines set out by the Oklahoma Insurance Department for healthcare coverage offered by HMOs. The applicable guidelines will vary depending on the beneficiaries they serve. All covered services offered by the RCO will be delineated through the procurement process. Oklahoma plans to include a comprehensive set of services within the capitated rate to achieve the largest return on investment and population health improvement.

Below are the high-level services Oklahoma intends on eventually including within the RCO. Limitations currently in place for Medicaid members, including cost sharing, caps on total services, etc., will remain.

Figure E.4: Covered Services

Services	Medicaid	Public Employees
Inpatient hospital	X	X
Primary Care and Outpatient services	X	X
Pharmacy	X	X
Institutional Long Term Care (both nursing facility and ICF/IID)	X	N/A
Personal Care	X	N/A
HCBS Home and Community Based Services	X	N/A
Inpatient Behavioral Health Services	X	X
Outpatient Behavioral Health Services	X	X
Dental	X	Separate
Non-Emergency Medical Transportation	X	N/A
Durable Medical Equipment (DME)	X	X

Finally, in addition to traditional healthcare services, the state is aiming to provide RCOs with innovative methods to provide care that address social determinants of health. As part of this effort, the RCOs will be required to include alternative non-State Plan services (i.e., flexible services) for Medicaid beneficiaries. The state will consider how flexible services could be provided for public employees where necessary. Since RCOs are to include community resources and stakeholders within their governance, it is anticipated that RCOs will enter into financial agreements or memorandums of understanding with community organizations for use of flexible services that improve the beneficiaries' health. Services must be consistent with the member's treatment plan, and not billable or reportable through a CPT or HCPC code.

Integrating the Social Determinants of Health

Integration of primary prevention strategies to address the social determinants of health is a fundamental component for the Oklahoma Model. A wealth of evidence demonstrates social determinants can affect health outcomes as much, if not more than, direct care. Varying levels of available social service supports across the state and the uncoordinated administration of social services programs limits Oklahoma's providers' ability to address these social determinants. The Oklahoma SIM model aims to connect physical health and social service providers within the RCOs so that providers may effectively refer patients to existing resources and begin to identify gaps in critical resources that must be solved in order to positively affect community health outcomes.

One mechanism for this connection is through the governance structure of the RCO. Each RCO is required to form a Community Advisory Board that comprises community partners who understand the region's social services assets and advocate their use to address the population's social needs. The members of the committee are described later within this section.

To assist in the integration of social services into the healthcare delivery system, Oklahoma will pursue flexible spending arrangements with CMS to allow for the use of federal dollars to pay for non-medical

expenditures that are in direct line with the patients' care plans. These services and arrangements are described later in the "Covered Services" section and include activities such as mold remediation to alleviate asthma exacerbations and refrigeration of medication, among many others.

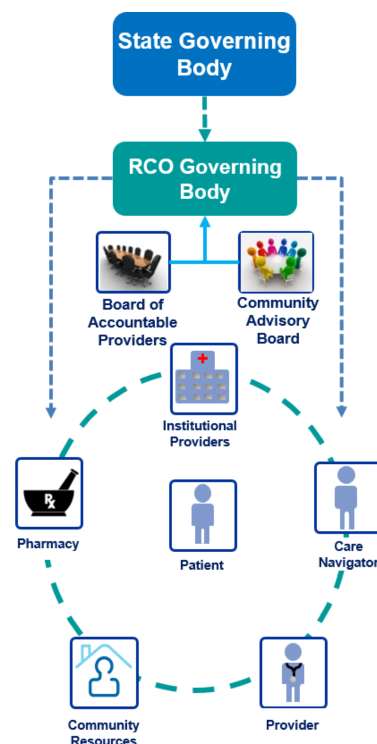
RCOs will also be required to implement and use a Human Needs Survey that will identify members' social and health needs at the point of program enrollment. The survey will help in the risk stratification of patients on both a medical and social determinant basis and identify in a proactive manner those patients with potentially higher needs not yet realized. If possible, further predictive risk identification and stratification will also be conducted using existing EHR and claims data for the individual.

Lastly, the RCOs will create and maintain a regional asset data system of community resources. This will enable the care team to have an easy referral source for services that can be provided in the community to enable patient health and success. Resources such as food pantries, mobile meal programs, health literacy programs, diabetes prevention programs, and ride sharing services are a few of the many community resources that will be entered into this data system, which will be accessed via a web portal by care coordinators, community health workers and other providers. Some of the potential resources have been described in Section B, the Description of the State Healthcare Environment. Some organizations around the state have started similar projects to inventory the available resources of their communities. The RCOs will look to partner with and further leverage these projects.

Governance

Currently, two state agencies are responsible for managing state-purchased healthcare. The Oklahoma Health Care Authority (OHCA) administers and manages healthcare for the Medicaid population through the SoonerCare program, and EGID administers and manages healthcare for most public employees through the self-insured PPO HealthChoice plans. In addition to the HealthChoice plans operated by EGID, state employees may also purchase healthcare through an array of private HMO plans. Those carriers that offer HMO plans contract with the Employees Benefits Department (EBD), and EBD collects and pays the premium to the HMOs on behalf of state employees that elect such coverage. The HMOs are then responsible for providing healthcare coverage for those state employees. Both EGID and EBD are divisions within the Office of Management Enterprise Services (OMES), the government agency which manages and supports the basic functioning of state government.

Figure 3: State Governing Body



Under the proposed RCO model, a State Governing Body will be responsible for overseeing the care provided by the RCOs for eligible attributed beneficiaries. The State Governing Body will have representation from Oklahoma Health and Human Service agencies, paying institutions, including private, public and self-insured payers, providers, and consumer advocates. The leadership for this governing body will consist of representatives from the following state agencies: the Oklahoma Health Care Authority, the Employee Group Insurance Division, the Department of Mental Health and Substance Abuse Services, and the Oklahoma Insurance Department. To ensure that the State Governing Body has broad stakeholder representation from across the health care system, numerous private representatives will also be included based on stakeholder feedback and comment. This includes a representative from tribal nations, a representative from a private healthcare payer association, a

representative from a self-insured plan association, and two members each from the Provider Advisory and Member Advisory Committees. The State Governing Body will have a formal charter and governance that will delineate the scope and authority of the body, term limits, and rotation of seats to ensure the body is operational and has adequate representation to act as an authoritative body. Oklahoma will work with the Oklahoma State Legislature, CMS, and relevant agencies to pursue the necessary authority required to enable this model and the State Governing Body, including proposing a new 1115 Demonstration Project Waiver.

The State Governing Body will draft, certify, procure, and administer contracts with eligible entities that wish to serve as RCOs to provide healthcare coverage for the state. The State Governing Body will be responsible for setting the specific RCO requirements in a detailed RFP as a part of the planning and implementation phase. The State Governing Body will be guided by several advisory committees in making the RCO certification and RFP requirements. A few of the advisory committees to the State Governing Body that have proposed to date are the: RCO Certification Committee, Quality Metrics Committee, Episodes of Care Committee and HIT Committee. Other requirements will be specified at a later time based on CMS negotiations and further detailed rollout of the model. Below are the proposed functions of the State Governing Body advisory committees:

Figure E.5: State Governing Body Advisory Board Committees

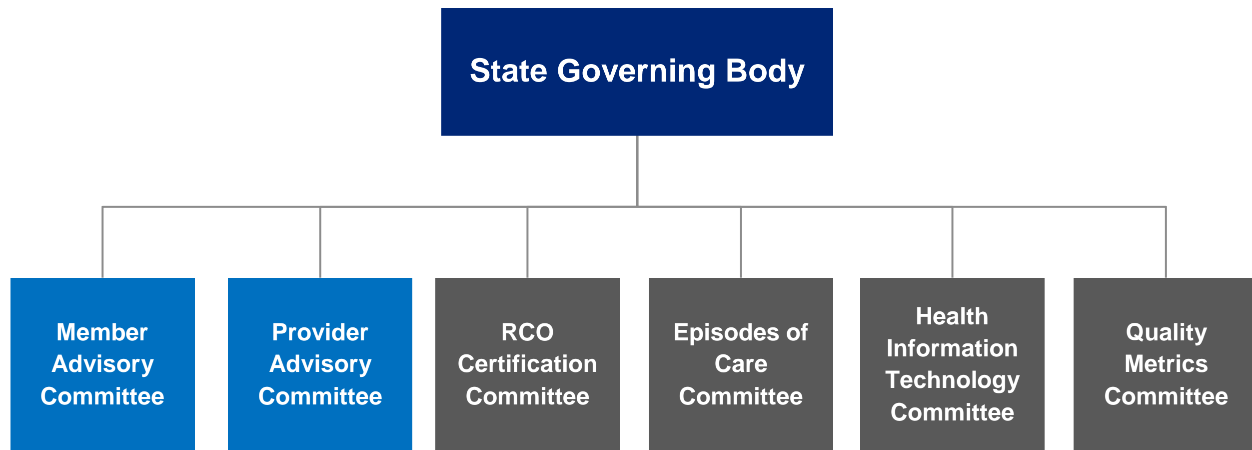


Figure E.6: State Governing Body Advisory Board Committee Functions

Advisory Committee	Function
RCO Certification	The RCO Certification Committee will create the criteria to certify a RCO, indicating that they have the capacity and plans to meet the goals and requirements to provide services that are in alignment with the goals of this model. The proposed certification criteria for RCOs can be found in Appendix D.

Quality Metrics	The Quality Measures Committee will set RCO quality measure benchmarks and reporting requirements, as well as overseeing RCO monitoring and evaluation.
Episodes of Care	The Episodes of Care Committee will propose episodes of care and episode framework, including needed, identified alterations to existing episodes of care.
Member Advisory Committee	The Member Advisory Committee will consist of the beneficiaries being served by the RCOs in operation around the state and will send two members to be a part of the State Governing Body. This committee will be responsible for ensuring the voice of the member is heard at the highest level of governance
Provider Advisory Committee	The Provider Advisory Committee (PAC) will be an overarching statewide committee that will consist of those providing care within the RCO model. The PAC will send two members to be a part of the State Governing Body. This committee will be responsible for ensuring the voice of the provider is heard at the highest level of governance.
Health Information Technology Committee	The HIT committee will work on issues of interoperability as it relates to the RCO model and needed HIT infrastructure for model success.

From a RCO performance perspective, the State Governing Body will be responsible for ensuring each RCO reports its quality measures. Through the development and use of the value-based analytics (VBA) platform and other HIT, the State Governing Body can closely monitor RCO activities and performance. The State Governing Body will work with the RCOs to ensure the availability of adequate resources for implementation and monitoring, including education, marketing, outreach, and enrollment.

The Board and its advisory committees will also assure its members of equitable access to services by establishing network adequacy and access requirements. They will also establish standards that the RCO will need to meet to ensure timely access to care and services and member protections are in place.

RCO Governance and Scope

While the state will provide a high degree of oversight of the RCOs, a key characteristic of the Oklahoma Model is to allow flexibility and discretion in the way the RCO organizes to deliver patient-centered care that meet and exceed outcome targets. Other states that have implemented similar types of models have fostered this by allowing RCOs to develop governance and payment models that match local health needs and account for provider maturity to move towards risk-based care.

Each RCO must establish a governance structure that reflects the coordination of care delivery and community resources into one integrated model. To accomplish this, RCOs must include specific stakeholders within the RCO governance and establish two distinct advisory boards. First, the RCO Governing Body must comprise individuals that share in the financial risk of the organization. The RCO Governing Body must also consist of the relevant stakeholders impacted by the RCO's operations. The suggestions for the makeup of each of these boards are described below:

- The RCO Governing body will be responsible for meeting all cost and quality targets of the RCO. It will direct the RCO on payment and delivery of care to attributed members. This board will consist of:
    - Persons that share in the financial risk of the organization, and who must constitute a majority of the governing body
    - The major components of the healthcare delivery system
    - At least three healthcare providers in active practice, including an Oklahoma licensed physician, a nurse, and a mental health or substance abuse treatment provider
    - At least two members from the community at large, to ensure the organization's decision-making is consistent with the values of the members and the community
    - At least one member of the Community Advisory Board
- The Board of Accountable Providers (BAP) will be a local provider board established to assure that best clinical practices and innovative approaches to delivering care are being used and are culturally appropriate. They will suggest interventions to address issues with cost and quality attainment. This board will include representation from provider types (or their representative organizations) active in the RCO's healthcare delivery system.
- The Community Advisory Board (CAB) will have broad regional representation from community partners, such as 501(c)(3) entities, county health departments, tribal nations, social service agencies and organizations, local municipalities and businesses, patient advocates, and community action agencies. This board will help guide the RCO to conduct a community health needs assessment and complete a community health improvement plan (CHIP). These will be used to help guide the RCO to provide regionally-specific care and guide interventions that help address the social determinants of health. The Community Board will be integral in linking the RCO to community resources that support whole-person care and will be required to maintain databases of community resources. The board must include representation from:
    - Consumers, patients, and advocates, forming a majority of the membership
    - Non-profit community organizations
    - County health departments from the counties served by the RCO
    - Tribal nations in the RCO service area
    - FQHCs operating within the service area

One person from the BAP will sit on the CAB and one person from the CAB will sit on the PAB to ensure that there is collaboration between the two boards. The boards will give joint recommendations on how to invest in new models and initiatives that support value-based purchasing. These boards will jointly help to guide the RCO to conduct a community health needs assessment and a community health improvement plan (CHIP).

These boards will be integral to linking the RCO to community resources that support whole-person care. They will also promote effective interventions to improve healthcare delivery, recommend strategies to better integrate community supports and services into healthcare, suggest methods to elicit consumer

feedback, and provide culturally aware information that supports the RCO to improve health outcomes in its respective region. Each RCO will be responsible to the State Governing Body to demonstrate how decisions related to its operations have taken input from the board into account. Governance approaches and membership will ultimately be approved by the State Governing Body.

Populations Covered

Oklahoma is proposing to attribute its Medicaid beneficiaries and public employees to the RCO model, with the exception of those exempt from managed care and those receiving limited benefit packages. The total number of eligible members to be included in this model is approximately one million lives, or a quarter of Oklahoma's population. Oklahoma can leverage the state's purchasing power and influence over the way healthcare is delivered to all Oklahomans by requiring mandatory enrollment of individuals with state-purchased healthcare into the RCO. By targeting as many individuals who receive healthcare insurance through some type of state-purchased healthcare into the RCO model, Oklahoma can move closer to its value-based benchmark for state-purchased insurance of 80 percent by 2020. A further description of the populations covered within both Medicaid and state employee insurance are described below.

Medicaid Covered Lives

Medicaid covers more than 800,000 individuals through various programs and waivers. Under this proposal, the RCOs will cover the majority of those Medicaid beneficiaries, including children, pregnant women, and individuals who qualify under the Aged, Blind, and Disabled (ABD) category, including persons dually eligible for both Medicaid and Medicare. There will be some populations excluded from the RCO, such as those receiving family planning services only, the Specified Low-Income Medicare Beneficiaries (SLMBs), Qualifying Individuals and Quality Working and Disabled Individuals and those who receive the Qualified Medicare Beneficiaries (QMBS) benefit only.

Under the proposed RCO model, Medicaid beneficiaries, except those that are exempt from mandatory managed care enrollment, must enroll with a RCO and choose to receive benefits through the RCO. By including nearly all Medicaid beneficiaries, the state can achieve a higher degree of budget predictability and accountability while driving the volume necessary to make RCOs financially viable.

To provide a rough estimate to CMS of the number of Medicaid beneficiaries Oklahoma proposes to cover, the Oklahoma SIM project has identified the various populations currently served under the Medicaid State Plan and various waivers it will attribute to the RCO model.

Figure E.7: RCO Covered Populations

RCO Covered Populations: Medicaid	Population
1115 Waiver (SoonerCare Choice and Insure Oklahoma)	**544,628**
SoonerCare Choice	540,708
Insure Oklahoma-Individual Plan	3,920
SoonerCare Traditional	**238,083**
Total	**782,711**
1915(c) Home and Community Based Waivers	**23,046**
Total Medicaid	**805,757**

Excluded populations:

Oklahoma is proposing to exclude the following Medicaid coverage groups from the RCO:

- Foster care children
- Children in Department of Human Services custody
- Qualified Medicare beneficiaries without full Medicaid
- Specified Low-Income Medicare beneficiaries without full Medicaid
- Qualifying Individuals between 120 percent and 138 percent FPL
- Qualified Disabled Working Individuals
- Insure Oklahoma Employee Sponsored Insurance program enrollees

Public Employee Covered Lives

The Employee Group Insurance Division (EGID), the agency responsible for administering and operating HealthChoice, and the HMO plans covering public employees currently have an enrollment of over 225,000 individuals. This number includes active employees, as well as Medicare and pre-Medicare populations, and their dependents. Under this proposal, RCOs will be responsible to provide healthcare services to all individuals enrolled with EGID and HMO plans. The coverage of these individuals will be phased in over time after enrollment of Medicaid populations. By including the majority of Medicaid beneficiaries and public employees, over a quarter of the state's population will be covered under a RCO. The table below illustrates the anticipated number of covered lives of public employees who will eventually be covered by a RCO.

Figure E.8: Public Employees Covered

RCO Covered Populations: Public Employees	Members	Dependents	Total
HealthChoice (Self-Insured)			
Active Employees	87,041	53,006	140,047
Pre-Medicare	**7,299**	**1,702**	**9,001**
Medicare	31,048	4,367	35,415
Total	**125,388**	**59,075**	**184,463**
HMOs			
Active Employees	20,388	16,468	36,856
Pre-Medicare	**1,266**	**221**	**1,487**
Medicare	2,646	409	3,055
Total	**24,300**	**17,098**	**41,398**
All Plans	**149,688**	**76,173**	**225,861**

Integrating the Private Market

The private market will be engaged in this model through multi-payer quality metrics and episodes of care. As it pertains to the RCO, we envision that other private markets could be incorporated as desired by commercial insurers as the RCO model matures. To date many of the commercial payers and self-insured businesses in Oklahoma have been involved in the discussions about this model. If the RCOs can demonstrate cost and quality improvements as expected, self-funded employers and commercial payers have indicated they will be interested in purchasing healthcare in a similar manner. However, it has been made clear by payers that there are different needs with the populations within the commercial market and this will require different model considerations. For example, some services, such as transportation, that are required through Medicaid are not as necessary for the commercial population. These kinds of considerations will have to be taken into account if commercial payers and self-insured businesses decide to utilize the RCOs for their populations. Representation of a commercial payer and self-insured entity on the State Governing Body, they will help guide the conversation of how to leverage markets and needs across populations.

Native Americans, Tribal Systems, and SIM

Oklahoma is home to 38 federally recognized tribes and more Native Americans than any other state. These tribes are sovereign nations that have a unique relationship with the United States and the State of Oklahoma. This government-to-government relationship recognizes the right of tribes to self-government and self-determination. The United States also has a federal trust obligation to supply Native Americans with access to quality care. As such, the Oklahoma State Innovation Model Design proposal must always take into account the federal trust responsibility and the sovereign status of our tribal partners.

How Will Tribal Health Systems Operate Within an RCO?

Regional Care Organizations will be required to engage Native Americans and their tribes' health systems in several ways, including ensuring tribal representation within their governance structure and contracting for services with tribal facilities in the RCO service area. Tribal representation within the RCO's local governance structure will be a key factor to the RCO's success, as tribal representatives possess irreplaceable knowledge of appropriate care delivery methods for the populations they serve.

As part of their provider contracting process, RCOs will be required to contract [utilizing the Indian Addendum (see Appendix K)] with tribal health systems and urban and IHS Indian facilities operating within their service area that wish to participate in the RCO delivery system. These facilities will not be required to contract with a RCO to receive payment, however. 25 U.S.C. §1621(e) provides that these systems retain the right to be paid, whether or not a contract exists with the RCO. This will ensure tribal Medicaid members are allowed to continue seeking services through their preferred tribal, urban, or IHS health facility and tribes would maintain the ability to receive payment directly from the Medicaid agency if they prefer.

If the tribal health systems, urban, and IHS Indian facilities choose to contract with the RCO, the facilities will have the option to participate in an interoperable health information exchange, which will provide valuable resources to tribal health facilities and RCOs in managing Native American members' health across the many settings they interact with over time. This enhanced data interoperability will also allow better quality metric measurement of all RCOs and their members to demonstrate both cost and quality performance. The current metrics proposed to measure RCO performance are in line with what tribes already have to report through the Government Performance and Results Act (GPRA). By aligning data sets and technology with existing platforms, the RCO can reduce burden and create a seamless system that is beneficial for members and tribal systems.

Under the current reimbursement system, tribes are reimbursed the OMB rate for services rendered to tribal Medicaid members. This reimbursement level is important to tribal health systems, and it will continue in an RCO. RCOs will be contractually required to reimburse tribal health systems the OMB rate for services rendered to a tribal Medicaid member, which will still be matched at 100% Federal Medical Assistance Percentage (FMAP).

Native Americans, Tribal Systems, and SIM

(Continued)

Tribal consultation will continue throughout all phases of implementation to address outstanding questions, including questions pertaining to provider network overlap, contract health referral services and how I/T/U facilities would be eligible to receive incentive payments from the RCO.

How Will This Affect Tribal Members?

Tribal members who are also Medicaid members will not automatically be enrolled in the RCO, but will have the option to receive their services through the RCO operating in the region in which the member resides or through the traditional Medicaid program. If they choose to receive their services through an RCO, they will be able to receive services from any provider contracted with the RCO, including their tribal health systems. They will also receive other enhanced benefits, such as care coordination services, integrated behavioral health services, and specialty services that may not be available at a tribal health facility. Tribal members in an RCO will still receive the cost sharing protections they are entitled to under federal law.

Can Tribal Health Systems Become RCOs?

Many of the concepts proposed within the Oklahoma State Innovation Model Design are things tribal health systems have been doing for their members for years, such as the integration of the healthcare delivery system with community resources like housing services and nutrition supplementation. Nevertheless, tribal health systems operate within numerous financial and regulatory boundaries, including those delineated in the Indian Health Care Improvement Act. These boundaries, which vary from tribal system to tribal system, often limit the populations tribal health system may serve and the financial risk they are able to assume. Because RCOs will be required to provide services to all Medicaid members and assume actuarial and performance risk, we came to a mutual determination that the boundaries in which tribal health systems operate would inhibit them from effectively operating an RCO.

Our tribal partners did determine, however, that the creation and the operation of an RCO through a tribe's business operations arm, which would not be subject to the same barriers as tribal health systems, would be of interest to some tribes, as they expand their health offerings to the general population. Special considerations for conditions of participation, applicable law, dispute resolution among other legal determinations pertaining to tribal sovereignty would have to be considered in this option.

Medicaid Supplemental Payments

Medicaid reimbursement rates for providers are bound by a federal reimbursement limit called the Upper Payment Limit (UPL). The UPL is the maximum a Medicaid program may pay a provider type in the aggregate, statewide. In simple terms, it is calculated through a reimbursement methodology that determines the amount Medicare would have paid for a service, or set of services, provided to a Medicaid fee-for-service patient. In most states, including Oklahoma, standard Medicaid payment rates are well below the allowable maximum, leaving a gap between what the provider is reimbursed and the UPL.

Federal regulations allow the Centers for Medicare and Medicaid Services (CMS) to authorize a state to pay a provider supplemental payments that would bring them up to the UPL. These programs include the Supplemental Hospital Offset Payment Program (SHOPP), Graduate Medical Education Program Payments (GME) among others. This type of supplemental payment program requires additional state funds to draw down federal matching dollars.

Currently, Oklahoma has several supplemental payment programs within its Medicaid program. These programs are integral to maintaining current healthcare access and capacity for all Oklahomans. As such, these programs will be maintained under the RCO model. Oklahoma will pursue the relevant authorities necessary to maintain these important programs within its RCO model design to protect against the degradation of current access to key health services.

Contracting

The State Governing Body will form a detailed request for procurement to solicit vendors for the regions, pursuant with Oklahoma law. The RFP requirements to become certified as a RCO will include requirements discussed here, as well as those that are established through further model development with stakeholders and negotiations with CMS. Once the vendors have been selected, this State Governing Body will be tasked with enforcing and managing those contracts to ensure all cost and quality targets are being met.

Encouraging Payer Participation in the RCOs

To ensure that there is adequate participation from RCOs and to meet federal and state legal and regulatory requirements, the state will employ necessary actuarial tools and analysis to determine actuarially sound capitation amounts for attributed beneficiaries. Additionally, the state will establish accountability mechanisms, learning collaborations, and stakeholder feedback to help RCOs remain sustainable and viable. This design will support the RCOs' maturation progression so that they can achieve success in supporting health outcomes while also experiencing financial incentives to keep their interest in serving these populations. Initial responses from the HB 1566 Request for Information process for a "care coordination model for the ABD population," in which 22 submissions were received are encouraging. The state will leverage the current interest in coordinated care for this population as it moves toward enrolling the majority of Medicaid beneficiaries and state employees in the RCOs.

QUALITY MEASURES

A key component of the Oklahoma SIM project is implementing quality and population-based health measures that reward value over volume and align them across payment models and payers. The Oklahoma SIM project has incorporated OHIP's flagship goals of obesity, tobacco use, diabetes, hypertension, and behavioral health within the SHSIP and model design to ensure consistent goals are used across the state's health transformation efforts. The Oklahoma SIM flagship issues will be used as the basis for many quality measures used to align payers and assess the RCOs. Another key goal of the Oklahoma SIM project is to develop extensive monitoring tools and quality metrics to assess the effectiveness of Oklahoma's healthcare delivery system.

The state understands the need to drive improvement through an active commitment to data collection and analyses. Many of the data collection and analysis of RCOs will be further described in the HIT Plan found later in this document. The project team considered multiple quality measures and data sources that could be used to evaluate the effectiveness of any model proposed through the Oklahoma SIM project. The proposed measure sets were developed using many data points such as OHIP 2020, extensive research related to quality measures used in value-based models, stakeholder feedback, alignment with other state and national initiatives, the measures link to clinical outcomes, and national quality accreditation. The list of suggested metrics will be further refined and deliberated by a quality metrics committee. This committee will work to further align this set with state and national initiatives such as the MIPS and APM programs that are being rolled out by Medicare through MACRA.

RCO Required Evaluation Metrics

The Oklahoma SIM project team has determined that two sets of quality measures are needed to support the state's healthcare transformation efforts. The first set of quality measures will be used to evaluate the performance of the RCOs. To achieve this, RCOs will be required to report on a number of different quality measures as mandated in their contract and to meet quality targets to be paid all or a portion of their withheld capitation payment. The second set is additional metrics that the RCO can meet for bonus payments beyond the capitated payment.

RCO Required Evaluation Metrics

- Metrics used by the state to evaluate the regional RCO entities
- Population-level and process metrics to measure overall population health and quality of care delivered
- Metrics to ensure patient access and patient satisfaction of care

RCO Optional Bonus Evaluation Metrics

- Metrics used by the state to evaluate if the RCO is eligible to receive incentive money from the community quality pool
- Mix of population-level and patient-level metrics

The following sections detail each metrics set.

As shown in the following table, RCOs will also be accountable for reporting on a set of metrics that are meant to gauge health outcomes against specific targets and benchmarks. Specific timeframes and reporting requirements have not been proposed for the SHSIP. However, prior the implementation of the

RCO model, the State Governing Board will include metrics and targets in the RCO contract, including how the RCO will be required to fulfill these obligations, as well as the reporting, evaluation and payment timeframes.

These measures are related to the Oklahoma SIM flagship issues and the OHIP 2020 goals. They were developed to ensure quality of care, access to care, and to monitor population health. With the goal of addressing disparities and poor outcomes within populations, these measures will be used to assess how well the RCOs coordinate and manage the care of the individuals attributed to it. Although the Oklahoma SIM project team hopes to include all the quality measures in the table below for both public employees and Medicaid, adjustments to the measures or benchmarks across beneficiary type and region may be made during the planning phase to account for normal variations found within all of state-purchased healthcare. Targets may also vary across the two populations.

Multi-Payer Quality Measure Alignment

Multi-payer involvement is an integral component of the Oklahoma SIM project. Alignment across a subset of quality metrics is a foundational first step toward healthcare transformation, as it streamlines provider efforts and allows for better aggregate data collection and analysis. Fostering multi-payer alignment on quality metrics will be an ongoing process of committee discussions. The Oklahoma SIM project has taken the first step of composing an inventory of metrics and reached an agreement, in principle, to align these measures across the carriers participating in the Oklahoma Model. These metrics are a distinct subset of all the metrics that will be incorporated into the RCO organizations. They will include measures across a wider range of chronic and high costs conditions, as well as system and population level evaluations. The first 11 proposed measures for multi-payer alignment are in the table below and are identified with an asterisk (*).

Figure E.9: Proposed RCO Required Evaluation Metrics

Measure Name	NQF Measure Number	Oklahoma SIM Flagship Issue/Key Health Indicator
Preventive Care and Screening: Tobacco Use: Screening & Cessation Intervention*	0028	Tobacco
Comprehensive Diabetes Management/Diabetes Poor Control*	0059	Diabetes
Diabetes Screening for People with Schizophrenia or Bipolar Disorder who are Using Antipsychotic Medications*	1932	Diabetes
Abnormal Blood Glucose and Type 2 Diabetes: Screening - Adults Aged 40 to 70 Years who are Overweight or Obese*	USPTF	Diabetes
Controlling High Blood Pressure*	0018	Hypertension
Preventive Care and Screening: Body Mass Index (BMI) Screening & Follow-Up*	0421	Obesity
Weight Assessment and Counseling for Nutrition and Physical Activity for Children/Adolescents*	0024	Obesity
Anti-Depressant Medication Management a) Optimal Practitioner Contacts For Medication Management b) Effective Acute Phase Treatment c) Effective Continuation Phase Treatment*	0105	Behavioral Health/Medication Adherence
Depression Screening*	0418	Behavioral Health
Initiation And Engagement of Alcohol And Other Drug Dependence Treatment a) Initiation b) Engagement*	0004	Behavioral Health
Follow Up After Hospitalization (within 30 days) (BH-related primary diagnosis)*	0576	Behavioral Health/ Readmissions
Ambulatory Care: Emergency Room Utilization	HEDIS	ER Utilization
PQI 05: Chronic Obstructive Pulmonary Disease Admission	0275	Tobacco Use
PQI 08: Congestive Heart Failure Admission Rate	0277	Heart Failure
PQI 01: Diabetes, Short Term Complication Admission Rate	0272	Diabetes
PQI 15: Adult Asthma Admission Rate	0283	Tobacco Use
CAHPS Composite: Satisfaction With Care	CAHPS	Patient Satisfaction
Developmental Screening In The First 36 Months	1448	Children’s Health
Prenatal And Postpartum Care: Timeliness Of	1517	Children’s Health

Prenatal Care		
% Of primary care practices co-located with a behavioral health provider	X	Behavioral Health
% Of primary care practices in network with expanded hours (after 5 weekends)	X	Access to Care
% Of primary care practices in network with 24 hour availability	X	Access to Care
% Of population who have an assigned risk score/stratification	X	X
% Of population assigned to a care coordinator with an elevated risk score	X	Care Coordination
% Of network with HIE access	X	HIT Interoperability
Electronic resource guide available to care coordinator/staff	X	Care Coordination
% Of population who screened yes to being a current tobacco user under 18 years of age	X	Tobacco
% Of population who screened yes to being a current tobacco user 18 years of age and older	X	Tobacco
% Of population with a current BMI over 25 who are under 18 years of age	X	Obesity
% Of population with current BMI over 25 who are 18 years of age and older	X	Obesity
% Of population diagnosed with diabetes (type I and II) under 18 years of age	X	Diabetes
% Of population diagnosed with diabetes (type I and II) 18 years of age and older	X	Obesity
% Of population diagnosed with hypertension under 18 years of age	X	Hypertension
% Of population diagnosed with hypertension 18 years of age and older	X	Hypertension
% Of population with a positive screening for depression under 18 years of age	X	Behavioral Health
% Of population with a positive screening for depression 18 years of age and older	X	Behavioral Health
Infant Mortality Rate	X	Children’s Health
Deaths Due to Heart Disease	X	Hypertension
Suicide Deaths	X	Behavioral Health
Diabetes Deaths	X	Diabetes

RCO-Optional Bonus Payment Metrics

The Community Quality Incentive pool will be used as an incentive payment based on the RCO meeting additional quality metrics. The RCO must choose at least seven additional quality metrics to report on and meet minimum thresholds to be eligible for the Community Quality Incentive pool payment. The proposed measures that may be chosen as bonus reporting measures are in the table below. Stakeholders have commented on moving certain measures, like cancer screening, to the RCO required set. These considerations will be further evaluated by the quality metrics committee

Figure E.10: RCO Optional Bonus Payment Metrics

Measure Name	NQF Measure Number	Oklahoma SIM Flagship Issue/Key Health Indicator
Cervical Cancer Screening	0032	Cancer
Colorectal Cancer Screening	0034	Cancer
Influenza Immunization (6months and older)	0041	Immunization
Influenza Immunization (50 and older)	0039	Immunization
Breast Cancer	0031	Cancer
Childhood Immunization Status	0038	Children’s Health
Well-Child Visits: Well-Child Visits in Third, Fourth, Fifth, and Sixth Years of Life	1516	Children’s Health
Plan All-Cause Readmission	1768	Readmission
Dental Sealants On Permanent Molars For Children	X	Children’s Health
Effective Contraceptive Use Among Women At Risk Of Unintended Pregnancy	X	Pregnancy
Chronic Stable Coronary Artery Disease: Lipid Control	0074	Heart Failure
Adherence to Statins	0569	Heart Failure
Proportion of Days Covered (PDC): 3 Rates by Therapeutic Category (Renin Angiotensin System Antagonists, Diabetes Medication, Statins)	0541	Heart Failure, Diabetes
Screening, Brief Intervention, and Referral to Treatment (SBIRT)	SBIRT	Behavioral Health
Cholesterol abnormalities screening: men – 35+, women 45+	USPTF	Heart Failure

Oklahoma Quality Metrics Committee

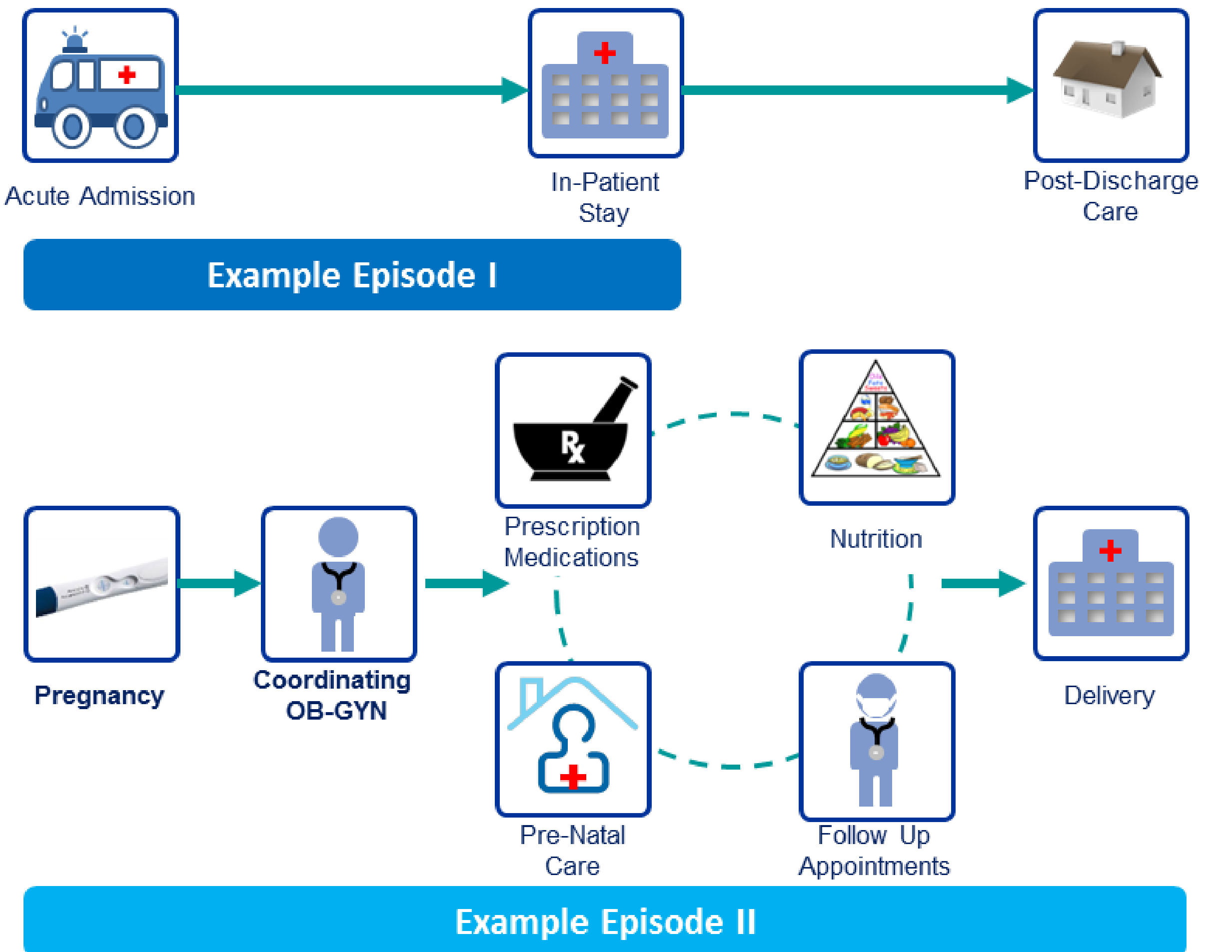
The sets of quality measures discussed here will be the early work of, and guidance to, a proposed Oklahoma Quality Measure Committee. This committee will be part of the State Governing Body. It will be responsible for proposing quality metric sets that can be applicable to the RCO and engaging multi-payer alignment, as well as how to benchmark and set targets to take into account regional considerations. This committee will also ensure that data sources and data measurement are standardized across payers and providers by recommending to the State Governing Body valid sources and methods for aligning those measures. Members of this committee would be:

- Six providers from different practice settings and populations (e.g., Doctor of Medicine (MD), Doctor of Osteopathic Medicine (DO), Pharmacist (PharmD), Nurse, Physician Assistant (PA), Behavioral Health Specialist)
- Two quality measure specialists, consultants, or experts
- One HIT/data reporting specialist
- One public health specialist
- One patient advocate
- One practice transformation consultant

EPISODES OF CARE

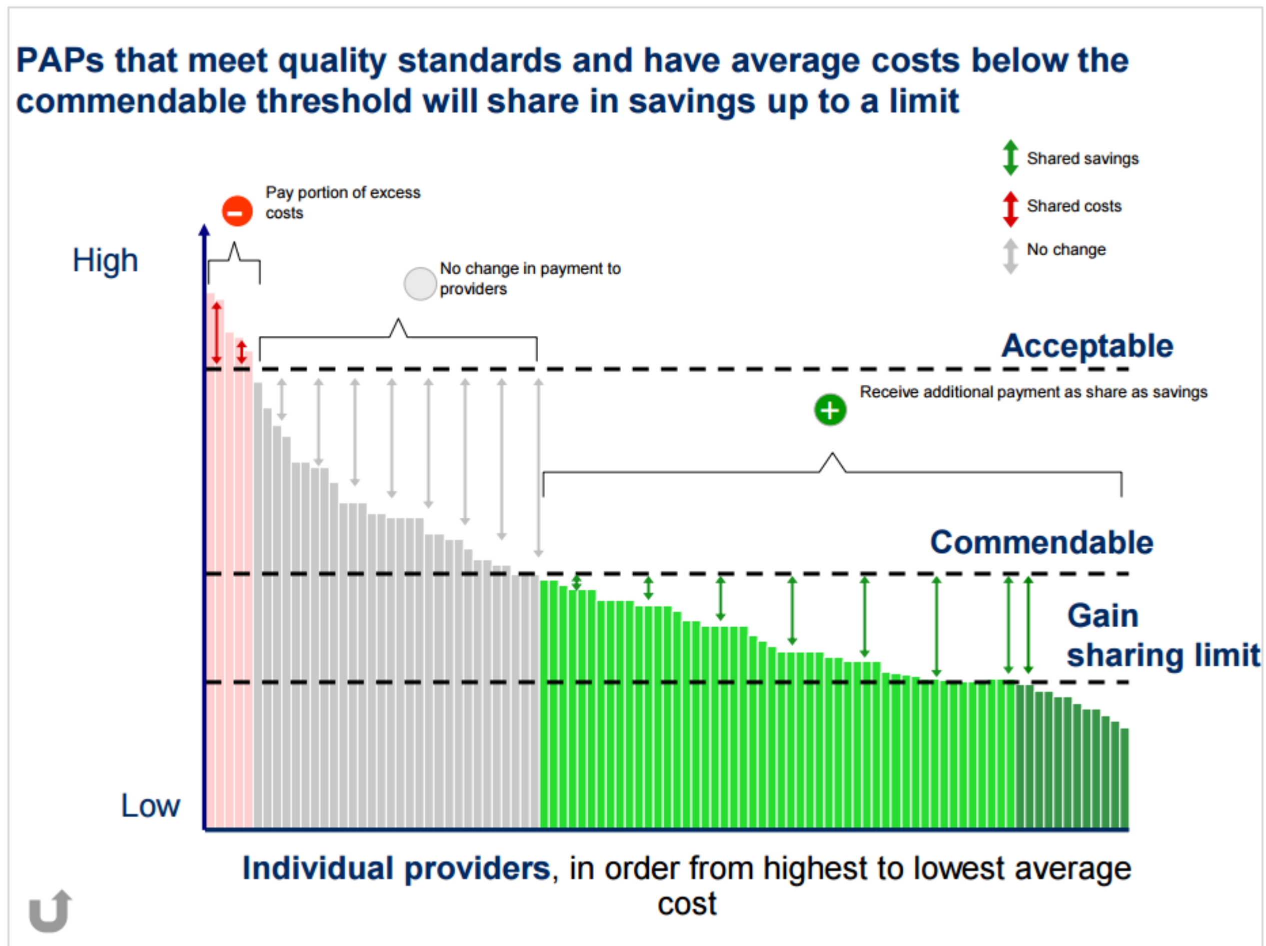
Episodes of Care (EOC) is a payment model in which related services that are provided to treat a specific condition over a specific period of time and are grouped into “episodes”. The episodes can include acute, chronic, and behavioral health conditions and vary in length depending on the condition. The purpose of EOC as an alternative payment arrangement is to encourage provider collaboration, patient coordination, and service efficiency across various care delivery settings. By establishing clear accountability for both outcomes and the total cost of care for an episode, this model rewards high performing providers and reduces variance in cost and quality.

