

B. Description of State Healthcare Environment

INTRODUCTION

The Oklahoma healthcare environment is complex. Major gains in critical health outcomes have been achieved in recent years. Yet, ongoing health issues exist, the impetus for the proposed new healthcare payment and service delivery model. Oklahoma has consistently ranked low in population health and health system performance when compared to other states. In 2009, Oklahoma ranked 49th in the nation on the America's Health Rankings®, a report issued by United Health Foundation. In 2015, Oklahoma's ranking improved to 45th in the nation.¹ The 2015 report showed that the state made several notable improvements, including a high immunization rate among children, a reduction in the infant mortality rate, a low prevalence of excessive drinking, and a historically low smoking rate of 21.1 percent. However, challenges remain in the high rate of cardiovascular deaths and limited availability of primary care providers. Additionally, the rate of obesity, diabetes, and deaths due to substance abuse rose in the state, though this followed trends at the national level.

Many efforts and initiatives are underway across the state to deliver 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, particularly regarding the reduction of chronic disease, tobacco use, and the rate of behavioral health disorders. Healthcare delivery and public health systems are undergoing significant transformation to meet the goals of the Triple Aim.

Oklahoma is positioning itself to place greater emphasis on quality care and healthier people at a lower cost. To accomplish this, the proposed Oklahoma State Innovation Model aims to confront the negative impacts of the social determinants of health that are the underlying causes of persistent inequalities, and in doing so, catalyze health system transformation.

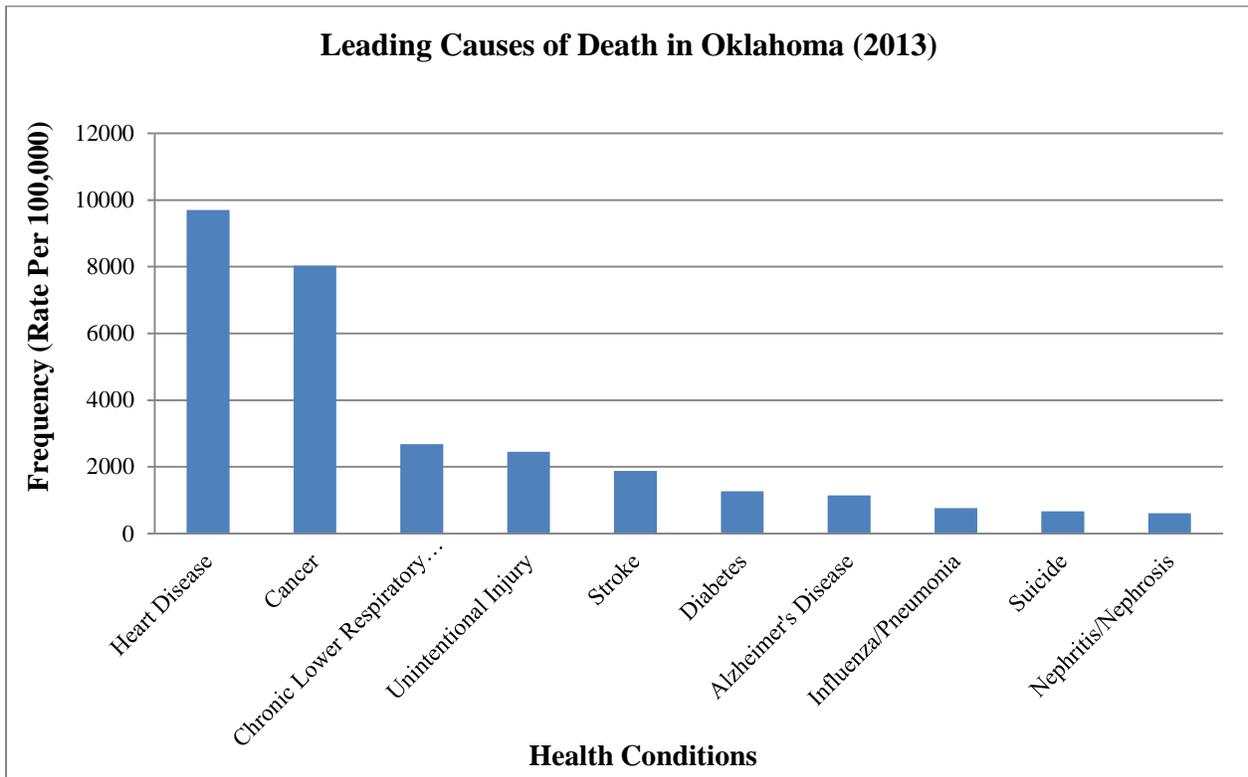
This section will cover the following topics:

- 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.² 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 Figure 1.

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



Oklahomans fare poorly when compared to residents of other states in terms of physical, dental, and mental health outcomes. Oklahomans experience high rates of chronic disease, such as diabetes, heart disease, and lower respiratory disease. Mental illness and substance abuse are also 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

In Oklahoma, 12 percent of the population has diabetes, giving the state the eighth highest rate in the nation.³ Risk of heart disease and stroke increase for individuals with diabetes, and lifestyle factors such as physical inactivity, poor diet, obesity, and tobacco use can exacerbate both the symptoms of diabetes as well as the risk of acquiring another chronic condition. It is projected that almost 37 percent of the adult population in Oklahoma have prediabetes with blood glucose levels higher than normal, and 100,000 have undiagnosed diabetes.⁴ Many complications from diabetes can be reduced through proper prevention, timely diagnosis, and disease management programs.

Between 90 to 95 percent of all diabetes cases in the state are type II diabetes, which can be prevented through weight loss, diet, and exercise.⁵ Diabetes increases the risk of heart attack and stroke by two- to four-fold. Heart attacks and strokes are serious health complications and the leading causes of premature death for individuals who have diabetes.⁶ There are currently 313,800 adults in the state that have diabetes, a rate which has continued to increase for the past 10 years.

Over 78 percent of Oklahomans with diabetes also reported having high blood pressure.⁷ 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. Future health system plans need to address Oklahoma's high diabetes rate and work to reduce the number of Oklahomans with diabetes or those with prediabetes from progressing to type II diabetes. Special populations to target would be Native American and African-American Oklahomans, who have shown to be more likely to experience diabetes than Oklahomans of other races.

Heart Disease

In 2013, one of every three deaths in the nation was attributed to some form of cardiovascular disease. Oklahoma has the third highest death rate in the nation from heart disease (289.1:100,000)⁸, which is the leading cause of death in Oklahoma and accounts for one in four deaths.

It is important to note that 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.¹ More than 25 percent of Oklahomans are physically inactive and 21.1 percent use tobacco, both of which play a significant role in premature death and health complications related to heart disease.⁹ Changing the behavior of Oklahomans to improve health requires an understanding of the causal underpinnings of poor health behaviors, which are often related to a lack of resources that would allow individuals to live a healthy lifestyle. Many Oklahomans, particularly in the poorer areas of southeast Oklahoma, not only lack money to buy nutritious food, but also lack access to nutritious food as many live in food deserts.

Hypertension

Hypertension, or high blood pressure, increases the risk for heart disease and stroke and can typically be controlled through medications, medical care, and lifestyle management. In 2013, 37.5 percent of adults in Oklahoma had a diagnosis of hypertension, compared to the national rate of 31.4 percent.¹² More than half of this population with hypertension is concentrated in six counties: Bryan, Marshall, Greer, Jefferson, McIntosh, and Pushmataha counties. Uncontrolled hypertension can result in serious health consequences and preventable hospitalizations. In 2013, there were an estimated 1,275 blood-pressure related preventable hospitalizations in the state.¹²

Tobacco Use

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.¹⁰ 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 of 21.1 percent.¹¹ This decrease has moved Oklahoma's ranking to 40th in the nation, up from 47th at the start of this decade. Tobacco use among school-age children is also a major issue. 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.¹²

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.¹³

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 percent¹² of the adult population being obese in 2014.¹⁴ Along with adults, children in Oklahoma also have high rates of obesity, with 11.8 percent of high school students being obese.¹² Poor nutrition and physical inactivity can be contributing factors to obesity, which can lead to many chronic conditions like hypertension, heart disease, and diabetes. 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.¹ 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, transportation, and health literacy and education about proper nutrition and exercise.

Cancer

Oklahoma faces poorer health outcomes related to cancer compared to most other states. Overall, Oklahoma has the sixth¹⁵ highest rate of death due to cancer and the sixth highest cancer incidence rate¹⁶ 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.¹⁷ Annually, there are 8,100 cancer-related deaths and 19,280 new diagnoses of cancer. The rate of cancer deaths is strongly influenced by the progression of the disease at the time of diagnosis. Having access to care and participating in routine preventive care and screenings increases one's ability to treat and survive the disease.¹⁸ It is also necessary to include tobacco cessation measures as a way to reduce the burden of cancer in the state. In Oklahoma, the leading cause of cancer deaths (30 percent of deaths) is from lung and bronchus cancers.¹ For most cancers, later stage diagnosis lowers the probability of survival¹¹, so it is critical to include population health measures related to utilization of preventive cancer screenings in order to detect cancers in earlier stages to improve survival rates and subsequently lower disease burden and cost on patients and the state as a whole.