Figure E.11: Episode of Care Example



The model requires that a Principle Accountable Provider (PAP) be designated as the provider responsible for quality outcomes and the total cost of care for a given episode over a given time. Factors for determining an episode of care include agreeing to an episode's time frame and triggering event, the services included within the episode, and situations or conditions that exclude some patients from being included in the episode. Patients who match the episode's criteria will be attributed to the episode, and PAPs will be evaluated on their performance for *all* patients attributed that episode. "Acceptable" and "commendable" cost benchmarks will be established for the episode, and quality measures are also used to ensure against the rationing of care. The PAP and all associated providers will be paid on a fee-for services basis and then evaluated retrospectively against those acceptable and commendable benchmarks. PAPs with costs below the commendable level for an episode can share in savings. Conversely, PAPs with costs above the acceptable level receive penalties. To be eligible for any savings, the PAP must also meet the quality measures set out for the episode.

Figure E.12: Episode of Care Payment Design



The Oklahoma SIM project team proposes to introduce multi-payer EOC within both Medicaid and state-employee healthcare coverage offered through HealthChoice. Because EOC have modular features that could work in other private insurance, the Oklahoma SIM project team will work with its Oklahoma SIM participating carriers to have them incorporate EOC within their payment methodologies. EOCs are being proposed as a way to allow providers to become more familiar APAs and as a starting place for them to begin their journey along the continuum of value based payments. The more payers that participate with EOC will help to realize larger returns from the synergy created by aligning payment methodologies around distinct processes and situations.

Episode Development and Methodology

Implementing Episodes of Care in Oklahoma will require strategic planning to align currently disparate systems. Internal system changes and administrative functions will need to be addressed by both OHCA and EGID to operationalize EOC within state purchased healthcare. The state, though, recognizes the need to develop reporting tools, such as provider and RCO dashboards with timely episodic performance indicators, and a thorough evaluation process to assure providers they can self-monitor and redirect efforts midstream if they are failing to meet quality measures or cost benchmarks. By developing these types of tools, the state can engender trust and transparency with stakeholders who will be a part of this model. Private payers who wish to participate in EOC will also require internal operational reviews to

ensure EOCs can be implemented effectively and provider performance reporting can be done a timely and accurate manner.

EOC will also have to include numerous provisions to help expedite its implementation and effectiveness. Importantly, EOC requires a number of potential payment mechanisms to ensure participating providers are evaluated fairly and accurately. Numerous payment adjustments, including patient, provider, and regional adjustments and stop-loss provisions, will have to be included for the model to be equitable and sustainable. As well, by using the existing fee-for-service payment system instead of grouping services together into one bundled payment, PAPs will not have to enter into new fiduciary relationships with other providers to disseminate the payment components of the bundled payment. The retrospective methodology for evaluation will also limit the number of system enhancements the state will have to develop to reimburse providers, thereby potentially limiting cash flow disruption for providers.

Episodes of Care Task Force

Since the goal of EOC is to address fragmented care and cost and quality variance, provider feedback and expertise will be needed to develop the episodes in a feasible way. Mirroring the work of other states that have implemented EOC, Oklahoma will create an EOC Task Force (Task Force) for each of the episodes proposed in the SHSIP to ensure ongoing stakeholder participation for the episode's design. The Task Force will work collaboratively to institute best practices and guidelines for developing and implementing the EOC. Furthermore, based on previous feedback and research from other states that have used EOC, the state understands that episodes are not static and need ongoing evaluation. Technology and best practices can change over time, affecting the model's ability to reduce costs or improve care. Episodes must be recalibrated and reviewed annually to ensure they still effectively reduce costs and improve quality of care. The Task Force will be a vital resource for the state to use to make EOC sustainable in Oklahoma. Proposed members of the overarching taskforce are:

- A representative from each participating payer
- Provider representatives relevant to each episode of care (PAP)
- A data reporting specialist
- A patient advocate
- The Oklahoma Insurance Department

For each individual episode, the Task Force will, like the Oklahoma SIM workgroups, assign chairpersons and project managers that will be responsible for building consensus and developing the parameters for the episode. Once the episode's criteria are set, the Task Force will continue to meet to address implementation issues, recalibrate cost benchmarks or quality measures, and provide consultation to practitioners participating in the model. Working with both OHCA and EGID, the Task Force can also help evaluate the efficacy of each episode. From the outset, the Task Force will address such episodic issues as:

Designating the PAP

Each episode requires an engaged and informed provider who can best influence the quality and cost of the overall outcome of the episode. The type of PAP will likely vary based on the episode or based on guidance provided by the Task Force. While the PAP may not have to direct financial or managerial control over other providers that participate in the episode, the PAP will, however, be responsible for communicating and coordinating with other providers to improve the overall outcome of the episode.

Episode designated PAPs should be similar across payers but may vary some between state-purchased and private insurance based on the payer's network and accreditation process.

Setting the Episode's Time Frame and Triggering Event

Each episode has a triggering event that attributes the patient to the model and begins the episode. Following a triggering event, a time period is set in which the PAP is accountable for the related costs and quality of the care provided to that patient. While the triggering event and time period vary based on the episode type, the Task Force can use EOC models developed by other states to help guide the optimal triggering event and time period for the episode.

Grouping Services by Episode

Since each episode is a series of related services grouped together to treat one condition, the services included or excluded from the episode must be set out in advance to help providers coordinate optimal and efficient patient care. Using data provided by the OHCA and EGID, the Task Force must determine the services that should ideally be included within an episode following a triggering event. Other states have already developed this type of intricate detail necessary for Oklahoma SIM's proposed episodes. However, further analysis and collaboration is necessary to ensure the services included in the episode meet the need of Oklahoma's Medicaid and state employee population. The Task Force will be responsible for fine-tuning the various episodic algorithms to assure they are representative of Oklahoma.

Episodic Risk and Gain Sharing

The cost thresholds for each episode must be established to incent providers to delivery efficient care to patients and avoid unnecessary costs due to a lack of care coordination. While OHCA and EGID will set out benchmarks for commendable and acceptable cost levels for provider risk and gain sharing, both agencies must ensure those benchmarks are developed transparently to help the provider understand their role in reducing unnecessary costs. By providing an avenue for providers to give input into the development of risk and gain sharing levels through the Task Force, the state can potentially avoid burdening providers with unfeasible benchmarks while still reducing overall cost.

Gain and risk sharing will likely be different for private carriers than for state-purchased healthcare because of differences in reimbursement rates, networks, cost sharing, or other proprietary information related to cost. Each payer will need to establish benchmarks for acceptable and commendable levels based on its historic cost data for the episode. The percentage of gain sharing may also be different between each and payer and the PAP. The Task Force may act in advisory role for carrier-specific payment issues.

Quality Measures

Although reducing costs is a goal of EOC, the state must assure patients that they will still have equitable and timely access to the necessary services related to their condition. Through the introduction of quality metrics that measure patient access, screenings, and follow-up care for the episode, the Task Force can create quality measures that help reduce state healthcare expenditures while still providing high quality care for state employees and Medicaid beneficiaries.

Provider Information

Ideally, EOC requires providers to be highly engaged in the care of their patients as they move across care settings and providers. This level of coordination requires a large commitment from the state to disseminate timely information to the PAPs and other participating providers to help them better evaluate their performance and monitor patient activity. This commitment will include using the Task Force to

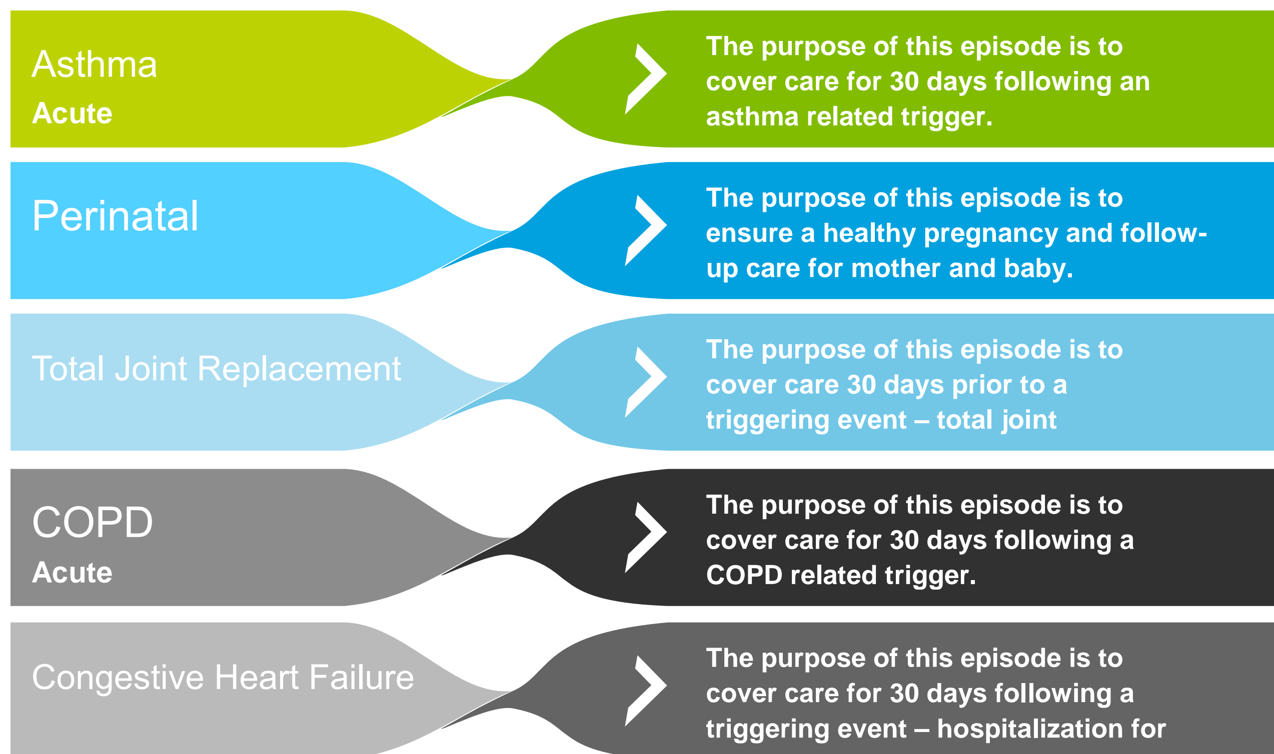
develop provider performance reports, alerts or notifications about recent patient activities, and best or evidence-based practices for treating the episode. Since the Task Force will include frontline providers and administrators who are intimately involved with the design and evaluation of the episode, this group can provide ongoing technical assistance and support to providers that may initially struggle to adapt to this payment model. Where possible, the state will work with private carriers participating in the model to determine the most efficient way to utilize interoperable HIT so providers can access performance reports for all payers in one centralized location.

By using the Task Force, the Oklahoma SIM project team will use technical assistance from CMS and other states to help with the design of each episode.

Proposed Episodes

Using previous research by other states that have implemented EOC, Oklahoma has proposed the following EOC that best align, where possible, with the Oklahoma SIM flagship issues. The Oklahoma SIM project team also considered other factors, such as high cost or high variance services from the Oklahoma SIM High Cost Services Report, in the choosing of the proposed episodes. The state will look to garner support from private payers to adopt the EOC to engender further payment alignment across Oklahoma's insurance market. A further justification and detail of the proposed episodes are provided below, and examples of the episode's criteria are included in Appendix E.

Figure E.13: Proposed Episodes of Care



Asthma, Acute Exacerbation

Asthma exacerbation is more commonly known as an asthma attack and occurs when a person's airways become swollen and inflamed, the muscles in the airway contract, and breathing becomes difficult.[1] Although asthma is considered a chronic disease, an asthma episode occurs when a patient is treated in a

healthcare setting for the acute exacerbation of their chronic condition. For providers, an asthma episode allows for opportunities to improve the quality and cost of care by preventing emergency department visits and hospital admissions, assuring medication adherence by the patient and family members/care givers, and providing appropriate discharge instructions for proper follow-up care.

Asthma is a costly condition for the state of Oklahoma as it is one of the post prevalent conditions among members of both the Medicaid and EGID populations. The 2014 State of the State's Health Report indicates that 292,000 adults and 123,100 children in the state had asthma.[2] In 2012, Medicaid paid more than $23 million[3] on asthma related hospital stays, and in 2013 EGID spent almost $19 million for asthma related claims.[4] Asthma is often associated with smoking and exposure to secondhand smoke, so the inclusion of the EOC correlates with the Oklahoma SIM flagship issue of tobacco use reduction.

- Principal Accountable Provider**:** The PAP for an asthma acute exacerbation episode is typically the initial facility or hospital emergency department where the triggering event is diagnosed.
- Triggering Event and Episode Period**:** The episode is triggered by an asthma acute exacerbation diagnosis in a healthcare setting, typically an emergency department or inpatient facility, and covers 30 days following the trigger.
- Example of Services Included in an Episode**:** Services that may be included in the episode are: provider visits, medication, labs and diagnostics, care coordination, hospital readmissions, and post-acute care.
- Episode Quality Measures**:** Quality measures for the episode can include hospital readmissions, tobacco cessation counseling, and medication management.

Perinatal

Perinatal refers to the period immediately before and after a woman gives birth to a child. To be included as an episode of care, the pregnancy is typically low to medium-risk. The aim of a perinatal episode is to ensure a healthy pregnancy and follow-up care for mother and baby.

In Oklahoma, Medicaid paid for approximately 60 percent of all births in the state, and covered 31,000 births in state fiscal year 2015. The average costs for the 21,875 deliveries without complications was $2,106 and $3,203 for 6,459 deliveries with complications.[5]

- Principal Accountable Provider**:** The PAP for a perinatal episode is typically the physician or nurse midwife who performed the delivery.
- Triggering Event and Episode Period**:** The perinatal episode is triggered by a live birth and covers 40 weeks prior to delivery and 60 days after delivery.
- Example of Services Included in an Episode**:** Services typically included in this EOC are prenatal care, labs, ultrasounds, medication, labor and delivery, and postpartum care.
- Episode Quality Measures**:** Quality measures include rates of prenatal screenings for HIV, chlamydia, and Group B strep, rates of C-section deliveries, and gestational diabetes.

Chronic Obstructive Pulmonary Disease (COPD), Acute Exacerbation

COPD can describe a serious of lung diseases including emphysema, chronic bronchitis, refractory asthma, and some forms of bronchiectasis. An acute exacerbation of COPD is described as a flare-up of the disease where breathing worsens and is often linked to an infection.[6]

In Oklahoma, lower respiratory disease was the third leading cause of death in 2013, and Oklahoma has one of the highest death rates for these conditions in the nation.[2] Complications of COPD can cause high rates of preventable hospital admissions, and in 2012 there were 1,567 COPD-related hospital readmissions, accounting for 3.5 percent of all 30-day hospital readmissions.[3] For the EGID, COPD was among the top ten conditions for most claims paid in 2013.[4]

- Principal Accountable Provider**:** The PAP for a COPD acute exacerbation episode is typically the facility where and emergency department visit or inpatient admission took place.
- Triggering Event and Episode Period**:** The triggering event for a COPD episode is the diagnosis of an acute exacerbation for COPD in an emergency department or inpatient facility. They episode period is typically 30 days following the triggering event.
- Example of Services Included in an Episode**:** Services that may be included in this EOC are physician visits, medications, care coordination, hospital readmissions, and post-acute care.
- Episode Quality Measures**:** Quality measures for COPD episodes may include hospital readmissions, tobacco cessation counseling, and providing appropriate follow-up care.

Total Joint Replacement

A total joint replacement (TJR) covers the elective replacement of the hip or knee joint. A joint replacement is a surgical procedure where parts of a damaged joint are removed and replaced with an artificial joint, or prosthesis.[7] The aim of a TJR episode is to reduce duplication of services and costs through better care coordination.

- Principal Accountable Provider**:** For a joint replacement EOC, the PAP is most often the surgeon who performs the joint replacement procedure.
- Triggering Event and Episode Period**:** The triggering event for a joint replacement EOC is the actual joint replacement surgery and the episode typically includes 30 days prior to surgery and 90 days post-operatively.
- Example of Services Included in an Episode**:** For a joint replacement EOC, services typically included are all orthopedic-related costs during the episode time period.
- Episode Quality Measures**:** Quality metrics for this episode can include 30-day readmissions, fracture rates, infection rates, dislocations, and blood transfusions.

Congestive Heart Failure

Congestive Heart Failure (CHF) occurs when the heart muscle does not pump blood properly due to narrowed arteries or high blood pressure, which can gradually leave the heart too week or stiff to work efficiently.[8] In Oklahoma, heart disease accounted for one in four deaths in 2012 and was the leading cause of death in the state.[2] For just the EGID population, heart failure accounted for 19 percent of total claims paid in 2013.[4] Heart failure and heart disease are also correlated with several of the flagship health issues identified in the SHSIP including tobacco use, obesity, and hypertension. The goal of a CHF episode of care is to improve care coordination for patients in order to reduce costs, especially though preventable hospital readmissions.

- Principal Accountable Provider**:** The PAP for a heart failure episode of care is typically the hospital with the initial inpatient admission.

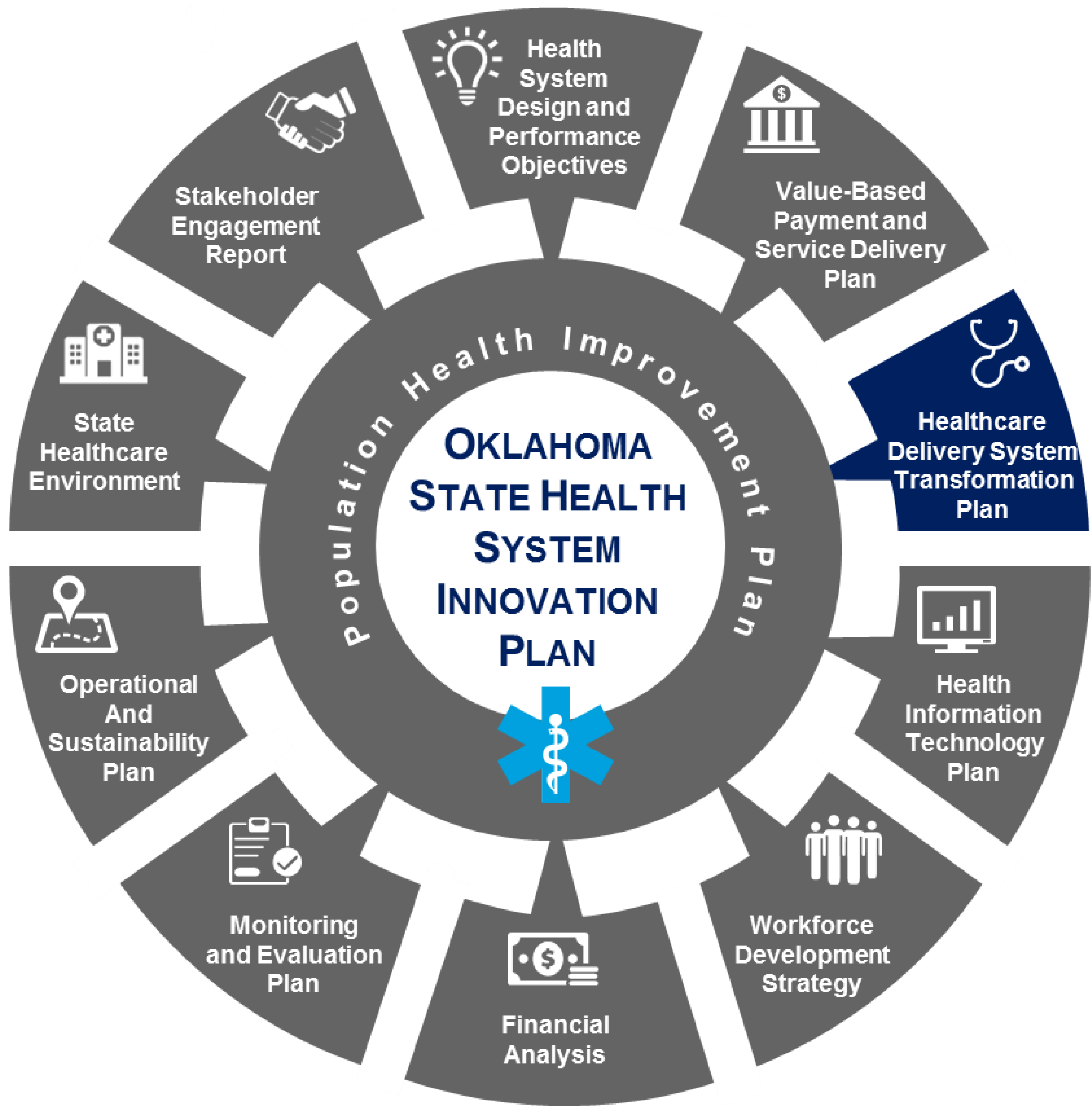
- Triggering Event and Episode Period**:** An episode of care for heart failure is triggered by a hospital admission for congestive heart failure and lasts for 30 days after admission.

- Example Services Included in an Episode**:** Facility services, inpatient services, emergency department visits, observation, post-acute care, and outpatient services like labs, diagnostics, and medication are covered under this episode.

- Episode Quality Measures**:** Providers responsible for CHF episodes report on measures related to medication management, ACE-inhibitor or Angiotension Receptor Blockers (ARB) therapy, and hospital re-admissions.

CONCLUSION

This section depicts a conceptual vision of moving Oklahoma's healthcare system from fee for service to value based purchasing. This vision was developed through stakeholder engagement. Through this process, our stakeholders created the model goals and tenets. The model was designed to reach those goals and tenets with an Oklahoma specific approach. Through the Regional Care Organization, Quality Measures, and Episodes of Care, Oklahoma hopes to engage 80% of healthcare payments in a value-based arrangement by 2020. The ultimate goal for Oklahoma is to reach the Triple Aim through this innovative payment and delivery plan.


Health System Design and Performance Objectives
Value-Based Payment and Service Delivery Plan
Healthcare Delivery System Transformation Plan
Health Information Technology Plan
Workforce Development Strategy
Financial Analysis
Monitoring and Evaluation Plan
Operational And Sustainability Plan
State Healthcare Environment
Stakeholder Engagement Report
Population Health Improvement Plan
OKLAHOMA STATE HEALTH SYSTEM INNOVATION PLAN

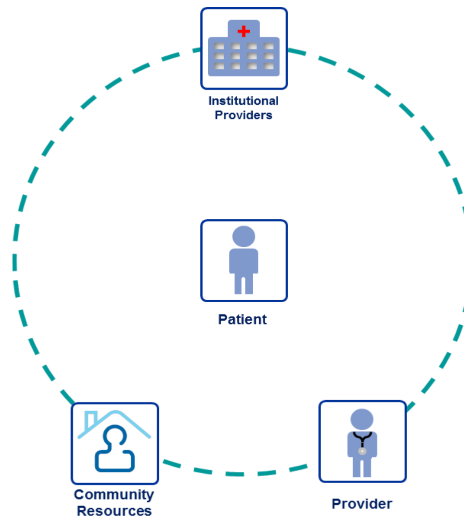
F. Plan for Healthcare Delivery System Transformation

INTRODUCTION

As mentioned in previous sections of the State Health System Innovation Plan (SHSIP), the goal of the Oklahoma State Innovation Model (SIM) project is to transform the state's healthcare payment and delivery system from a fee-for-service payment system to value-based payment system that emphasizes primary prevention strategies. Undergoing a carefully planned and executed transformation plan and successfully engaging patients, providers, and payers is essential to achieving this goal. The Oklahoma SIM project will use a phased implementation process that will enable patients, providers, and payers to have adequate time to adapt to each aspect of this health system transformation.

The Oklahoma SIM project targets three primary stakeholder groups: health care providers, healthcare facilities, and community resources. Figure F.1 below, demonstrates how these stakeholder groups will be interconnected for patient care delivery under the new Oklahoma Model.

Figure F.1: Regional Care Organization Network



Within each phase of the transformation process, each stakeholder group will be required to make a series of adaptations that incrementally move the state's healthcare system from the current fee-for-service model to a value-based model. As these changes represent a fundamental shift in delivering and paying for care, the Oklahoma SIM project is preparing to provide ample guidance and resources to ensure that stakeholders can meet the demands of this transformation. Many of the resources that the project will leverage are pre-existing entities within the state that have established capabilities and relationships across the healthcare system. The Oklahoma SIM project will work with these entities to ensure that they

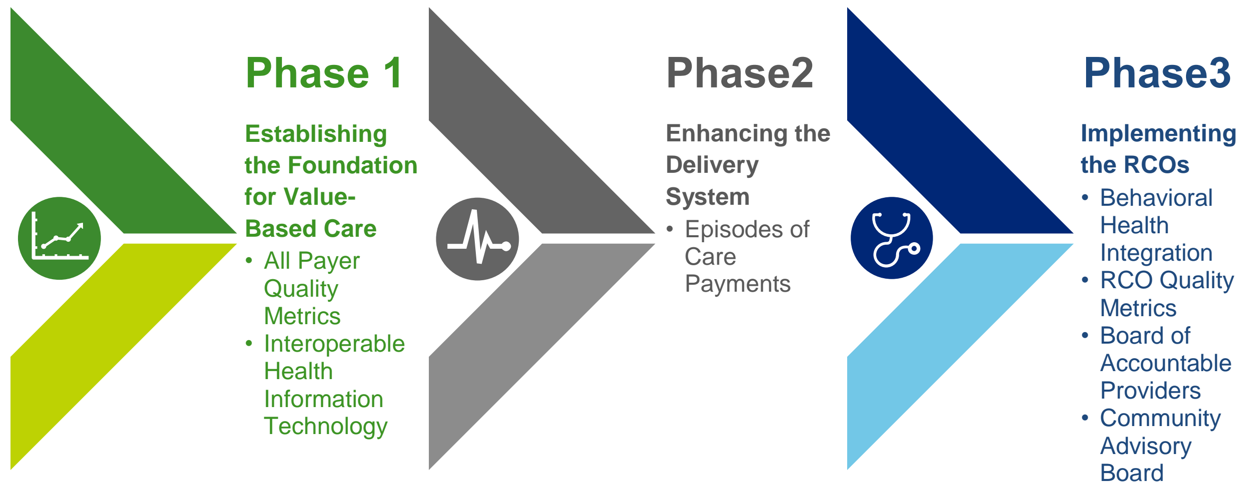
are prepared to meet the needs of stakeholder groups during each phase of this transformation process. The project will also help coordinate and streamline the efforts of these entities.

For this fundamental shift to value-based purchasing to be successful, many primary and acute care facilities will have to undergo significant reporting, process, workflow, and quality improvement adaptations. These adaptions are sometimes referred to as “practice transformation”. Oklahoma has several practice transformation efforts already underway. This transformation plan will incorporate each of these efforts and propose a new entity to help drive healthcare system transformation across the state.

It will be imperative to have a multi-payer organizational structure to implement and maintain these transformation efforts. This multi-payer structure could look very similar to the current multi-payer field teams employed by the Comprehensive Primary Care (CPC) Initiative and the Healthcare Extension Cooperative employed by the Healthy Hearts for Oklahoma initiative, as described in Section B. Additionally, the Oklahoma SIM project can leverage the practice facilitators and practice transformation networks employed by the Oklahoma Healthcare Authority (OHCA). All of these entities, as well as the providers they have trained, are helping to build a well-prepared workforce aligned to the Oklahoma SIM objectives and strategies.

PHASED APPROACH TO HEALTHCARE SYSTEM TRANSFORMATION

Figure F.2: Phased Approach to Transformation



This is an overview of the phases of this transformation process:

1. **Phase I: Establishing the Foundation for Value-Based Care**
   a. All Payer Quality Measure Alignment
   b. Interoperable Health Information Technology (HIT)
2. **Phase II: Enhancing the Delivery System**
   a. Episodes of Care
3. **Phase III: Implementing Regional Care Organizations (RCOs)**
   a. RCO Implementation
      i. Behavioral Health Integration
      ii. RCO Quality Metrics
      iii. Board of Accountable Providers
      iv. Community Advisory Board

Phase I: Establishing the Foundation for Value-Based Care

The initial phase of the transformation process includes system-wide changes that are needed to establish a strong foundation for value-based care delivery within the state. Due to the fundamental nature of these adaptations, they affect most system stakeholders in similar ways.

Foremost among these fundamental aspects is multi-payer alignment on a core set of metrics for monitoring and evaluating care delivery within the state. Alignment of quality metrics is critical to the transition to a value-based healthcare system because such a system must have a method to compare and

evaluate performance across providers and payers. If individual stakeholders track and evaluate success disparately, aggregate monitoring and evaluation are difficult, if not impossible. The Oklahoma SIM project team will convene a multi-stakeholder committee to drive consensus on a core set of quality metrics that are both applicable to Oklahoma and palatable to all parties, providers and payers expressly.

The following is the Oklahoma SIM resource allocation plan to support stakeholders through Phase I:

All Payer Quality Measurement Alignment

All Payer Quality Measure Alignment refers to aligning a core set of multi-payer quality metrics among participating payers to support improved health, better care, and lower costs.

Figure F.3: Phase I – All Payer Quality Measure Alignment

Target Group	Needs	Resources
Providers/Practices	• Education and training on new core set of quality metrics • Clear delineation between current state and new metrics (customized to practices) • Explanation of long-term evaluation process evolution (i.e., monitor and report, upside risk sharing, full risk)	Private/Public Payer Communication Channels • As most payers will adopt the core metrics, they can leverage their current channels to communicate with providers to inform them of the metrics and their evaluation and incentives, as applicable Practice Transformation Resources • Practice transformation resources differ statewide but are available through many channels as described below. Some measures will align with the goals of the transformation initiative; this initiative can be leveraged to assist providers in meeting those metrics • Practice Transformation Center can provide resources to assist providers in achieving quality metrics Quality Metrics Committee • The committee will be a place where providers can participate in the selection of measures, receive education on the measures selected, and give feedback
Hospitals/Institutions	• Education and training on new core set of quality metrics • Clear delineation between current state and new metrics (customized to practices) • Explanation of long-term evaluation process evolution (i.e., monitor and report, upside risk sharing, full risk)	Private/Public Payer Communication Channels • As most payers will adopt the core metrics, they can leverage their current channels to communicate with providers to inform them of the metrics and their evaluation and incentives, as applicable Practice Transformation Resources • Practice transformation resources differ statewide but are available through many channels as described below. Hospitals and institutions are more likely to have their own transformation plans and supports. These will look to be supported. • Practice Transformation Center Quality Metrics Committee • The committee will be a place where hospitals and institutions can participate in the selection of measures, receive education on the measures selected, and give feedback

Interoperable HIT

Interoperability HIT refers to creating a system of interoperability within the state that allows for providers and patients to have the most complete information with which to meet quality metrics.

Figure F.4: Phase I – Interoperable HIT

Target Group	Needs	Resources
Providers/Practices	• Information about how HIT interoperability can be used to improve patient health outcomes • HIT implementation and best practices use training (e.g. user interface, clinical process integration)	Practice Transformation Resources • Many of the practice transformation resources provide information and training regarding HIT technology, interoperability, and functionality
Hospitals/Institutions	• Information about how HIT interoperability can be used to improve patient health outcomes • Emphasis on institutional data timing (e.g. hospitals push data monthly) • HIT implementation and best practices use training (e.g. user interface, clinical process integration)	Practice Transformation Resources • Many of the practice transformation resources provide information and training regarding HIT technology, interoperability, and functionality

Phase II: Enhancing the Delivery System

Phase II of the transformation process will focus on moving providers along the continuum of value-based purchasing and supporting them through initial programs in which they begin to share risk. The first step along the continuum will be to pursue episodes of care (EOC). The following section describes how providers will be supported in this transformation phase.

Episodes of Care

The five EOCs being proposed are for asthma, perinatal care, total joint replacement, chronic obstructive pulmonary disease, and congestive heart failure. These episodes are described in detail in Section E, Value-Based Payment and/or Service Delivery Model.

Figure F.5: Phase II – Episodes of Care

Target Group	Needs	Resources
Providers/Practices	• Understanding the components of the episodes of care (period, diagnosis, procedures, provider types) • Training on reporting, billing, and reimbursement • Training on best practices including utilization of data analytics • Ready new and existing practice transformation resources to be able to educate on episodes of care. This could be multi-payer effort to support practice transformation around selected episodes.	Commercial Payer Support • Payer-specific field support OHCA/EGID Support • SoonerCare Practice Facilitators • EGID Practice Facilitators • Payer communication channels to direct education EOC Committee • Committee workgroups for each episode will be established. This will be a resource for providers to engage in the selection and criteria of the episodes and find education resources
Hospitals/Institutions	• Communication plan for rollout and timing of episode based payments to appropriate institutions • Explanation of long-term evaluation process evolution (i.e. monitor and report, upside risk sharing, full risk) • Ready new and existing practice transformation resources to be able to educate on episodes of care. This could be multi-payer effort to support practice transformation around selected episodes.	Commercial Payer Support • Payer-specific field support OHCA/EGID Support • SoonerCare Practice Facilitators • EGID Practice Facilitators EOC Committee • Committee workgroups for each episode will be established. This will be a resource for hospitals and institutions to engage in the selection and criteria of the episodes and find education resources

Phase III: Implementing RCOs

Phase III of the transformation process will focus on moving healthcare delivery into the RCOs. This will be a longer transition process with sustained provider resources to ensure a smooth and continuous transformation.

RCO Implementation

The RCOs will be implemented over a six-year process, as described in Section L, Operational and Sustainability Plan.

Figure F.6: Phase III – RCO Implementation

Target Group	Needs	Resources
Providers/Practices	• Education on roles and responsibilities within the RCO and how those differ from current practice	Board of Accountable Providers • Provide an outlet for providers to voice input to shape RCO and implementation process within region Regional RCO • Education and support for network of providers Practice Transformation Center • Disseminate best practices and provide technical assistance to providers
Hospitals/Institutions	• Education on the roles and responsibilities of the hospitals and institution within the RCO	Board of Accountable Providers • Provide an outlet for providers to voice input to shape RCO and implementation process within region Regional RCO • Education and support for network of providers Practice Transformation Center • Disseminate best practices and provide technical assistance to providers
Community Organizations	• Education on role and responsibility within the RCO	Community Advisory Board • Provide an outlet for the community to voice input to shape the RCO and implementation process Regional RCO • Will establish relationships as well as processes for integrating community resources into the RCO model specific to the region • Distill and share best practices among community Turning Point/Community Health Improvement Organizations • Provide ongoing support regarding interventions at the community level and engage community partners at the local level

OKLAHOMA SIM TRANSFORMATION RESOURCE INVENTORY

The Oklahoma SIM project team has identified resources that will facilitate the transformation of the delivery system. This list is not exhaustive and may continue to grow as additional resources and needs are identified. Currently, these resources are providing practice transformation resources across system stakeholders at varying levels. The Oklahoma SIM leadership will need to assess whether these resources or others are necessary to provide adequate resources when examined at a more granular level. Additionally, it is incumbent upon the Oklahoma SIM project team to maintain this resource inventory and to re-evaluate whether resources are under- or overleveraged and aligned correctly as the SHSIP Operational and Sustainability Plan (see Section L) evolves and unfolds.

Private Payer Communication Channels

As a required part of their business model, private payers have established communication channels and relationships with providers within Oklahoma required for ongoing business relationships. As the Oklahoma Model is a multi-payer initiative, many payers will be participating in its various aspects. As multiple payers often have relationships with the same provider, some level of coordination will be required to minimize confusion and the burden on providers during the transition processes.

SoonerCare Practice Facilitators

As described in Section B, the OHCA currently employs practice facilitators that are available to any SoonerCare provider. These facilitators are available to assist with any quality improvement initiative that the practice may desire to implement. The Health Management Program at OHCA is currently using Telligen within the practices to help create chronic disease registries and report quality metrics. The Oklahoma SIM project will incorporate these practice facilitators to achieve transformation across the state.

Practice Transformation Networks

As described in Section B, CMS recently announced the Transforming Clinical Practice Initiative award to 29 participants that will serve as Practice Transformation Networks (PTNs). PTNs are peer-based learning networks designed to coach, mentor, and assist clinicians in developing core competencies specific to practice transformation. The Iowa Healthcare Collaborative received an award to implement a six-state PTN in Iowa, Nebraska, South Dakota, Oklahoma, Kansas, and Georgia. Telligen, an Iowa-based organization, will partner with the Iowa Healthcare Collaborative to serve as the centralized data vendor. Telligen will provide consulting support for program management, data analysis, and measures and serve as quality improvement advisers providing direct technical assistance to practices in all aspects, including HIT. Oklahoma will leverage its participation in the PTN as part of the Oklahoma SIM practice transformation effort. The Oklahoma SIM project team has already had a call with senior leadership on this project. Telligen and their partners will enable Oklahoma practice transformation across the state.

Turning Point

As described in Section B, Turning Point works as an independent statewide consortium focused on policy issues aimed at improving Oklahoma's health[6] and has partnered with communities all across Oklahoma to work on local innovations to transform public health in Oklahoma. Under the Oklahoma Model, the State Governing Body and the RCO will need to build upon and potentially expand this effort in order to make the strides in practice transformation that will support the new RCO model.

Healthy Hearts for Oklahoma (H2O)

As described in Section B, H2O is a grant from the Agency for Healthcare Research and Quality that aims to determine if a healthcare extension cooperative can spread the use of evidence-based primary care. The grant runs from 2015 to 2019 and will work with hundreds of practices with 10 providers or less. These practices will receive one-on-one quality improvement help from a practice facilitator related to attaining and maximizing electronic health records (EHRs), practice workflow, and assisting with the transition to value-based payments.

The Oklahoma SIM project team and H2O team have set up biweekly meetings to coordinate their efforts and share information. The Oklahoma Model will leverage the H2O initiative with practice transformation across the state to help enable smooth transitions to value-based purchasing. To this end, the Oklahoma SIM project team is looking to align quality measures across payers with the measures that H2O has identified. The Oklahoma SIM project team will work with H2O to implement processes that support the RCO design.

CPC Initiative Field Team

As described in Section B, the CPC Initiative is a four-year demonstration project that aims to provide comprehensive primary care for Medicare beneficiaries. In Oklahoma, the initiative operates in the greater Tulsa area with participation from Blue Cross Blue Shield of Oklahoma, CommunityCare, OHCA, Medicare, and Medicaid. The program runs through December 2016. Through the initiative it became evident that, in addition to an enhanced per member per month payment (PMPM), the participating practices also needed transformation assistance. The payers convened a "field team" that would visit practices and assist with reporting and creating new processes that would enable success within the CPC Initiative. Each payer contributed full-time employees to the team. When working with providers, the field team members represented the initiative, not their individual payer organizations. The Oklahoma SIM project is looking to capitalize on these efforts by incorporating best practices of the initiative into the SIM transformation plan, utilizing the lessons learned about effectively working with the payers to sustain this effort within the RCO model.

The Oklahoma Foundation for Medical Quality (OFMQ)

OFMQ has been the Regional Extension Center in Oklahoma and is an independent not for profit organization. OFMQ's mission is to be an expert consultant in quality improvement within the community to advance and improve healthcare in Oklahoma. OFMQ offers many services, including: analytics, case review, health information technology, quality improvement, national quality measures, and provider education.

OU Health Sciences Center, Oklahoma Shared Clinical and Translational Resources Center

The University of Oklahoma Health Sciences Center, a partner of the Oklahoma SIM initiative, provides resources to support healthcare delivery system research, education, and community engagement. Of particular relevance to Oklahoma SIM practice transformation efforts are their community outreach efforts. The Oklahoma Health Sciences Center houses the Oklahoma Shared Clinical and Translational Resources Center (OSCTR), which leads community outreach efforts. OSCTR divides its community outreach efforts into two programs: the Oklahoma Primary Healthcare Extension program and Practice-Based Research Networks. Each program emphasizes the value and benefits of provider practice-based research for the participants and the healthcare system overall.

The Oklahoma Primary Healthcare Extension Program aims to improve the quality of primary healthcare available to Oklahomans, reduce the cost of care and health insurance premiums, and improve the health of the population through greater visibility and alignment of local health improvement initiatives. The

program has a state hub, extension center, and county health improvement organization, which work together to connect the community to resources that improve the delivery and quality of care.

The Practice-Based Research Networks aim to improve the quality of healthcare services available to Oklahomans by developing and sharing resources and by conducting relevant practice-based research. There are three networks under the auspices of the OSCTR which focus separately on physicians, pharmacists, and child health.

OSU Center for Health Systems Innovation

The vision of the Center for Health Systems Innovation at Oklahoma State University (OSU) is to discover and implement market-based solutions for the transformation of health and health systems through creativity, innovation and entrepreneurship. This center has shown special attention to the rural health providers and is located in Tulsa. The center has been made possible by Cerner Chief Executive Officer and OSU alum Neal Patterson.

PLANNED RESOURCES

Practice Transformation Center

The Oklahoma SIM will establish a Practice Transformation Center (PTC) to support provider education and ongoing transformation efforts.

The major responsibilities of the PTC will include:

- Consolidating and endorsing best practices in healthcare transformation in Oklahoma
- Coordinating practice transformation initiatives across stakeholder groups to ensure consistency in education and awareness
- Developing and maintaining an inventory of support services and resources that providers can access to facilitate their successful execution of new payment models

The PTC could grow out of existing resources should one organization be willing to take on these tasks or start as a new initiative in the state. It is envisioned the practice transformation would be a multi-payer effort that supports all payers to move to value-based purchasing as well as the multi-payer quality metrics. It will then serve as a hub for disseminating this information to providers in Oklahoma and will help to advance all transformation phases lined out above. The PTC may also provide grant and on-site training and support for eligible practices to enhance their delivery of services. One of the primary aspects for initial consideration is whether this center should facilitate or oversee a licensure process for transformation activities, which is a question that its initial membership can address upon inception. Deliberations on the practice transformation center are ongoing and will be a part of the Oklahoma SIM 2016 agenda.

RCO PRACTICE TRANSFORMATION INITIATIVES

A critical aspect of the SHSIP is the integration of community resources into care delivery. As detailed in previous sections, the RCOs will operate independently and will be regionally-bound entities that assume responsibility for the total costs of care and outcomes for their patients. Due to the geographic and socio-economic differences between regions in Oklahoma, the RCOs will need to have discretion as it relates to the design and operation of their specific systems and incentives for quality care delivery and care coordination.

Regional variations mean that each RCO will have slightly different practice transformation goals, and as such, may require slightly different methods to foster these transformations. The Oklahoma SIM project team has determined that it is best to leave these decisions in the hands of the RCO organizations. The RCO RFP process will require that successful application submissions include a detailed description of their practice transformation goals and concrete plans to achieve them. Prospective RCO applicants will have access to the Oklahoma SIM resource inventory in order to gain a better understanding of the prospective channels that they could leverage to achieve their transformation goals. Negotiating the use of these channels, and any appropriate compensation for their use, will be the responsibility of the RCO. The implementation of RCOs in Oklahoma occupies the majority of Phase III. Practice transformation will play a significant role in RCOs. This places significant emphasis on the Oklahoma SIM RCO selection committee to engage with prospective applicants to ensure that their transformation goals and plans are thorough and achievable.

CONCLUSION

The efforts to support payment and delivery system transformation will be an ongoing, evolving process. The Oklahoma SIM project team will continue to update the resource inventory and revise their allocation to ensure that all healthcare system stakeholders receive sufficient support to make the transition towards value-based healthcare. The project team will also ensure that health transformation efforts continue to receive the attention and funding required to engender their success. It will be imperative that providers are supported through the initial transformation process, as well as for the future iterations that will be necessary to sustain a high functioning healthcare system.

Health System Design and Performance Objectives
Value-Based Payment and Service Delivery Plan
Healthcare Delivery System Transformation Plan
Health Information Technology Plan
Workforce Development Strategy
Financial Analysis
Monitoring and Evaluation Plan
Operational And Sustainability Plan
State Healthcare Environment
Stakeholder Engagement Report
Population Health Improvement Plan
OKLAHOMA STATE HEALTH SYSTEM INNOVATION PLAN

G. Plan for Improving Population Health

INTRODUCTION

This section of the State Health System Innovation Plan (SHSIP) discusses how overall population health will be improved through current statewide health initiatives and the proposed Oklahoma Model. Certain aspects of population health differentiate it from the traditional clinical perspective. For example, improving population health outcomes involves addressing social determinants of health and not just clinical health needs.[119] This plan uses the Oklahoma Health Improvement Plan (OHIP), State of the State's Health Report, Population Health Needs Assessment, and Community Health Improvement Plans (CHIP) to examine statewide data and set a baseline and framework for population health improvement. This plan also outlines how the Oklahoma Model will incorporate current statewide initiatives or otherwise use best practices and lessons learned to promote the health of all Oklahomans. Other areas of the plan describe how community members will actively participate, provide direction, and make decisions regarding how community health initiatives will be determined and managed through the Regional Care Organization (RCO). The goal of the Oklahoma State Innovation Model (SIM) project is to provide statewide solutions to Oklahoma's healthcare challenges. The Oklahoma SIM project will help drive vital improvements by integrating primary prevention strategies for the Oklahoma SIM population health flagship issues into the state healthcare delivery system.

LEVERAGING STATE HEALTH REPORTS AND ASSESSMENTS

The Oklahoma SIM project aims to use research from past state health reports and assessments to establish the baseline of population health status and guide the development of the Oklahoma Model. These reports will continue to be leveraged throughout the Oklahoma Model implementation process, which are:

- The State of the State's Health Report (SOS);
- The Oklahoma Health Improvement Plan (OHIP),
- The Population Health Needs Assessment (PHNA), and
- Community Health Improvement Plans (CHIPs).

State of the State's Health Report

The State of the State's Health Report provides data on the leading causes of death, disease rates, risk factors and behaviors, and socioeconomic factors for Oklahomans. It also outlines outcomes by county, providing a snapshot of how each county's health compares to national health outcomes. The report identifies the areas in which the state has had health improvements, such as the decreases in infant mortality and smoking rates. According to the report, heart disease, stroke, cancer, chronic lower respiratory disease, and diabetes are identified as the state's biggest challenges and most prevalent causes of death. These conditions are exacerbated by low rates of physical activity, low fruit and vegetable

consumption, and high rates of smoking. The report emphasizes the importance of setting statewide health improvement goals and the need to work on improving population health through targeted statewide initiatives such as the Oklahoma State Innovation Model. The Oklahoma SIM flagship issues are identified using this report along with the OHIP. The Oklahoma SIM flagship issues are tobacco use, diabetes, hypertension, obesity, and behavioral health; all five issues are also identified as OHIP flagship issues or key health indicators leading to poor health outcomes.

Oklahoma Health Improvement Plan

The Oklahoma Health Improvement Plan (OHIP) is a public private partnership that is charged with creating a comprehensive plan for the improvement of the physical, social, and mental well-being of all Oklahomans.[15] Legislatively mandated in 2008 and first published in 2010, the OHIP is now in its second installation (OHIP 2020) and fifth year of implementation. Previous state health reports, community surveys, and OHIP designated workgroups were all used to design plan goals and strategies.[15] Input is also provided by business leaders, school teachers, healthcare providers, professional organizations, tribal nations, and other community members. Taking a statewide approach to assessing needs has allowed the OHIP to pinpoint the state's most preventable and costly conditions, and set goals for health improvement surrounding those conditions The OHIP 2020 focuses on four flagship issues to improve population health: tobacco use, obesity, children's health, and behavioral health. These flagship issues were determined by identifying key risk factors that contribute the most to negative health outcomes in Oklahoma. Since the first OHIP report was issued in 2010, there has been improvements made in the adult smoking prevalence; a leveling of the rate of adult obesity; and a decrease in infant mortality. However, there is still great variation between population health improvements at a county-level and thus much work to be done.[15] The OHIP provided the basis for the Oklahoma SIM project by collectively applying for the SIM Grant to further the pursuit of improved population health.

Population Health Needs Assessment

The Oklahoma SIM project produced the Population Health Needs Assessment using data from various sources including the 2014 State of the State's Health Report and the OHIP 2020. The assessment identifies populations that experience more adverse health outcomes and account for a large part of the healthcare costs across the state. The assessment also evaluates and reports on the social determinants of health influencing health outcomes across the state. While each community identifies different social determinants, several overarching factors, including housing, food security, transportation, literacy, and employment adversely affect a vast majority of Oklahomans.[12]

County Health Improvement Plans

The Community Health Improvement Plan (CHIP) is a long-term, systematic effort to identify and address public health concerns with the input of community partners to set priorities, coordinate resources, and prepare a strategic plan of action to make improvements. Specific health priority areas, goals, and objectives are set that address the communities' health issues and their contributing factors.

Eighteen counties across the state have completed CHIPs. The CHIPs are developed in collaboration with community partners, health officials, education officials, and human service agency officials. Community chats, focus groups, and community health needs assessments coupled with morbidity and mortality data are used in the creation of CHIPs. Many of the counties serve as a hub for their region; therefore, the CHIP often speaks to the needs of the county and the region as a whole. To create a CHIP, each county must first conduct a community health assessment. Each CHIP identifies goals and measurable objectives, strategies, timelines, and performance measures.[17] The CHIP also identifies organizations and responsible parties for these objectives. The CHIPs are used to drive local population health improvement efforts through aligning local partners on health improvement goals, creating an action plan with specific

interventions to improve priority areas, monitoring progress on plans, and making adjustments to priorities as needed.[17]

One example of a CHIP is from Beaver County, a rural county located in the Oklahoma panhandle. Beaver County conducted and completed their community health assessment and CHIP in 2013. They determined that some of their most important drivers to poor health outcomes were mental health, access to care, and youth wellness.[18] They found that 20 percent of the population reported four or more days of poor mental health in the previous month. Additionally, only 25.7 percent of residents were eating the recommended servings of vegetables each day. [18]

Similarly, Oklahoma County (of which the largest city is Oklahoma City) identified mental health and nutrition and physical activity, for both adults and children, as two of their priority areas.[19] Oklahoma County reported only 27.6 percent of their residents eating the recommended number of vegetables each day. Additionally, 25 percent of their residents reported four or more poor mental health days in the previous month.[19] Both Oklahoma and Beaver Counties set goals around improving access to and promoting current mental health services in their respective areas, and goals to work with schools on improving their physical activity policies and accessibility.

In another example, McCurtain County, a rural county in southeastern Oklahoma, has one of the highest rates of poverty in the state (27.1 percent).[20] Studies show that poverty is linked to a variety of issues. In McCurtain County, poverty contributes to issues such as high rates of teenage mothers, minimal fruit and vegetable consumption, tobacco use, and poor mental health.[20] The McCurtain County CHIP identified 11 potential strategic issues. The issues were then bundled together into five priority areas: teen pregnancy and infant mortality; mental health and substance abuse, domestic violence and unintentional death and injury; chronic disease, physical activity, obesity and tobacco use.[20] Their CHIP focuses on these issues, some of which are not unique to the county but others which have been due to the county's high rate of poverty and rural location.

In contrast, Tulsa County, one of the richest and most urban counties in the state, has a majority of residents (84.3 percent) that report always or frequently having access to fresh fruit and produce.[21] A total of 51.0 percent of residents reported participating in regular, sustained moderate or vigorous physical activity.[21] Despite what most would consider as higher rates of access to fresh fruits and regular physical activity, Tulsa County reports that nearly one in three adults (32.3 percent) are obese.[21] Tulsa County also reports a diabetes prevalence rate of 11.9 percent, which is higher than the overall state prevalence of 11.6 percent.[21] Due to the higher rates of obesity and diabetes, along with high rates of heart disease, chronic lower respiratory disease, and cancer, Tulsa County has identified chronic disease, obesity, and poor diet and inactivity as three of their six CHIP priority areas. The other priority areas are: drug and alcohol abuse, access to healthcare, and tobacco prevention.[21]

EXISTING CAPACITY AND EFFORTS AIMED AT POPULATION HEALTH

This section will review initiatives that are currently in place to address the health of the population. This is not meant to be an exhaustive list of resources. However, this does demonstrate the community partners that the RCO will look to partner with to and existing efforts to be leveraged to improve population health in Oklahoma. The Oklahoma SIM project specifically looked at these high-cost conditions, as described in Section B, the Description of the State Healthcare Environment, and the associated burden to guide the selection of multi-payer quality metrics and episodes of care that would make the most impact on health outcomes, cost, and quality under the Oklahoma Model.

Federal, State, and Local Healthcare Initiatives

The Oklahoma Model will leverage and build upon the many innovative payment, delivery, and public health models that are already in existence across the state. Most initiatives to date have been targeted at the Medicare population. These initiatives have aimed to improve population health through the innovative use of payment and reporting to incent coordination and proper screening and tests. A greater emphasis on multi-payer collaboration in recent years has produced a large enough revenue share to make the pursuit of healthcare transformation relevant for providers. The Oklahoma Model must complement existing models in the state and allow for new ones to emerge by creating the necessary infrastructure. Currently, the Oklahoma SIM project has identified the following models and resources operating within Oklahoma to advance population health.

Figure G.1: Federal, State, and Local Healthcare Initiatives

Name of Initiative	Incorporation into the RCO Model
Accountable Care Organizations (ACO)	Provide a foundation for RCOs on quality metric reporting, coordination of care, provider networks, etc.; a RCO may want to implement an ACO alternative payment arrangement for specific populations and/or may want to continue existing ACOs to meet Medicare requirements and qualify for Medicare incentive payments.
Bundled Payments for Care Improvement Initiative	Provide results and lessons learned to assist RCOs in adapting business and healthcare delivery practices for episodes of care, alternative payment arrangements, and bundled payments
Comprehensive Primary Care Initiative	Risk stratification, practice transformation, care coordination, shared savings (value-based purchasing)
Healthy Hearts for Oklahoma	Serve as an excellent model and potential partner as the RCO adapts a higher level of reliance on HIT, develops connections with community, implements care coordination, changes process to match value-based purchasing practices, and works with providers to transform practice to improve health outcomes, lower costs, and increase patient satisfaction.
Federally-Qualified Health Centers	Serve as valued partners that can provide needed guidance on the integration of primary care and behavioral health and how to approach and implement necessary practice transformations
Free/Charitable Clinics and Pharmacy Programs	Provide critical healthcare access in communities, and with better coordination of community resources, potentially enable better - continuity of care for members who over utilize public programs.
Oklahoma Department of Mental Health and Substance Abuse Services (ODMHSAS) Health Homes	Provide a foundation from which RCOs can build upon, including lessons learned, care coordination, network development, and adaptation to value-based payment
State and Local Public Health Actions to Prevent Obesity, Diabetes, Heart Disease and Stroke	Work with RCOs to identify evidence-based interventions, as RCOs and 1422 organizations share core goals for improving Oklahoma health outcomes

Accountable Care Organizations (ACOs)

As described in Section B, ACOs are groups of doctors, hospitals, and other healthcare providers who voluntarily collaborate and accept collective accountability for the cost and quality of care delivered to a population of patients. Under the Oklahoma Model, the ACO model has laid the foundation for several of the components of the RCO. It has also introduced many providers to value-based purchasing. Additionally, RCOs may want to implement an ACO as an APA for specific populations to allow for risk/gain sharing with providers. RCOs may also need to continue ACOs that include dual eligibles to meet CMS requirements and to qualify for Medicare incentive payments from CMS.

Bundled Payments for Care Improvement Initiative

As described in Section B, bundled payments are a reimbursement methodology in which providers receive payment for the expected costs of an episode of care to promote care coordination and integration and better outcomes. In Oklahoma, 39 sites are currently participating in the Bundled Payments for Care Improvement (BPCBPCI) Initiative. Under the Oklahoma Model, bundled payments will be an alternative payment arrangement option that can be used by hospitals within a RCO.

Comprehensive Primary Care Initiative

As described in Section B, the Comprehensive Primary Care (CPC) Initiative aims to support primary care practices with innovative payment models to implement, on a broader scale, a core set of five comprehensive primary care functions identified by CMS and stakeholders. Under the Oklahoma Model, the CPC Initiative will serve as a foundational model for the RCO in terms of risk stratification efforts and strategies, practice transformation, care coordination and adapting to value based purchasing practices, such as the shared savings employed by the CPC Initiative.

Federally Qualified Health Centers

As described in Section B, Federally-Qualified Health Centers (FQHCs) are designated by the Health Resources and Services Administration (HRSA) to provide healthcare services to medically underserved populations, regardless of ability to pay. Under the Oklahoma Model, RCOs must include FQHCs within their provider networks if they exist within the RCO's region. The RCOs will have the flexibility of determining how to incorporate FQHCs. FQHCs will also be incorporated into the Oklahoma Model's Practice Transformation Center. FQHCs will also serve as an important role model to the RCOs in terms of integration of primary and behavioral healthcare.

Free/Charitable Clinics and Pharmacy Programs

As described in Section B, a total of 40 licensed charitable pharmacies and over 80 free clinics exist in Oklahoma. Examples include clinics supported by the Health Alliance for the Uninsured, the Sandy Park Clinic in Tulsa, and the Good Shepherd Community Clinic in McAlester County. Under the Oklahoma Model, the State will include these resources as part of the RCOs inventory of community resources that providers can access and reference for patient referrals.

Healthy Hearts for Oklahoma

As described in Section B, the Healthy Hearts for Oklahoma (H2O) initiative is a four-year statewide cooperative, using a $15 million grant from the Agency for Healthcare Research and Quality (AHRQ), to test if a learning cooperative can improve the care of cardiovascular patients. Under the Oklahoma Model, H2O will serve as an excellent role model and could become a valuable partner as the RCO adapts a higher level of reliance on HIT, develops connections with community, implementations care

coordination, changes process to match value-based purchasing practices and works with providers to transform their practice to improve health outcomes, lower cost and increase patient satisfaction.

Health Homes

As described in Section B, Health Homes are an optional Medicaid State Plan benefit through a collaboration of the ODMHSAS and OHCA Health Homes provide an opportunity to build a person-centered system of care that achieves improved outcomes and better services and value for the Oklahoma SoonerCare program for individuals with complex mental health needs. Under the Oklahoma Model, RCOs will use best practices and lessons learned from the Health Homes initiative for behavioral and physical healthcare integration. RCOs will learn from the health homes experiences with care coordination and quality improvement efforts.

State and Local Public Health Actions to Prevent Obesity, Diabetes, Heart Disease and Stroke (Centers for Disease Control and Prevention 1422 Grant)

As described in Section B, the Chronic Disease Service and the Center for the Advancement of Wellness located within the OSDH are collaborating with local county health departments to develop and implement evidence-based interventions to combat obesity, diabetes, heart disease, and stroke. Local county health departments are currently performing care coordination related to these health conditions. The state will examine findings and best practices from these initiatives to determine how best to incorporate local health departments into the Oklahoma Model and incorporate appropriate representation of local health departments in the RCO governance and community board.

Oklahoma Health Care Authority Programs

The OHCA has implemented several initiatives aimed at improving the health of their member population and to decrease costs. The Oklahoma Model will incorporate aspects of these initiatives and lessons learned into the RCOs, as described below.

Figure G.2: Oklahoma Health Care Authority Initiatives

Name of Initiative	Incorporation into the RCO Model
Health Access Networks	Provide lessons learned and possibly contract with RCOs for care coordination, practice transformation, or other tasks.
SoonerCare Choice	Provide lessons learned for care coordination and quality improvement.
SoonerExcel Program	Serve as a foundational model for the RCO in terms of how to implement and operationalize value based purchasing.

Health Access Networks

As described in Section B, Health Access Networks (HANs) are designed to increase access to care, quality of care, and cost effectiveness by providing a higher degree of care coordination support to HAN-affiliated SoonerCare Choice providers. Under the Oklahoma Model, HANs will be able to contract with RCOs to offer services for care coordination, practice transformation, and other needed resources that they offer in the current healthcare environment. RCOs will have the flexibility to determine how they will collaborate with HANs.

SoonerCare Choice

As described in Section B, SoonerCare Choice is a Primary Care Case Management (PCCM) program in which each member is assigned to a medical home with a primary care provider. Under the Oklahoma Model, the PCMH model will serve as a foundational model for RCOs in terms of care coordination strategies, provider network building, and quality improvement efforts.

SoonerExcel Program

As described in Section B, SoonerExcel is a performance-based reimbursement component of SoonerCare Choice where providers are eligible for incentive payments if they meet certain quality-of-care benchmarks.[120] This program will be considered as an APA option for the RCOs. The measures that are used in the SoonerExcel Program are currently being reviewed by the Oklahoma SIM project team and will be required for use in the RCOs. RCOs will have the flexibility to determine the specific incentive payment methodologies associated with this program for their region.

Public Health and Community Organizations

In addition to the healthcare models and initiatives going on across the state that were described in Section B, RCOs will include and leverage regional public health programs in order to best address health outside of the healthcare setting and to address social factors that affect health. Although regions will differ in services available, RCOs will need to attest to how they will incorporate these ongoing efforts into their care delivery and payment design. The efforts listed below give an overview of some of the broader public and community health efforts occurring across Oklahoma.

Figure G.3: Public Health and Community Organizations

Name of Organization	Incorporation into the RCO Model
Alliance for Healthier Generation – Healthy Schools Program	Serve as a community partner to address and prevent childhood obesity
County Health Department Accreditation	The state will leverage this accreditation process to incorporate the CHIPs and community health needs assessments as part of the RCOs in each region
Department of Human Services Aging Services Division	Work in partnership with RCO to address social determinants and environmental concerns for RCO members age 65 and old
Health Equity Campaign	Serve as a state partner to provide resources to RCOs regarding health equity and the social determinants of health
Mental Health Association of Oklahoma	Serve as a community partner to address and provide resources for mental illness and homelessness
Schools for Healthy Lifestyles	Serve as a community partner to address and prevent childhood obesity
Regional Food Bank	Serve as a community partner to address social determinants related to nutrition and food insecurity
Tobacco Settlement Endowment Trust	Serve as a state partner to support the mutual goal to lower the rate of tobacco by 2020 by 2%
Tulsa Area United Way	Serve as a community partner to provide resources to address social

	determinants of health
Turning Point Partnerships	Continue to provide services and potentially expand to serve as partners with the State Governing Body and RCO on practice transformation
United Way of Central Oklahoma	Serve as a community partner to provide resources to address social determinants of health

Alliance for Healthier Generation – Healthy Schools Program

As described in Section B, the Alliance for Healthier Generation Healthy Schools Program includes strategies to improve snack policies, add physical activity breaks in the classroom, start active afterschool programs, and start employee wellness programs. Under the Oklahoma Model, the alliance will serve as community partner of the RCOs to help address childhood nutrition and obesity.

County Health Department Accreditation

As described in Section B, the OSDH is currently accredited through the Public Health Accreditation Board (PHAB) and 32 of 68 county health departments are participating in some part of the accreditation process. Under the Oklahoma Model, the state will leverage this accreditation process to incorporate the CHIPs and community health needs assessments as part of the RCOs in each region.

Department of Human Services Aging Services Division

As described in Section B, the Department of Human Services (DHS) Aging Services Division contracts with 11 Area Agencies to provide services to residents age 60 and older. Under the Oklahoma Model, the division will serve as a community partner.

Health Equity Campaign

As described in Section B, the Oklahoma Health Equity Campaign (OHEC) is a statewide campaign alerting state and community leaders to socioeconomic and ethnic inequities in health and engaging leaders in conversations that result in actions to fight the effects of these inequities in Oklahoma. Under the Oklahoma Model, the state will incorporate the OHEC as a partner to the State Governing Body to provide resources to RCOs regarding health equity.

Mental Health Association Oklahoma

As described in Section B, Mental Health Association Oklahoma is an advocacy voice representing people impacted by mental illness and homelessness in communities throughout Oklahoma. Under the Oklahoma Model, the association will serve as a community partner of the RCOs to provide services and resources to address mental illness and homelessness.

Regional Food Bank

As described in Section B, the Regional Food Bank distributes food and other products through a network of more than 1,100 charitable feeding programs, including food pantries, homeless shelters, church pantries, soup kitchens, Food Resource Centers, and schools. Under the Oklahoma Model, the food bank will serve as community partners of the RCO.

Schools for Healthy Lifestyles

As described in Section B, Schools for Healthy Lifestyles is a program that provides health education to Oklahoma elementary students in five key areas: physical activity and fitness, nutrition education and awareness, tobacco use prevention, safety and injury prevention, and oral health. Under the Oklahoma Model, the program will serve as a community partner of the RCOs to help address childhood nutrition and obesity.

Tobacco Settlement Endowment Trust

As described in Section B, the Tobacco Settlement Endowment Trust (TSET) is a grant-making state agency that focuses on preventing tobacco use, reducing tobacco use, and preventing obesity. Under the Oklahoma Model, both the State Governing Body and the RCO will need to work in partnership with TSET to meet the SHSIP goal of lowering Oklahoma's smoking rate by two percent by 2020.

Turning Point Partnerships

As described in Section B, Turning Point works as an independent statewide consortium focused on policy issues aimed at improving Oklahoma's health[6] and has partnered with communities all across Oklahoma to work on local innovations to transform public health in Oklahoma. Under the Oklahoma Model, the State Governing Body and the RCO will need to build upon and potentially expand this effort in order to make the strides in practice transformation that will support the new RCO model.

Tulsa Area United Way

As described in Section B, Tulsa Area United Way serves 505,000 people through 60 partner agencies in six counties of the Tulsa region: Tulsa, Creek, Okmulgee, Osage, Rogers, and Wagoner counties. Under the Oklahoma Model, the organization will serve as a community partner of the RCOs to address social determinants of health.

United Way of Central Oklahoma

As described in Section B, United Way of Central Oklahoma works to provide access and critical funding to over 127 results-oriented programs at 61 accountable nonprofits across central Oklahoma. Under the Oklahoma Model, the organization will serve as a community partner of the RCOs to address social determinants of health.

SIM POPULATION HEALTH STRATEGIES AND ACTIVITIES

The Oklahoma Model will build upon strategies and activities employed by SIM to advance population health improvement goals, namely the workgroup structure, focus on social determinants of health, and multi-payer quality alignment.

Workgroup Structure

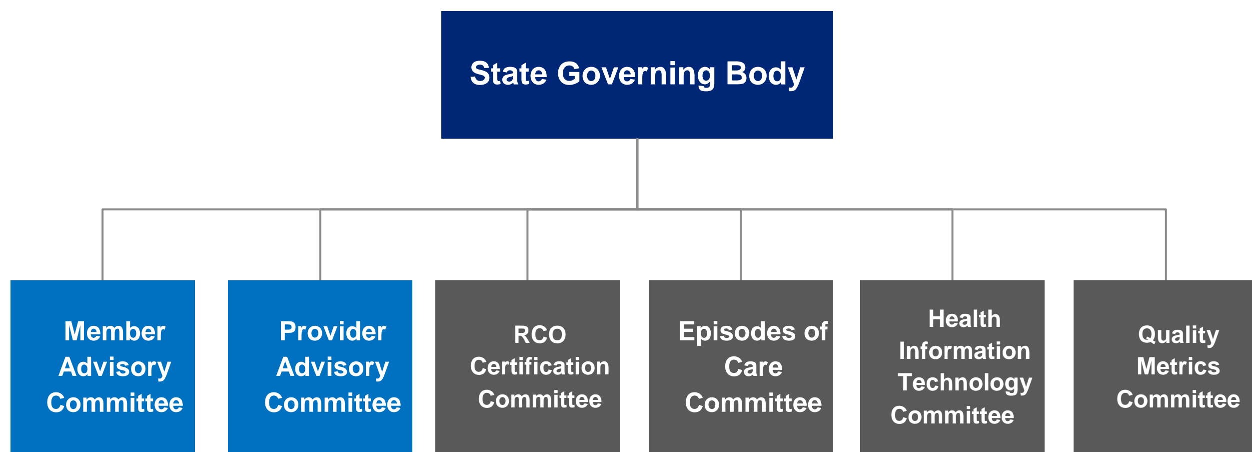
As described in Section B, the Oklahoma SIM project leveraged the workgroup structure that was established by the OHIP Coalition as a vehicle to accomplish the goals of the initiative. The workgroups participated in the planning and development of the SHSIP. The four workgroups included the:

- Health Efficiency and Effectiveness Workgroup;

- Health Workforce Workgroup;
- Health Information Technology (HIT) Workgroup; and
- Health Finance Workgroup.

Moving forward, the Oklahoma Model will retain some aspects of this workgroup structure for the State Governing Body to advise the body on population health matters for the RCOs. This may be done by infusing aspects of the Oklahoma SIM workgroups into the State Governing Body committees or by standing by new committees or subcommittees for the State Governing Body. For instance, aspects of the HIT Workgroup may be infused into the HIT Committee and aspects of the Health Workforce Workgroup may be infused into the Provider Advisory Committee. The current proposed workgroup structure of the State Governing Body is displayed below. It is envisioned that other workgroups will be added.