Chronic Lower Respiratory Disease

Chronic Lower Respiratory Disease includes both chronic obstructive pulmonary disorder (COPD) and asthma. In 2013 this disease was the third leading cause of death in Oklahoma with a COPD prevalence of eight percent among adults.¹⁹ Oklahoma tied with West Virginia for the fourth highest COPD prevalence in the nation.²⁰ Like heart disease, smoking is strongly correlated with respiratory disease; smokers are more likely to have asthma and smoking is the leading cause of COPD.¹ An estimated 85 to 90 percent of COPD deaths can be attributed to smoking.¹

Other Chronic Conditions

In 2013, Oklahoma had the sixth highest rate of stroke deaths in the nation²¹, and strokes were the fifth most common cause of death in the state. Much like heart disease, 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. Some medical conditions—including high blood pressure, high cholesterol, heart disease, diabetes, overweight or obesity, and previous stroke or transient ischemic attack can also raise one's stroke risk. Avoiding smoking and drinking too much alcohol, eating a balanced diet, and getting exercise are all choices you can make to reduce your risk. Stroke deaths, the fifth most common cause of death in Oklahoma, are most often caused by high blood pressure, high cholesterol, smoking, and physical inactivity.

Mental Health and Substance Abuse

Mental health and substance abuse are a growing health concern for Oklahomans. Oklahoma is ranked 49th nationally for mental illness prevalence among adults.²² Additionally, data from the 2014 State of the State Health Report ranked Oklahoma 42nd in the average number of poor mental health days each month reported by adults.¹ In 2014, 21.9 percent of adults in the state reported having a mental health issue and 12 percent reported having a substance abuse issue.¹² Approximately 700,000 to 950,000 residents experience mental or substance abuse issues. Recent trends suggest mental health outcomes in Oklahoma are not improving. 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. Still, six of 10 Oklahoma adults and four of 10 youth are not receiving needed treatment.²³

Approximately 12 percent of Oklahomans reported having a substance abuse problem in 2014. 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.²⁴ 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.¹ The rate of suicide in Oklahoma is the 13th highest among states and the District of Columbia.¹ Suicides have increased from 13.63 deaths per 100,000 persons in 2003 to 17.28 deaths per 100,000 persons in 2013.²⁵ 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, there will be a projected 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).

The need for accessible, affordable behavioral health services in Oklahoma is imperative, especially in the southeastern and northeastern portions of the state. Not only do these areas have a higher incidence of mental health issues and substance abuse, but they are also areas where there are too few behavioral health providers. Behavioral health issues can be addressed from both a treatment and prevention standpoint. Healthcare providers can utilize the same mental health risk screening to ensure that the majority of the population is receiving evidence-based screening to identify mental health or substance abuse issues. The co-location of behavioral health and primary care providers will be essential in addressing the extent of mental health issues 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 2014, Oklahoma ranked 45th in the nation for the number of adults with a recent dental visit.²⁸ In 2012, merely 58.9 percent of Oklahomans received some form of dental care, a proportion lower than the national rate of 67.2 percent. Rural, low-income Oklahomans were less likely to receive dental care than Oklahomans living in urban areas that had a higher income. Currently 43 counties in Oklahoma have a critical shortage of dentists and are federally designated as dental health professional shortage areas.²⁹ Approximately 66 percent of Oklahomans that reside in these dental HPSAs have an unmet need, and in order to meet 100 percent of needs, an additional 88 dentists would need to enter the workforce and practice across these underserved counties.

Maternal and Child Health

Oklahoma continues to improve in its maternal and child health outcomes but ranks in the lower 50 percent among other states. Although the state infant mortality rate has decreased by more than seven 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.³⁰ 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.³¹ In 2012, the proportion improved; 68.2 percent of expecting women in Oklahoma received prenatal care in their first trimester.

Table 1: Infant Mortality Rate

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

Health System Performance Trends – The Burden of Disease

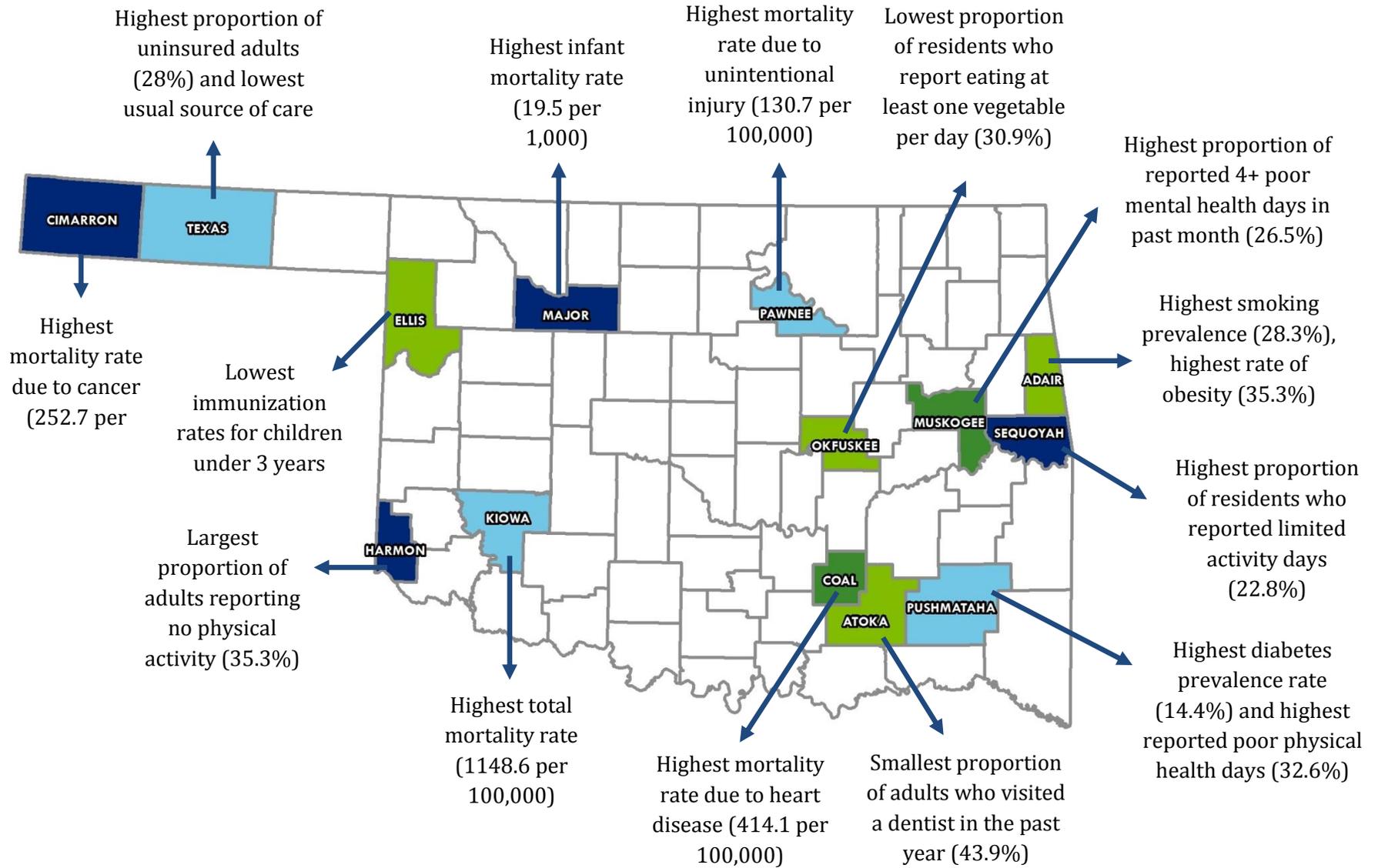
Oklahoma’s current health system performance is evident in poor health outcomes, which have been driven by reactive care that lacks emphasis on prevention and control. These problems are exacerbated by a complex health system that is difficult for patients to navigate due to the fragmentation between 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 (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 was among several states that improved on the greatest number of indicators – the state improved in 14 indicators and worsened in only two indicators – it 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 2: Oklahoma's Worst Health Outcomes by County Location



Quality Performance Indicators

Reducing preventable hospitalizations, non-emergent emergency department (ED) utilization, and hospital readmissions 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 and treating events in the proper care setting. 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. Urgent care settings not only have extended hours and a walk-in policy, but also have 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.³²

Preventable Hospitalizations

Preventable hospitalizations are defined as stays that might have been avoided with timely and effective outpatient care and appropriate self-management. In 2015, there were 1836.2 per 100,000 population preventable hospitalizations in Oklahoma.³³ 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.³⁴ It is estimated that there were 52,000 potentially preventable hospitalizations annually that cost over \$1 billion in unnecessary annual charges. These preventable diseases and unmanaged chronic illnesses stress the healthcare system, treats 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.³⁵

Non-Emergent Emergency Department Utilization

Emergency care is appropriate for health problems that pose an immediate danger to one's life, 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 and is generally not considered appropriate to be provided in an emergency setting. The Oklahoma Health Care Authority (OHCA) indicates that one percent of their total annual budget pays for non-emergent emergency department (ED) utilizations.³⁶ 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 ER 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.³⁷ These diagnoses demonstrate that EDs are being used for health problems that could be treated in a lower acuity setting.

Currently, OHCA has initiatives in place to discourage non-emergent ED utilization from Medicaid members as well as incentives in place for providers that reward alternative modalities of care. For example, patient-centered medical homes (PCMH), known as SoonerCare Choice in Oklahoma, have been used to extend access hours, The health management program (HMP) and health access networks (HAN) also work to better manage care to avoid inappropriate use of healthcare services. Members identified for the HMP receive advanced program access, enhanced care coordination, and planning for quality and effectiveness goals. In 2014, the total ED cost for the Medicaid population in Oklahoma enrolled in the SoonerCare Choice was over \$151 million, with an average cost of \$264 per visit and each member averaging two ED visits per year.³⁸ Behavioral health conditions are the number one reason for visits to the ED among all but the youngest adults enrolled in SoonerCare Choice. Hypertension and COPD are significant contributors of ED use by the older adult population.³⁹

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 conditions is an important strategy for addressing ED utilization as well as leveraging care coordination efforts.