Figure G.4: State Governing Body Advisory Committees



Social Determinants of Heath

The Oklahoma SIM project highlighted health disparities and the impact of social determinants on health status. RCOs will play an important role in addressing the social determinants of health that impact poor health outcomes. As stated in Section B, the social determinants of health that most impact Oklahomans are: access to care, affordable housing, access to fresh and affordable produce, walkability or access to a place to be physically active, literacy, employment, and transportation.**Error! Bookmark not defined.** RCOs will work with community members to address these barriers to promote the health of the population they serve, and in turn, meet the cost and quality targets required of the RCO.

RCOs will formally identify and incorporate community resources in their region through their Community Advisory Board. The Community Advisory Board will advocate concerns about barriers that members of the region face in achieving better health outcomes. This board will also bring knowledge of the resources that are available to address the issues that are inhibiting healthy behaviors and lifestyle. RCOs will be encouraged to use these boards and resources to help bridge the gap to accessing healthy foods, transportation, places to exercise, and other social factors in order to improve the health of their attributed members. Through this feedback, the RCO can determine the most effective way to support members and providers in promoting health. In light of the diverse needs and varying levels of resources in counties across the state, specific methods to address the social determinants of health will be left to the RCO. This will provide RCOs the flexibility to find best fit solutions for their region. RCOs will have to

demonstrate how they have the necessary partnerships and community board membership to address the social determinants of health that impact healthcare costs. Once the RCO is operational, it will be a part of the CHIP process at the community level. RCOs will work with county coalitions and the RCO governing board to revise and develop the CHIP.

RCOs will also use "flexible spending" to address social determinants of health and improve health. Flexible spending refers to allowing the use of RCO funds for non-clinical services that are medically necessary. Historically, federal funds for Medicaid could not be used for anything besides direct patient care at the time of service. However, many states have been able to negotiate spending for services outside of the clinical setting that directly affect the health outcomes of patients. The scope of services that will be allowed with these funds will be determined through the state plan and waiver negotiation process with CMS. This will be a direct way that the RCO can support the provider and community to address the social determinants of health.

Multi-Payer Quality Alignment

The Oklahoma SIM project aims to align population-based health outcomes with clinical quality measures using National Quality Forum (NQF) Measures and Clinical Quality Measures (CQM) for the SIM flagship issues: tobacco use, obesity, diabetes, hypertension, and behavioral health.

According to the PHNA, the state's mortality rate (941.9 per 100,000, age-adjusted) is 23 percent higher than the national rate.**Error! Bookmark not defined.** Several factors, including the flagship issues, contribute to this high rate. Oklahoma exceeds the national prevalence average in all areas of the flagship issues. Assigning and linking measures to incentive payments and penalties based will ensure that providers are taking a more active role in screening patients for diseases, assisting patients with health improvement, and following up with patients. Adopting multi-payer quality measures will help to lower healthcare costs, improve quality of care and patient experience, and population health.

Quality measures will be aligned across payers and focus on the leading causes of disease and disability within their patient population. All payers will be asked to use these common measures as reporting tools, and where possible, to improve health outcomes and evaluate them with these agreed upon measures. Multi-payer alignment of quality measures prevents an unnecessary workload from being placed on providers due to multiple measure sets from different payers. This alignment also helps to ensure that providers have a clear understanding of their responsibilities with regard to achieving high-quality patient health outcomes. Sophisticated analytics are the most common way providers (and payers) are able to determine how well they are doing in meeting quality measure targets. EHRs and tools within their EHR systems help providers identify where they need to improve. Many EHR systems also have clinical decision support tools that guide providers in referring patients to outside resources. Some EHR systems lack these resources for provider guidance and reporting. In such cases, the provider must have knowledge of what resources are available and how the patient can gain access to those resources.

Under the Oklahoma Model, the Board of Accountable Providers will advise RCOs on how to address traditional clinical approaches to meet quality metrics guidelines for attributed patients in their region.

ADDITIONAL OPPORTUNITIES UNDER SIM

Coordination with Tribal Public Health Efforts

Oklahoma is home to 38 federally recognized tribal nations[121] and has an American Indian population of almost 350,000 persons, comprising nine percent of the state's population.[122] Along with being citizens of

the state, tribal members are also citizens of their respective tribal nation that has its own inalienable self-governance of its citizens and territories, and possess unique culture, beliefs, value systems, and history as a sovereign nation. American Indian people suffer greater health disparities than other populations, such as havinghigher rates of heart disease and diabetes than other Oklahomans. Due to the high rates of chronic disease and other health issues, it is important for the state to address the health needs of the American Indian population, but it must be done within the context of the tribal nation's sovereignty. As part of the Oklahoma Model, the State Governing Body will include representation from tribal nations. The RCO governance and advisory boards for each region will also include representation from tribal nations, as determined by the population of tribal nations in the region. As described in Section B, the OSDH has utilized two outlets for respectfully communicating and collaborating with the 38 federally-recognized tribal nations in Oklahoma to address public health issues: the Office of the Tribal Liaison and Tribal Public Health Advisory Committee.

ROADMAP TO IMPROVE POPULATION HEALTH

The Centers for Disease Control and Prevention (CDC) has identified three approaches to improving population health: traditional clinical approaches, innovative patient-centered care and community linkages, and community-wide strategies. This section will review the Oklahoma SIM model components within each of these categories. These interventions leverage current initiatives to give a roadmap to population health improvement.

Traditional Clinical Approaches

The healthcare environment is rapidly changing. Providers now have to meet quality standards in order to receive their payments from some health plans. Quality measures give providers a guideline/best practice to follow that is shown to improve the quality of care and overall health of their panel or population. Sophisticated analytics are the most common way providers are able to determine how well they are doing on meeting quality measures. The table below details lists the multi-payer quality measures suggested for the Oklahoma Model. By converging on a set of multi-payer quality metrics, there would a concerted, statewide effort to perform well on these evidence-based metrics. Through this traditional clinical approach, there would be the potential to show improvement in the related population health issue. [120,121,122,123] All clinical approaches and suggested best practices were adapted from the American College of Physicians, National Committee for Quality Assurance, National Quality Forum, and United States Preventive Services Task Force. [123,124,125,126]

Figure G.5: Multi-Payer Quality Measures

Measure	Health Condition
NQF 0028	Tobacco Use: Screening and Cessation Intervention
NQF 0059	Diabetes: Poor Control of Hemoglobin A1c
NQF 0018	Hypertension: Controlling High Blood Pressure
NQF 0421	Obesity: BMI Screening and Follow-Up
NQF 0418	Behavioral Health: Depression Screening
NQF 0105	Medication Adherence: Anti-Depressant Medication Management
NQF 1932	Behavioral Health: Diabetes Screening for People with Schizophrenia of Bipolar Disorder
USPTF	Abnormal Blood Glucose and Type 2 Diabetes – Adults Aged 40-70 Years Who Are Overweight or Obese
NQF 0024	Children's Health: Weight Assessment and Counseling for Nutrition and Physical Activity
NQF 0004	Initiation And Engagement of Alcohol And Other Drug Dependence Treatment a) Initiation b) Engagement
NQF 0576	Follow Up After Hospitalization (within 30 days) (BH-related primary diagnosis)

Innovative Patient-Centered Care and Community Linkages

In addition to addressing traditional clinical approaches for healthcare, RCOs will focus on how to incorporate innovative clinical approaches to meet quality measure targets and improve population health. RCOs will furthermore go beyond the provider's office for solutions to improving population health. For real healthcare transformation to occur in Oklahoma, healthcare strategies and interventions need not only to occur in traditional healthcare settings but also in the places where people live, work, and learn.

The Oklahoma Model will incorporate patient-centered care and community-based linkages to transform healthcare delivery by focusing on a more holistic approach to population health improvement. More specifically, RCOs will integrate physical and behavioral healthcare delivery; use care coordination to direct patients to the appropriate healthcare settings and resources once they leave the provider's office; and refer patients to community resources that address social needs that impact health. RCOs will also adhere to quality measures that align to the Oklahoma SIM flagship issues.

An example of how RCOs will deliver patient-centered care and community-based linkages is with diabetes treatment and management. Under the traditional clinical model, if a patient presents to a provider with diabetes complications, the normal clinical approach would be for the provider to modify the patient's medications, provide recommendations for diet and exercise modifications (typically though a pamphlet or health education materials), and schedule routine follow-up. In comparison, under the Oklahoma Model, the patient would receive traditional medical care that would also include care coordination with community programs. These community programs could include a disease self-management program and an in-person health education for nutrition and exercise. If needed, the community programs could include a referral to community resources for access to healthy foods and physical activities, assistance with transportation to medical appointments, and pharmacy resources for purchasing medications. Along with traditional provider reporting on quality measures related to patient health, the RCO would report on how providers' actions impact patient quality of care and health outcomes. These reports would also include non-clinical activities, such as referrals and linkages to

community-based resources and supports, to ensure all health-related needs of attributed beneficiaries are met. In this way, the state will be able to examine both clinical and social outcomes of patient health to determine the priorities to include in future interventions to improve population health the most efficiently and effectively.

RCOs will also have to demonstrate their ability to integrate primary care with behavioral health services. Traditionally, behavioral health is an overlooked or undiagnosed component of overall patient health and well-being.Under the Oklahoma Model and RCOs, all providers will have to conduct behavioral health screenings for clinical depression and substance abuse disorders. If a patient receives a behavioral health or substance abuse diagnosis, the provider would immediately connect the patient to a care coordinator, who would organize a care plan to address both physical and behavioral healthcare needs. This could include referrals to mental health providers, substance abuse treatment providers and/or facilities, community support groups, and pharmacy support programs.

Overall, under the Oklahoma Model, integrating behavioral and physical healthcare and linking patients to care coordination and community resources will help to reduce health disparities and improve population health.

Community-Wide Strategies

Under the Oklahoma Model, the state will incorporate community-wide strategies into the decision-making process of the State Governing Body and Practice Transformation Center. The State Governing Body itself will serve as a resource for RCOs to disseminate best practices regarding public health practices and serve as an advocate for public health policy. Additionally, the public health sector will be represented in the membership of the State Governing Body.

In addition to improving health through clinical care transformation and the incorporation of community initiatives that address the social determinants of health, the state will continue to pursue community wide strategies that aid communities in being healthy. For example, policies related to tobacco-free schools, workplaces, and communities can encourage tobacco users to quit and protect non-smokers from dangerous secondhand smoke. In Oklahoma, organizations and coalitions, like TSET and the OHIP Coalition, will continue to work to implement policies that help improve population health on a large scale. Both have garnered support from public and private entities, which has allowed them to saturate the state's health environment with comprehensive health policies.

Tobacco Settlement Endowment Trust Community Grants

As aforementioned, TSET is a state agency that uses earnings from the Master Settlement Agreement to fund community grants through policies related to tobacco, physical activity, and nutrition. Policies related to tobacco include 24/7 tobacco-free schools, businesses, early childhood centers, restaurants, and local communities. Local grantees also work with community stakeholders to pass tobacco policies for smoke-free multi-unit housing and smoke-free local events. Local community coalitions work to pass policies related to obesity through increased physical activity and consumption of healthier foods. Schools, businesses, and communities work to pass policies related to healthy vending options, physical activity breaks, shared-use agreements between cities and schools for spaces to exercise, and promoting biking or walking to school or work. In addition to these local policies, TSET is working with the Free the Night Campaign, a statewide campaign to encourage bars and nightclubs to adopt smoke-free policies.

Certified Healthy Oklahoma Program

As described in Section B, the Certified Healthy Oklahoma Program is a free, voluntary statewide certification for public and private entities that spotlights businesses, campuses, communities, congregations, early childhood programs, restaurants, and schools that are committed to supporting

healthy choices through environmental and policy change. These entities are implementing policies and programs that will help Oklahomans eat better, move more, and be tobacco free.

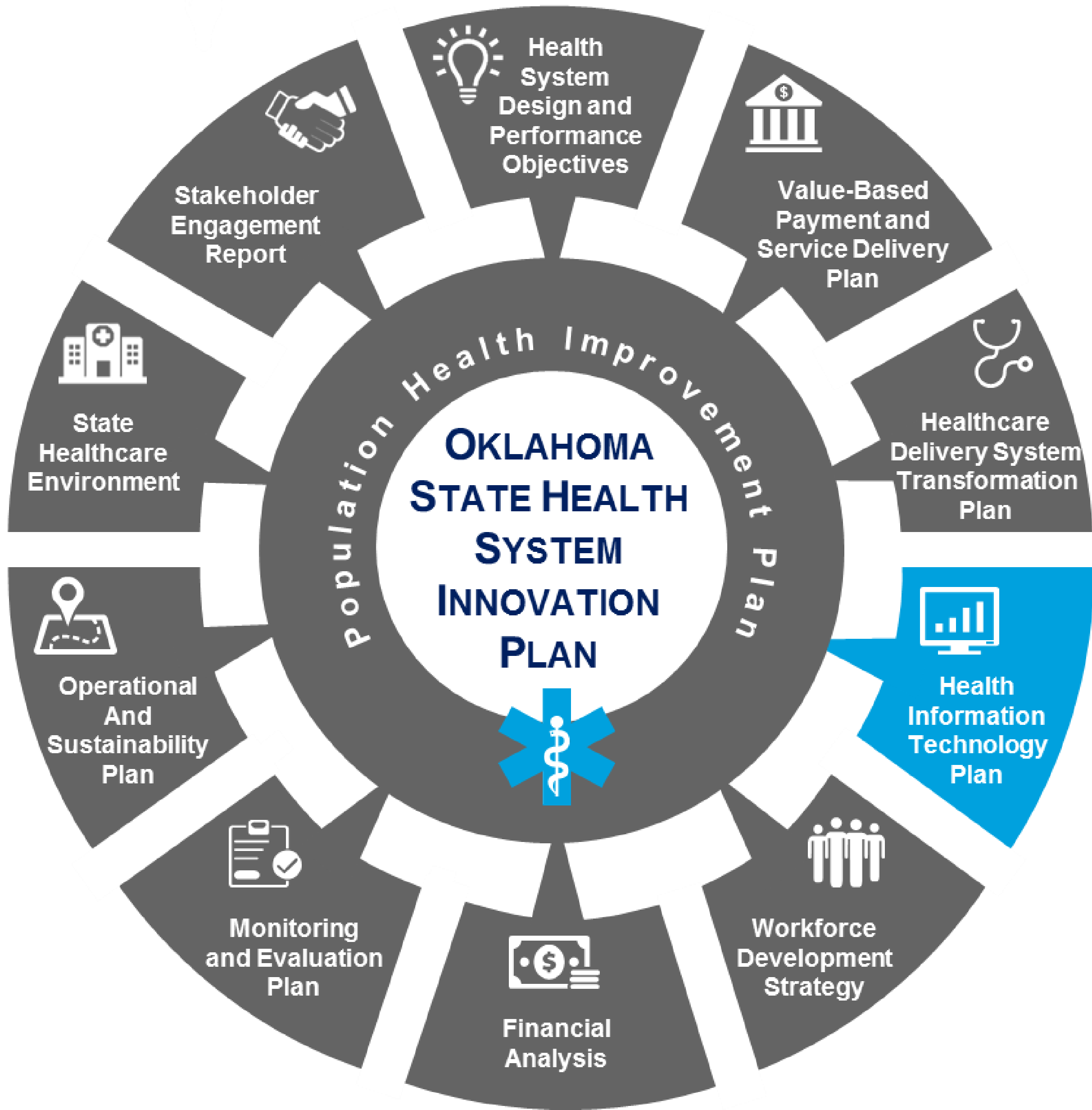
Oklahoma Health Improvement Plan/Community Health Improvement Plan

As aforementioned, the OHIP is a comprehensive statewide plan for improving the physical, social, and mental well-being of all Oklahomans. The OHIP is now in its second installation (OHIP 2020) and fifth year of implementation. At the county-level, the CHIP is a long-term, systematic effort to identify and address public health concerns with the input of community partners. A CHIP is critical for local communities to develop policies and define actions to that promote community-wide health. As the various plans are implemented, performance indicators are used to evaluate the effectiveness of the strategies and tactics related to each priority area.

Under the Oklahoma Model, the OHIP and CHIPs will serve as inputs into the State Governing Body for public health policies and goals for the RCOs. The RCOs will use the CHIPs to set priority areas for improving the health of the community served. The priority areas will be aligned with statewide priorities and quality measures to ensure key health issues are being addressed clinically and the communities' overall health improves.

CONCLUSION

The Population Health Improvement Plan details how the Oklahoma Model will incorporate current statewide initiatives or otherwise use best practices and lessons learned to promote the health of all Oklahomans. As the Oklahoma SIM aims provide statewide solutions to Oklahoma's healthcare challenges, it will continue to engage community, consumer, provider, and purchasers of healthcare to create a holistic approach to improve population health.


Health System Design and Performance Objectives
Value-Based Payment and Service Delivery Plan
Healthcare Delivery System Transformation Plan
Health Information Technology Plan
Workforce Development Strategy
Financial Analysis
Monitoring and Evaluation Plan
Operational And Sustainability Plan
State Healthcare Environment
Stakeholder Engagement Report
Population Health Improvement Plan
OKLAHOMA STATE HEALTH SYSTEM INNOVATION PLAN

H. Health Information Technology Plan

INTRODUCTION

The Oklahoma Health Information Technology (HIT) Plan identifies HIT objectives and strategies to support the Oklahoma State Innovation Model (SIM). These objectives and strategies address the deficiencies in electronic health information interoperability and exchange in Oklahoma and support Oklahoma in moving toward value-based purchasing to improve the health of all Oklahomans.

Studies have demonstrated the benefits of HIT in providing better care and improving outcomes. For instance, when healthcare providers have access to complete and accurate information, patients receive better healthcare.[127]

In 2005, a team at the RAND Corporation reported that properly implemented and widely adopted HIT would save money and significantly improve healthcare quality.[128] A 2012 national survey of doctors ready to comply with meaningful use revealed that 94 percent of providers reported that their electronic health records (EHRs) makes records readily available at the point of care; 88 percent reported that their EHR produces clinical benefits for the practice; and 75 percent reported that their EHR allows them to deliver better patient care.[1]

The drivers for HIT in Oklahoma include national-level initiatives such as:

- Meeting the Triple Aim Initiative
- Compliance with new Medicare payment regulations
- Meeting the CMS goal of moving Medicare payments to value based payment

HIT is also a critical component in meeting the goals of OHIP 2020. Furthermore, OHIP 2020 clearly identifies HIT as one of four core areas of work to support Oklahoma's health system transformation. Section H of the SHSIP describes the goals and objectives that HIT will support.

Through the evaluations completed by numerous Oklahoma SIM contractors and stakeholder input, Oklahoma has determined an optimal approach to support these HIT drivers and achieve the Triple Aim:

1. Partner with and support the existing private, nonprofit Health Information Exchanges (HIE);
2. Develop multiple levels of governance to ensure transparency, balance, and public/private stakeholder input; and
3. Establish technology and infrastructure to support statewide health information technology interoperability and state-level value-based analytics (VBA).

The Oklahoma HIT Plan leverages past experiences, existing public/private resources and relationships, and examples from other states to establish this technology infrastructure for the Oklahoma Model. This plan will serve as the roadmap for an HIT infrastructure to support the next phase of healthcare initiatives.

CURRENT HIT ENVIRONMENT

To identify the changes needed in the Oklahoma HIT environment, it is necessary to evaluate the existing environment. Over the past five years, Oklahoma has made significant strides in improving health information technology: EHR utilization continues to improve, two Health Information Exchanges (HIEs) are thriving in an open-market environment, and the state has made significant decisions to support ongoing improvements through the development of a state-agency interoperability system and in supporting initiatives to improve the use of HIT. This section will describe the current EHR adoption and utilization, health information exchange, and past state HIT initiatives that have shaped the landscape today.

EHR Adoption and Utilization

Oklahoma's EHR adoption and utilization continues to improve due to the CMS EHR Incentive Program, the efforts of the Oklahoma Regional Extension Center (REC) and other federally-funded initiatives. According to the Healthit.gov April 2015 Health IT Dashboard, 64 percent of Oklahoma physicians, 72 percent of Oklahoma nurse practitioners, 3.2 percent of physician assistants, and 91 percent of eligible and critical access hospitals had demonstrated Meaningful Use of Certified Health IT and/or Adopted, Implemented, or Upgraded any EHR.[129]

EHR Incentive Program

As described in Section B, the Medicaid Oklahoma EHR Incentive program provides a financial incentive to assist eligible providers in adopting (acquiring and installing), implementing (training staff, deploying tools, exchanging data), and upgrading (expanding functionality or interoperability) meaningfully use certified EHR technology. The Oklahoma Health Care Authority (OHCA) maintains monthly EHR Incentive Program statistics and provides information about the EHR vendors operating in the state. The following tables detail the number of eligible providers and hospitals and percent of participation with the percent increase from June 2014 to June 2015.

Figure H.1: SoonerCare (Medicaid) EHR Program

Provider Type	June, 2014			June, 2015			Percent Increase
	Total Eligible *	Total Attested	Percent of Participation **	Total Eligible *	Total Attested	Percent of Participation **	
Eligible Professional	10499	2329	22.18%	11983	2725	22.74%	2.51%
Eligible Hospital	146	105	71.92%	150	108	72.00%	0.11%

* Total Eligible represents the total number of SoonerCare Providers with a qualifying provider type (Physician, Nurse Practitioner, Certified Nurse-Midwife, Dentist, Physician Assistant in a PA led FQHR/RHC, Acute Care and Children's Hospitals).

** Percent of Participation represents the total number of providers attested versus the total number of providers eligible.

Figure H.2: Oklahoma Medicare EHR Program

Provider Type	Total Attested		
	June, 2014	June, 2015	Change
Eligible Professional	2369	2869	500
Eligible Hospital	108	116	8
Source: OHCA Oklahoma EHR Incentive Program August, 2014 and June, 2015			

Figure H.3: Top Ten EHR Vendors in Oklahoma among Eligible Professionals and Eligible Hospitals participating in the Medicaid EHR Incentive Program

Vendor	Count of Providers
GE CENTRICITY	909
RPMS (Indian Health Service System)	410
NEXTGEN	185
E CLINICAL WORKS	183
ALLSCRIPTS	103
PRACTICE FUSION	93
ATHENA	85
EMDS	69
GREENWAY	64
SUCCESS EHS	63

The top 10 EHR vendors, as shown in this table, are currently certified under the 2014 criteria which would enable providers utilizing these systems to easily interoperate and exchange electronic health records. Providers that are utilizing a non-2014 certified system may still exchange electronic health records by setting up a one-way or bi-directional transaction through an HIE. Although having a certified EHR is not necessarily required to exchange electronic health records, further analysis will be conducted to identify specific barriers preventing the provider from interoperating and/or exchanging electronic health records.

The Oklahoma Electronic Health Record (EHR) Incentive program, one of the first in the nation, began January 3, 2011. It is funded by the Centers for Medicare and Medicaid Services (CMS). The rate of EHR adoption and utilization in Oklahoma continues to improve due to the EHR Incentive Program, efforts of the Oklahoma Regional Extension Center, and other federally-funded initiatives.

However, growth has been slow. Approximately 112 EHR systems are currently in use in Oklahoma. According to the Oklahoma Health Care Authority (OHCA), the state Medicaid agency, by June 2015, 22.18 percent of professionals and 71.92 percent of hospitals eligible for the EHR program had attested for Meaningful Use (MU) through the Oklahoma SoonerCare (Medicaid) EHR Program. In addition to

the slow growth of EHR adoption, the vendor environment is unstable due to changing reporting requirements and the inability of the EHR vendors to meet those requirements.

Regional Extension Center

Oklahoma has developed resources to work with providers and hospitals to assist with new technology and improving workflows. The Oklahoma Foundation for Medical Quality (OFMQ) served as the Oklahoma REC beginning in 2011 continuing until April 2016 and has played an integral part in improving EHR utilization. The OFMQ has worked with over 2,000 physicians on projects for over 10 years with a major focus on quality improvement, Meaningful Use (MU) adoption and attestation, Patient Quality Reporting System (PQRS), HIE adoption, EHR workflow, practice workflow, and HIPAA (Health Insurance Portability and Accountability Act). In addition to their role as the REC, OFMQ has served as a contractor for OSDH projects to assist in the optimization of data attestation and extraction processes. The OFMQ will be hosting the first Oklahoma HIT conference in 2016.

Other EHR Support Initiatives

Oklahoma has implemented federally-funded initiatives that have included requirements for HIT and provider support related to EHR utilization and quality reporting. The Oklahoma Department of Mental Health and Substance Abuse Services (ODMHSAS) established 88 Health Homes across 22 organizations to offer holistic care by providers, social services, and behavioral healthcare specialists. All Health Homes are required to have a certified EHR and HIE connectivity and to leverage that connectivity to provide quality and value reporting.

OSDH has received two grants from the Centers for Disease Control and Prevention (CDC): 1305 - State Public Health Actions to Prevent and Control Diabetes, Heart Disease, Obesity and Associate Risk Factors and Promote School Health; and 1422 - State and Public Health Actions to Prevent Obesity, Diabetes, and Heart Disease and Stroke. Both projects require the electronic exchange of health information and clinical quality reporting. Funds from the two CDC grants have been used to provide technical support for eligible providers in terms of EHR contracts, EHR implementation and utilization, workflow analysis, and quality reporting by utilizing the experience of the REC. Providers eligible for MU or Adopt/Implement/Upgrade (AIU) have been assisted with the attestation preparation and methods for extracting data from EHR systems. Future efforts surrounding data extraction of the specified elements for hypertension and HbA1C will be supplemented with:

- Review of provider documentation and tracking regarding Clinical Quality Measures to provide verification of data accuracy and integrity, education about how the measures are populated within the EHR and how to extract them, and appropriate use of measure(s) to improve patient panel management;
- Practice-specific education, either on-site or (when applicable) at the community level, at regional locations or through various other methods such as teleconferences and/or web-based trainings; and
- Access to web-based resources and links.

For the remaining cycles of both grants, OFMQ will assess healthcare provider skills, knowledge, and attitudes with EHR utilization and determine the level of optimization that can be met over the three year grant period. Project plans include utilization enhancements such as:

- Patient referral management;
- Clinical decision support;

- Patient portal utilization and engagement;
- Population health management reporting and registry functionality;
- Patient reminders and utilization of screening tools to identify high-risk patients;
- Standard treatment protocols or order sets; and
- Direct messaging and use of formulary function for Rx coverage.

The AHRQ-funded Healthy Hearts for Oklahoma (H2O) Project will develop Community Health Information Organizations to work with 300 primary care practices to advance care for cardiovascular disease. The project requires EHR utilization and clinical quality reporting to ensure information is available for care coordination and for evaluating the success of the project.

Under the recently announced Transforming Clinical Practice Initiative award, Oklahoma will be part of the Iowa Healthcare Collaboratives six-state Practice Transformation Networks (PTN), which will help the state to undergo largescale practice transformation. Telligen, the data vendor, will provide consulting support for program management, data analysis and measures and serves as quality improvement advisers providing direct technical assistance to practices in all aspects including HIT.

Oklahoma will leverage its private nonprofit HIEs, Coordinated Care Oklahoma and MyHealth Access Network, as well as the state-agency interoperability system, Health-e Oklahoma, to support these initiatives and enable the exchange of health information across EHRs.

Health Information Exchange (HIE)

To evaluate the existing Oklahoma HIE environment, the Oklahoma SIM project contracted with Milliman to deliver an HIE Statewide Environmental Scan. For more information, including the number of lives touched and the technology, the complete Milliman report can be found in Appendix F.

The evaluation included stakeholder interviews and research of HIE initiatives in other states. Oklahoma has two active private nonprofit HIEs, Coordinated Care Oklahoma and MyHealth Access Network, as well as a state-agency interoperability system under development. The business models of the nonprofit HIEs differ and each has established a client base that supports their respective models with governance that ensures they serve the interests of their customers.

Although the two private-nonprofit HIEs have a robust clientele that extends across and outside Oklahoma, interoperability among them does not exist. This forces providers and hospitals to look to both HIEs to receive complete patient information. In addition, with limited funding and resources, the state continues to struggle with interoperability for eligible professionals and eligible hospitals reporting public health measures resulting in duplicate data entry for immunizations and reportable disease case reports. Achieving statewide interoperability will be a significant improvement in reducing the burden on providers in Oklahoma.

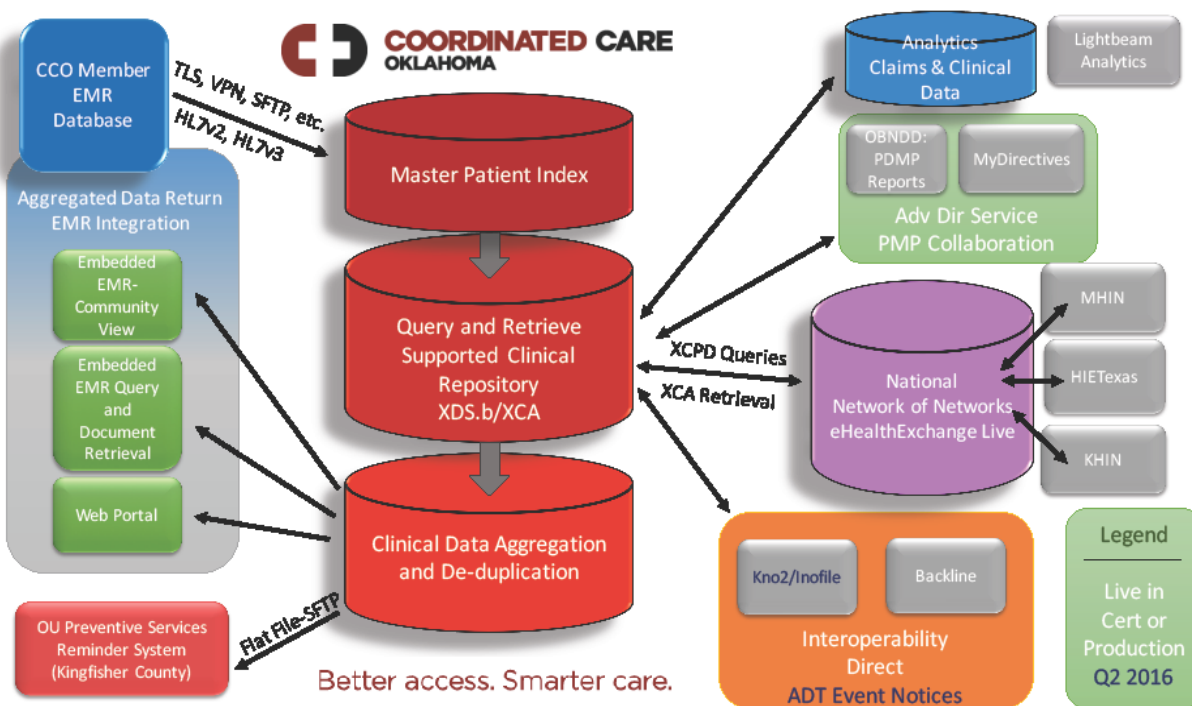
Coordinated Care Oklahoma

Coordinated Care Oklahoma is a non-profit organization that has been in operation in the Norman and Oklahoma City areas since 2014. Coordinated Care Oklahoma is governed by a board of directors comprised of health systems, small provider groups, large provider groups, rural hospitals, post-acute care, and community participants. Coordinated Care Oklahoma is managed by Yeaman and Associates with Dr. Brian Yeaman serving as Chief Executive Officer (CEO).). Coordinated Care Oklahoma's start-

up costs were funded by health systems and provider groups and have been sustained through subscription fees.

Coordinated Care Oklahoma provides tools that support patient transitions of care, presenting a complete medical record on demand at the point and time of care (see Figure H.4). Coordinated Care Oklahoma has a hybrid centralized-federated data model. Users access the HIE via a Cerner Corporation technology-based single sign-on or via a web portal. Coordinated Care Oklahoma is developing analytics capabilities for risk stratification and reports for population health management, condition management, Health Effectiveness Data and Information Set (HEDIS) measures, and information on treatment and clinical quality. Coordinated Care Oklahoma also provides a multistate electronic repository for patients' portable advanced directives.

Figure H.4: Coordinated Care Oklahoma Technology Stack

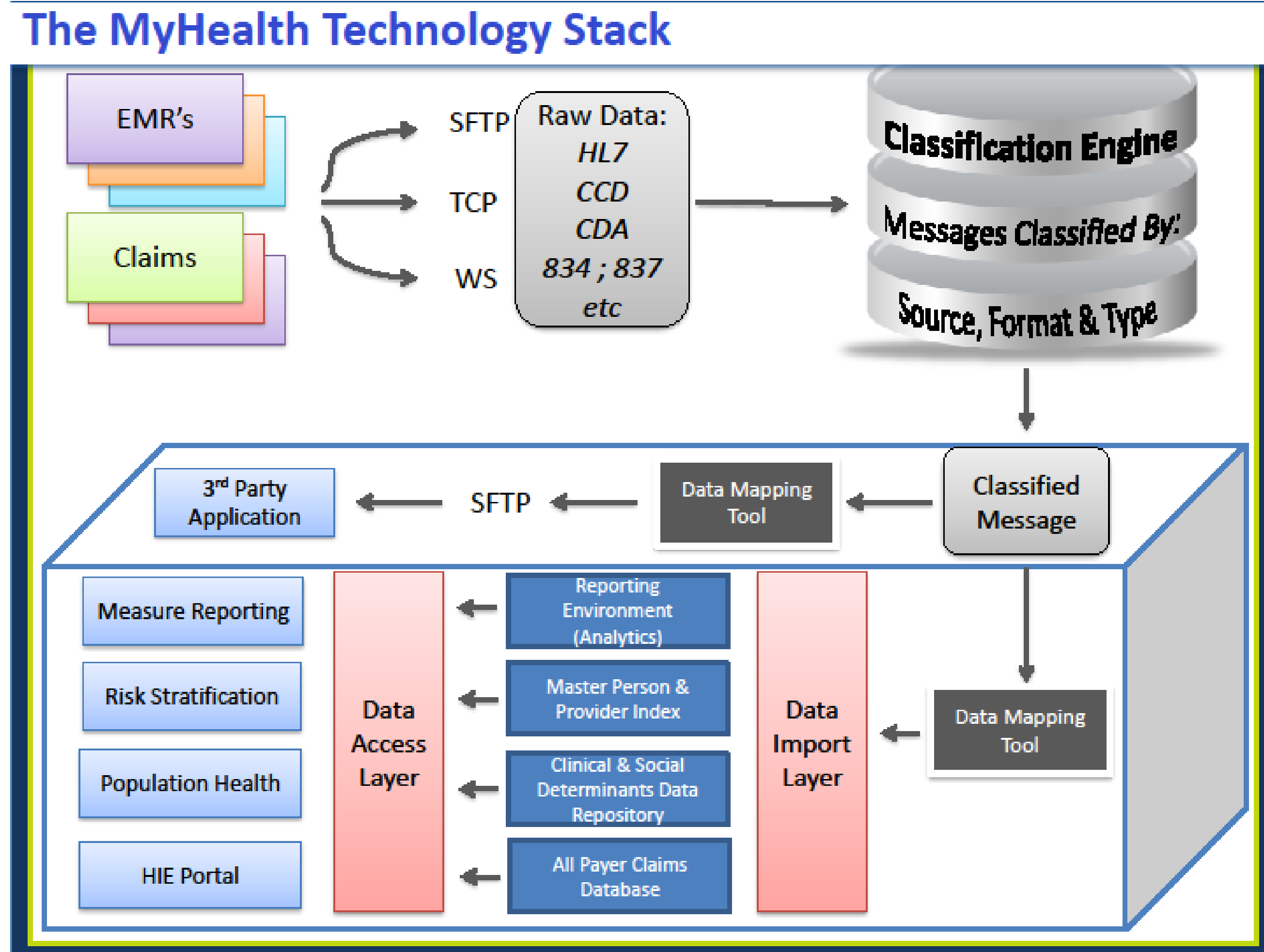


MyHealth Access Network

MyHealth Access Network (MyHealth) is a nonprofit organization that has been in operation since 2009. MyHealth collects patient information to create opportunities for early intervention with at-risk patients, to assist in treating decisions during the patient visit and to enable population management programs through analytics and reporting tools. MyHealth is governed by a board of directors consisting of 20 members from health systems, tribal organizations, patients, universities, private payers, clinicians, representatives from the community, and public and allied health organizations. Dr. David Kendrick is the organization's CEO. MyHealth received funds through an Office of the National Coordinator for Health Information Technology (ONC) Beacon Community grant in 2010 to invest in infrastructure and technology. MyHealth is sustained through membership fees.

MyHealth supports care coordination through a consolidated Continuity of Care Document that summarizes and presents relevant point-of-care information. Authorized users may access patient data on-demand via the HIE by logging into a web portal from their EHR using single sign-on. As a participant in the Comprehensive Primary Care (CPC) Initiative, MyHealth is expanding their HIE data model to include claims data for value-based assessment of care. See Figure H.5 below for the MyHealth technology stack.

Figure H.5: MyHealth Access Network Technology Stack

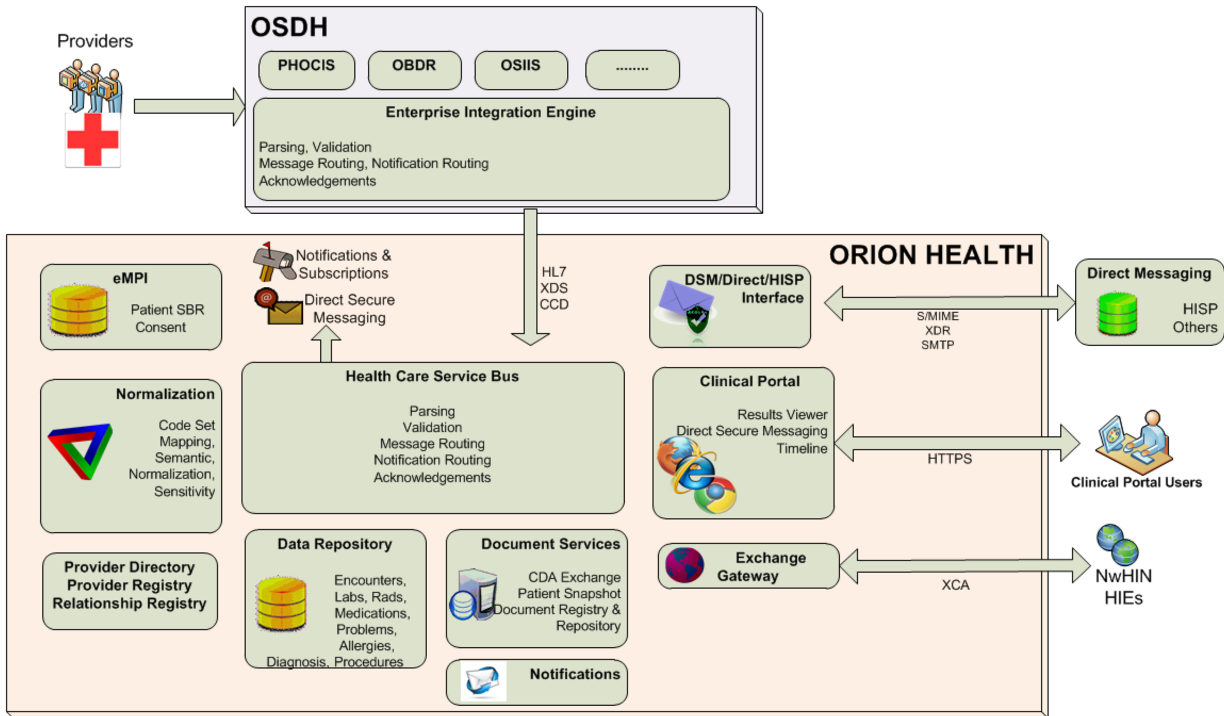


Health-e Oklahoma

Health-e Oklahoma is the Oklahoma Health and Human Services (HHS) interoperability system currently under development. In 2014, the Oklahoma HHS cabinet created the Deliver Interoperable Components Utilizing Shared Services (DISCUSS) committee with the mission to share technology resources among the HHS agencies. One of the first identified shared resources was to create the Health-e Oklahoma interoperability system. The purposes of Health-e Oklahoma are to share data within and across state health agencies, enable the consumption of health information from the two nonprofit HIEs, and support non-HIE participating providers submitting public health data. See Figure H.6 for the Health-e Oklahoma HIE technology stack. Health-e Oklahoma is governed by the DISCUSS Committee and is managed by

the State HIE Director with support from the OSDH's Informatics Division and the Office of Management and Enterprise Services Information Services (OMES-IS) Division.

Figure H.6: Health-e Oklahoma Technology Stack



Health-e Oklahoma will initially receive public health data from 18 OSDH data systems, behavioral health data from ODMHSAS, and Medicaid claims data from OHCA with the potential to receive additional data from the Oklahoma Department of Human Services (DHS), Department of Rehabilitation (DRS) Services, and the Employee Group Insurance Division (EGID).

Health-e Oklahoma will provide numerous benefits related to public health data and state-level analytics. Included in the 18 OSDH data systems are the services data provided at the 86 county health department clinics located in 69 of the 77 Oklahoma counties. The table below contains the types of services and the unduplicated count of clients served in state fiscal year (SFY) 2014. Due to the lack of Certified Electronic Health Record Technology (CEHRT) within the county health departments, OSDH is unable to electronically exchange standardized data with other healthcare providers. Currently, paper records, encrypted thumb drives and other portable media are used to exchange information.

Figure H.7: Unduplicated Clients for OSDH Programs for SFY 2014

Program	Client Count
Adult Services	17,975
Child Health Services	22,803
Home Visitation Services	3,394
Dental Services	425

Early Intervention Services	7,744
Family Planning	55,473
Child Guidance	5,400
Immunization	208,582
Maternity	200
Sexually Transmitted Disease	25,775
Breast and Cervical Cancer Screening	8
Tuberculosis	8,750

In addition to exchanging treatment data through Health-e Oklahoma, the OSDH immunization information system will have the ability to receive standard immunization records submitted for Meaningful Use purposes and respond to queries returning immunization records and schedules. Additional use cases will be developed for newborn blood and hearing screening, lead reporting, birth defects reporting, and case reporting for reportable diseases. The implementation of Health-e Oklahoma provides Oklahoma state agencies with the ability to exchange data in a standardized, timely, and efficient format that has not been previously possible. This also provides state agencies with the ability to exchange data with other HIEs thereby reducing the reporting burdens on providers

Past HIT initiatives

Recognition of the need for statewide interoperability is not new. In 2010, Senate Bill 1373 created the Oklahoma Health Information Exchange Trust (OHIET) to support State Health Information Exchange Cooperative Agreement Program (SHIECAP) to achieve statewide interoperability. The purpose of OHIET was to foster and encourage the development and meaningful use of EHR technology throughout Oklahoma followed by ensuring complete coverage of the state by health information exchange through secure and appropriate transmission of electronic health information.

OHIET identified six major activities to fulfill its purpose:

- Develop a process to certify HIE organizations to ensure high quality health information services;
- Develop and operationalize grant programs that enhance an overall state strategy to assist providers in meeting MU requirements;
- Work to ensure cooperation and coordination at a high quality level in a ‘network of networks’ philosophy;
- Identify and shepherd policy and statutory changes to insure on-going, appropriate and secure health information exchange;
- Coordinate activities of the various entities established for information exchange; and
- Evaluate and monitor activities related to the OHIET Operational Plan.

OHIET expended the SHIECAP funds through a three-level voucher program to support eligible professionals and eligible hospitals in rural locations. The vouchers supported recipients in activities

related to sending and receiving standard messages, connecting to an HIE, and implementing workflow enhancements.

An ONC Challenge Grant was awarded in 2011 as a sub-recipient under OHIET. Working through the Oklahoma-based healthcare professional services firm, Yeaman and Associates, OHIET used the Challenge Grant to conduct a pilot program aimed at facilitating care coordination between five long-term and post-acute care (LTPAC) facilities and the Norman Regional Health System. Through a combination of elements, the LTPAC pilot sites observed reductions in returns to the emergency department within 24 hours of discharge and in hospital readmissions within 30 days of discharge.

Following the conclusion of the SHIECAP, OHIET was eliminated through Senate Bill 516, effective January 1, 2016. Unfortunately, OHIET was unable to achieve statewide interoperability before it was eliminated.

Current HIT Governances

Governance for HIT in Oklahoma occurs at various levels. Each of the HIEs has a governance structure. However, with the elimination of OHIET, there is no state-level governance of HIT activities operating within the Oklahoma borders. The two nonprofit HIEs each have a Board of Directors responsible for governing their operations. Coordinated Care of Oklahoma's board is comprised of health systems, small provider groups, large provider groups, rural hospitals, post-acute care, and community participants. Coordinated Care Oklahoma has entered into an agreement with Yeaman and Associates, where Dr. Brian Yeaman serves as CEO, to provide organizational support, legal counsel, operations, finance and project management, and general oversight of the HIE. My Health's board is comprised of participants from health systems, tribal organizations, patients, universities, private payers, clinicians, community representatives, and public and allied health organizations.

Health-e Oklahoma, the HHS interoperability system, has established governance through the HHS DISCUSS committee via the HHS DISCUSS Data Subcommittee. The DISCUSS committee is responsible for identifying and championing shared interoperability services efforts to support Oklahoma's health and human services agencies. The DISCUSS committee is chaired by the Deputy Secretary of Health and Human Services and includes five additional voting members from the largest HHS agencies: OSDH, OHCA, DHS, ODMHSAS, and DRS. The State Chief Information Officer (CIO), CIO for Health and Director for Enterprise Data Driven Services, and CIO for Human Services and Director of Technology Strategy provide guidance and subject matter expertise to support the DISCUSS committee. In addition to other shared-services identified by DISCUSS, the members agreed to create Health-e Oklahoma, the shared HHS interoperability system, to facilitate the sharing of the state's data across agencies and to link disparate systems. The DISCUSS Data Subcommittee consists of representatives from the DISCUSS agencies and Office of Management and Enterprise Services Information Services Division (OMES-ISD), is chaired by the OHCA Data Governance Director, and is responsible for establishing standard practices related to data shared among the HHS agencies. A Health-e Oklahoma stakeholder workgroup provides direct input into the design of the system and has representation from all data systems participating in the system.

There have been a number of attempts to achieve state-level HIT governance. Besides OHIET, the 2009 Senate Bill 757 created the Health Information Infrastructure Advisory Board (HIIAB) to support the OHCA in developing a strategy for adoption and use of electronic medical records and health information technologies that was consistent with emerging national standards and promotes interoperability of health information systems. In 2013, the OHCA ceased the development of a state-agency HIE. HIIAB stopped all activities in 2014.

Although there have been a number of attempts to achieve state-level governance of HIT activities, and specifically, interoperability between the various HIEs operating in the state, this has not been achieved. To address the lack of state-level governance, Mr. Bo Reese, the State Chief Information Officer, was recently appointed by Governor Mary Fallon as the State HIT Coordinator. A State HIE Director was recruited in October 2015 to support Mr. Reese and implement future initiatives. The State HIT Coordinator and State HIE Director co-Chair the SIM HIT Workgroup. They will continue to lead the workgroup in HIT-related initiatives and developing HIT governance for the Oklahoma Model.

DRIVERS FOR HIT

The drivers for improved health information technology (HIT) occur in all levels of the healthcare, from primary care to specialty care and behavioral health. HIT is a vital component of optimal healthcare delivery. Patient-centered and patient-driven care must rely on HIT to improve traditional healthcare systems, expand the concept of healthcare through new services and tools, and give patients the ability to contribute to their care. Transitions of care among care teams rely on interoperability to provide a complete view of the patient's health issues. This requires complete, accurate and timely information. HIT offers opportunities to monitor the overall health of a population and reduce healthcare costs. HIT enables providers and payer the ability to manage and deliver efficient care to patients and is vital to new payment methodologies being pursued both at a state and national level.

HIT OBJECTIVES

The HIT objectives included in this plan will support the OHIP 2020 HIT goals and the Oklahoma SIM goals and objectives. The 2015-2019 Oklahoma Health Improvement Plan (OHIP) established the HIT Workgroup. As a domain within the OHIP Access to Services the HIT workgroup aims to create a robust interoperable IT ecosystem to improve the health of all Oklahomans. The HIT workgroup developed the following goals to achieve their five-year vision: "Within the next five years, the Health IT workgroup will develop an interoperable ecosystem capable of supporting the delivery of better health, better care at lower costs by ensuring availability and enabling the use of appropriate health data, promoting patient, families and caregivers engagement with their own health data, goals of care and plans, and fostering health innovation in Oklahoma."

Figure H.8: HIT Workgroup Members

Workgroup Member	Title/Organization
Chair: Bo Reese	State Chief Information Officer/State HIT Coordinator Office of Management and Enterprise Services, Information Services Division
Vice-Chair: Rebecca Moore	State HIE Director Office of Management and Enterprise Services, Information Services Division

Dr. Rodolfo Alvarez del Castillo	Chief Medical Officer Yeaman & Associates
Erika Anderson	Humana
Jesse Anderson	Sr. Clinical Applications Coordinator Chickasaw Nation
Mario Cruz	Chief Information Officer, Oklahoma Foundation for Medical Quality
Dr. Paul Darden	Chief, General and Community Pediatrics, University of Oklahoma College of Medicine
Lisa Gifford	Chief Information Officer, Oklahoma Health Care Authority
Dr. David Kendrick	Chief Executive Officer MyHealth Access Network
Tracy Leeper	Policy Analyst Oklahoma Department of Mental Health and Substance Abuse Services
Patsy Leisering	Director of IT – Health Agencies Office of Management and Enterprise Services
Cynthia Scheideman-Miller	Executive Director Heartland Telehealth Resource Center
David Thompson	Senior VP and COO Global Health
David Wharton	Health Services Program Manager Choctaw Nation
Lindsey Wiley	Health Information Technology Manager Oklahoma Foundation for Medical Quality
Dr. Brian Yeaman	Chief Executive Officer Yeaman & Associate

Oklahoma SIM HIT Goals and Objectives

The following Oklahoma SIM HIT goals and objectives represent an intersection of the OHIP 2020 goals and tactics and additional objectives to support the Oklahoma Model. The HIT objectives are categorized into two separate goals and are addressed throughout the plan as two systems to support each of goals.

Goal 1: Establish a statewide health information exchange

Objectives:

- Define and establish state-level governance to ensure transparency, inclusion, balance across participants, and authority over state-level health information exchange activities, and to advise the State HIT Coordinator.
- Review existing legislation; define and establish new legislation as needed to protect patient privacy and to improve health through the use of HIT and to protect patient privacy.
- Establish policies to address standards-based on interoperability across provider-based and HIE-based patient portals to allow patient's access and input into their health information.
- Identify and develop staff resources to support HIT including management, compliance, risk management, evaluation and technical support.
- Increase adoption and utilization of certified EHR technology.
- Increase adoption and utilization of HIEs.
- Establish and/or adopt metrics for EHR and HIE utilization, connectivity and performance
- Identify technology needs to support standards-based interoperability and the integration of data including retention, aggregation, and analysis and reporting.
- Facilitate statewide and cross-jurisdictional exchange of health information through HIE participation with the eHealth Exchange.
- Facilitate statewide exchange and consolidation of health information through a Health Information Network (HIN).).

Goal 2: Develop a state-level solution for integrated clinical, claims, and social determinants of health data to support a value-based analytics (VBA) system.

Objectives:

- Define and establish a state-level governance structure to ensure transparency, inclusion, and authority over the VBA system.
- Review existing legislation; define and establish new legislation as needed to support the VBA system.
- Establish a state data analytics system to support the VBA. The state data analytics system is to include data collection, data management, quality assessment and improvement, analyses, reporting, dissemination and ongoing quality improvement.
- Identify and develop staff resources to support the VBA system including staff and budget management, compliance, risk management, evaluation and technical support.

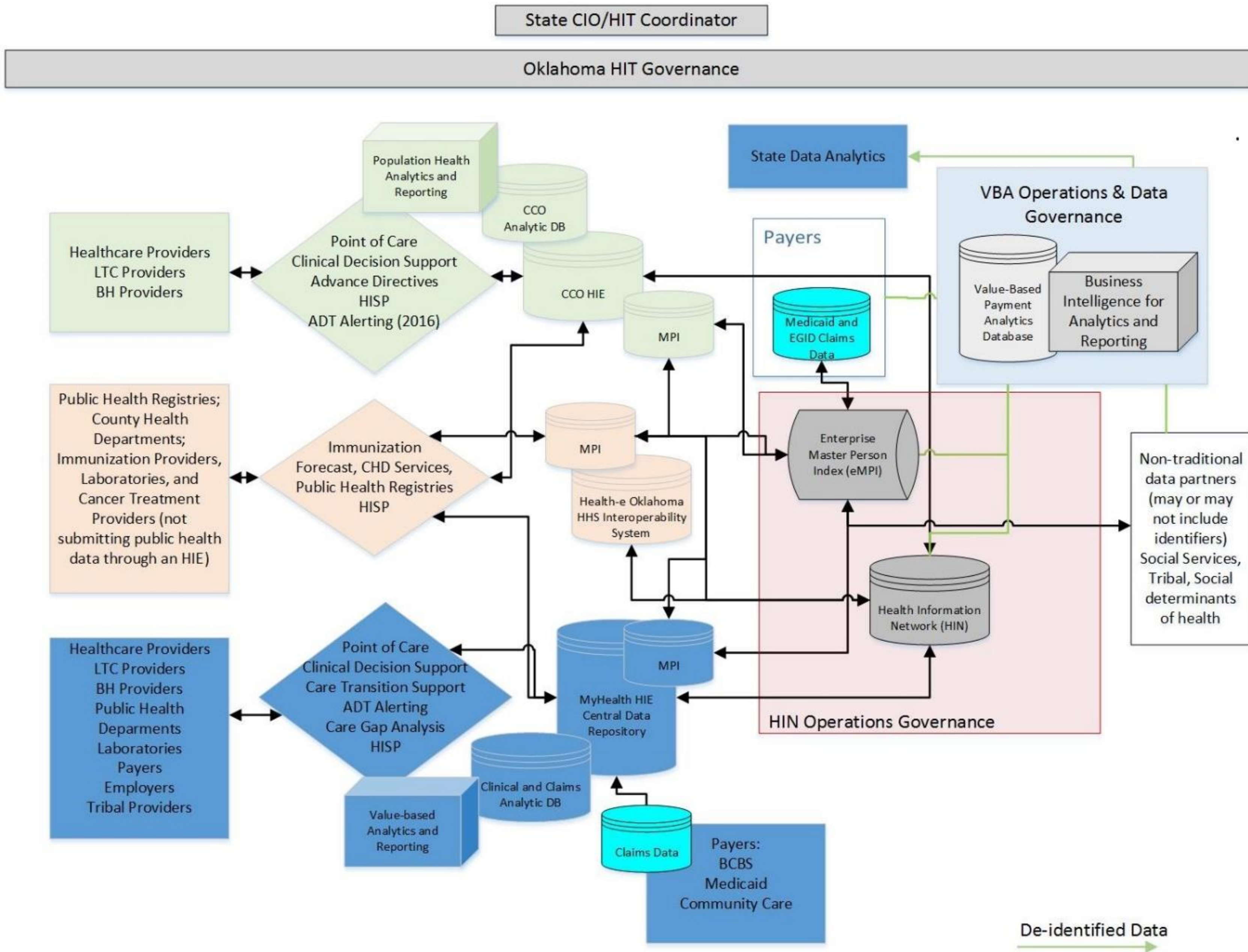
These goals and objectives are critical for the success of the Oklahoma SIM model. Without interoperability and a VBA system, the participants will not have the necessary information to support the model. The systems, in conjunction with the HIEs, will provide data to support the SIM model participation and model performance metrics as identified in the Round 2 Reporting Metrics Guidance.

Through the stakeholder engagement process in developing this plan, the Oklahoma SIM project identified a critical component for success: the availability of electronic information to support provider and program decisions, support transitions of care, identify gaps in community resources, and encourage patient engagement. All providers participating in Oklahoma SIM programs will be required to be utilize data from an HIE participating in statewide interoperability.

The proposed Oklahoma HIT design (see the figure below) is a conceptual framework that incorporates the existing HIEs and new state-agency interoperability system to meet the statewide interoperability needs, support the value-based payment model, and leverage existing resources. Public health data will be exchanged with the nonprofit HIES to the greatest extent possible to reduce connectivity burdens on providers and support the HIEs. Through the state-agency HIE, county health departments (CHDs) will have the unique opportunity to exchange electronic data with private providers. Each HIE will exchange data through the HIN using the Master Patient and Provider Index (MPI) under the Health Information Network (HIN) governance. Clinical data will be matched with Medicaid and EGID claims data and other patient-centric data through the HIN MPI to enable linking of needed information to support the value-based payment model.

Patient engagement is a critical component of the HIT plan and objectives. Patients will be included in governance to provide input into the design and implementation of the systems and to assist in developing standards related to data sharing. In addition, patients will help determine when and where their healthcare data should be available to ensure they have the necessary information to engage in their healthcare decisions and to communicate necessary information to their providers.

Figure H.9: Proposed Oklahoma HIT Design



MEETING THE HIT OBJECTIVES

This section will review how each of the following areas will be leveraged or erected to support the above framework and meet the HIT objectives set out for the state of Oklahoma.

EHR Adoption and Utilization

Many areas for improvement exist for certified EHR technology (CEHRT) adoption and utilization in Oklahoma. Information gaps exist regarding where CEHRT is implemented. The Oklahoma HIT environment is fragmented and incomplete. The percentage of provider organizations using CEHRT is unknown. Among Oklahoma's physicians, nurse practitioners, and physician assistants, over 40 percent are reported to have not demonstrated Meaningful Use of Certified HIT and/or Adopted, Implemented, or Upgraded any EHR (HIT Dashboard). That estimate does not represent the number of Medicaid and/or Medicare organizations and does not include organizations that do not serve Medicaid and/or Medicare recipients.

Although there have been many initiatives across Oklahoma to expand CEHRT use, with 22.74 percent participation of eligible professionals and 72 percent participation of eligible hospitals for the Medicaid EHR Incentive Program at the end of June 2015, there remains a significant need to support further expansion of CEHRT adoption and utilization across the state. The HIT Workgroup will develop tasks to identify and implement methods for working with providers and CEHRT vendors to promote CEHRT adoption and utilization across all Oklahoma healthcare providers including those not eligible for the EHR incentive funds. The task domains will include contractual support, funding, training, and on-going on-site support. The HIT Workgroup will continue to collaborate with initiatives including the OSDH chronic disease projects, the AHRQ-funded Healthy Hearts Oklahoma project, the ODMHSAS Health Home project and the newly awarded PTN initiative with Telligen.

Health Information Exchanges

Oklahoma's two nonprofit HIEs are robust and continuously improving and expanding services available to their participating providers. Although their business models differ, both HIEs have prioritized point of care and clinical decision support. Each HIE has developed additional services to meet the needs of their customers. MyHealth has established a referral service, Doc2Doc, and Coordinated Care.

These HIEs cover a large geographic area across the state. However, neither covers the entire state. Therefore, as previously noted, the two HIEs are not interoperable. The OSDH is implementing Health-e Oklahoma to fill some of the information gaps related to public health services and reporting but there continues to be a critical need for statewide interoperability to improve the health of all Oklahoma citizens.

Statewide Interoperability

Two options exist for establishing statewide standards-based interoperability: the federal health information exchange network, eHealth Exchange (or similar national initiative for HIE interoperability), and the establishment of an Oklahoma Health Information Network (HIN). Each of the options has benefits and limitations. It will ultimately be the responsibility of a governing board to determine the best solution(s) for Oklahoma.

eHealth Exchange

The eHealth Exchange is operated by The Sequoia Project, previously Healtheway, a nonprofit organization that supports interoperability and HIE initiatives. The eHealth Exchange is a rapidly growing network of exchange partners who securely share clinical information via the web using a standardized approach. Currently, 110participants are active in eHealth Exchange, including the Oklahoma HIE, Coordinated Care Oklahoma; HIEs from four border states including the Colorado Regional Health Information Organization (CORHIO),Kansas Health Information Network (KHIN), New Mexico Health Information Collaborative (NMHIC), and Texas Health Services Authority (HITTexas). Four federal agencies are participating, including Department of Defense, Veteran's Affairs, Centers for Medicare and Medicaid Services, and Social Security Administration. Participation in the eHealth Exchange will support interoperability across all participants and provide critical information at the point of care for Oklahoma citizens receiving care in Oklahoma and for those receiving care in four surrounding states. It is expected that Oklahoma SIM HIEs will be required to participate with eHealth Exchange or a similar national initiative to improve health information exchange across the state and with other eHealth Exchange participants.

As noted in Milliman's Statewide Environmental Scan Findings (Appendix F), there are limitations to eHealth Exchange for value-based payment models. Healthcare data shared across eHealth Exchange will be limited to point-of-care clinical information as the federated connection inhibits use of analytics or aggregation of information for reporting purposes. To address those limitations, Oklahoma could establish a HIN to support statewide interoperability of critical systems and the value-based payment and analytics system.

Health Information Network

The Oklahoma HIN will be similar to eHealth Exchange through a common set of standards, legal agreements, and governance. To prevent additional burdens on the Oklahoma HIEs, the Oklahoma HIN will deviate as little as possible from eHealth Exchange standards and policies. To support value-based analytics, the Oklahoma HIN will differ in terms of the data model. The Oklahoma HIN would be a hybrid federated and centralized model if statewide interoperability is not achieved through a national initiative. Data from all Oklahoma HIN participants would be centralized to provide the ability to link with claims data and other data identified to support the Oklahoma value-based payment model. Data from non-RCO participants would not be retained in the HIN. The Oklahoma HIN will include a privacy and security layer with consent management, a Master Patient Index to identify patients, a provider directory, a notification system for ADT alerts, and solutions for data extraction, data transport, and load. In addition, it will develop and implement data retention policies to support the value-based payment model analytics. The Oklahoma HIN governing board will determine the best way to enable electronic clinical quality measure (eCQM) reporting for providers submitting data through HIEs.

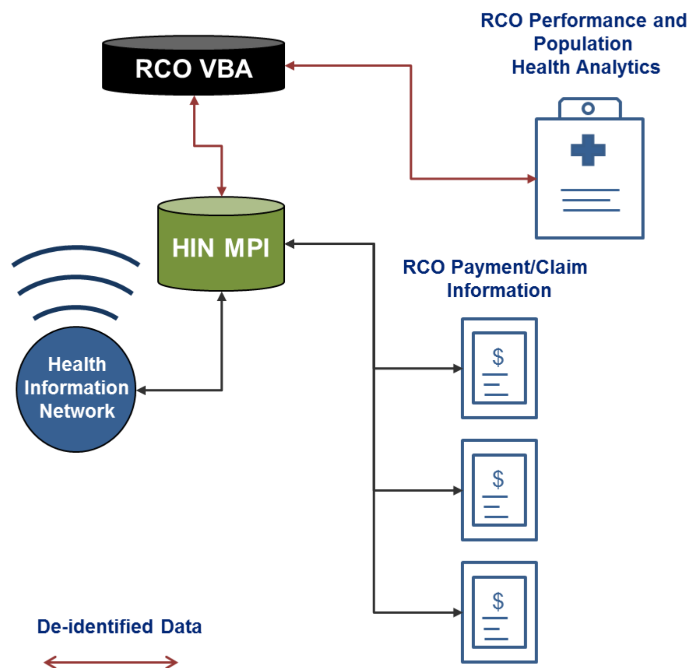
Regardless of the solution to support statewide HIE interoperability, statewide HIE interoperability is critical to the improvement of healthcare, health, and cost reduction in Oklahoma. In addition, the clinical data exchanged across the state would feed into the VBA system to provide clinical information important to quality and outcome measures that cannot be obtained from claims or public health data.

Value-Based Analytic System

The VBA system will consist of platforms that include a structured database for storing integrated data and a business intelligence solution. The VBA database will contain integrated clinical, claims, public health, and social determinants health data. To protect the privacy of the plan participants, the data contained within the database will be de-identified following assignment of an encrypted unique identifier

using an MPI included in the HIN. The unique identifier will then be used to link clinical, claims, and other data determined to be critical to support the value-based payment model.

Figure H.10: Value-Based Analytics System



Data Sources

Clinical data will be obtained from the HIEs via the Oklahoma HIN and from non-HIE participants including, but not limited to, tribal health services, long-term care services, and behavioral health services. Claims data for state-purchased healthcare will be obtained from the Medicaid Managed Information System (MMIS) and the Oklahoma Office of Management and Enterprise Services, Employees Group Insurance Department (EGID). As the system expands, additional private-payer claims data, state-funded behavioral health data, and prescription and social determinants of health data will be added to support the analytics required to better inform activities to support the Oklahoma SIM value-based payment model and the Triple Aim.

Business Intelligence

Business intelligence (BI) is a technology-driven process for analyzing data and presenting actionable information. The BI encompasses a variety of tools, applications, and methodologies that will enable the Oklahoma SIM analytics team to:

- Collect data from internal and external sources;
- Prepare it for analysis;
- Develop and run queries against the data; and

- Create reports, dashboards and data visualizations to make the analytical results available to Oklahoma SIM stakeholders.

With the inclusion of clinical, behavioral health, claims, and social determinants of health data in the VBA system, there will be significant opportunities for analyses to measure episodes of care, population health outcomes, social determinants of health (e.g., education, employment, income, and access to services), and performance and quality metrics; and to conduct risk-adjustments using multiple regression methods. The VBA will be used to monitor and report clinical, population health, and quality measures across providers, payers, employers, and patients. As noted in Milliman's Oklahoma Value-Based Analytics Roadmap (Appendix G), questions related to screenings and test results, impact of demographics such as education and employment on treatment compliance and outcomes, provider performance, interventions and innovations related to outcomes will be available.

Reporting will be available through dashboards, standard reports, and user-defined queries. Standard reports will include, but are not limited to, characteristics of patients receiving care coordination services by provider and payer and characteristics of patients by outcomes.

HIT Metrics

HIT metrics will be established through the governance of the HIN and the VBA. The HIT metrics will include measures for performance, security, and quality. In addition, measures and benchmarks will be developed to ensure the goals and objectives have been met and maintained, and to support the measures identified for the value-based payment model including state-level clinical quality and model adherence measures. The Quality Measures Committee will also ensure that data sources and data measurement are standardized across payers and providers by recommending to the State Governing Body valid sources and methods for aligning those measures.

CRITICAL FACTORS AND STRATEGIES FOR SUCCESS

HIT Governance

A body of governance for the technology and data needed to support the Oklahoma Model will establish standards and consistency to protect the privacy of Oklahoma citizens. The HIT Plan governance model will ensure that decisions are made and authority is exercised with inclusiveness and accountability for all partners. This will in turn establish transparency and trust. The HIT Plan governance model will also incorporate governance over the Oklahoma HIN and VBA. The governance bodies will have authority over planning, designing, purchasing, implementing, and ongoing operations of all HIT components.

Three states are similar to Oklahoma in terms of population characteristics, economics, and politics were evaluated to identify existing HIT structures and governance models: Arkansas, Kansas, and Texas. Additionally, the New York eHealth Collaborative policy and governance structure was evaluated due to its success. These governance models are detailed in Appendix H.

Oklahoma is proposing a multi-tiered governance structure due to the distinction between the Oklahoma HIN and the VBA systems. Differences exist in the types and levels of data contained within each system and proposed uses of the two systems. Although the final governance model will be established once the SIM governance is implemented, a proposed governance model includes three governing bodies:

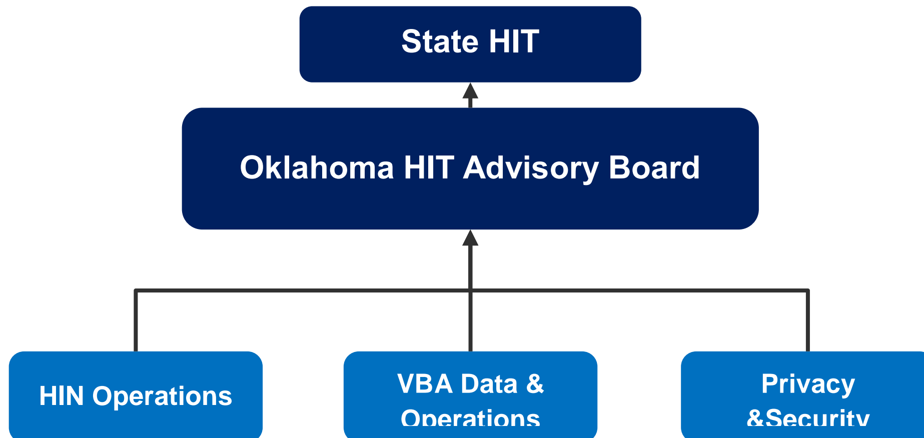
1. HIN Operations Committee;
2. VBA Operations Committee, and an
3. HIT Advisory Board.

The Oklahoma HIT Advisory Board will be responsible for advising the State HIT Coordinator. The board will be supported by the State HIE Director. The Board will develop and adopt policies for recommendation to OMES-ISD regarding:

- Policies and procedures for protecting the confidentiality of the personal and health information of Oklahoma citizens regarding their healthcare information;
- Standards related to health information exchange and security;
- Evaluation and selection of technology to support statewide interoperability;
- Internal procedures for adoption of policies that assure compliance with federal and state regulations;
- Planning and monitoring investments to maintain sustainability of HIT systems

Figure H.11 shows the multiple layers of governance included in the plan.

Figure H.11: Proposed Oklahoma HIT Governance Structure



Oklahoma HIN Operations

An Oklahoma HIN Operations Committee is proposed. The committee will consist of public and private stakeholders including providers and organizations submitting data, users of the data, and patient representatives. Membership will include representatives from a mix of rural and small providers and Native American tribes. The HIN Operations Committee will be responsible for establishing a vision for statewide interoperability in Oklahoma, determining the purpose and use of the HIN, and defining and publishing use cases to describe the manner in which users interact with the system.

Healthy Oklahoma 2020 established the HIT Workgroup. As a domain within the OHIP Access to Services – Infrastructure area, the Health IT workgroup aims to create a robust interoperable IT

ecosystem to improve the health of all Oklahomans. Although not an official governing body, the HIT Workgroup provides guidance and direction for all HIT activities and as such developed the aforementioned goals and tactics to improve statewide health information exchange.

Oklahoma VBA Data & Operations

The VBA will operate under a separate governance body due to the inclusion of additional data and the need to establish oversight over analytics and reporting. There will be overlap between the HIN and VBA committees due to the inclusion of clinical data. Unlike the HIN membership, the VBA Committee will include representatives from health plans and care-coordination organizations. With input from the VBA Committee, the committee chairperson will be responsible for establishing a vision for the Oklahoma Model VBA system, determining the purpose and use of the system, and defining and publishing use cases to describe the manner in which users will interact with the system, thereby defining the system's required capabilities. To assist in the development of the design, the VBA Governance Committee will seek guidance from experts in developing multi-payer claims database systems and in value-based model evaluation.

One alternative to establishing a new governing body is the Health Care Information Advisory Committee The Oklahoma Health Care Information System Act, 63 O.S. § 1-115, established the Oklahoma Health Care Information System responsible for the development and operation of a method for collecting, processing and disseminating healthcare data, including but not limited to quality, expenditure and utilization data. The Health Care Information Advisory Committee, 63 O.S. § 1-122, was established to advise and assist the Division of Health Care Information with determinations related to data elements to be collected, reporting requirements, and the release and dissemination of information to the public. The membership of the advisory committee is appointed by the State Commissioner of Health. The membership shall include but is not limited to the Administrator of OHCA, or a designee and the presidents, or their designees, of the following organizations:

- The Oklahoma State Chamber of Commerce;
- The Oklahoma Hospital Association;
- The Oklahoma State Medical Association;
- The Oklahoma Osteopathic Association;
- The Oklahoma AFL-CIO;
- A statewide healthcare consumer coalition;
- The Association of Oklahoma Life Insurance Companies;
- The Oklahoma Health Care Authority;
- The Oklahoma Pharmaceutical Association;
- The Oklahoma Dental Association;
- The Oklahoma State Chiropractic Association;
- The Oklahoma Optometric Association;

- The Oklahoma Physical Therapy Association;
- The Oklahoma Podiatric Medical Association;
- The Oklahoma Psychological Association; and
- The Oklahoma Association of Home Care.

Privacy and Security

The Oklahoma Health Information Security and Privacy Collaboration (HISPC) was establish in 2007 as a permanent standing body to advise on privacy and security issues related to health IT implementation. The Oklahoma HISPC will serve as the Privacy and Security committee to develop and approve standards for the HIN and VBA.

Organizational Capacity

The State HIE Director, under the supervision of the State HIT Coordinator and HHS Deputy Secretary of Health and Human Services, will provide leadership and management support for the HIN Governance Committee. The State HIE Director, with assistance from the OSDH Center for Health Innovation and Effectiveness, Planning Manager for the Office of Health Innovation Planning, will provide support through meeting facilitation, document management, pursuit of funding opportunities, and outreach to garner membership and additional resources. The VBA Governance will be supported by the Health Care Information Division Director in collaboration with assistance from the OSDH Center for Health Innovation and Effectiveness, Planning Manager. The Office of Health Innovation Planning will provide support through meeting facilitation, document management, pursuit of funding opportunities, and outreach to garner membership and additional resources. The HIT Oversight Board will be supported by the State HIE Director with assistance from OMES-ISD. The State HIE Director will be responsible for meeting facilitation, document management, staff management, and pursuit of funding opportunities

Project Management

Project Management will be required for all aspects of governance and during all phases of the project. Project managers will assist in the development of tasks, assignment of responsibilities, and be responsible for maintaining adherence to commitments and timelines. Project managers skilled in agile methodology, project lifecycles, and system lifecycles will be included from the beginning of the projects. They will be responsible for developing regular status reports, risk and mitigation plans, and communication plans. The project managers will be responsible for ensuring that each team member is accountable and will escalate issues when they arise.

Leveraging Shared Solutions

The HHS DISCUSS Committee is committed to identifying and leveraging shared solutions when a need is identified. As part of the governance structure, the DISCUSS Committee will make recommendations related to state solutions that could be leveraged as part of the HIT plan. To ensure transparency, all procurement will meet requirements under the Oklahoma Central Purchasing Act. Therefore, shared solutions will be evaluated under the same rigorous processes and must meet the same criteria as other potential solutions identified during the planning and design phases of the HIN and VBA projects.