Figure 3: SoonerCare Emergency Department Utilization Per 1,000 Persons

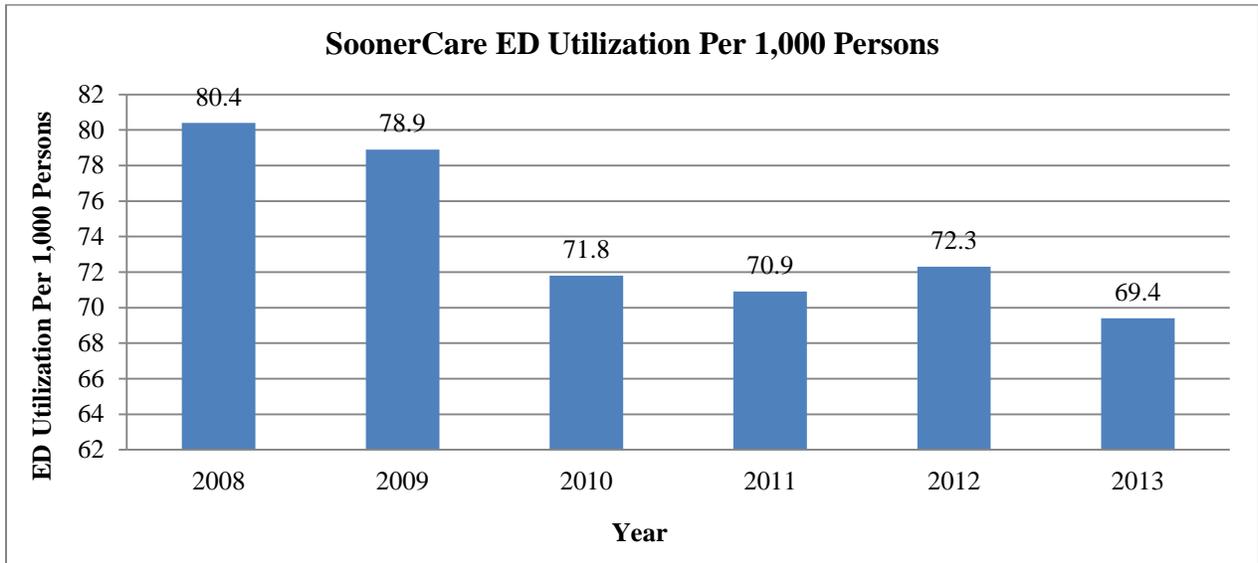
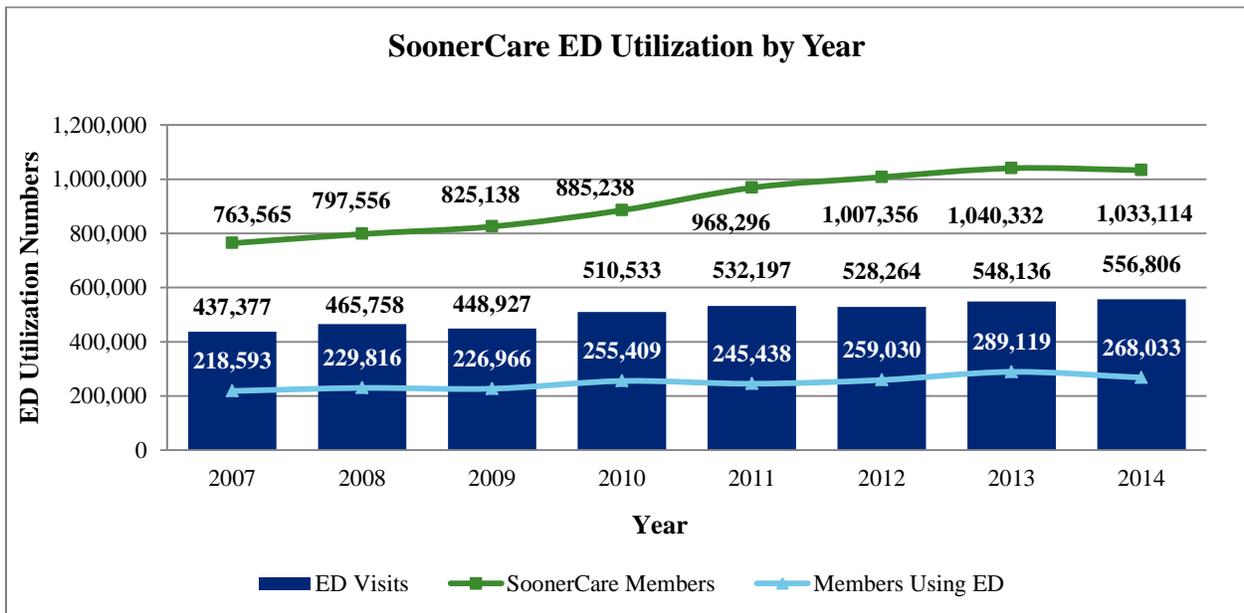


Figure 4: SoonerCare Emergency Department Utilization by Year

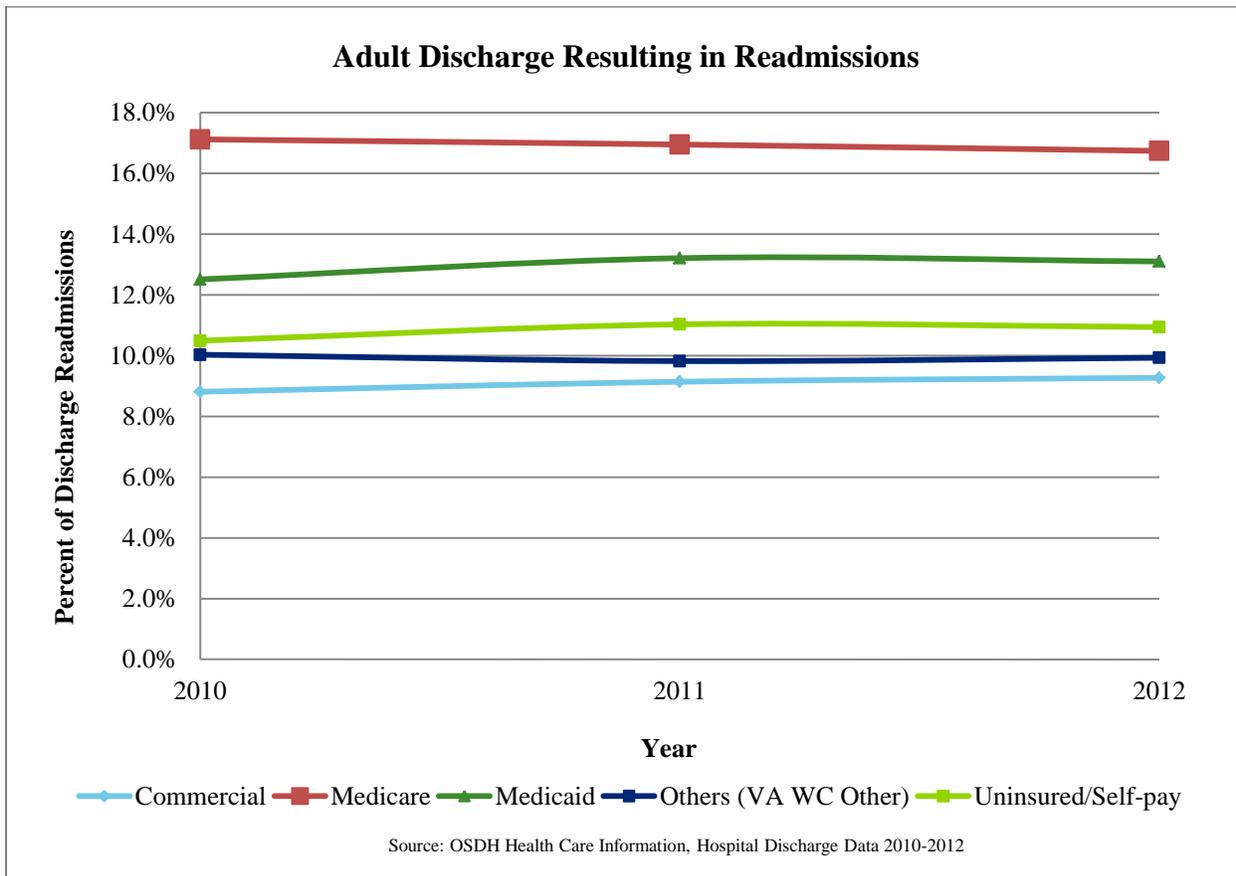


Readmissions

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 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 5: Percent of Adult Discharges Resulting in Readmissions



Healthcare Cost Trends

Oklahoma payer data indicates that in 2010 and 2012, the top 25 principal diagnoses had total costs of \$12.9 billion and \$14.2 billion (increase of 10.1 percent), respectively.⁴² Total personal healthcare