Leveraging Existing Health Information Exchanges

Existing HIEs will be leveraged in terms of both knowledge and exchange of data. Both HIEs have highly skilled and experienced staff members who have offered to provide guidance and technical assistance in

the design and implementation of the systems and data management, quality and reporting. The HIEs will support the HIN through data submissions and will partner with the state to support their participating providers in public health reporting. The HIEs are represented on HIT Workgroup and have input into the HIT plan.

Timelines

The timelines for all HIT activities will be developed to support the Oklahoma SIM timeline. The HIT timelines will be developed through agile project management methodology following the development of user stories which will include time-oriented SIM objectives. To monitor the activities and adherence to the timelines, tasks will be assigned and daily status reports will be produced by the project manager and provided to the project leadership.

Policy

Policies for HIT will be established by the governance bodies of the HIN, VBA, and privacy and security committee. The policies will provide guidelines under which the systems will operate and will establish rules for each layer including privacy and security, consent management, identify management, data extraction, data management, data aggregation, data quality and provenance, analytics, notifications and reporting.

The Oklahoma SIM project will pursue policy levers such as grants and incentives to enable success of the model. Oklahoma will pursue CMS funding through an HIE Advance Planning Document and ONC funding through interoperability grants. Oklahoma will also seek legislative support to establish the HIT Oversight Board. Oklahoma will continue to support existing HIE networks and focus on statewide interoperability and adoption of standards-based HIT interoperability with a focus on protecting the privacy of Oklahoma citizens.

SIM Alignment with Existing HIT Efforts

The Oklahoma SIM activities closely align with existing HIT efforts that support EHR and HIE adoption and utilization and data collection and reporting. As previously described, Oklahoma has received federally-funded grants that include HIT requirements, private health plans are requiring HIE participation, and the legislature has established regulations for collecting and disseminating data.

For claims and clinical data reporting, the Oklahoma Model aligns directly with the Oklahoma Health Care Information System Act, 63 O.S. § 1-115, which establishes the policies to support the VBA including collecting, processing and disseminating clinical and claims information. Under the Health Care Information System Act, the Oklahoma Health Care Information System is responsible for the development and operation of a method for collecting, processing and disseminating healthcare data including, but not limited to, quality, expenditure and utilization data.

Transparency

The establishment of the public/private HIN and VBA Governance Committees in collaboration with the public/private collaborations through the OHIP Steering Committee and OHIP HIT Workgroup will provide all stakeholders the opportunity to be informed of any decisions related to the Oklahoma SIM project. In addition, all procurement activities will be required to meet the state purchasing requirements as defined by the Oklahoma Central Purchasing Act (74 O. S. §85.1, et seq.).

Patient Engagement and Shared-Decision Making

Patient engagement will be done through the inclusion of patients in the governance committees. Both the HIN and VBA governance committees will include clinical and behavioral health patient representatives and a mix of public and private representation. The final decisions regarding the information to be shared, design of the systems, the process for de-identifying data, access to the system, and management of the systems will be shared across all stakeholder groups.

Infrastructure

Existing program and technical infrastructure will be utilized where available. During the design phase, as needs are identified, additional infrastructure will be established to support HIT activities in terms of technology for the HIN and VBA; technical assistance related to EHRs, HIEs, and clinical quality reporting; and staff resources to support governance, technology, and data management, analytics and reporting.

Technology

Statewide interoperability will be achieved through the eHealth Exchange and Oklahoma HIN. The HIN will include an MPI and database to store health information. Analytics and reporting will be achieved through the VBA which will include a data warehouse and BI solution. The specifications of the technology stack for the HIN and VBA will be determined during the requirements and design phases of the project.

A timeline for the HIT activities will be developed to coincide with the timeline for the SIM initiatives. It will be critical to ensure the technology and infrastructure is established and tested prior to implementation of SIM activities.

Technical Assistance

The need for technical assistance will be determined at the initiation of the project and re-evaluated periodically. Potential technical assistance will provide direct support to organizations in the selection of and contracting with EHR vendors, to providers to better utilize their EHRs for patient management and in developing eCQMs and reporting to the Physician Quality Reporting System (PQRS), and to organizations in understanding and utilizing HIEs.

Staff Resources

As aforementioned, the State HIE Director will lead the Oklahoma HIN and VBA and develop a staffing plan to support all activities. Staff responsibilities will include project management, compliance, and technological support including design, development, implementation, and maintenance of the system. General administrative support will be provided by OMES-ISD.

The OSDH Health Care Information Division in the Center for Health Statistics was established under the Oklahoma Health Care Information System Act. The Health Care Information Division has staff experienced in collecting and evaluating vital statistics, inpatient discharges, outpatient and ambulatory surgery procedures, and survey data. A VBA evaluation team will be established within the Division and will partner with the Oklahoma SIM management team to determine the types of analytics needed to support the care coordination model and to inform the development of policies.

Project Management will be required at the beginning of the both the HIN and VBA projects to assist in the development of tasks, assignment of responsibilities, and to maintain adherence to commitments, budget and timelines. Project managers skilled in agile methodology, project lifecycles, and system

lifecycles will be included from the beginning of the projects and will be responsible for developing regular status reports, risk and mitigation plans, and communication plans.

Funding

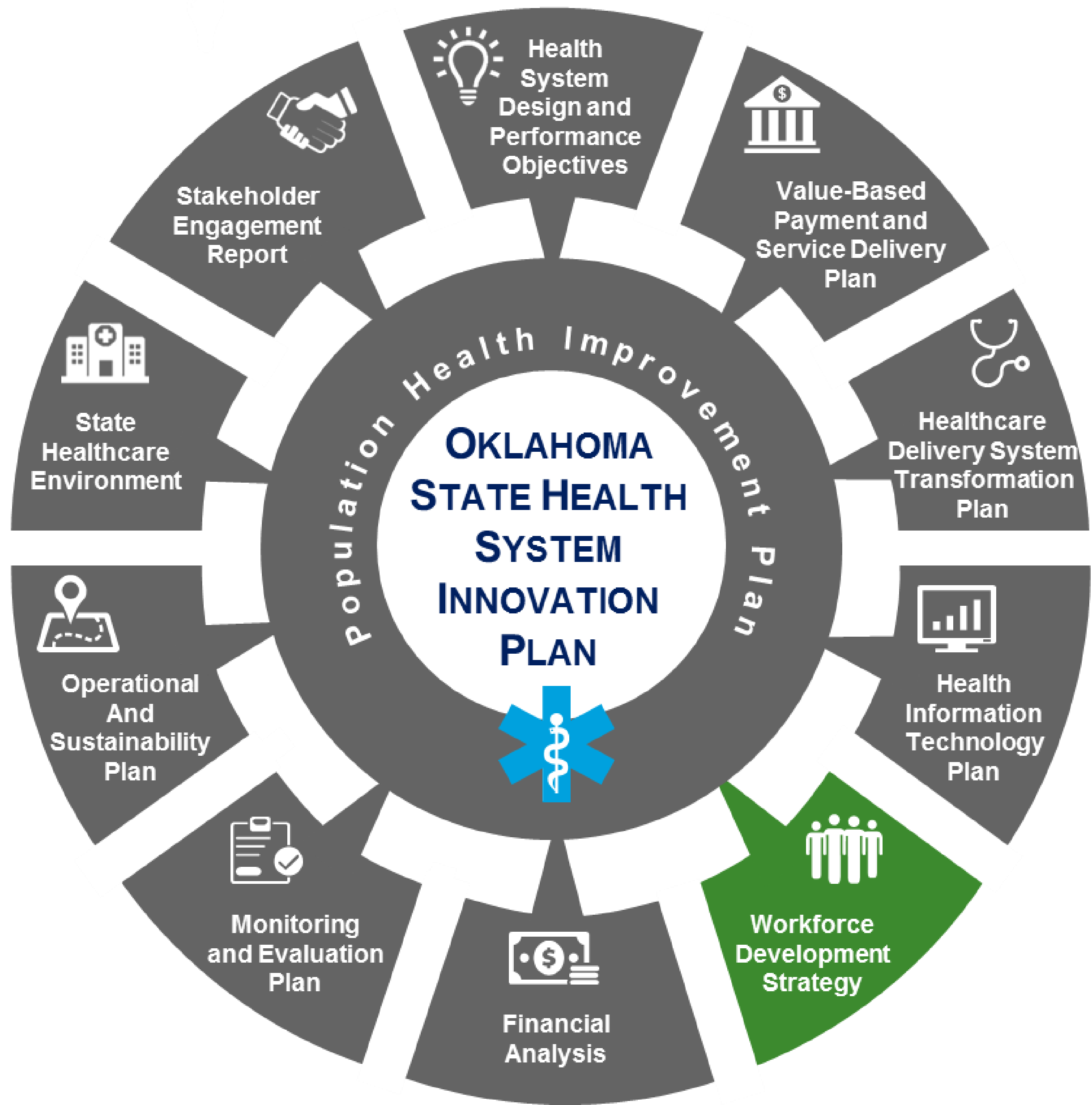
Initial seed funding will be obtained through grants, CMS HIE Advance Planning Documents, Medicaid waivers, and private contributors. On-going maintenance will be funded with a to-be-determined percentage hold out from the capitated payment or by charging the plans fees designated for HIT maintenance. All of the Oklahoma Model governing groups will be responsible for identifying and pursuing funding to support Oklahoma's innovation activities.

CONCLUSION

Through the evaluations completed by Milliman and public input, Oklahoma has determined the best approach to success is to partner with and support the existing private, non-profit HIEs; develop multiple tiers of governance to ensure transparency, balance, and public/private input; and establish technology and infrastructure to support statewide interoperability and state-level value-based analytics.

The Oklahoma HIT Plan leverages past experiences, existing public/private resources and relationships, and examples from others states to establish a technology infrastructure to support the drivers for the Oklahoma SIM. Lessons learned from the SHIECAP and OHIET will be considered with both governance and infrastructure. The plan incorporates the two existing HIEs, Coordinated Care Oklahoma and MyHealth, as critical and required components to the model, to support the goal that providers have access to their patient's comprehensive medical information, and to provide patients with options for accessing their healthcare information through patient portals. Existing partnerships through OHIP, the Tribal Public Health Advisory Council, SIM and DISCUSS provide a strong foundation for collaboration and transparency. As the governance is defined and established those relationships will help guide the final outcome.

Oklahoma believes that supporting the multiple HIEs as shown in Kansas, Texas, and New York provides the necessary environment for providers to have a choice based on their priorities and establishes the network-of-networks as originally planned through the SHIECAP. The network-of-networks enables necessary redundancies for statewide sustainability and scalability as requirements change and new approaches to healthcare are established. Oklahoma looks forward to the next phase in healthcare initiatives and will develop an HIT infrastructure to support those initiatives.


Health System Design and Performance Objectives
Value-Based Payment and Service Delivery Plan
Healthcare Delivery System Transformation Plan
Health Information Technology Plan
Workforce Development Strategy
Financial Analysis
Monitoring and Evaluation Plan
Operational And Sustainability Plan
State Healthcare Environment
Stakeholder Engagement Report
Population Health Improvement Plan
OKLAHOMA STATE HEALTH SYSTEM INNOVATION PLAN

I. Workforce Development Strategy

INTRODUCTION

One of the hallmarks of Oklahoma Governor Mary Fallin's tenure in office has been her innovative efforts to build a stronger workforce. A goal outlined in the governor's inaugural address is to increase educational attainment in order to produce a more educated workforce that is prepared to meet the needs of the 21st century. In pursuit of this goal, the "Oklahoma Works" initiative was created, which seeks to increase the wealth of all Oklahomans by aligning and elevating the state's education and workforce training systems with the needs of the state economy. Oklahoma's health workforce development strategy for the State Health System Innovation Plan (SHSIP) is aligned and integrated with the "Oklahoma Works" initiative.

The Governor's Council on Workforce and Economic Development is the primary governance body charged with the implementation of Oklahoma Works. Strong gubernatorial leadership in workforce development resulted in the 2015 passage of Senate Bill 612 by the Oklahoma State Legislature, which created a Health Workforce Subcommittee of the Governor's Council for Workforce and Economic Development. The Council on Workforce and Economic Development is one of the main state bodies charged with implementing Oklahoma Works. The establishment of the Subcommittee was the culmination of efforts of many stakeholders: the governor's administration, a Core Leadership team appointed by the governor to participate in the National Governors Association (NGA) Health Workforce Policy Academy, the Oklahoma State Department of Health, the Oklahoma Health Care Authority, the Oklahoma Health Improvement Plan Coalition (OHIP), and members of the OHIP/Oklahoma State Innovation Model (SIM) Health Workforce Workgroup. Once seated, the Health Workforce Subcommittee will serve as the guiding entity for Oklahoma's health workforce efforts.

Throughout 2014 and 2015, key stakeholders worked to move Oklahoma forward to achieve shared goals of a well-trained, flexible, and evenly distributed health workforce. Technical assistance and support from the OHIP Coalition, the NGA Policy Academy, and the SIM design grant enabled collaborative opportunities in which consensus was achieved around a statewide mission and vision for Oklahoma's health workforce. These efforts culminated in the development of a Health Workforce Action Plan and the SIM Workforce Strategy, both designed to support a transformed system of care. The promotion by the governor of this Oklahoma Health Workforce Action Plan will launch the initiation and implementation of the four core areas of the health workforce strategy:

1. Health Workforce Data Collection and Analysis;
2. Statewide Coordination of Workforce Development Efforts;
3. Health Workforce Redesign; and
4. Pipeline, Recruitment, and Retention.

The following table details a summary of Oklahoma health workforce activities and outcomes.

Figure I.1: Oklahoma Health Workforce Activities and Outcomes

Participants	Outputs	Outcomes		
	Activities	Short-term	Medium-term	Long-term
OHIP Workforce Workgroup **Licensure Boards** **Professional Societies** **Oklahoma Office of Rural Health** **Oklahoma Regents For Higher Education** **Oklahoma Careertech** **Oklahoma State Department of Health** **Governor's Office of Workforce Development** **Tribal Health/IHS** **Telehealth Alliance of Oklahoma** **Oklahoma Hospital Association** **Oklahoma Health Care Authority**	Establish Minimum Data Sets (MDS) That Align with HRSA Recommendations Centralize Healthcare Workforce Data Management and Analysis Evaluate Health Workforce Composition Vis-À-Vis Community/ Health Needs Assessments	Licensure Renewal Incorporates MDS Elements Ensure CHNAS Assessment Responses Reflect Demographic Profile of Community	OHIP Workforce Workgroup Publishes MDS Enhanced Data Standardized Key Workforce Questions Across Survey Instruments	Improve Healthcare Workforce Data in Oklahoma Health Workforce Is Aligned with Community Needs
	Evaluate Current Primary Care Provider Training Initiatives in The State Evaluate Primary Care Provider Recruitment and Retention Initiatives Evaluate The Roles of Physicians Assistants and Nurse Practitioners in The Delivery of Primary Care	Better Understanding of Program/Training Effectiveness	Adjustments to Training Initiatives	Increase Primary Care Workforce
	Evaluate The Effects of State Sponsored Financial Incentive Programs on The Recruitment and Retention of Primary Care Providers to Rural and Underserved Areas Increase Primary Care Graduate Medical Education Positions in Rural and Underserved Areas	More Primary Care Providers Are Recruited to Rural & Underserved Practice Locations More Physicians Complete GME in Rural and Underserved Areas	More Providers Practice in Rural & Underserved Areas	Reduce Maldistribution of Primary Care Workforce
	Assess Alternative Models of Care Delivery That Incorporate Mental Health Professionals and Oral Health Professionals into Value-Based Reimbursement	Better Comprehensive Health Care For Vulnerable Populations	Improved Health Outcomes and Cost Savings	Integrate Mental Health and Oral Health into Primary Care
	Develop Registry of Providers Using Telehealth Monitor Proposed and Newly Enacted Telehealth Regulations For Effects on Access to Care Through Clinician Participation Evaluate The Demand For Distributed Clinical Consultations Among Rural-Based Providers	Telehealth Alliance of Oklahoma & Licensure Boards to Identify Relevant Survey Question	Surveys Questions Are Incorporated into Licensure Renewal Process	Comprehensive List of Providers Using Telehealth Regulation Updates Are Disseminated to Providers Communicate Rural Provider Clinical Consultation Needs to Academic Health Centers

Stakeholders	Activities		Outputs	Short-term Outcomes	Long-term Outcomes
Oklahoma Physician Manpower Training Commission **MyHealth Access Network** **Coordinated Care Oklahoma** **Insurers** **Legislature**			Survey Instrument Development	Compile and Prioritize Clinical Consultation Needs	
	Expand Health Information Technology Training	➤	Number of HIT Training Programs Increase	Better Integration of HIT Workforce into Care Delivery Teams	Develop Adequate Health Information Technology Workforce
	Assess Alternative Models For Changing Scope of Practice Laws and Regulations Create Standardized Credentials For Community Health Workers Develop Community Paramedicine Pilot Projects in Rural Communities Assess How The Emerging Healthcare Workforce Is Currently Utilized in Care Delivery	➤	Improved Process For The Evaluation of SOP Changes Develop Competency-Based CHW Training Identify Pilot Project Communities Enhanced Workforce Data Provides Information on Emerging Workforce Roles	More Effective Use of Primary Care Workforce (Practicing At Top of Their License) Increased Number of Certified CHWs Train Community Paramedics for Program Implementation Align Workforce Development to Accommodate Emerging Workforce Roles	Optimize Workforce For Value-Based Healthcare Delivery

HEALTH WORKFORCE DATA COLLECTION AND ANALYSIS

During the Oklahoma SIM design planning process, the OSDH Office of Primary Care and Rural Health Development (OPC) and OHIP stakeholders worked in tandem to develop a comprehensive plan to improve the quality and availability of comprehensive health workforce data. As an initial step to establish the OPC as a centralized state health workforce data center, the OPC initiated outreach efforts with a broad range of stakeholders to collect and catalog reliable workforce data that will be used to inform health workforce policy and program decisions.

Additional revisions to the data collection and analysis process initiated in 2015 will significantly improve the quality and availability of state health workforce data. The OPC has secured agreements from the medical, nursing, behavioral health, and social work, licensing boards to share data on a consistent basis and to collaborate on the adoption of minimum data sets for the purpose of monitoring and research. In May 2015, the OPC produced its first statewide health workforce data book, and is in the process of pioneering a statewide report on Graduate Medical Education. In addition, in 2015 the OPC revised its health professional shortage designation process and updated the survey design and procedure to include Advanced Practice Registered Nurses and Physician Assistants. In January 2016, the OPC will work with OHIP partners to revise the state's healthcare service areas to reflect workforce investment areas and healthcare markets. This new process will provide the information necessary to best identify health professional shortage areas and in turn, develop targeted strategies that will meet the needs of Oklahoma's unique and diverse regions.

The Health Workforce Action Plan includes strategies to further enhance health workforce data analysis:

- The Oklahoma Office of Workforce Development is leading the development and implementation of an interoperable health workforce data system that will integrate data from the Oklahoma Department of Commerce, Oklahoma Employment Security Commission, and the Oklahoma State Regents for Higher Education. This data will be used to inform health workforce supply planning efforts.

- The OHIP Workforce Workgroup, in conjunction with the Oklahoma Office of Workforce Development, will produce a forecast of the state's 25 critical health occupations that reflect integration of the current workforce along with economic indicators and value statements based on the predicted demands of a transformed health system. New and emerging health professions required for care coordination, health informatics, and the integration of a focus on social determinant strategies into healthcare will be included. The Workforce Workgroup will use this forecast to identify existing gaps and recommend evidence-based strategies to ensure an adequate supply of traditional and emerging health professionals.

- The OSDH Office of the Tribal Liaison has initiated a collaborative effort for a Data Community of Practice that will ultimately enable the sharing of both health workforce and population health data of Oklahoma's Tribal health systems. This initiative aligns with the Health Workforce Action Plan and will allow the state to fully integrate health workforce data from private and public entities and Tribal nations.

STATEWIDE COORDINATION OF WORKFORCE DEVELOPMENT EFFORTS

Health workforce data alone will not be sufficient to inform statewide health workforce policy and planning. The engagement and input of state leaders from public, private, and academic sectors is needed to successfully pursue a statewide vision of health workforce. The OPC and the Workforce Workgroup will provide the newly-created Health Workforce Subcommittee with high quality health workforce research and recommendations. Specific coordination strategies include:

- The Health Workforce Subcommittee will ensure alignment of health workforce efforts with state and regional economic and workforce development initiatives. This alignment will include consideration of strategies to leverage and integrate health workforce initiatives into regional Workforce Investment Board priorities.
- The Workforce Workgroup will develop a comprehensive set of health workforce research questions that will be used to develop a policy agenda for the Health Workforce Subcommittee. The OPC and the Workforce Workgroup will identify research partners and establish memorandums of agreement for data sharing, collaborative research, and accountabilities of information dissemination.
- Housed in the OSDH Center for Health Innovation and Effectiveness, the OPC is well-suited to serve as a neutral coordinating entity. OSDH leadership has committed resources that augments federal health workforce funding and supports robust research capacity. Therefore, the Workforce Workgroup will submit a recommendation to the Health Workforce Subcommittee to officially designate the OPC as the state health workforce data resource center.

HEALTH WORKFORCE REDESIGN

The Workforce Workgroup and the NGA Health Workforce Policy Academy created an avenue for genuine interdisciplinary dialogue on the health workforce needs of the state. Over the past 18 months, a broad range of health professional disciplines, program administrators, health informatics specialists, and other representatives of the health workforce offered their expertise and affirmed their commitment to refining their ability to work in teams focused on coordinated, patient-centered care. Stakeholders have evaluated and considered workforce implications of state efforts, to include, but not limited to, the Medicaid Primary Care Medical Home Model, Health Access Networks, the Comprehensive Primary Care Initiative, Community Health Improvement Organizations, and the Centers for Disease Control and Prevention's Million Hearts Initiative and the critical health occupations list developed by the Oklahoma Office of Workforce in 2015 (Appendix J).

In September 2015, over 40 stakeholders participated in a strategic planning session to develop recommendations for the transition to the practice of interdisciplinary care. Consensus was achieved as to the imperative of increasing care coordination efforts to manage healthcare costs and better respond to the social and environmental needs of patients but not to the optimal composition of healthcare teams. The dialogue highlighted the need for increased provider education and the development of robust technical assistance and support for healthcare organizations and providers as the state transitions to a value-based care delivery system.

Based on dialogue throughout this process, it is clear that “workforce redesign” is already occurring, particularly in Oklahoma’s rural areas. It is also apparent, however, that policy and programs to address health workforce redesign vary widely. Aligning and prioritizing state health workforce initiatives with OHIP health system transformation will support the transition of the existing healthcare workforce to one that functions in a value-based delivery system.

Similar to other states, in Oklahoma, attempts to address the issue of scope of practice remains a challenge. Recommended work redesign strategies reflect not only pathways for developing new health professionals but also incorporate scope of practice concerns and the need for increased support throughout the health system transformation process:

- Oklahoma will develop strategies for training and development for emerging health professions, including care coordinators, health informatics specialists, and practice facilitators. The Workforce Workgroup will define positions and propose standard descriptions for new health professionals. This effort will focus first on Community Health Workers, Care Coordinators, and Health Informatics Specialists. Working with the health profession associations, provider organizations, Oklahoma Foundation for Medical Quality, Oklahoma’s State Regents for Higher Education, and Career and Technical Training Centers, the Workforce Workgroup will recommend the adoption of certification standards for identified “emerging professions” as well as the establishment of training programs and career pathways for these health professions. These efforts will contribute to the goal of an optimized workforce for value-based healthcare delivery.

- In collaboration with Healthy Hearts for Oklahoma (H2O), the Workforce Workgroup will develop a standard definition of practice facilitators and will work with stakeholders to identify strategies to support and promote practice facilitation for health transformation.

- A subcommittee of the Workforce Workgroup will recommend a process to the Health Workforce Workgroup for thoughtful evaluation of scope of practice issues. The subcommittee will conduct research and develop a recommendation for a collaborative, informed process in which to address scope of practice and competencies for traditional, new, and emerging health professions. Priority will be placed on assessing barriers to health workforce flexibility and optimization, including those that prevent healthcare providers from fully utilizing their training and competencies. Suggested models under consideration include the establishment of an interdisciplinary board or ad hoc committee tasked with the development of a holistic, balanced approach to scope of practice considerations and decision-making. Research and work in this area will continue throughout 2016.

- The Workforce Workgroup will collaborate on current efforts to better incorporate behavioral health and substance use disorder prevention and treatment into primary care settings. Currently, 69 out of 77 counties are federally designated as Mental Health Professional Shortage Areas. The Workforce Workgroup will develop strategies that ensure an adequate supply of behavioral health professionals, such as pipeline, recruitment, and retention strategies as well as continuing education and support for the integration of existing behavioral health providers. Additional strategies will address policy and reimbursement barriers to integration.

- The Workforce Workgroup will collaborate with the Telehealth Alliance of Oklahoma to develop an evidenced-based plan for optimizing telehealth capabilities.
    - The plan will include the utilization of technology to increase statewide opportunities for training and professional development of health professionals on health transformation innovation, including practicing team-based and goal-directed care. The plan will seek to establish virtual communities of practice aimed at increasing support and the financial

viability of rural practice. The telehealth strategy will also incorporate "provider to provider" strategies that will connect rural primary care providers with academic medical centers and specialists to provide consult services through video and teleconferencing. Additional components of the plan will include using telehealth to deliver distance learning, Grand Rounds, and other educational content to clinical and residency training sites.

- The Workforce Workgroup will evaluate and recommend additional telehealth strategies that may include remote patient monitoring, direct to consumer telehealth services, emergency room triage, and telepsychiatry.

PIPELINE, RECRUITMENT, AND RETENTION

The United Health Foundation currently ranks Oklahoma's health as in 45th worst in the nation, citing a limited availability of primary care physicians as a contributing factor. The Commonwealth Fund ranks Oklahoma's health system even lower with an overall rank of 50 out of 51 and a rank of 48 out of 51 for access to health care. .. A nationwide shortage of primary care providers is expected to exacerbate the situation. As national health systems trend toward an increased focus on primary and preventive health services, Oklahoma will need to identify and overcome barriers to an effective health professional pipeline that aligns with a redesigned healthcare system, that pursues evidence-based strategies for recruitment and retention of healthcare professionals, and that develops new programs and secures adequate funding for health professional education and training. Ensuring an adequate supply of healthcare providers in Oklahoma will require a multi-pronged strategy that includes a high functioning, coordinated "K-20" pipeline, rural and community-based residency and clinical education opportunities, and coordinated recruitment and retention programs that not only include scholarship and loan repayment but also local economic and community development to ensure high quality, financially viable communities of practice..

In 2012, the Oklahoma State Legislature authorized the Oklahoma Hospital Residency Training Program (OHRTP). Initial plans were to fund the Oklahoma State University Foundation to establish rural residency programs in Oklahoma's medium-sized hospitals that serve rural areas. Ultimately, no additional state funds were appropriated. The Oklahoma State University Center for Health Sciences, however, pursued private funding for start-up activities with hospitals and developed a plan to train rural providers in Oklahoma. Oklahoma's challenge will be to facilitate cooperation between academic medical centers to ensure a sufficient supply of providers that can be trained and retained.

The Oklahoma SIM strategies for pipeline, recruitment, and retention reflect the consensus on the critical need for a coordinated state approach to health workforce training, recruitment, and retention that increases the supply of healthcare providers and assures the state achieves an even distribution of well-trained, flexible health professionals:

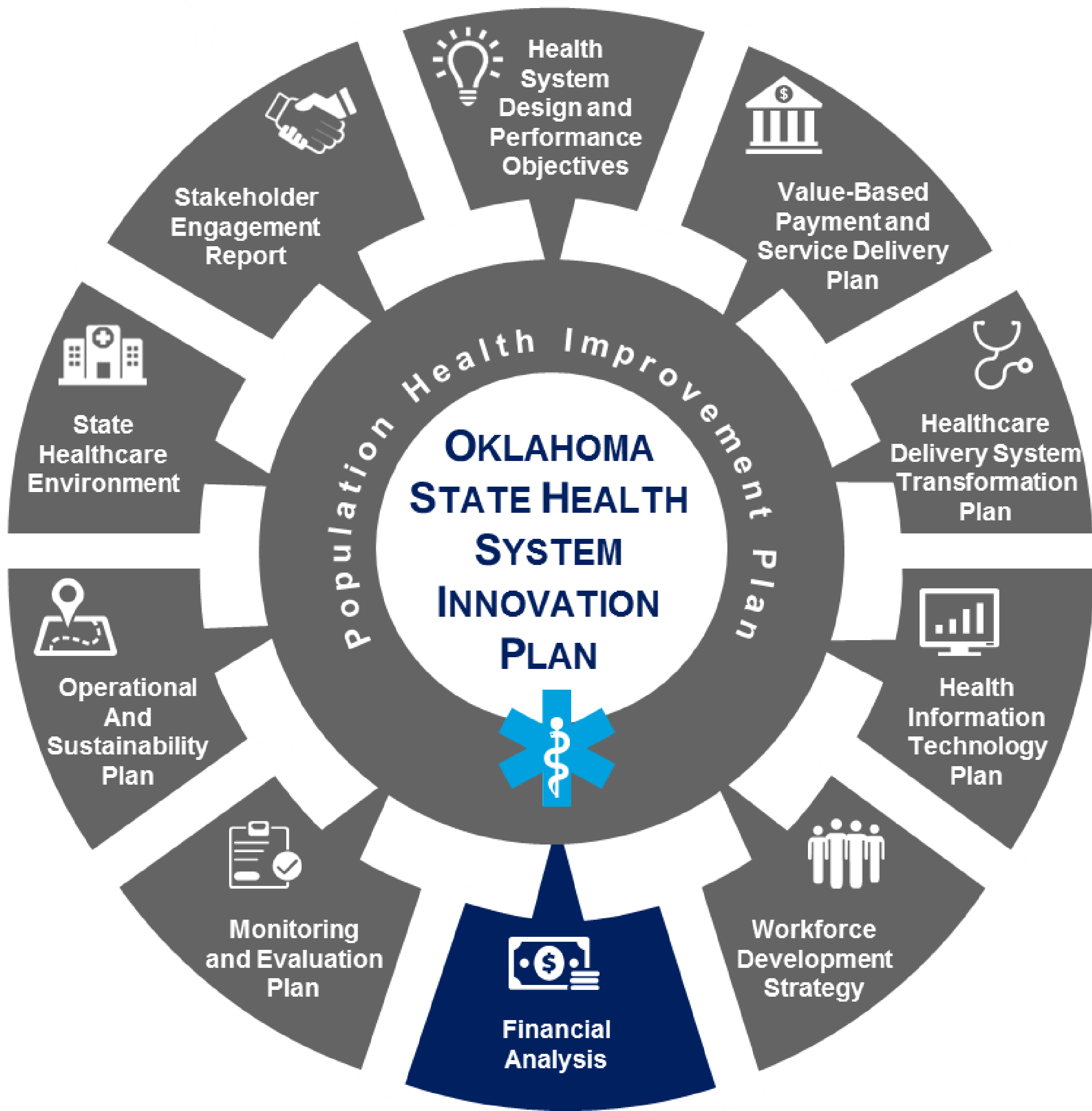
- Oklahoma has established a statewide Graduate Medical Education (GME) Committee to provide the Health Workforce Subcommittee of the Governor's Council on Workforce and Economic Development with recommendations for strategies to address the supply and distribution of well-trained physicians and ancillary healthcare providers. Initial meetings of the GME Committee resulted in the agreement to develop a state GME plan to address physician shortages, which includes the development of a statewide GME report, the sustainability of current state GME initiatives, and the identification of areas for statewide collaboration between academic medical centers, the Physician Manpower Training Commission, the State Chamber of Commerce, and

other stakeholders. The plan will aim to leverage the OHRTP to increase the number of physicians trained and retained in Oklahoma by expanding the number of GME slots, increasing the number of teaching health center GME slots, and providing additional community-based training opportunities. The plan will be submitted to the Health Workforce Subcommittee for consideration.

- The GME Committee will explore ways in which GME can be supported through innovative strategies to maximize Medicaid matching funds. It will also consider state plan amendments, demonstration project waivers, or other methods to increase state-supported GME.
- Oklahoma will examine existing state statutes that provide state resources for loan repayment and scholarship programs and will carefully construct business plans to leverage federal or private funds. Initial plans include conducting analysis and feasibility studies of several Health Resources and Services Administration programs, to include the National Health Service Corps State Loan Repayment.

CONCLUSION

Through steadfast state leadership, many health workforce initiatives have begun work to assess and address current and emerging health workforce issues. The Oklahoma SIM process aims to integrate and leverage existing efforts to create an agile, well-distributed workforce capable of meeting the demands of a value-based healthcare environment. Oklahoma’s stakeholders in health workforce will continue to collaborate to develop and provide data-driven recommendations to the Health Workforce Workgroup and the Health Workforce Subcommittee of the Governor’s Council on Workforce and Economic Development.


Health System Design and Performance Objectives
Value-Based Payment and Service Delivery Plan
Healthcare Delivery System Transformation Plan
Health Information Technology Plan
Workforce Development Strategy
Financial Analysis
Monitoring and Evaluation Plan
Operational And Sustainability Plan
State Healthcare Environment
Stakeholder Engagement Report
Population Health Improvement Plan
OKLAHOMA STATE HEALTH SYSTEM INNOVATION PLAN

J. Financial Analysis

INTRODUCTION/PURPOSE

The Oklahoma State Department of Health is proposing to engage payers, providers, purchasers, and communities to implement Oklahoma's OSIM plan. The OSIM plan emphasizes delivery system transformation, payments based on value rather than volume, effective use of policy levers to support change, and investments to improve population health. The proposed approach is based upon three main components that were chosen following discussion with stakeholders which span the state's healthcare system:

- Regional care organizations (RCOs) for the Medicaid and EGID programs
- Multi-payer quality metrics
- Multi-payer episodes of care

OSDH is proposing to roll these changes out on a statewide basis beginning calendar year 2018, with RCO implementation in calendar year 2019. The RCO model will be a fully capitated arrangement. The focus of the RCO model is local (regional) organizations which have one budget that involves all mental and physical health services for its enrolled members. The RCOs will be accountable for health outcomes of the population they serve and are governed by a partnership among health care providers, community members, and stakeholders in the health systems that have financial responsibility and risk. The goals of the RCO care delivery approach align with those of OSIM's triple aim initiative in improving health, providing better care, and reducing health expenditures for Oklahomans with the intention of being able to better coordinate care for the enrolled members.

The forecast provides an estimate of the potential savings achievable through utilization and provider reimbursement changes produced by the proposed innovations across the State of Oklahoma's healthcare system. The purpose of our analysis was to analyze the different programs and populations that are being targeted by OSIM, to develop projections of future expenditures under a baseline scenario, to project expenditures with the OSIM plan in place, and to calculate the potential savings between the baseline and OSIM plan scenarios. We reviewed claims and enrollment data provided by OSDH and its vendors along with other publicly reported information for the populations intended to be impacted by OSIM. A significant portion of our analysis was focused on the Oklahoma Medicaid and Oklahoma Employees Group Insurance Division (EGID) populations based on the assumption that these populations will be the most impacted by the OSIM plan. A more detailed account of the financial analysis can be found in Appendix I.

OVERVIEW OF THE TARGET POPULATION

The innovation plan proposed in the State of Oklahoma will affect beneficiaries of multiple participating payers. This analysis focuses on Medicaid and EGID populations, but recognizes that multi-payer initiatives will impact commercial and Medicare Advantage payers as well. The state anticipates that full implementation will begin in calendar year 2019 with calendar year 2018 serving as the base year for this innovation plan. The financial analysis assumes that not all individuals will be able to be reached over the course of the projection period, but does provide sufficient time to account for savings to be accrued under this plan.

Our analysis attempts to capture savings reasonably achievable under the proposed OSIM plan, but projected savings from the analysis are heavily dependent upon the impact the RCO model will be able to make on the Medicaid and EGID populations in the state of Oklahoma. The statewide populations of the Medicaid and EGID programs will be required to enroll with a RCO. The Medicaid population was divided into a number of population groupings according to aid categories as defined by the Oklahoma Health Care Authority (OHCA). The EGID population was split based on the benefit design plan types offered to EGID covered members in the historical data. The mandated enrollment does include specific exceptions for Tribal nations and other noted exclusions. Although implementation of multi-payer initiatives will occur at an earlier date, the initial time period for the RCO model will begin covered services in calendar year (CY) 2019.

The current Medicaid program in Oklahoma is operated on a fee-for-service basis with a primary care case management fee paid to contracted providers. The EGID program will also undergo a significant change in its care delivery system under the RCO model. Although a smaller population, members enrolled in the HealthChoice plans offered through EGID will create a sizable group of individuals whose current delivery system is a self-funded fee-for-service arrangement. Throughout the projection period, the delivery systems will be attempting to improve care through a care coordination approach to produce a reduction in service utilization by improving health in these populations.