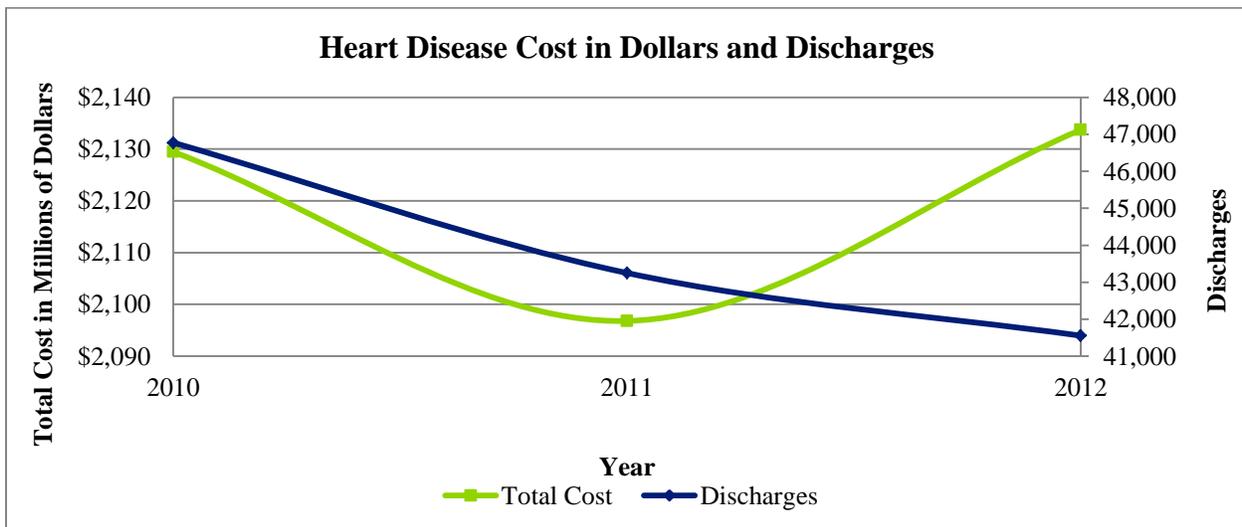
expenditures topped \$24 billion in Oklahoma in 2009 and have continued to increase steadily since 1991, when expenditures were \$7.5 billion.⁴³

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.⁴⁴

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.⁴⁵

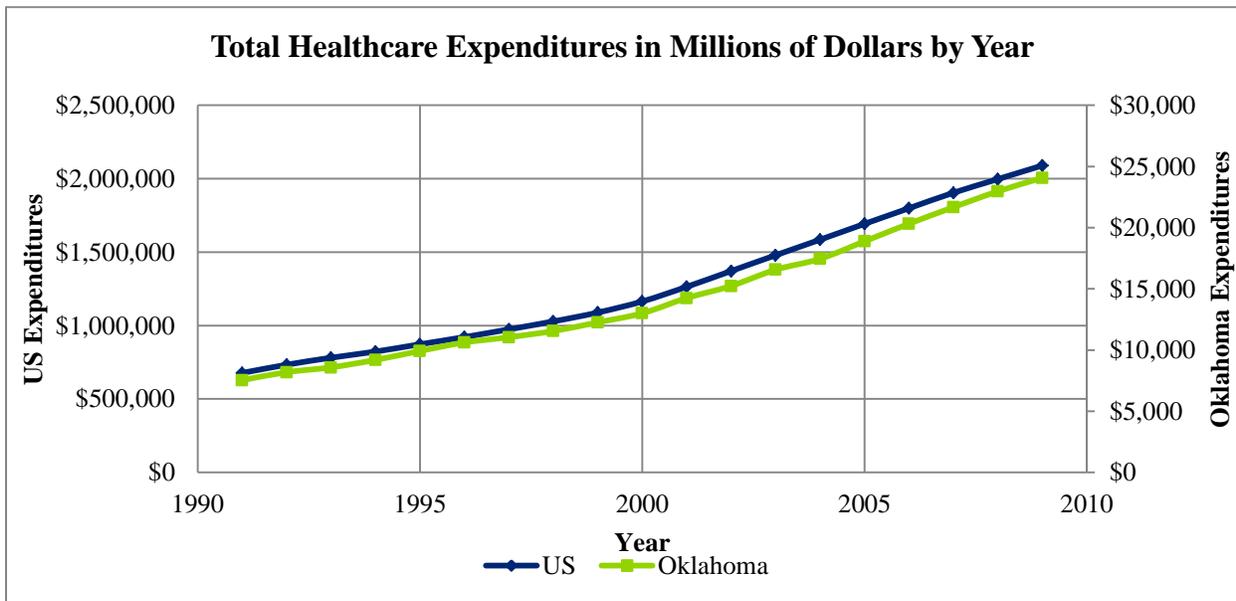
Heart disease, Oklahoma’s leading cause of death, attributed to one in four deaths that occurred in the state in 2013.⁴⁶ It should be noted, however, that the driver of marked increases in both the total and average costs per hospital inpatient discharge is not necessarily due to increased patient utilization. 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.⁴⁷ These types of healthcare trends are present in other diseases as well and can be attributed to many different causes from the delivery side with new procedures, pharmaceuticals, or intensity of services and from the payment side with methodologies potentially changing over time to include more services and increases in the total cost of care.

Figure 6: Heart Disease Total Cost in Millions of Dollars and Number of Discharges by Year



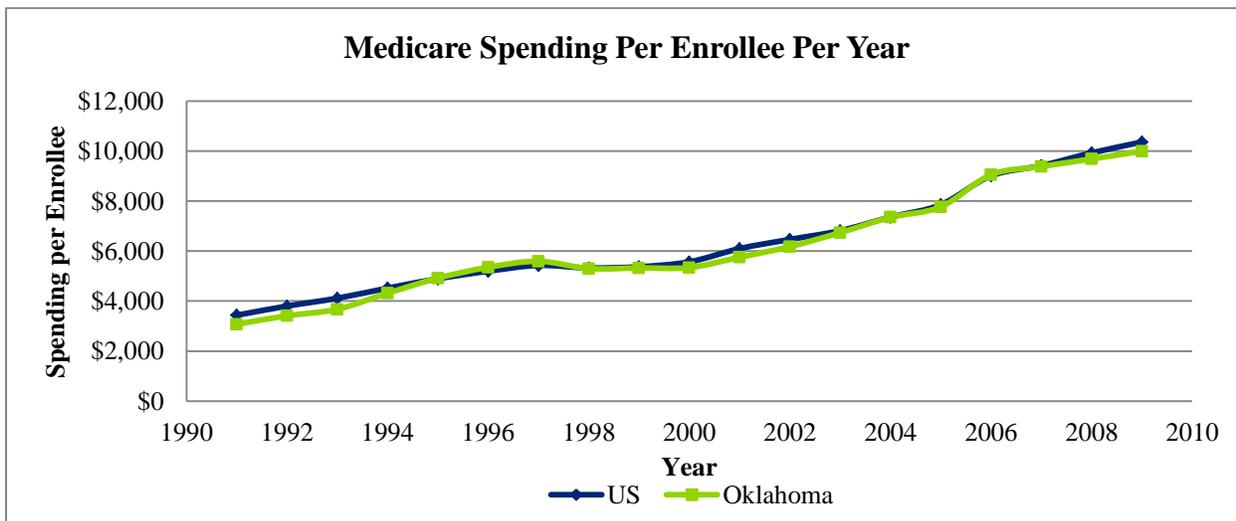
The most common principal diagnosis for all payers was complications from pregnancy, childbirth, and puerperium residual, which had a total of 52,582 discharges in 2012. Medicaid was the most common payer, accounting for 58.03 percent in 2010, 56.77 percent in 2011, and 55.97 percent of all discharges 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 7: 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 healthier 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.⁴⁸

Figure 8: 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.⁴⁹

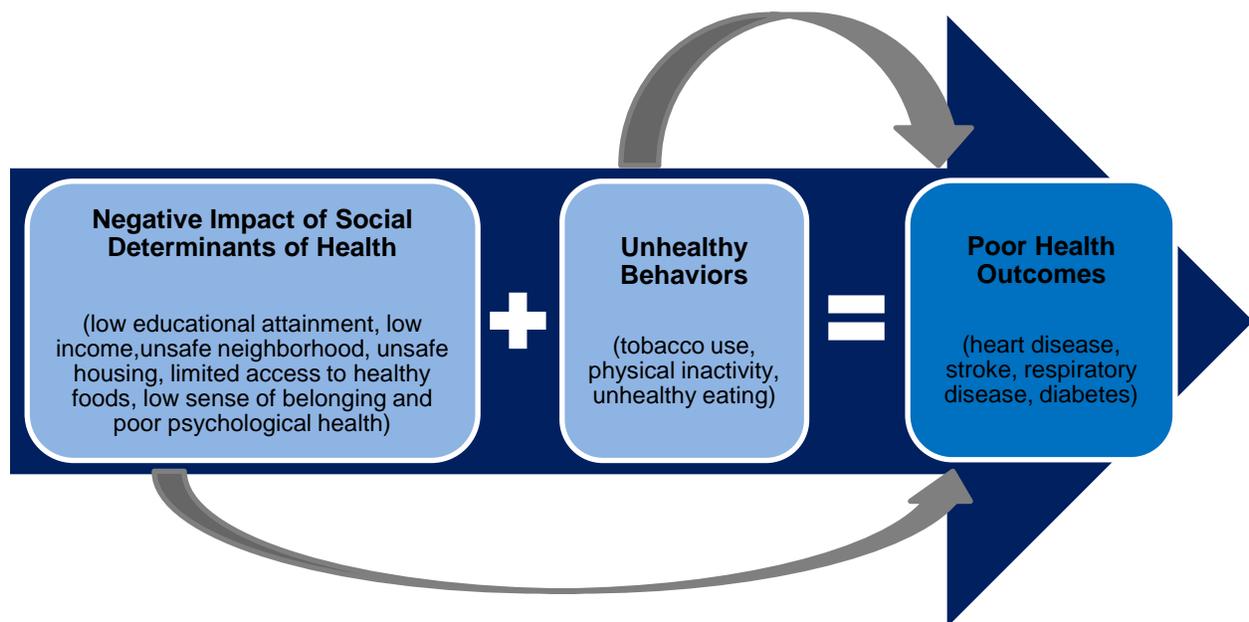
CURRENT ENVIRONMENT FOR HEALTH

To better understand the reason for the poor outcomes mentioned above it is necessary to look at the current environment for health. This section describes some characteristics of the environment to enable a better understanding of what is driving health outcomes beyond the disease state.

Social and Economic Determinants of Health

Social circumstances alone account for 15 percent of premature deaths and significantly influence health behaviors.⁵⁰ Many Oklahomans lack basic needs such as an adequate income, housing, and nutrition, which not only affect overall health but health behaviors as well. The figure below details the relationship between social determinants, personal behaviors, and health outcomes. 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.⁵¹

Figure 9: 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.⁵² 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 ethnically Hispanic.⁵³

Oklahoma is home to the second highest number of Native American people, second only to California.⁵⁴ 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.⁵⁵ With this population and the growing number of non-native English speaking Latino residents, (currently 6.37 percent of the state's population⁵⁶), 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".⁵⁷ 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.⁵⁸

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.⁵⁹ 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 \$53,046.⁶⁰ 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.⁶¹ 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.⁶²

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 5.0 percent.⁶³

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.⁶⁴ The State faces up to a \$1 billion dollar budget shortfall in 2016, a deficit largely attributed to low oil prices.⁶⁵

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,⁶⁶ 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.⁶⁷ 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.⁶⁸ Addressing Oklahoma’s health issues by confronting social determinants of health, such as education, including alignment with state job needs, could be expected to improve both health and educational outcomes, two forces that are closely intertwined.

Access to Care

Inadequate access to healthcare and furthermore quality healthcare contributes to 10 percent of premature deaths in the United States. In turn, this increases cost due to preventable hospitalizations and/or non-emergent emergency room utilization.⁶⁹ 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 counties in Oklahoma are classified as Primary Care HPSAs, 44 counties are classified as Dental HPSAs (22 are still pending approval), and 69 counties are classified as Mental HPSAs.⁷⁰ Oklahoma ranks 44th in the nation for the number of primary care physicians per population.⁷¹ The distribution of primary care physicians is also of concern. The United Health Foundation Health Care Rankings lists Oklahoma as third worst among rural states in the misdistribution of doctors among the population.⁷² Additionally, almost 30 percent of the 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 workforce is a priority of the Governor of Oklahoma. 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 state⁷³. More information and maps of provider and provider organization locations can be found in Appendix A and B.

Table 2: Physician Count in Oklahoma

Physician Type	No.
Physicians (D.O. and M.D.)	7,838
<i>Rate per 10,000 population</i>	20.36
Osteopathic Physicians (D.O.)	1,619
Allopathic Physicians (M.D.)	6,219
Primary Care Physicians	3,642
<i>Rate per 10,000 population</i>	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
<i>Rate per 10,000 population</i>	3.10

Table 3: Nurse Count in Oklahoma

Nurse Type	No.
Registered Nurses	32,351
<i>Rate per 10,000 population</i>	84.02
Licensed Practical Nurses	12,810
<i>Rate per 10,000 population</i>	33.27
Advanced Practice RN's	2,005
<i>Rate per 10,000 population</i>	5.21
Nurse Practitioners	1,299
<i>Rate per 10,000 population</i>	3.37
Nurse Midwives	52
Clinical Nurse Specialists	216
Nurse Anesthetists	438

Table 4: Dental Health Professional Count in Oklahoma

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

Table 5: Mental and Behavioral Health Professional Count in Oklahoma

Mental and Behavioral Health Professionals	No.
Psychiatrists (D.O. and M.D.)	341
<i>Rate per 10,000 population</i>	0.89
Child and Adolescent Psychiatrists	26

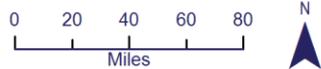
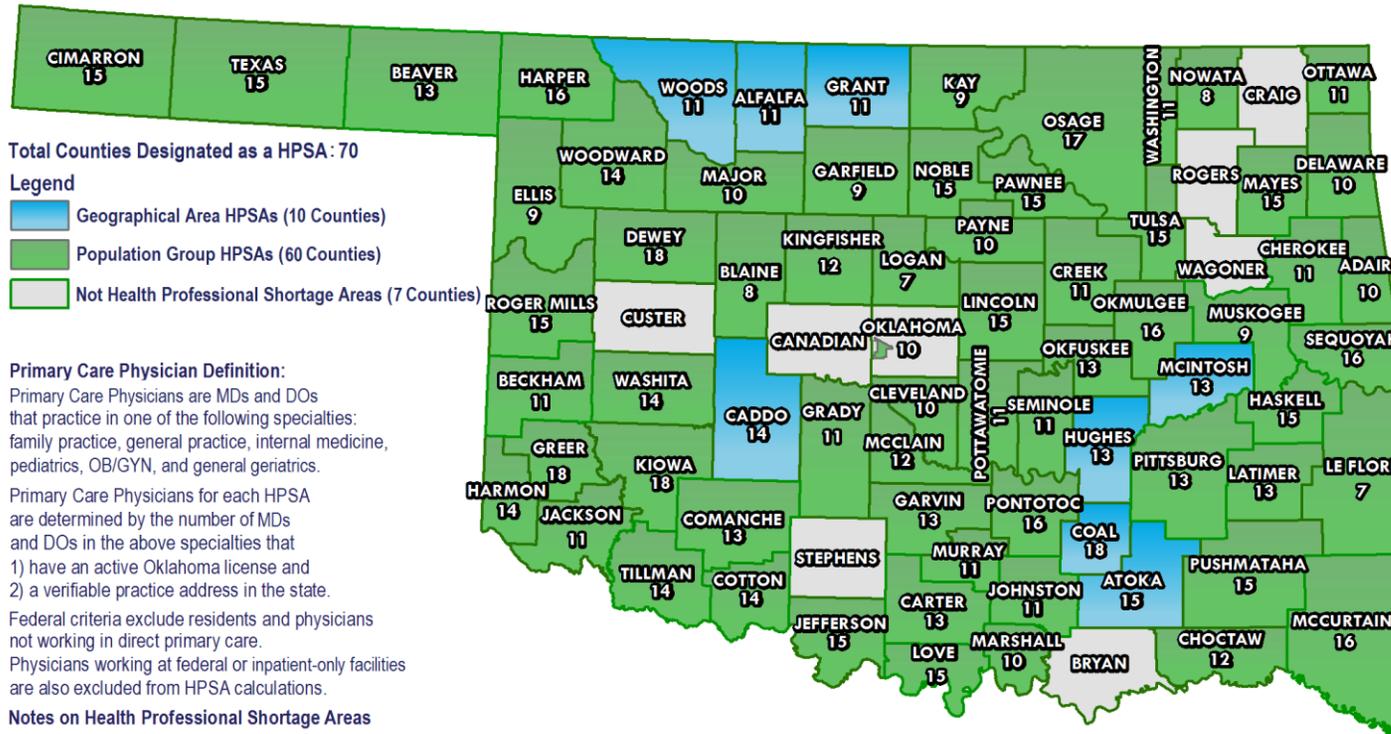
Clinical/Counseling Psychologists	512
<i>Rate Per 10,000 Population</i>	1.33

Table 6: Health Care Facility Count in Oklahoma

Facility Type	No.
General Medical / Surgical Hospitals	99
Critical Access Hospitals	34
Rural Health Clinics	54
Federally Qualified Health Center Sites	75
Free Clinics	84
Indian Health Services (Federal)	12
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 10: Oklahoma Primary Care Health Professional Shortage Areas (2015)

Primary Care Health Professional Shortage Areas (HPSAs)



Disclaimer: This map is a compilation of records, information and data from various city, county and state offices and other sources, affecting the area shown, and is the best representation of the data available at the time. The map and data are to be used for reference purposes only. The user acknowledges and accepts all inherent limitations of the map, including the fact that the data are dynamic and in a constant state of maintenance.



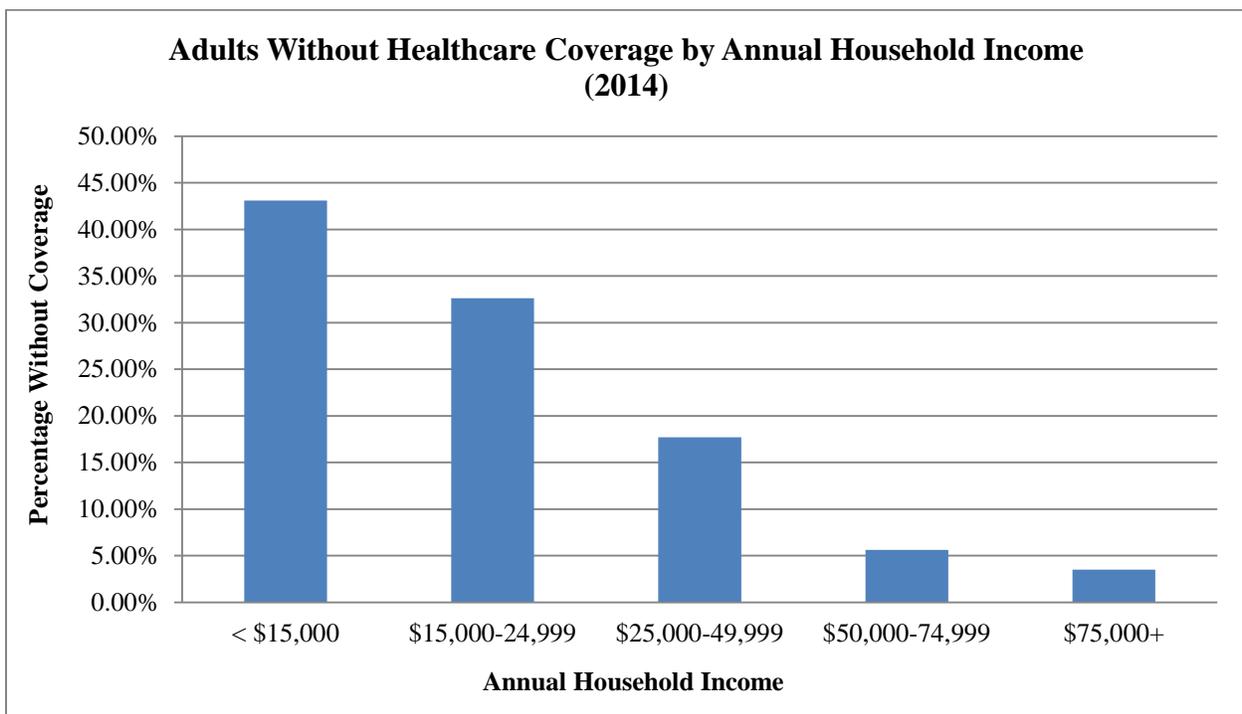
Office of Primary Care & Rural Health Development
 Center for Health Innovation & Effectiveness
 Oklahoma State Department of Health