METHODOLOGY FOR DEVELOPING THE BASE PERIOD COST AND UTILIZATION

Base period costs and utilization were developed separately for the Medicaid and EGID populations. The target populations previously noted were identified from the base claims and enrollment information that was provided by the respective vendors. The following describes the different sets of data:

Medicaid

Medicaid fee-for-service claims and enrollment information was provided for service dates from January 1, 2012 through September 30, 2015 and paid through September 30, 2015. Base experience data was limited to State Fiscal Year (SFY) 2014 (July 1, 2013 to June 30, 2014) for purposes of the financial analysis. The information included costs related to all Medicaid eligible lives during the base period. Based on discussions with OHCA and OSDH, we have excluded data specific to those who were only eligible for the MHSAS aid category in a specific month. All other members and associated claims were included in our analysis. No additional shifts in the population were made outside of application of enrollment trends.

EGID

The financial analysis for the Oklahoma EGID population is intended to affect beneficiaries across all plan types. EGID provided us with detail claim and enrollment information for a historical time period with service dates from January 1, 2012 through December 31, 2014 and paid through December 31, 2015. This information was provided by EGID through OSDH specifically for purposes of use in this analysis. The information included costs related to all EGID beneficiaries with the exception of the Medicare supplement members. We are utilizing CY 2014 information for the financial analysis based on the completeness of this data and it being the most recently available information.

Baseline projections were developed utilizing actuarial cost models for the Medicaid population for the indicated time periods with a similar approach proposed for the EGID program. These were utilized to help identify the opportunity for savings with the implementation of the Oklahoma Model. The table below provides a summary of the Projection Year 0 and Projection Year 6 baseline costs for each of the noted population groupings across the Medicaid population. Information related to the EGID program will be incorporated upon analysis completion

Figure J.1: State of Oklahoma, OSIM Financial Analysis, Baseline Projected Spend (in million)

Projection Year 0 (CY 2018) to Projection Year 6 (CY 2024)					
Medicaid Population	**Projection Year 0**	**Projection Year 6**	**EGID Plan Type**	**Projection Year 0**	**Projection Year 6**
Insure Oklahoma	$55	$75	**Basic**	$60	$84
Aged	487	529	**High**	5	6
Blind/Disabled	1,521	1,849	**HDHP**	835	1,157
TANF	1,518	1,943	**Total Spend**	**$900**	**$1,247**
Pregnant Women	151	179			
All Other	34	44			
Total Spend	**$ 3,766**	**$ 4,619**			

All actuarial cost models were summarized utilizing base year experience with additional adjustments applied to project to Projection Year 0 and forward of the projection period. Actuarial cost models were summarized on a paid dollar and per member per month (PMPM) basis. Individuals were identified in the different population categories for each month of the base experience period. Claims associated with an individual for that given month were also included. To the extent a beneficiary shifted between groups (within Medicaid or EGID), their experience may appear in more than one population grouping, but the data was not duplicated.

Baseline Enrollment Trend

Enrollment was estimated for each population in Projection Year 0 through Projection Year 6 using a constant percent enrollment trend. Prospective trend rates were estimated based on a review of historical enrollment trends in the Oklahoma healthcare system for these populations. The enrollment trend was maintained across each year of the projection in the baseline scenario. Additionally, we have not projected any large changes (increases or decreases) in enrollment from the base period to the projection period.

Baseline Claims Trend

Certain PMPM, utilization per 1000, and cost per service trends were estimated to project the cost profile of each population/group through Projection Year 6. The following table illustrates the range of PMPM trends used to estimate Projection Year 0 through Projection Year 6 claim costs for each of the categories of service summarized across Medicaid and EGID programs. These trend estimates were established based on a review of historical Oklahoma experience and applicable programs in other states.

Figure J.2: State of Oklahoma, OSIM Financial Analysis, Composite Annual PMPM Trends

Category of Service	Medicaid	EGID
Inpatient Hospital & Nursing Facility	0.5%-1.5%	5.0%
Outpatient Hospital	2.5%-3.0%	7.5%
Diagnostic Imaging/X-Ray	2.5%-3.5%	5.0%
Laboratory Services	2.5%-3.5%	5.0%
DME	2.5%-3.5%	5.0%
Professional Primary Care	3.0%-4.0%	4.5%
Professional Other	3.0%-4.0%	4.5%
Home Health	0.0%-0.5%	N/A
Prescription Drugs	7.0%-9.5%	12.0%
Other	2.0%	6.5%

Additional Considerations

Both the Medicaid and EGID populations required additional considerations for provider reimbursement reductions and other proposed changes to the programs. These adjustments are anticipated to be effective prior to OSIM implementation and would impact the baseline projections. All reasonable changes are to be accounted for in the baseline projections in order to reflect savings applicable to the state innovation plan based on the description of estimated savings under state innovation models. In accordance with this description, we have applied adjustments for historical and future projected provider reimbursement reductions in both programs, the planned transition of Oklahoma's Aged, Blind, and Disabled Medicaid populations to managed care, and acknowledgement of the new HealthChoice plan offering in the EGID program.

Medicaid

Effective July 1, 2014 and January 1, 2016 reimbursement reductions were taken based on budgetary decisions in the state with an additional provider reimbursement reduction targeted for the end of SFY 2016. This future change was developed consistent with prior rate reductions following discussions with OHCA. We applied these to the whole base experience period as all of these reductions are prior to implementation of the OSIM plan, but after the end of the base experience period (SFY 2014).

An additional adjustment was applied for Oklahoma House Bill 1566 which required OHCA to issue a request for proposal (RFP) for a care coordination model on the Aged, Blind, and Disabled (ABD) populations within the Oklahoma Medicaid program[2]. The result of stakeholder discussion was to move forward with transitioning the ABD population into managed care. The current projected timeline for this shift to managed care is CY 2018, which would occur prior to OSIM implementation. The goals listed for this legislation align with those of the OSIM plan and many of the aspects considered for a fully capitated statewide model of care is consistent with the methodology to be employed under the OSIM plan. Projected impact of this legislation was based on similar savings assumptions applied in the OSIM plan scenario for the remaining Medicaid populations. The savings produced under this legislation are not attributable to OSIM for purposes of the financial analysis based on expected timing of the transition.

The information summarized for the base period costs did not include information related to a number of payments that are paid for outside of the normal claim payment database. These would include, but are not limited to hospital supplemental payments, medical education payments, Medicare Part A and B premiums, and DSH payments.

EGID

Effective June 1, 2014 revisions were made to provider reimbursement for both inpatient and outpatient services in the EGID program. The noted reimbursement adjustments were not fully phased-in until October 1, 2015. Therefore, additional adjustment was necessary for the base data to account for these facility reimbursement changes. The facility reimbursement changes were anticipated to have a gradual impact on the baseline costs and be fully reflected by the end of Projection Year 0. An additional provider reimbursement change was noted for the incorporation of bundled payment arrangements for a significant portion of surgical and radiological services. The bundled arrangements are intended to result in improved quality by including multiple providers involved in a patient's treatment for the noted events. The impact of the reimbursement changes were applied to all populations in our analysis and specific to services that are targeted by the reimbursement arrangement changes.

An additional HealthChoice offering, FOCUS, was made available in CY 2016. As this was not part of the historical experience, we have not included projected enrollment for this plan in either the baseline or SIM projections. The addition of this benefit design is not expected to increase overall EGID enrollment, but merely shift beneficiaries from the previously offered plan designs. A care coordination program is available to FOCUS participants with one or more chronic conditions or diseases.[3] For purposes of our analysis we have acknowledged that this new benefit design does exist and may have an impact on healthcare expenditures in the EGID program. To the extent that savings are achieved through this additional program, these would occur outside of SIM implementation and would serve to lower both the baseline and SIM projection estimates.

---

[2] Information was retrieved from https://okhca.org/about.aspx?id=17366
[3] https://www.ok.gov/sib/documents/FOCUS.pdf

PROJECTED ASSUMPTIONS FOR THE DELIVERY SYSTEM AND PAYMENT REFORMS

The table below provides information related to the projected expenditures under the Oklahoma Model after applying savings assumptions to the estimates indicated in the table. The estimated changes are intended to reflect utilization and service cost reductions, but netting against the projected administrative expenses of the RCOs.

Figure J.3: State of Oklahoma, OSIM Financial Analysis, OSIM Project Spend (in million)

Projection Year 0 (CY 2018) to Projection Year 6 (CY 2024)					
Medicaid Population	**Projection Year 0**	**Projection Year 6**	**EGID Plan Type**	**Projection Year 0**	**Projection Year 6**
Insure Oklahoma	$55	$72	**Basic**	$60	$81
Aged	487	526	**High**	5	6
Blind/Disabled	1,521	1,841	**HDHP**	835	1,122
TANF	1,518	1,876	**USA**	$900	$1,209
Pregnant Women	151	175	**Total Spend**	$0	$150
All Other	34	43			
Total Spend	**$ 3,766**	**$ 4,533**			
Total Savings	**$0**	**$350**			

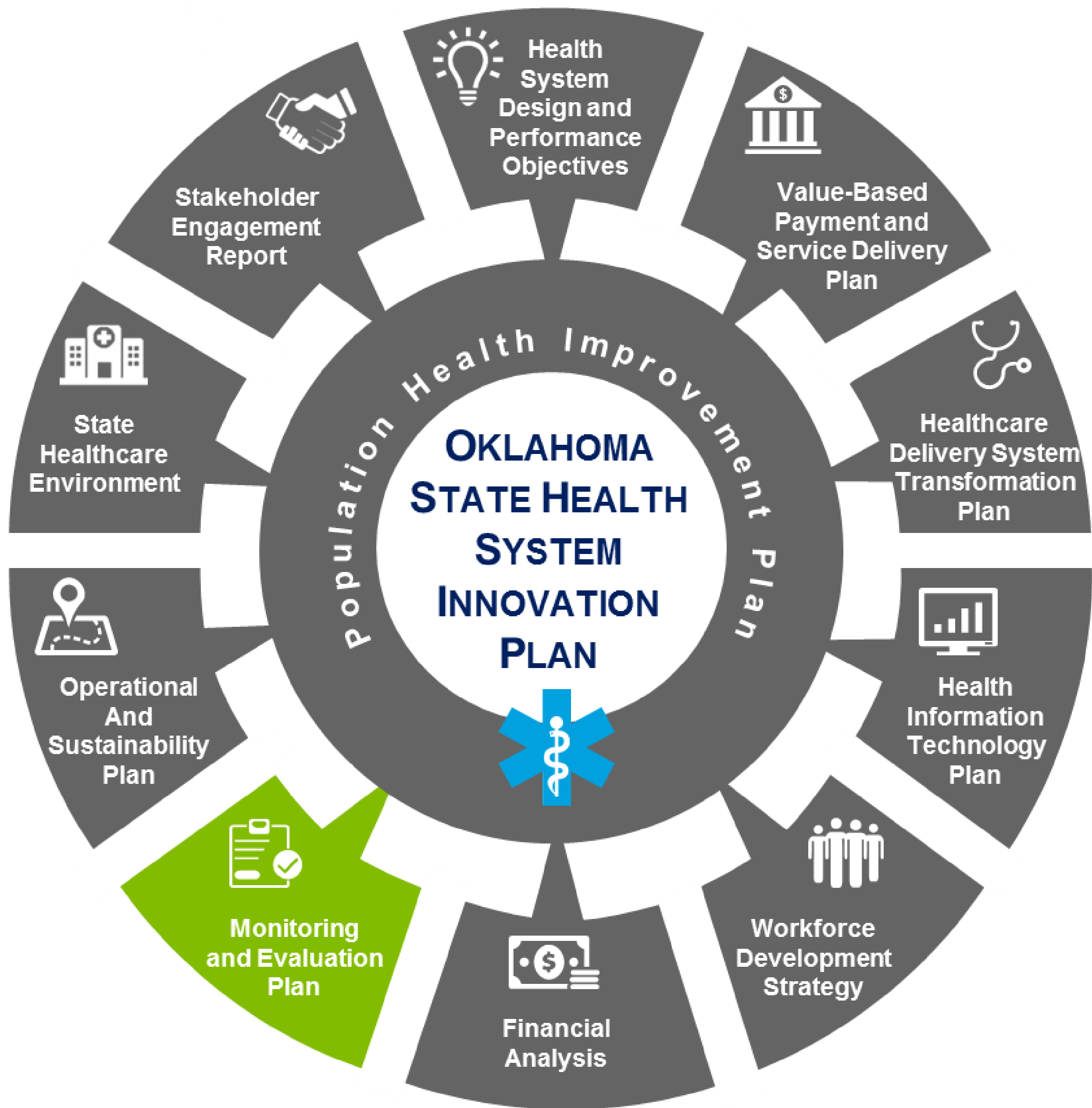
The RCOs are anticipated to improve the care management of both the Medicaid and EGID populations. The projected spend illustrated in the table is based on certain utilization reductions and population health changes that are anticipated to be associated with establishment of the RCOs and the multi-payer initiatives within the Medicaid and EGID programs. These reductions are supported through review of results from other Oklahoma program initiatives, similar delivery model changes across other state states and additional literature research. The potential savings identified under these projections were deemed reasonable and achievable based upon the reviewed experience. The results of this analysis are subject to change to the extent that OSIM plan changes occur, or other program changes are modified prior to OSIM implementation. The degree of care management was assumed to increase from Projection Year 1 to Projection Year 6, resulting in incremental savings over the projection period. The reductions in utilization and cost per service are driven by care coordination and care management. These adjustments do consider both utilization and cost per service and have been established to net the impact of administrative expenses to the RCOs.

Both the Medicaid and EGID programs operating in the State of Oklahoma currently provide services to numerous individuals on a statewide basis. The state recognizes that certain savings may be produced by other programs that are either currently operating or may occur during the evaluation period. The savings estimates analyzed for purposes of this financial analysis are to be considered in excess of the savings that may be observed through any current program changes and initiatives occurring in the state. In particular, the savings estimates illustrated in this memorandum do not attempt to take credit for savings that may be produced by the Oklahoma House bill 1566.

RETURN ON INVESTMENT ANALYSIS

The values noted in prior figures document the estimated savings under the OSIM plan for the Medicaid program and EGID over the projection period on a gross basis in relation to claims and projected administrative expenses to be incurred by the RCOs. The savings do not account for potential investments from Oklahoma to establish the program, develop infrastructure, and evaluate the program over time. It is important to note that these savings do not consider the savings estimated to be realized under the managed care transition for the ABD population proposed by Oklahoma House Bill 1566. Savings for the ABD beneficiaries would significantly increase the overall projected savings if they were to be attributed to the OSIM plan based on the high costs associated with the ABD population.

The forecast is being shared with CMS to facilitate discussion for involvement and investment with Oklahoma on the OSIM plan. Investments to operationalize the SIM model proposal will be necessary for project management and evaluation of the OSIM plan as well as helping to develop infrastructure and health information technology capabilities to handle the different aspects of the proposed care delivery model. These costs would be removed from the total investment in the development of the net savings, as they are considered overhead associated with the model application and not essential operational costs to the Medicaid and EGID programs outside of the OSIM plan.


Health System Design and Performance Objectives
Value-Based Payment and Service Delivery Plan
Healthcare Delivery System Transformation Plan
Health Information Technology Plan
Workforce Development Strategy
Financial Analysis
Monitoring and Evaluation Plan
Operational And Sustainability Plan
State Healthcare Environment
Stakeholder Engagement Report
Population Health Improvement Plan
OKLAHOMA STATE HEALTH SYSTEM INNOVATION PLAN

K. Monitoring and Evaluation Plan

INTRODUCTION

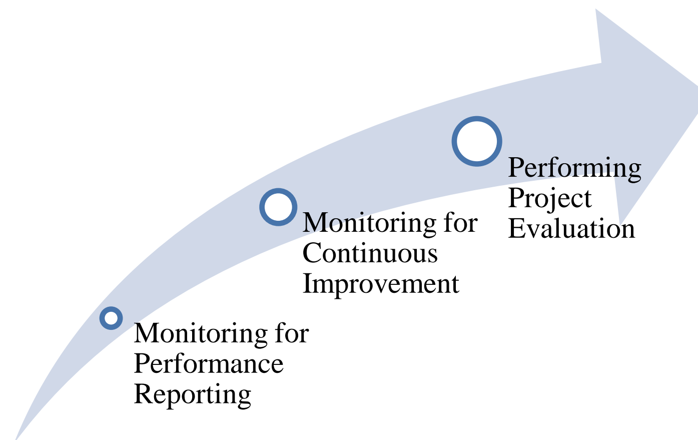
The adoption of multi-payer quality metrics and episodes of care (EOCs) and the move to Regional Care Organizations (RCOs) represent a transformational shift of Oklahoma's healthcare delivery system. This will impact almost one million Oklahomans covered by Medicaid, administered by the Oklahoma Health Care Authority (OHCA), and 176,709 Oklahomans covered by the public employees' health plan, administered by the Employees Group Insurance Division (EGID). This transformation includes a sweeping redirection of the system toward prevention, the integration of disparate silos of care, the establishment of proactive and evidence-based management of chronic illness, and the increase of patient and community engagement. The multi-payer quality metrics, multi-payer EOCs, and alternative payment arrangements implemented within each RCO will support this redesign and result in improved health outcomes.

These changes are complex and require a robust plan for quality monitoring and improvement, as well as an evaluation strategy that can illuminate unique and combined effects of different innovations. Oklahoma's goals for performance reporting, continuous improvement, and evaluation support are to:

- Provide continuous feedback on performance to multiple audiences to allow timely assessment, correction, and dissemination of best practices;
- Generate data necessary for testing the RCO model and its key elements; and
- Build evidence toward a broader evaluation of the RCO model and health system transformation.

The monitoring and evaluation plan described in this section of the State Health System Innovation Plan (SHSIP) is designed to assist health system transformation under the RCO model as well as determine if these changes are successfully implemented at the end of a five year period. Moreover, the monitoring and evaluation plan is designed to incorporate insight from internal and external stakeholders on an annual basis to determine if the Oklahoma Model, the proposed model for the state, needs to be modified to achieve its objectives. The plan is broken down into three sections: monitoring for performance reporting, monitoring for continuous improvement, and performing project evaluation. The sections on monitoring for performance reporting and monitoring for continuous improvement apply to the implementation of all aspects of the Oklahoma Model (i.e., multi-payer quality metrics, multi-payer EOCs, and RCOs). The section on project evaluation focuses on the RCOs to determine, on an ongoing basis, if the Oklahoma Model is resulting in improved health outcomes, lower costs, and increased patient satisfaction; or if 'course corrections' for the model are needed at the State Governing Body and RCO governance levels.

Figure K.1: Monitoring and Evaluation Plan



MONITORING FOR PERFORMANCE REPORTING

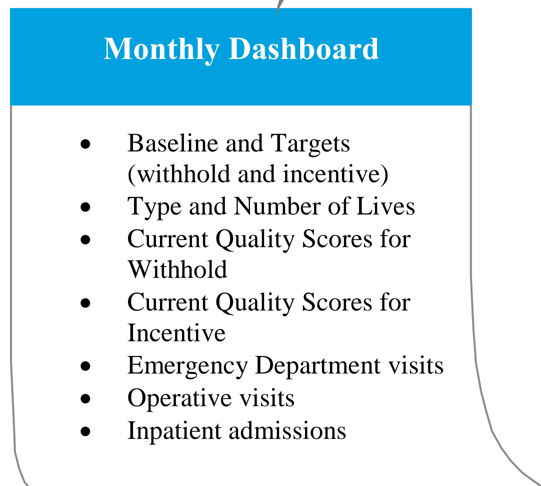
Quality data and timely performance reporting are essential to improving the delivery of services and driving change across the health system. Oklahoma will first commit to a robust measurement agenda that includes 11 multi-payer performance metrics focused on the five Oklahoma State Innovation Model (SIM) flagship issues. These 11 metrics will be collected and reported by providers to Medicaid, EGID, and other payers. The collection and reporting of these 11 metrics will establish a strong foundation for monitoring the implementation of the RCO model. The State Governing Body will oversee performance measurement for the transformation plan, including these multi-payer metrics and RCO-specific metrics that will focus on additional health issues outside of the five Oklahoma SIM flagship issues. The State Governing Body will perform rapid-cycle monitoring of RCOs as well as project evaluation.

One of the State Governing Body's first tasks will be to make recommendations for a robust RCO performance incentive system to drive the outcomes-based payments that will make up an increasing proportion of RCO revenue. Beyond incentive design, the State Governing Body will be responsible for recommending future performance metrics and establishing performance benchmarks for certified RCOs. As described in Section H, the HIT Plan, Oklahoma is creating a Value-Based Analytics (VBA) tool that will be leveraged for ongoing monitoring of trends, problem identification and characterization, testing, and evaluation. Data sources for the VBA will include:

- Claims and utilization data;
- State population health status data (e.g. BRFSS, YBRFSS, Immunizations, birth and death registry);
- Enrollee surveys and experience of care data (e.g., CAHPS, the Consumer Assessment of Healthcare Providers and Systems); and
- Key operational data such as enrollee grievance and appeal logs, external quality review organization reviews, and provider capacity reports.

To collect this data, the State Governing Body will implement direct patient health and risk assessments at enrollment and re-enrollment (redetermination) for Medicaid and public employee health plan members. The State Governing Body will also conduct qualitative data collection such as interviews, focus groups, and observation with State Governing Body or RCO staff and providers to assess how model elements are being implemented. A committee of the State Governing Body, utilizing the value-based analytics tool, will act as the monitoring and evaluation body for performance reporting on the RCOs. Using the data sources described above, they will produce a variety of specialized reports targeted to different audiences and uses, including:

Figure K.2: Monthly Dashboard



- Monthly monitoring reports and dashboards on RCO performance, trends, and emerging issues that will be shared with staff from the OHCA and EGID, practice transformation agents, and RCOs. The dashboard will include the core RCO performance metrics with comparisons to peers and benchmarks.

- Predictive modeling reports to help the RCOs and providers determine the risks that patients present for future utilization and costs as well as the gaps in care that could be filled to reduce those risks.

- An annual report to determine progress towards the goals set for the RCO model at the outset and identify any ‘mid-course’ corrections that the State Governing Body or the RCOs may need to consider. The annual report will include the following information:

    - Number of RCOs and geographic service areas;

    - Number, population type, age, gender, race, and ethnicity of patients covered by each RCO and by all RCOs combined;

    - Payment models being utilized, percentage of total payments provided through each payment model, percentage withheld, and amount paid to incentive pool;

    - Emergency department visits in the current versus previous plan year;

    - Hospital admission rates for individuals with chronic diseases (e.g., chronic obstructive pulmonary disease, asthma, and diabetes) and ambulatory care sensitive conditions;

    - Periodic reports from enrollee experience surveys or other surveys or from qualitative data collection from state and RCO staff and providers;

    - Healthcare cost trend versus national and Oklahoma historical trend rates;

    - Use of behavioral health screening tools within primary care;

    - Grievances by type, covered population, ethnicity, and age;

    - Grievance resolution;

- Measures and processes on how the RCO has addressed social determinants of attributed members;
- Access to care metrics (typically measured using data from managed care plans that list provider location, specialty areas, urgent care facilities, hospitals, clinics, and other provider organizations); and
- Progress made toward meeting Oklahoma Health Improvement Plan (OHIP) 2020 goals.

MONITORING FOR CONTINUOUS IMPROVEMENT

Oklahoma has chosen the strategy of fostering RCOs and their member providers to become "Rapid Learning Health Systems," whereby a system assesses and applies evidence in real-time and facilitates bi-directional learning between evidence and practice.[130] This model has been tested in large and complex health systems and has demonstrated success in rapid implementation of new models of care, improved population outcomes, high patient satisfaction, and enhanced morale of healthcare teams.[131]

The elements of the Rapid Learning Health System include:

- Data and information collection;
- Design of the intervention or change;
- Implementation;
- Evaluation with feedback from all parties,
- Adjustments and refinements in the intervention; and
- Dissemination of findings to reinforce the learning culture.

The Practice Transformation Center (Center) will be the main vehicle for rapid cycle learning in Oklahoma. Building on the performance reporting mechanisms described above, the Center will support continuous improvement through multiple methods including learning collaboratives, technical assistance, and coaching. Practice transformation agents from both the Center and other practice transformation entities will disseminate findings and successful innovations. The Center will involve clinicians, staff from the RCOs and health systems, and other parties to understand the new processes and new innovations that are being implemented. Healthcare practices that have been successful in one setting will be collected and shared by the Center with other RCOs, as well as with external health systems and payers. In addition, the Center will provide data and research on external innovations by gathering expertise and input from Oklahoma, the regional, and the nationally on the best evidence-based practices and innovations in quality and payment that will facilitate improvement on problems that have been identified. The State Governing Body will use expertise and research from staff to provide support for evaluation activities.

PERFORMING PROJECT EVALUATION

A monitoring and evaluation team, which would be selected at a later time, will employ a mixture of analytic approaches, using both qualitative and quantitative methods, to ascertain the ultimate impact of the project on the healthcare delivery system and patient outcomes. The team will also ascertain the possible reasons for achieving (or not achieving) the project goals. To the extent possible, the evaluation will focus on determining the causal effects of the project in the context of any simultaneous policy and programmatic interventions occurring in Oklahoma.

The project evaluation will focus on the progress that Oklahoma has made in attaining the goals and objectives set forth in Section D, Health System Design and Performance Objectives.

The monitoring and evaluation team will complete both qualitative and quantitative analysis of the objectives, assesses stakeholder perceptions of implementation processes, and delineate opportunities for improvement. Stakeholder groups such as payers, providers, health service delivery organizations, consumers and consumer advocates, state agencies, policymakers, community-based social service organizations, and health researchers each have an important perspective on the project and will be utilized in the evaluation.

The monitoring and evaluation team will use national surveys as another benchmark to test the sensitivity of the evaluation results. Combining analyses of data from the Current Population Survey (U.S. Census Bureau), and Current Employment Statistics (Bureau of Labor Statistics) against behavioral analyses from the Behavioral Risk Factor Surveillance System (Centers for Disease Control and Prevention) will also help allow the monitoring and evaluation team to determine the cost savings to the state as well as to individuals.

Quantitative Analysis

The goal of the quantitative portion of the project evaluation will be to determine the extent to which the initiatives developed through the Oklahoma SIM project contribute to achieving the Triple Aim: improved health, improved care, and decreased costs. This quantitative analysis of the monitoring and evaluation plan is structured around the major goals outlined in the SHSIP:

1. Alignment with health system design and performance objectives;
2. Statewide impact; and
3. Cost savings.

All efforts to measure and evaluate the impact of the strategies designed to achieve each of these goals will align with the efforts of the State Governing Body’s Quality Metrics Committee to understand the patient and provider impact, appropriateness and design features of implemented strategies, and financial impact of each. The HIN is a key resource for this evaluation, providing data to examine the impacts of the reform initiatives outlined in the SHSIP. As described in Section H, the HIN will combine a number of data sources, linking them together to enhance the ability to track health outcomes and provide the capability to examine quality and value within the healthcare system. Using this data, the monitoring and evaluation team will determine how well the project has progressed in the areas described below.

Alignment with Health System Design and Performance Objectives

The health system design and performance objectives form the foundation for the overall SHSIP. Each payment and service delivery transformation is designed to drive Oklahoma’s population closer to

reaching these established goals. The monitoring and evaluation plan will link closely to efforts to track progress against the objectives identified in Section D. As the final evaluation methodology is developed, the monitoring and evaluation team will work with the State Governing Body to map each SHSIP strategy to specific population health outcomes.

Statewide Impact

The state's vision is to implement comprehensive payment reform mechanisms that align economic incentives with population health goals, ideally impacting at least 80 percent of the covered population. Oklahoma has formulated a framework for payment transformation based on the principles of moving payers and providers toward value-based purchasing, setting evidence-based benchmarks for care, and capturing and using data in a consistent and actionable manner.

In collaboration with the Quality Metrics Committee, the monitoring and evaluation team will identify appropriate participation, utilization, quality, and patient and provider satisfaction metrics for evaluating the RCO and EOC models. Participation will be measured through assessment of the number of providers adopting, payers covering, and consumers receiving care under the RCO and EOC models. Utilization data related to inpatient and outpatient hospital services, provider services, prescription drugs, as well as quality data from both the provider and patient perspectives are essential for measuring value-based care.

As health information technology (HIT) is a key component of this effort, the monitoring and evaluation team will also work with the State Governing Body's HIT Committee to incorporate metrics of HIT implementation and utilization across the state. Metrics may include those related to HIT implementation at an organizational level, progress on developing and implementing statewide databases, submission of provider and payer data into state databases, use of data systems to report back to providers, and the extent to which those HIT systems are integrated across communities, including EHR utilization.

Finally, the evaluation team will determine the extent to which the payment and delivery system reforms implemented have impacted that attainment of the SIM health system design and performance objectives.

Cost Savings

"Cost savings" refers to the dollar value of the amount of cost avoidance that can be attributed to a reduction in the growth of healthcare costs as a result of implementing the initiatives described in this plan. While a demonstration of cost savings is a required component of the SIM project, the Oklahoma SIM project team believes savings will ultimately result from the improvement of population health outcomes.

Evaluation efforts under this goal will link strategies employed to metrics of cost and value, including the total cost of care per person, as well as overall utilization and quality metrics. Where possible, health outcomes will be ascertained from clinical data using the HIN. Additionally, organization-level financial data may be queried using available claims data. Cost savings will be aggregated to the state level to measure success in achieving a reduction in healthcare cost trends over the implementation period.

Evaluation data will be analyzed using qualitative research methods described by Miles, Huberman, and Saldaña.[132] The methods describe in the study provide a structured approach to managing and coding qualitative data and synthesizing results. All data under the outcome evaluation will be analyzed longitudinally, where possible, to identify trends, examine the impact on sub-groups (e.g., stratify analyses by race, ethnicity, gender, disability status, among other individual attributes), and determine the differential effects of the strategies over time. While a true experimental design is not feasible, quasi-experimental methods for assessing change over time will provide data and information to monitor outcomes of the program and provide evidence for future expansions or innovations. The monitoring and evaluation team will monitor trends of average and median out-of-pocket medical expenditures of

Oklahomans compared against trends in neighboring states. Group analyses will also help to determine if there are specific groups and service regions in the state that recognized a greater share of cost savings. By monitoring cost savings alongside population health improvements, the value of RCO efforts will be assessed.

Qualitative Analysis

The qualitative evaluation will address the following six research questions, which would be investigated by the external evaluator for this Monitoring and Evaluation Plan:

- To what extent have the Oklahoma SIM strategies been implemented?
- What are the barriers to and facilitators of implementation?
- What modifications were undertaken and in response to what?
- What opportunities exist for improving implementation of identified strategies?
- What are the lessons learned relative to increasing access to care, increasing integration and coordination of care, improving systemic efficiency and effectiveness, expanding the HIT infrastructure, and improving population health?
- To what extent do stakeholders perceive that the program goals were achieved? Why do stakeholders perceive that the program goals were or were not achieved?

Data will be routinely collected via semi-structured interviews of key informants. Document reviews of publicly available information will also be performed. As necessary, different interview modules will be designed and used to target particular respondent types and perspectives. Stakeholder perspectives identified through the process evaluation will be reported back to the Quality Metrics Committee for use in ongoing quality improvement and for strengthening of the RCO model.

CONCLUSION

Per federal and state requirements, the Oklahoma Model must be adequately monitored and evaluated. Furthermore, the model will fulfill the SIM health system design and performance objectives, the foundation of the SHSIP. This monitoring and evaluation plan of the SHSIP serves as a roadmap for the successful implementation of these monitoring and evaluation activities for the Oklahoma Model. As detailed in this plan, the state will monitor for performance reporting, monitor for continuous improvement, and perform a project evaluation. Successfully implementing these monitoring and evaluation activities will enable the Oklahoma Model to make meaningful progress in improving the health and lives of Oklahomans.

Health System Design and Performance Objectives
Value-Based Payment and Service Delivery Plan
Healthcare Delivery System Transformation Plan
Health Information Technology Plan
Workforce Development Strategy
Financial Analysis
Monitoring and Evaluation Plan
Operational And Sustainability Plan
State Healthcare Environment
Stakeholder Engagement Report
Population Health Improvement Plan
OKLAHOMA STATE HEALTH SYSTEM INNOVATION PLAN

L. Operational and Sustainability Plan

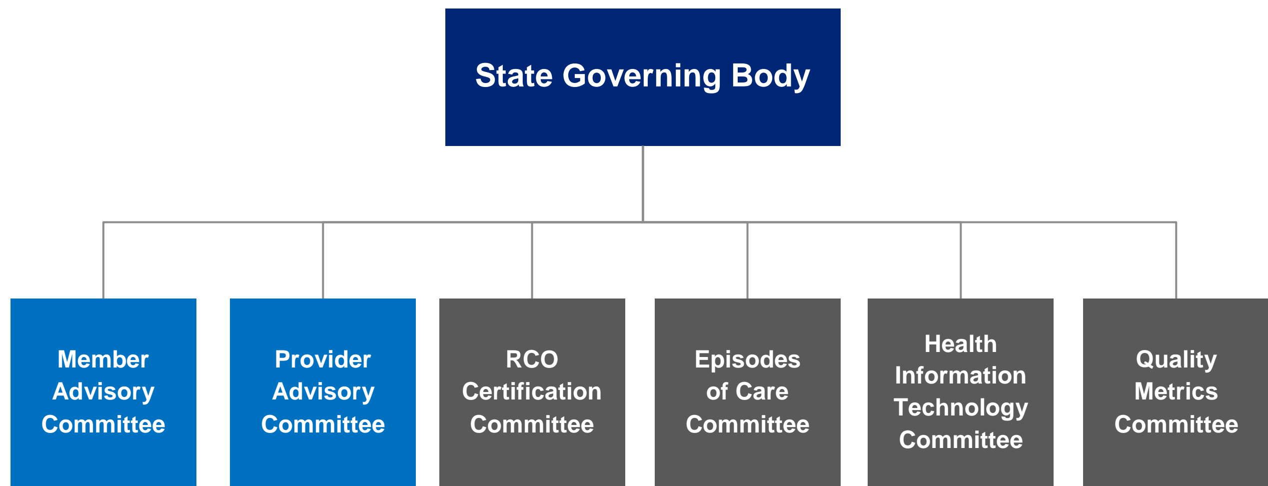
INTRODUCTION

The Oklahoma State Innovation Model (SIM) project has proposed three initiatives to transform Oklahoma's health system as part of the Oklahoma Model: Regional Care Organizations (RCOs), multi-payer quality measures, and multi-payer episodes of care (EOC). The state will need to formulate a number of operational considerations to plan for and implement these initiatives. Such considerations include formal policy promulgation, a clear governance structure to oversee and evaluate operational and administrative activities, and ongoing stakeholder engagement to ensure transformation is feasible and inclusive. In parallel, supporting infrastructure will require investments into the resources which underpin and sustain healthcare transformation. Supporting infrastructure includes developing interoperable health information technology (HIT), practice transformation networks, and a strong health workforce while leveraging existing initiatives and resources that support healthcare transformation.

OPERATIONAL PLAN

The Oklahoma SIM project team has developed a high-level operational plan and timeline that describes the various implementation activities. Once the governance structure for each proposed initiative (RCOs, multi-payer quality measures, and multi-payer EOCs) is established, the project team will develop a more detailed operational plan that describes specific resources, tasks, and milestones. This will include budgetary items, performance targets, and resource allocation. The scopes and roles of the governing bodies for this model are described in Section E, the Value-Based Payment and/or Service Delivery Model, of the State Health System Innovation Plan (SHSIP). The governing bodies will include an array of stakeholders from across the health system in order to achieve inclusivity and drive broader consensus in Oklahoma. The following figure shows a diagram of the State Governing Body advisory committees for the Oklahoma Model.

Figure L.1: State Governing Body Advisory Committees



This operational plan details a year-by-year description of the activities that will be required to implement the three SIM initiatives within a six year period. As with any long-term plan, this represents the Oklahoma SIM project team's understanding of what will be needed based on previous implementation efforts in Oklahoma and a review of other states' implementation of similar initiatives.

It is important to note that the planning and development phases of the RCOs have been extended due to the need for Oklahoma to encourage the development of healthcare organizations that can meet the requirements of a RCO. The state will be moving its Medicaid and public employees' health plan from a fee-for-service (FFS) and primary care case management (PCCM) system to a full-risk, fully-capitated coordinated care model. Based on a review of the efforts of other states that have made this transition in recent years, this will be a complex and workload intensive project.

The following figures detail an overview of this six year operational plan timeline.