Created: 02/03/2016

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.⁷⁴ 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 (19.9 percent), while Tulsa has the lowest uninsured rate (15.1 percent).⁷⁵ 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 11: Percentage of Nonelderly without Healthcare Coverage by Annual Household Income, Oklahoma, 2014



Health Behaviors

In the United States, poor health behavioral patterns account for 40 percent of illnesses and premature deaths. Health behavioral patterns are the largest determinant impacting health, more than genetic predisposition, healthcare access, social circumstances, and environmental exposure.⁷⁶

Overall, Oklahomans eat fewer fruits and vegetables, exercise less often, use tobacco more often, and are more obese than average Americans.⁷⁷ Oklahoma is ranked the 44th least active state; 28 percent of Oklahomans were not physically active in 2012.⁷⁸ Oklahoma is also 50th and 39th in the nation in fruit and vegetable consumption, respectively.⁷⁹ Oklahomans engage in unhealthy behaviors at high rates, which contribute to development or exacerbation of chronic disease and the higher rates of chronic diseases and mortality than the national average. Data from the State of the State Health’s Report shows that tobacco use, obesity, physical inactivity, and poor diet are some of the most common behavioral and lifestyle factors driving poor health outcomes in the state.

Tobacco use among school-age children is also a major issue. 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.⁸⁰

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.⁸¹

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.⁸² 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, more likely to have more poor mental health days, and are less physically active.⁸³

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.⁸⁴ 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.⁸⁵ 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.⁸⁶

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.^{87,88} 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

Estimated Healthcare Enrollment by Insurance Source

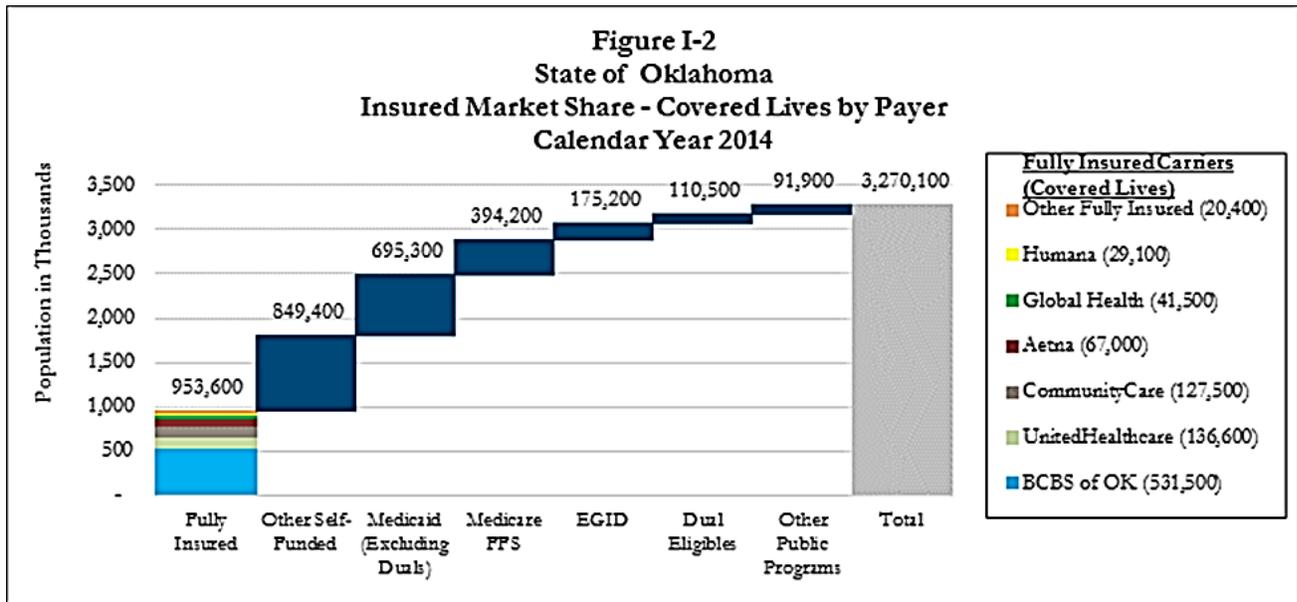
In 2015, 43 percent of Oklahomans were insured through employer-sponsored insurance plans, 36 percent through governmental plans (Medicaid, Children's Health Insurance Program, Medicare), and six percent through individual insurance. The remaining 14 percent of Oklahomans were uninsured.⁸⁹

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).⁹⁰ 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 12: 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.

Table 2: 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).⁹¹ 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.⁹²

Figure 13: Average Health Insurance Premiums as a Percent of Median Household Income

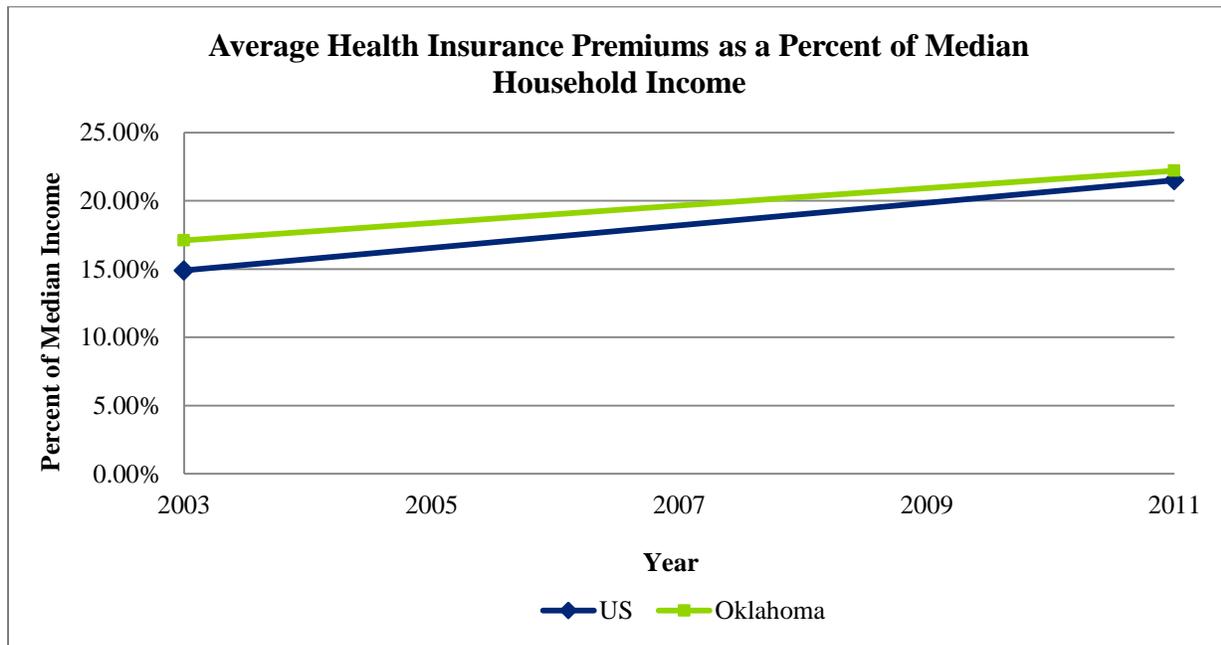
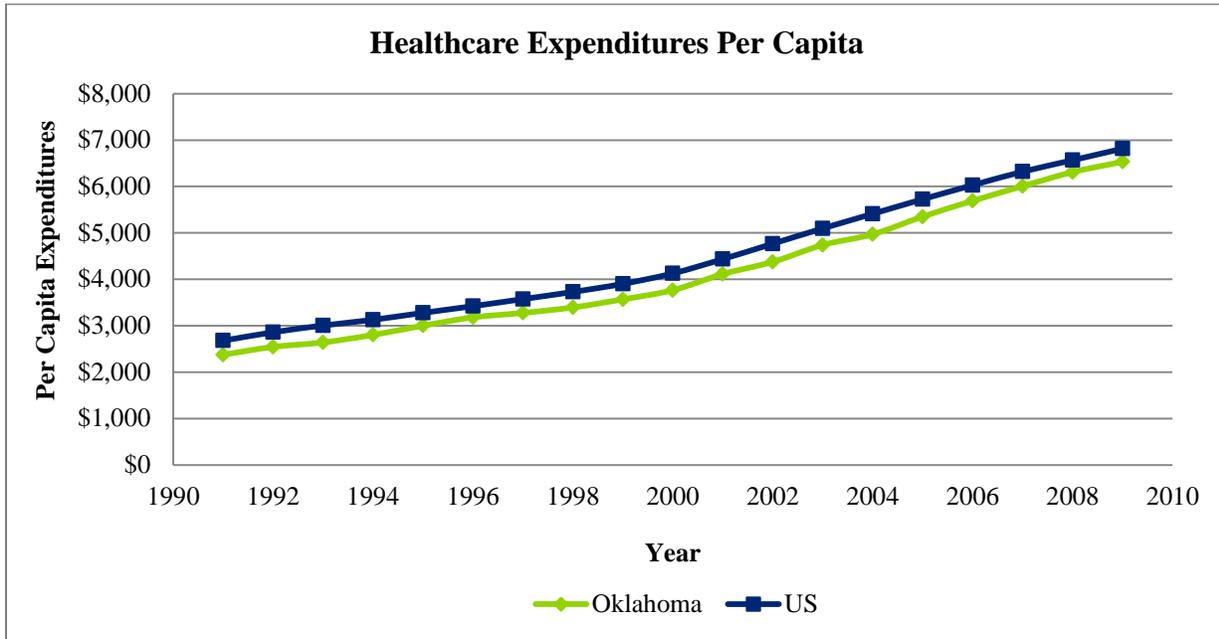