Figure L.2: Operational Plan Milestones

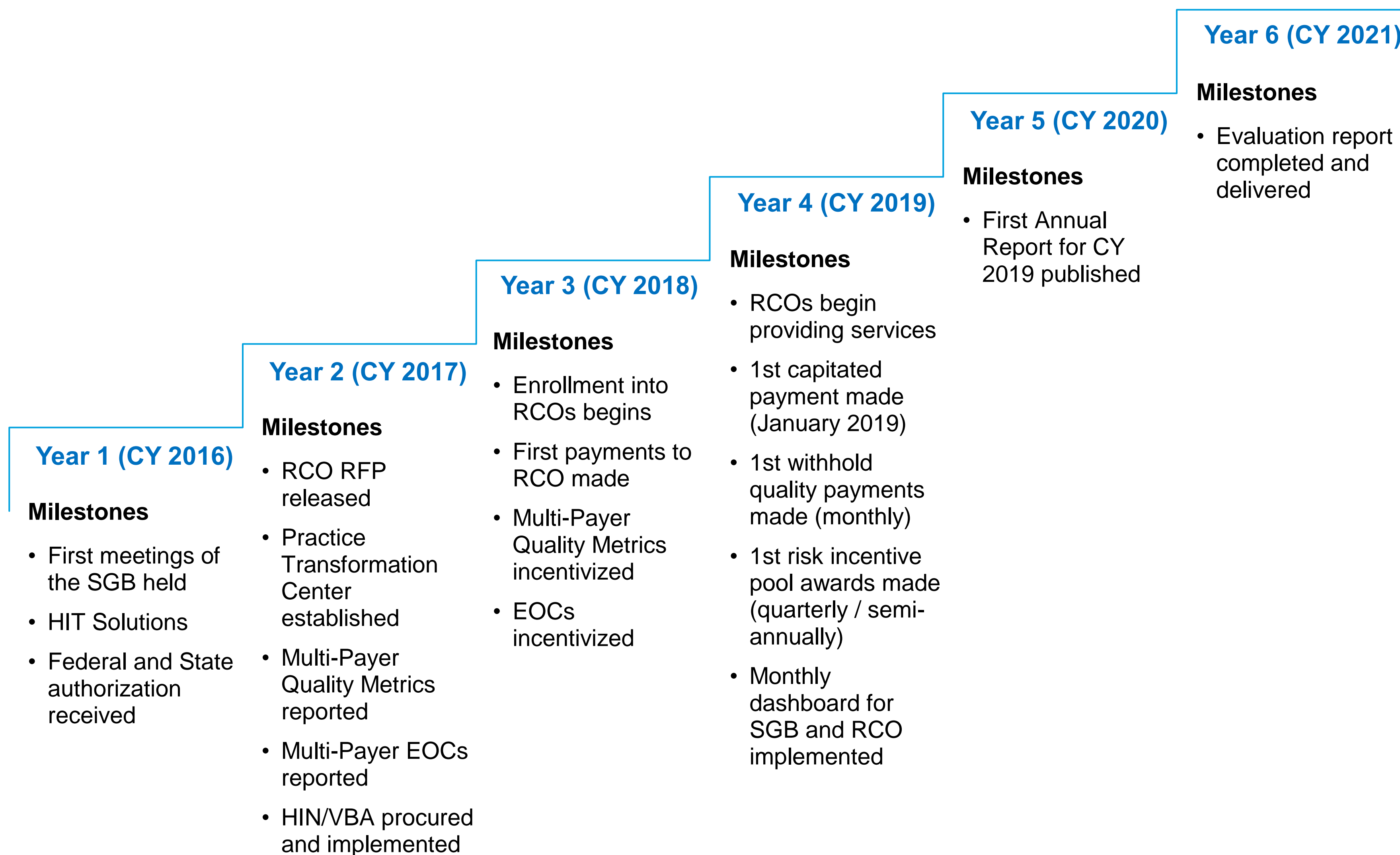
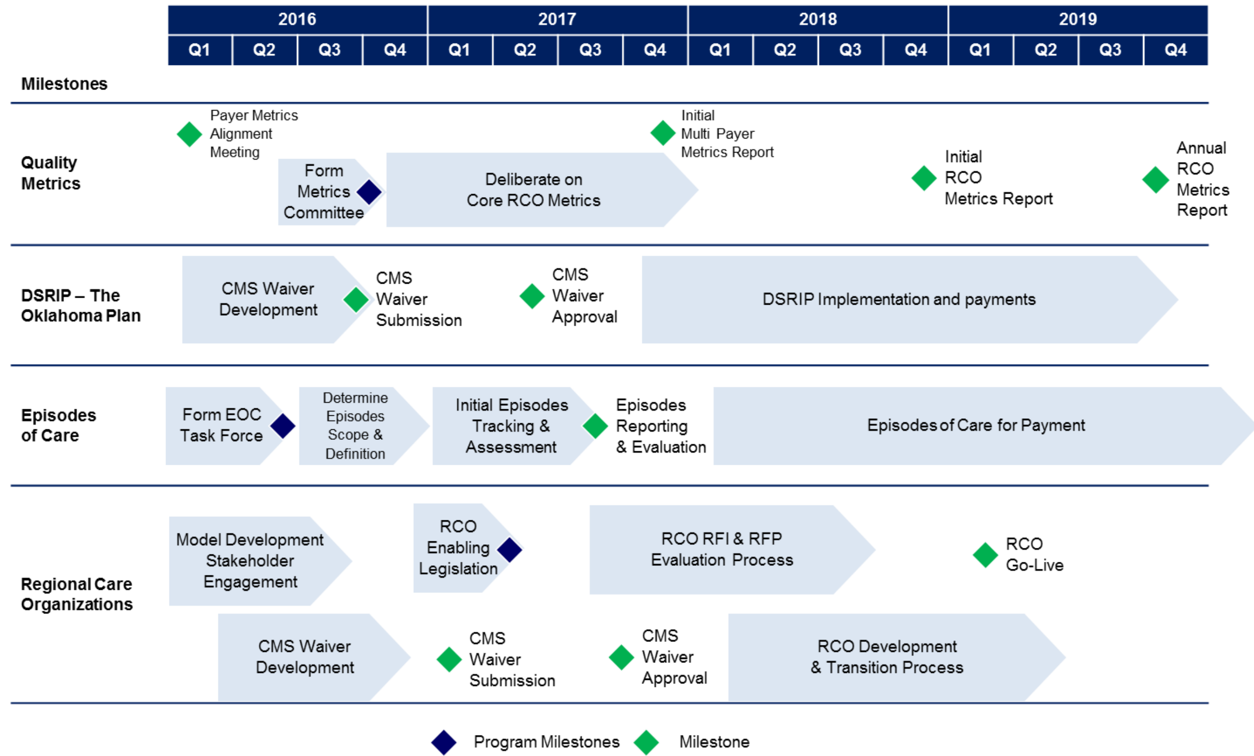


Figure L.3: SIM Operational Roadmap



Year 1 – Calendar Year (CY) 2016

Milestones

- Hold the first meetings of the State Governing Body.
- Establish the HIT solutions.
- Receive federal and state authorization.

Activities

- **Authorization**: The first year of the model implementation will be focused on seeking and receiving authorization from the federal and state government to proceed with these initiatives. The federal approval process will involve the creation of a concept paper for review with the state's federal partners to identify the best route for approval. This may include Medicaid State Plan Amendments, freedom of choice and home and community based services (HCBS) waivers under Sections 1915(b) and 1915(c), and/or a Section 1115 Demonstration Project waiver. It will also include the development and submission of an Implementation Advance Planning Document (IAPD) to access Medicaid funding (both regular and enhanced federal funding) for needed updates to existing Medicaid systems. From a state perspective, state law and administrative rules will need to be developed and approval will need to be sought to allow the state to proceed with its implementation of the RCO model. State law may need to be modified to define the RCO model and authorize the State Governing Body. This effort will also require an understanding and perhaps an update to the Medicaid cost allocation plan.

- **Governance**: The first year will also see the appointment, and first meeting of, the State Governing Body. The State Governing Body will need to convene, establish its governance rules, and set up the committees that support the governing body. This includes setting up the committee membership, identifying committee chairpersons, assigning and setting deadlines for certain tasks, and identifying the resources that will be available for these committees to operate and succeed.

  Working with stakeholders, including payers and providers, the RCO Certification Committee of the State Governing Body will begin the process of defining the requirements that would need to be met for an organization to become a RCO and defining how prospective RCOs will compete to serve geographic areas of Oklahoma. The RCO Certification Committee will also begin a discussion of RCO regulatory requirements, rate setting methodologies, service areas, roles and responsibilities, risk adjustment, allowable organizational and governance configuration, percentage of withhold from capitated payments, incentive pool funding, and other facets of the development of a risk-bearing RCO. The committee will also begin the process of drafting the RCO Request for Proposal (RFP) process, which may involve a Request for Information, release and review of a draft RFP, and a complete review of similar state procurement efforts.

  A separate committee under the State Governing Body will be formed to begin the process of identifying the exact functions, staffing needs, timeline, funding mechanisms, and other parameters needed to develop the Practice Transformation Center.

- **Implementation:** The State Governing Body will identify and gather business requirements then design and schedule the changes that will be required to existing Medicaid and state employee health plan systems to move from a PCCM/FFS model to a RCO model. This includes the required financial management and reporting, enrollment/disenrollment activities, receipt and management of RCO encounter records, and other changes that will be necessary as people transition from the current model to a RCO model.

- **Practice Transformation**: The State Governing Body and its committees will begin to work with hospitals, primary care and specialty care health systems, behavioral health systems, and long-term services and supports systems to determine how these entities might best integrate their services as a precursor to RCO development.

- **HIT**: HIT is a vital infrastructure component to the successful implementation of all health system initiatives. One of the first steps in creating the necessary HIT infrastructure will be enabling legislation to establish a HIT advisory committee in Oklahoma in 2016. This legislation is foundational to overall HIT development to give direction to the State Chief Information Officer (CIO) in purchasing necessary IT solutions that can be leveraged in the state to promote the HIT objectives. There will also be enabling legislation for the new technology necessary to form the health information network (HIN) that will also be created in 2016 and operational in 2017.

  Specifically the HIN and Value Based Analytic vendor selection can commence throughout 2017. In the duration, the State Agency Health Information Exchange (HIE) (described in Section H, the HIT Plan) will become operational. When the HIN is in place, the HIEs in the state can begin working toward interoperability. The establishment of a HIN and VBA are particularly critical to the RCO model because these tools will provide the data necessary to implement, monitor, and evaluate RCO performance as well as provide data-driven solutions for quality improvement within the RCO model.

- **Workforce:** The Workforce Committee of the State Governing Body will develop standards for the RCO community health workers program. The committee will identify how current community health workers are being used, determine the role that they play in the RCO, and identify how best to seek federal approval to fund these positions and other non-traditional provider types with Medicaid dollars.

  The Workforce Committee will also work to develop, with input from the Member Advisory and Provider Advisory Committees of the State Governing Body, network adequacy standards for the RCO. This must be compliant with federal regulations and will include the review of other state approaches. This same analysis will be essential to the RCO Certification Committee's work to define RCO geographic service areas.

- **Quality**: The Quality Measures Committee of the State Governing Body, after being established, will meet to begin the process of describing and promoting the multi-payer quality measures. This committee will drive multi-payer alignment by identifying specific descriptions of the data improvement that will need to be collected for each of these measures, how population health baselines will be established for these measures, how progress will be measured, and the definition of success over the course of time. This committee will also ensure that data sources and data measurement are standardized across payers and providers by recommending to the State Governing Body valid sources and methods for aligning those measures.

As referenced in Section E of the SHSIP, the Value-Based Payment and/or Service Delivery Model, the proposed members of this committee are:

- Six providers from different practice settings and populations
  E.g., Doctor of Medicine (MD), Doctor of Osteopathic Medicine (DO), Pharmacist (PharmD), Nurse, Advanced Practice Registered Nurse (APRN), Physician Assistant (PA), Behavioral Health Specialist
- Two quality measure specialists, consultants, or experts
- One HIT/data reporting specialist
- One public health specialist
- One patient advocate
- One practice transformation consultant

- **EOC**: The EOC Committee of the State Governing Body will define the EOCs that will be rolled out in the second year of the model implementation. The committee will also decide how to promote the EOCs across the payer spectrum and how to implement the EOCs for Medicaid and the public employees' health plan. The committee will work in consult with the Quality Measures Committee to determine how the impact of EOCs will be measured.

As referenced in Section E of the SHIP, proposed members of the committee are:

- A representative from each participating payer
- Provider representatives relevant to each episode of care (Principle Accountable Provider)
- A data reporting specialist
- A patient advocate

  - The Oklahoma Insurance Department

- **Communications**: The State Governing Body will need to establish a formal communications plan, for both internal and external audiences, to describe the development and implementation of the multi-payer quality measures, multi-payer EOCs, and RCO model. The communications plans will also need to promote an understanding of these initiatives and identify potential pitfalls. The communications plan will include the continued involvement of the broad array of stakeholders that have had input into this plan. A new stakeholder engagement plan for the duration of the model implementation will be developed, monitored, and continually updated.

Year 2 – CY 2017

Milestones

- Release the RCO RFP.
- Establish the Practice Transformation Center.
- Procure and implement the HIN/VBA.
- Report the multi-payer quality measures.
- Report the multi-payer EOCs.

Activities

- **RCO:** The State Governing Body (SGB) will determine the RCO rate setting process, RCO rates, geographic service areas, risk adjustment, incentive pool contribution, attribution and award, withhold amounts, schedule, and payments. The RCO Certification Committee will also develop a draft RCO contract for inclusion in the RCO RFP. The committee will complete the development of the RCO RFP and release the RFP. The committee will discuss RCO development with interested organizations. They will also provide the information that these organizations need as they consider developing a RCO. Finally, the State Governing Body will oversee the development of the operational readiness criteria for RCOs and share the criteria with the RCOs and state system administrators.

- **Implementation:** The State Governing Body will begin to change existing Medicaid and employee health plan systems, as necessary, to move from the PCCM/FFS model to the RCO model. This includes the required financial management and reporting, enrollment/disenrollment activities, receipt and management of RCO encounter records, and other changes that will be necessary as people transition from the current model to the RCO model.

  During this year, potential RCO entities will have been self-identified and will have begun the process of setting up their organizations, making connections with community organizations and with providers in the geographic area for which they will potentially provide services.

- **Practice Transformation**: The State Governing Body will continue to work with hospitals, primary and specialty care health systems, behavioral health care systems and long term services and supports systems to align and integrate their activities in preparation for the RCO implementation. Additionally, the State Governing Body will set up a workgroup that will

determine the optimal timing for the transition of current Medicaid and public employee health plan members to RCOs and how best to undergo this process.

During this period, the State Governing Body will oversee the implementation and initial efforts of the Practice Transformation Center.

- **HIT:** The HIT Committee of the State Governing Body will complete the necessary procurement and contracting tasks for implementing the HIN/VBA. The committee will then oversee the implementation of the HIN/VBA.
- **Quality**: The Quality Measures Committee will work with public and private payers to set baselines needed for the evaluation of the multi-payer quality measures. The committee will be responsible for monitoring data that will be used to measure the effectiveness and use of these measures. Providers will begin reporting quality measures (but will not yet be evaluated on quality metric outcomes).
- **EOC:** The EOC Committee will report to the public the multi-payer EOCs that RCOs will utilize.

Year 3 – CY 2018

Milestones

- Award and sign the RCO contracts.
- Make the first payments to RCOs.
- Begin enrollment into the RCOs.
- Incentivize the multi-payer quality measures.
- Incentivize the multi-payer EOCs.

Activities

- **RCO:** The State Governing Body will evaluate RCO proposals and award contracts, allowing time for an appellate process. The SGB will then negotiate and sign contracts with RCOs that cover the State of Oklahoma. The committee will then begin the task of determining how best to monitor compliance with the contract both during the ramp up to and after the implementation of RCOs, including the monitoring of the RCO implementation preparation process. The committee will then oversee the enrollment, and subsequent transition from FFS, of members into RCOs.
- **Implementation**: RCOs will set up their networks, set up the required business processes, and develop or modify IT systems to allow for RCO operations. The operational readiness of the RCOs and state systems will be tested. Then, open enrollment into RCOs will begin.
- **Practice Transformation**: Practice transformation work will commence across the state, both in concert with existing organizations and for the Practice Transformation Center.
- **HIT:** The HIT committee will oversee the collection of data by the HIN/VBA for the EOCs and quality measures. The committee will also work with RCOs to ensure that they are connected with the HIEs and that data submitted by the RCOs are available through the HIN/VBA.
- **Quality**: The Quality Measures Committee will oversee the implementation of incentive payments for Medicaid and EGID based on quality measures. The committee will also set targets and benchmarks for the RCO implementation year (Year 4).

- **EOC**: The EOC Committee will oversee the implementation of the five EOCs. Payers will start paying for the EOCs on an episodic, bundled payment basis. The committee will begin collecting data from providers for the evaluation of the EOCs.

Year 4 – CY 2019

Milestones

- RCOs begin providing services.
- Make the first capitated payment (January 2019).
- Make the first withhold quality payments (monthly).
- Make the first risk incentive pool awards (quarterly/semi-annually).
- Implement the monthly dashboard for the State Governing Body and RCOs.

Activities

- **Governance**: The State Governing Body will begin compliance monitoring of the RCOs and processing appeals and grievances from members.

- **RCO:** RCOs will begin providing services for their enrolled Medicaid and public employee health plan members. After the State Governing Body evaluates quality measures, it will make the first withheld payment to RCOs for meeting their benchmarks and the first bonus incentive payments to those RCOs that meet their quality metric target. RCO will begin processing appeals and grievances from members.

- **Implementation**: The state will implement the first enrollment/disenrollment of members, payment cycles, and other IT system processes. The state will make the first payments to RCOs. RCOs will send the state their first encounter records and the state will run the first analytics to determine the next year's rates.

- **Practice Transformation**: Providers within the RCO networks will begin to be supported in the transition by the PTC, the RCOs, and ongoing coordination of independent initiatives.

- **HIT:** RCOs will start to access their monthly dashboards. The SGB will also begin to use the HIN/VBA for monitoring and evaluation of RCOs.

- **Quality**: The Quality Measures Committee will begin its review of the RCO quality measures and provide information to the State Governing Body to determine if withheld cap payments can be paid and if bonus incentive payments should be made. The committee will also consider whether the measures being used should be revised for the next plan year and plan for the second year of RCO administration. Additionally, the committee will oversee the development of the annual report.

- **EOC:** The EOC Committee will begin reviewing data gathered on the five EOCs implemented in the previous year. It will determine if the current episodes should continue unchanged, if they should be modified, or if new episodes should be identified and substituted for these measures.

Year 5 – CY 2020

Milestones

- Publish the first Annual Report for CY 2019.

Activities

- **Governance:** The State Governing Body will continue compliance monitoring of RCOs and processing appeals and grievances from members.
- **RCO:** RCOs will continue providing services for their enrolled Medicaid and public employee health plan members. The State Governing Body will continue evaluating quality measures, making withheld payments to RCOs for meeting benchmarks, and making bonus incentive payments to RCOs for meeting quality metric targets. RCOs will continue processing appeals and grievances from members.
- **Practice Transformation**: Providers within the RCO networks will continue to be supported through PTC and RCOs.
- **HIT:** RCOs will continue to access their monthly dashboards. The SGB continues to utilize the HIN/VBA to monitor and evaluate.
- **Quality**: The Quality Measures Committee will publish the annual report and update measures.
- **EOC:** The EOC Committee will continue reviewing the data gathered on the EOCs. The committee will determine if the current episodes should continue unchanged, if they should be modified, or if new episodes should be identified and substituted for these episodes.

Year 6 – CY 2021

Milestones

- Complete and deliver the evaluation report (June 30, 2021).

Activities

- **Governance:** The State Governing Body will continue compliance monitoring of RCOs and processing appeals and grievances from members.
- **RCO:** RCOs will continue providing services for their enrolled Medicaid and public employee health plan members. The State Governing Body will continue evaluating quality measures, making withheld payments to RCOs for meeting benchmarks, and making bonus incentive payments to RCOs for meeting quality metric targets.
- **Practice Transformation**: Providers within the RCO networks will continue to access support services.
- **HIT:** RCOs will continue to maintain and update dashboards for their networks and maintain data exchange connections.
- **Quality**: The Quality Measures Committee will publish the five year evaluation report.

- **EOC:** The EOC Committee will continue to review data gathered on the EOCs and determine if the episodes should be kept, modified, or replaced.

FINANCIAL SUSTAINABILITY

Oklahoma's health system transformation has a high likelihood of success and sustainability. The state plans to invest the necessary time and resources to lay the groundwork for a strong foundation to advance the new model for state-purchased healthcare. The state will do so by working with key stakeholders at the state level (including legislators, beneficiaries, health plans, providers, and advocacy organizations) and partners at the federal level through CMS.

As we have described throughout the SHSIP, foundational changes are needed to transform Oklahoma's health care system to a value and outcomes based model. These changes include: infrastructure, workforce, culture, and education. All of these efforts will require significant federal investment that can be used to support hospitals and other entities in changing how they provide care to Medicaid beneficiaries and public employees. The state will need the ability to pursue projects that address these changes and enhance health care programs for Medicaid and public employees' health coverage while maintaining current delivery capacity and access.

Currently, there are different federal funding mechanisms that have been used elsewhere to help reform the Medicaid delivery landscape. These efforts have been used to support local hospitals and providers in improving how they deliver care to Medicaid beneficiaries, and others, by providing significant funding to projects that achieve specific quality outcomes and reduce unnecessary and preventable costs. Through these types of funding programs, Oklahoma can invest in the infrastructure development necessary for health system redesign to transition hospitals and providers to new, more innovative models of delivering health care. This funding will be needed to help expedite innovation and reform without damaging provider networks by creating financial pathways to move from fee for services to value based health systems. As part of the immediate next steps, Oklahoma will begin to pursue opportunities to fund healthcare transformation across the spectrum. Oklahoma will need to obtain federal approval to implement the RCO model for its Medicaid members. This may entail including an approved five-year, statewide Medicaid 1115 waiver demonstration and amendments to the Medicaid State Plan. The 1115 waiver demonstration would be expected to project that the RCO model will generate both federal and state Medicaid savings, a crucial element of long-term sustainability. Initial support will be needed from a variety of sources, including the Oklahoma SIM project team, Medicaid infrastructure funding, and innovation grant programs, to provide the upfront investment and framework that will be needed to support and operate the RCO model.

Additionally, Oklahoma plans to sustain these investments in several ways. For one, many of the staff, consultants, and contractors for the model implementation will initiate activities but will ramp down or be eliminated over time. Some ongoing costs will eventually be funded in whole or in part by the savings generated out of the model or by a fixed plan fee assessed to the RCOs to maintain the interoperability infrastructure and reporting capabilities necessary for RCO oversight and performance. Over time, the Center may transition to a public-private collaborative supported in part by fees from participating health sector entities.

CONCLUSION

While the Oklahoma SIM project team has provided a high-level operational plan for achieving the goals and objectives of the SIM project, more ongoing and detailed work will be needed to help stakeholders and policymakers implement the Oklahoma SIM initiatives. In the interim, this operational plan will help to provide key milestones towards full model implementation in 2019 and guide the work of the Oklahoma SIM project team throughout the coming years.

---

[1]Stephenson Cancer Center, Presentation for Senate Interim Study 15-12. November 4, 2015.

[2]State of Mental Health in America, 2016 edition, pp. 12. http://www.mentalhealthamerica.net/sites/default/files/2016%20MH%20in%20America%20FINAL.pdfOklahoma Health Improvement Plan: OHIP 2020. (2015). Pg. 34.

[3] AHRQ - QI SAS 4.5a - PQI - PQI #90 Prevention Quality Overall Composite. 2015.

[4] House Bill 2906, OHCA ER Utilization Study. Pg. 7.

[5] Oklahoma Health Improvement Plan: OHIP 2020. (2015). Pg. 14-15.

[6]Oklahoma Population Health Needs Assessment. (2015): 10-11.

[7] United Health Foundation America's Health Rankings, 2015. Retrieved from www.americashealthrankings.org

[8] American Diabetes Association. The Burden of Diabetes in Oklahoma. Retrieved from http://main.diabetes.org/dorg/PDFs/Advocacy/burden-of-diabetes/oklahoma.pdf

[9]State of the State's Health. (2014). Pg. 18-23.

[10]Oklahoma Population Health Needs Assessment. (2015). Pg. 44.

[11] Heart Disease and Stroke Statistics-2016 Update: A Report from the American Heart Association. Table 13-2. Age-Adjusted Death Rates per 100 000 Population for CVD, CHD, and Stroke by State, 2011–2013. *Circulation*. Published online December 16, 2015. Retrieved from http://circ.ahajournals.org/

[12]Stephenson Cancer Center, Presentation for Senate Interim Study 15-12. November 4, 2015.

[13]Oklahoma Population Health Needs Assessment. (2015). Pg. 27-29.

[14] Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Behavioral Risk Factor Surveillance System 2014, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Accessed at http://www.health.ok.gov/ok2share .

[15] Oklahoma Population Health Needs Assessment. (2015). Pg. 27-29.

[16] Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Behavioral Risk Factor Surveillance System 2014, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Accessed at http://www.health.ok.gov/ok2share .

[17] State of the State's Health (2014). Pp. 28-29

[18] United Health Foundation America's Health Rankings, 2015. Retrieved from www.americashealthrankings.org
[19] Stephenson Cancer Center, Presentation for Senate Interim Study 15-12. November 4, 2015.
[20]State of the State's Health. (2014). Pg. 25. Stephenson Cancer Center, Presentation for Senate Interim Study 15-12. November 4, 2015.
[21]America's Health Rankings, United Health Foundation, 2015. Retrieved from http://www.americashealthrankings.org/OKState of the State's Health. (2014). Pg. 41.
[22] CDC Chronic Disease Indicators (CDI), retrieved from http://www.cdc.gov/cdi/.
[23] The COPD Foundation, COPD Statistics Across America, retrieved from http://www.copdfoundation.org/What-is-COPD/COPD-Facts/Statistics.aspx.
[24] CDC Division for Heart Disease and Stroke Prevention, Interactive Atlas of Health Disease and Stroke Tables 2011-2013. Retrieved from
http://nccd.cdc.gov/DHDSPAtlas/reports.aspx?geographyType=county&state=OK&themeSubClassId=3&filterIds=9,2,3,4,7&filterOptions=1,1,1,1,1#report.
[25]State of Mental Health in America, 2016 edition, pp. 12.
http://www.mentalhealthamerica.net/sites/default/files/2016%20MH%20in%20America%20FINAL.pdfOklahoma Health Improvement Plan: OHIP 2020. (2015). Pg. 34.
[26]Oklahoma Population Health Needs Assessment. (2015). Pg. 70.
[27]Inventory of Current Health Care Transformation Initiatives. (2015). Pg. 19.
[28] Oklahoma State Department of Health, Injury Prevention Service. Preventive Health and Health Services Block Grant Success Story, January 2016.
[29]Oklahoma Population Health Needs Assessment. (2015). Pg. 70.
[30]United Health Foundation America's Health Rankings, 2016. Retrieved from http://www.americashealthrankings.org/OK/State of the State's Health. (2014). Pg. 41.
[31] Health Resources and Services Administration, First Quarter Fiscal Year 2016 Designated Health Professional Shortage Area Summary Report.
[32]State of the State's Health. (2014). Pg. 11.
[33] State of the State's Health. (2014). Pg. 38-39.
[34] How Many Emergency Department Visits Could be Managed at Urgent Care Centers and Retail Clinics? Pg. 1.
[35] AHRQ - QI SAS 4.5a - PQI - PQI #90 Prevention Quality Overall Composite. 2015.
[36] Realizing Health Reform's Potential. (2012). Pg. 20.
[37] Population Health Needs Assessment. (2015). Pg. 24.
[38] Milliman Market Analysis. (2015). Pg. 27-28.
[39] House Bill 2906, OHCA ER Utilization Study. Pg. 2-3.
[40] The Revolving Door: A Report on U.S. Hospital Readmissions. Pg. 2.
[41] Milliman Market Analysis (2015). Pg. 20.
[42] Oklahoma Health Improvement Plan: OHIP 2020. (2015). Pg. 14-15.
[43] State of the State's Health. (2014). Pg. 30.
[44]Oklahoma Population Health Needs Assessment (2015): Pg. 10-14.
[45] U.S. Census Bureau, 2010-2014 American Community Survey 5-Year Estimates. Retrieved from http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF
[46] U.S. Census Bureau, 2014 American Community Survey 1-Year Estimates. Table S0201 - Selected Population Profile in the United States. Retrieved from http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF
[47] U.S. Census Bureau, 2014 American Community Survey 1-Year Estimates. Table S0201 - Selected Population Profile in the United States. Retrieved from http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF
[48] U.S. Census Bureau, 2009-2013 American Community Survey. Table 37 - Detailed Languages Spoken at Home and Ability to Speak English for the Population 5 Years and Over for Oklahoma: 2009-2013. Release Date: October 2015.
[49]List of Rural Counties and Designated Eligible Census Tracts in Metropolitan Counties, updated Census 2010. Areas based on the 2010 standards and Census Bureau data were delineated in February of 2013.
ftp://ftp.hrsa.gov/ruralhealth/Eligibility2005.pdf. Population 2014 Estimate, U.S. Census Bureau, http://quickfacts.census.gov/qfd/states/40000.html
[50]U.S. Census Bureau. (2014). Census of Population and Housing, Tiger line files estimates (data file). Retrieved from http://www.census.gov/
[51]U.S. Census Bureau (2014). http://quickfacts.census.gov/qfd/states/40000.html
[52] Oklahoma Population Health Needs Assessment. (2015): Pg. 10-14.
[53]America's Health Rankings, United Health Foundation, 2015 Edition. Retrieved from http://www.americashealthrankings.org/OK
[54]Income and Lack of Insurance, Oklahoma, Behavioral Risk Factor Surveillance System, 2013.

[55]Bureau of Labor Statistics, Labor Force Data. Retrieved from http://www.bls.gov/news.release/laus.nr0.htmhttp://www.bls.gov/news.release/laus.nr0.htm
[56]The Wall Street Journal, (2014). Retrieved from: http://www.wsj.com/articles/chesapeake-energy-plans-to-cut-15-of-jobs-1443559639
[57]State of Oklahoma Fiscal Year 2016 Executive Budget. (2015). Retrieved from: http://www.ok.gov/OSF/documents/bud16.pdf.
[58]Oklahoma Population Health Needs Assessment. (2015): Pg. 10-14.
[59]Degrees of Progress: The State of Higher Education in Oklahoma. (2014). Retrieved from: http://www.okhighered.org/studies-reports/annual-report/annual-report2014.pdf.
[60]Oklahoma's Business Case for Education Reform. (2015). Retrieved from: http://www.okewi.org/sites/www.okewi.org/files/OEWI_OKBizCaseEduReform-FINAL-WEB.pdf.
[61]Oklahoma Health Improvement Plan: OHIP 2020. (2015). Pg. 14.
[62]Oklahoma Population Health Needs Assessment. (2015): Pg. 20-22.
[63]Merritt Hawkins 2015 Physician Access Index Map.
[64] Oklahoma Hospital Association. (2015).
[65] Oklahoma Health Workforce Data Book, 2014-2015. Oklahoma State Department of Health, Center for Health Innovation and Effectiveness, Office of Primary Care and Rural Health Development
[66] State of the State's Health. (2014). Pg. 11.
[67]Population Health Needs Assessment: Supplement. (2015).
[68] Oklahoma Population Health Needs Assessment. (2015). Pg. 16.
[69] Oklahoma Population Health Needs Assessment. (2015). Pg. 16.
[70] Oklahoma Population Health Needs Assessment. (2015). Pg. 16.
[71] Oklahoma Population Health Needs Assessment. (2015). Pg. 14.
[72] Coleman-Jensen, A., Rabbitt, M., Gregory, C., & Singh, A. (2015). Household Food Security in the United States in 2014. USDA ERS.
[73] State of the State's Health. (2014).
[74] Oklahoma Population Health Needs Assessment. (2015). Pg. 20-22.
[75] Oklahoma State Innovation Model Insurance Market Analysis. (2015). Pg. 6.
[76] State of Oklahoma Fiscal Year 2016 Executive Budget. (2015). Retrieved from: http://www.ok.gov/OSF/documents/bud16.pdf.
[77] Realizing Health Reform's Potential. (2012). Pg. 28
[78] Realizing Health Reform's Potential. (2012). Pg. 24.
[79] Milliman Market Analysis. Pg. 23.
[80] Milliman Market Analysis. (2015). Pg. 20.
[81] Employee Group Insurance Division, Pg. 4.
[82] Population Health Needs Assessment (2015). Pg. 15.
[83] DisabilityStatistics.org.
[84] Oklahoma State Innovation Model Insurance Market Analysis. (2015). Pg. 10-11.
[85] Oklahoma State Innovation Model Insurance Market Analysis. (2015). Pg. 12.
[86] Georgetown University Health Policy Institute: Center for Children and Families. Children's Health Insurance Rates in 2014: ACA Results in Significant Improvements (2015).
[87] Oklahoma State Innovation Model Insurance Market Analysis (2015). Pg. 15-16.
[88] Milliman High Cost Services Report (2015)
[89] Oklahoma's Business Case for Education Reform. (2015). Retrieved from: http://www.okewi.org/sites/www.okewi.org/files/OEWI_OKBizCaseEduReform-FINAL-WEB.pdf.
[90] Delivery of High-Cost Services (2015). Pg. 11.
[91] High Cost Services. Pg.2.
[92] Employees Group Insurance Division (EGID). Pg. 5.
[93] Health Care Information, Hospital Discharge Data (2012).
[94] CMS, National Health Expenditure Data: Health Expenditures by State of Residence (2011).
[95] State of the State's Health Report (2014). Pg. 44
[96] Aiming Higher: Results from a Scorecard on State Health System Performance (2014). Pg. 35
[97] Health Care Information, Hospital Discharge Data (2012).
[98] Health Care Information, Hospital Discharge Data (2012).
[99] CMS, National Health Expenditure Data: Health Expenditures by State of Residence (2011).
[100] Inventory of Current Health Care Transformation Initiatives (2015).
[101] PBHCI Grantees Map. SAMHSA-HRSA Center for Integrated Health Solutions (2015).
[102] Oklahoma Health Improvement Plan: OHIP 2020. Pg. 39-40.

[103] Federal Health IT Strategic Plan (2015-2020), ONC.
[104] Success Stories, First in the Nation, OHCA.
[105] http://www.okhca.org/about.aspx?id=10601&parts=12681_12397_13532_11707 Medicare and Medicaid Incentive Provider Payments by State, Programs and Provider Type CMS (2015).
[106] E.H.R. Stats Report. OHCA (July 2015).
[107] Oklahoma SIM E.H.R. Survey Final Report (2015).
[108] Oklahoma SIM E.H.R. Survey Final Report (2015). Pg. 25.
[109] Oklahoma SIM E.H.R. Survey (2015). Pg. 26.
[110] Comprehensive Primary Care Initiative Website, CMS (2014).
[111] Milliman Market Analysis. Pg. 14.
[112] http://blog.cms.gov/2015/10/07/primary-care-makes-strides-in-improving-quality-and-costs/.
[113] Evidence Now: Advancing Heart Health in Primary Care Website, AHRQ (2015).
[114] Accountable Care Organizations website, CMS.
[115] State of Oklahoma Fiscal Year 2016 Executive Budget. (2015). Retrieved from: http://www.ok.gov/OSF/documents/bud16.pdf.
[116] Annual Report, SFY 2014.
[117] Home and Community Based Services Website, OHCA (2015).
[118] Annual Report, OHCA, SFY 2014, Pg. 13-15.
[119] Kindig, DA, Stoddart G. (2003). *What is population health?* American Journal of Public Health, 93, 366-369.
[120] Oklahoma Health Care Authority SoonerExcel. http://www.okhca.org/providers.aspx?id=9426&menu=74&parts=8482_10165&terms=incentive
[121] Oklahoma State Department of Health. *Office of the Tribal Liaison*. http://www.ok.gov/health/Community_Health/Community_Development_Service/Office_of_Tribal_Liaison/index.html
[122] United States Census Bureau. (2014) State and County Fast Facts: Oklahoma. Retrieved from http://quickfacts.census.gov/qfd/states/40000.html
[123] American College of Physicians. (2015). *Guidelines: ACP Clinical Recommendations*. Retrieved from: https://www.acponline.org/clinical_information/guidelines/
[124] National Committee for Quality Assurance. (2015). *HEDIS Measures*. Retrieved from: http://www.ncqa.org/HEDISQualityMeasurement/HEDISMeasures/HEDIS2015.aspx
[125] National Quality Forum. (2015). NQF Endorsed Standards. Retrieved from: http://www.qualityforum.org/Measuring_Performance/Measuring_Performance.aspx
[126] United States Preventive Task Force. (2012). The Guide to Clinical Preventive Services 2012. Retrieved from: http://archive.ahrq.gov/professionals/clinicians-providers/guidelines-recommendations/guide2012/guide-clinical-preventive-services.pdf
[127] https://www.healthit.gov/providers-professionals/improved-diagnostics-patient-outcomes#footnote-1
[128] http://www.rand.org/pubs/research_briefs/RB9136/index1.html
[129] http://dashboard.healthit.gov/quickstats/quickstats.php
[130]Etheredge L, A rapid-learning health system. Health Affairs 2007: 26: 107-18. The elements of the Learning Health System include: data and information collection, design of the intervention or change, implementation, evaluation with feedback from all parties, adjustments
[131]Greene, Sarah M. MPH; Reid, Robert J., MD, PhD; and Eric Larson, MD, MPH, "Implementing the Learning Health System: From Concept to Action," Annals of Internal Medicine, 2012; 157:207-210.
[132] Miles, Matthew B. Qualitative data analysis: a methods sourcebook / Matthew B. Miles, A. Michael Huberman, Johnny Saldaña, Arizona State University. — Third edition.