Figure 14: Healthcare Expenditures Per Capita



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 2011.⁹³ 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.⁹⁴ 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.⁹⁵ 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.⁹⁶

Disabled Populations

An estimated 15.8 percent of Oklahoma’s total population is living with a disability. Of those Oklahomans that are under the age of 18, 4.8 percent (44,819) 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, 42.3 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).⁹⁷ As previously mentioned, delaying care may subsequently lead to more serious, more expensive, and higher acuity health problems. It is important to stress and encourage potential patients to be actively involved in their own care to improve health outcomes.

Table 7: Percentage of Population by Age Group with Disability US Census, Oklahoma, 2009-2013

	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).⁹⁸

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 be 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.⁹⁹ 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. Table 8 shows estimates of enrollment by insurance source for urban and rural residents in 2015.

Table 3: 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.¹⁰⁰ 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 2014.¹⁰¹

Table 4: Estimated Enrolment by Insurance Source and Age (2015)

Insurance Source	Age Group					Total
	Under 19	19 to 34	35 to 49	50 to 64	Over 64	
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.¹⁰² 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. Table 10 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.

Table 5: 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

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.¹⁰³ 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 than 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.

Table 6: 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.¹⁰⁴

Table 8: High Cost Condition Relative to Average Member by Payer in Oklahoma

Condition	Commercial Insurance	Medicare	Medicaid
Obesity (based on coding)	343%	229%	<i>Information Unavailable</i>
Adult Obesity (based on published research)	<i>Information Unavailable</i>	122%	<i>Information Unavailable</i>
Diabetes	349%	157%	232%
Hypertension	283%	127%	217%
Tobacco Use (based on coding)	345%	213%	N/A
Adult Tobacco Usage (based on published research)	<i>Information Unavailable</i>	115%	<i>Information Unavailable</i>
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.¹⁰⁵ 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 2013.¹⁰⁶

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.

CURRENT INITIATIVES FOR HEALTH IMPROVEMENT

The current disease burden in Oklahoma has given rise to many efforts for improvement. Through better reporting of health needs and outcomes, state and federal initiatives, as well as community and public health efforts, there are many ongoing initiatives that address Oklahoma’s current health disparities. As health is so closely correlated with the social determinants, many initiatives to address these needs are also discussed here. However, this is not meant to be an exhaustive list of resources in Oklahoma, but examples of resources to create a foundation for health improvement with which to grow from.

State Health Reports

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.

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.¹ 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.

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,¹² food security, transportation, literacy, and employment adversely affect a vast majority of Oklahomans.

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

Current State Health 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.¹⁰⁷ 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 landscape of healthcare initiatives in Oklahoma is dynamic. If cross-collaboration is to succeed, a process or infrastructure will need to be implemented to coordinate and facilitate these varied, but related, initiatives. Oklahoma has many worthwhile ongoing healthcare initiatives, the effects of which could be magnified through effectively coordinating resources.

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.

Table 9: Identifiable Primary Payers / 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%
Blue Cross and Blue Shield of Oklahoma	Private/Non-Profit/ Commercial	2	2%
Notah Begay III Foundation	Private Foundation	2	1%
Oklahoma Health Care Authority	State Agency	2	1%
American Heart Association	Non-Profit Association	1	1%
Association of State and Territorial Health Officials	Non-Profit Association	1	1%
Community Care of Oklahoma	Private/Non- Profit/Commercial	1	1%
Tobacco Industry – Unspecified	Private/ Commercial	1	1%
United Health Foundation	Private Foundation	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, serves over 818,000 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), 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.

Primary Care Medical Home

SoonerCare Choice is a Primary Care Case Management (PCCM) program in which each member is assigned to a primary care medical home. The medical home provider will coordinate all healthcare services to qualifying Oklahomans. SoonerCare Choice members are designated a primary care physician (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 primary care 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

OHCA created a Health Access Network (HAN) pilot program serving Oklahoma SoonerCare members. A HAN is an entity representing a collection of providers which may include hospitals, community health centers, public health departments, providers, rural health clinics (RHCs), federally qualified health centers (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; and
- Offers 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 or State.

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 PCMH providers. 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 HANs operating in Canadian, Tulsa, and Payne counties.

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 improve their health. Telligen was chosen by the Oklahoma Health Care Authority 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. This will 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 will 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.

Oklahoma Department of Mental Health and Substance Abuse Services (ODMHSAS)

The Oklahoma Department of Mental Health and Substance Abuse Services is responsible for providing services to Oklahomans who are affected by mental illness and substance abuse. In FY13, ODMHSAS provided services to approximately 187,000 individuals

Health Homes

Health Homes is an optional Medicaid State Plan benefit that provides 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 needs. Health Home providers integrate and coordinate all primary, acute, behavioral health, and long-term services and supports to treat the “whole person”.

In Oklahoma, the ODMHSAS has partnered with OHCA to expand upon the patient-centered medical home model to provide coordinated primary and behavioral health integration for adults with serious mental illness and children with serious emotional disturbance. Implementation began January 5, 2015.

These Health Homes provide comprehensive care management, care coordination, health promotion, comprehensive transitional care from inpatient settings, individual and family support, and referral to community and social support services. Health Homes are responsible for reporting on HEDIS measures related to hospital admission rates, emergency department visits, and skilled nursing facility admissions.

Primary Care and Behavioral Healthcare Integration¹⁰⁸

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 federally-qualified 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.

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.¹⁰⁹ 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).¹¹⁰

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 2011.¹¹¹

According to CMS data from July 2015, more than \$484 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.¹¹² 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.)¹¹³ 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.¹¹⁴ 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).¹¹⁵ 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.¹¹⁶

Figure 15: Responses Selected for Having “No EHR” (N = 209)

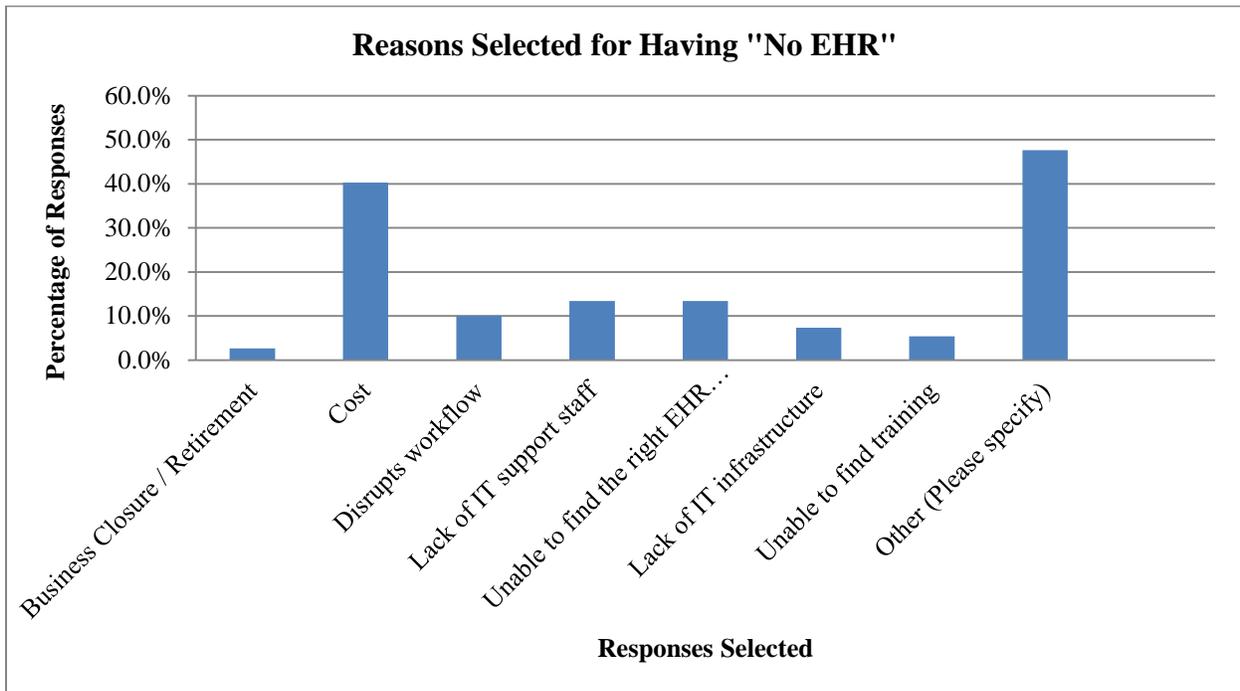
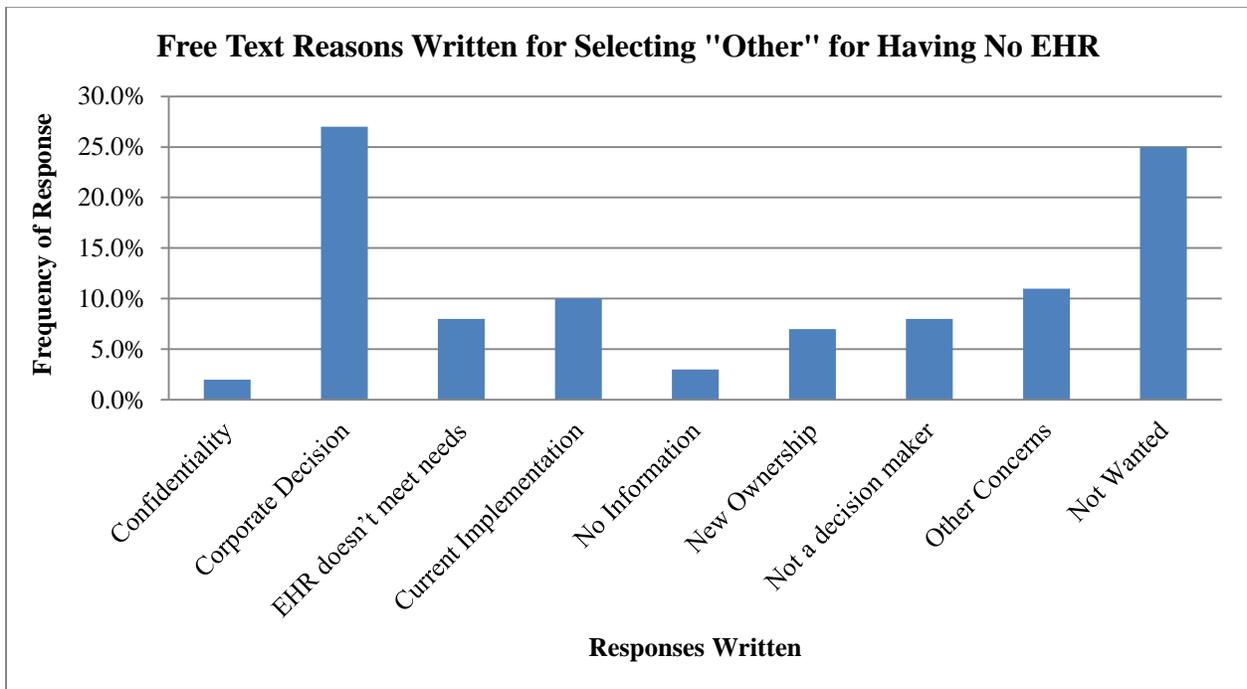


Figure 16: Free-Text Reasons Written for Selecting “Other” for Having “No EHR” (N = 71)



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.

Public Health and Community Organizations

Certified Healthy Oklahoma Program

The Certified Healthy Oklahoma Program is a free, voluntary statewide certification for public facilities. The program began in 2003 as a collaborative initiative with four founding partners: the Oklahoma Turning Point Council, the Oklahoma Academy for State Goals, the Oklahoma State Chamber, and the Oklahoma State Department of Health. The certification spotlights businesses, campuses, communities, congregations, early childhood programs, restaurants, and schools that are committed to supporting healthy choices through environmental and policy change.

Tobacco Settlement Endowment Trust

Tobacco Settlement Endowment Trust (TSET) is a grant making state agency. Funds for the trust come from payments from tobacco companies through the Master Settlement Agreement. All earnings from the fund are used for programs that promote the improvement of health for Oklahomans. Grants focus on preventing tobacco use, reducing tobacco use, and preventing obesity.

- Healthy Communities Incentive Grants: These are incentive grants to communities throughout Oklahoma for the purpose of supporting improved health for every Oklahoman.
- Healthy Schools Incentive Grants: School districts that adopt all of the incentive grant policies and criteria that effect students during the school day will be eligible to apply for funding. A bonus incentive grant will be offered to Districts that opt to adopt policy that allows for only healthy food and beverage options outside of the school day. This would include after school events, celebrations, fundraising and concessions.
- TSET Healthy Living Program Grants: TSET Healthy Living Program grants are community-based grants that seek to prevent and reduce tobacco use and obesity through a comprehensive approach that includes strategic actions and partnerships with businesses, cities and governments, community institutions, organizations, and schools.
- Rural Health Providers Grant: These are grants to support medical residency programs to place providers in rural and medically underserved portions of the state.

Turning Point Partnerships

The Oklahoma Turning Point Council (OTPC) helps to transform public health in Oklahoma by working directly with community partnerships for health improvement initiatives. Rather than using a top down approach to public health, Turning Point seeks input from communities to help identify community priorities and implement local solutions. For over 15 years, OTPC has partnered with communities across

Oklahoma to work on local innovations such as community health centers, extensive walking trails, community gardens, improved school health activities, and advocacy for health improvement policies. Moreover, OTPC continues as an independent statewide consortium focused on policy issues aimed at improving Oklahoma's health.⁶ Below are several highlights of OTPC coalitions:

- Currently there are 67 Turning Point partnerships statewide and two partnerships in development.
- There are 24 partnerships engaged in the Mobilizing for Action through Planning and Partnerships (MAPP) process, the strategic planning process for improving community health. Eighteen partnerships have developed a Community Health Improvement Plan (CHIP) and five partnerships have conducted a community health assessment.
- Overarching issues identified by the CHIPs include: food security, access to healthcare, behavioral health, substance abuse, physical activity, obesity, and teen pregnancy.

County Health Department Accreditation

The OSDH is currently accredited through the Public Health Accreditation Board (PHAB). In addition to the central office, Oklahoma has 68 counties with health departments. Currently, 32 county health departments are participating in some part of the accreditation process.

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, heart disease, and stroke. This multi-year project is being advanced in Carter County, Comanche County, LeFlore 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.

Health Equity Campaign

The 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. The OHEC looks to address inequities that are a result of the social determinants of health. OHEC will provide the opportunity for groups to build on the strengths, assets, and resources of a community and work toward reducing the health inequities of underserved populations in Oklahoma.⁹

The OHEC has four focus areas: transportation, health literacy, food security, and housing.

- **Transportation:** The goal of this focus area is to increase access to healthcare and jobs through reliable, low-cost public transit, and building healthy cities and communities to give people cleaner, safer options for active transportation.

- **Health Literacy:** The goals of this focus area are to improve literacy skills of adults and children so that individuals can fully function in society; improving access to accurate, easy to read and understand health information; and improving access to resources for health professionals to effectively address patient literacy and language barriers.
- **Food Security:** The goals of this focus area are to increase food security in Oklahoma by making fresh, affordable, locally-grown food more available; and to increase consumption of fresh produce, whole grains, and lean meat.
- **Housing:** The goal of this focus area are to identify housing solutions for homeless veterans and low-wage workers; improve access to affordable, safe housing for people with disabilities; and develop long-term planning to meet affordable housing needs by Oklahomans.

Free/Charitable Clinics and Pharmacy Programs

A total of 40 licensed charitable pharmacies and over 80 free clinics exist in Oklahoma. Below are several examples of these important safety net programs.

- **Health Alliance for the Uninsured (HAU):** Care Connection coordinates diagnostic testing, specialty consultants and surgical care for low-income, uninsured patients of partner safety net clinics in Oklahoma County. The HAU also partners with Oklahoma County Social Services to provide bulk prescription medications to free charitable clinics in Oklahoma County so that acute illnesses are treated at the time the patient is diagnosed.
- **Sandy Park Clinic (Tulsa):** Sandy Park was the first Bedlam Public Housing Clinic. It is located in the southwest part of Tulsa and operated through the Tulsa Housing Authority. It serves at risk school children, residents of public housing, isolated elderly, single parents, and the working poor.
- **Good Shepherd Community Clinic (McAlester):** Located in McAlester County and serving a five county area, Good Shepherd offers medical, dental, vision, pharmacy, and prevention programs to residents who are uninsured, underinsured, and indigent. Today, Good Shepherd is a free healthcare home for over 4,000 patients.

Regional Food Bank

The Regional Food Bank of Oklahoma 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. Food is provided to feed 110,000 Oklahoma residents each week. Programs include: Food for Kids, Fresh RX, Senior Feeding, Urban Harvest, Beef for Backpacks, USDA Commodities, Hunger 101, and the Food and Resource Center Programs.

Department of Human Services Aging Services Division

The Department of Human Services (DHS) Aging Services Division contracts with 11 Area Agencies to provide services to residents age 60 and older. Services included include:

- **Congregate and Home Delivered Meals:** Meals are served each year at local nutrition sites throughout Oklahoma and to homebound individuals. Meals are planned by a Registered Dietitian and must meet one-third of the recommended daily requirement.
- **Evidence Based Health Promotion:** Often located at the local nutrition site, health promotion services include provision of educational presentations, exercise programs, and health screening activities to residents 60 years and older.

- **Nutrition Education:** Information on the benefits of healthy eating and exercise are provided to congregate and homebound meal participants.
- **In-Home Assistance:** Local projects are funded by Area Agencies on Aging to provide chore services, personal care, housekeeping, and home repair.
- **Outreach:** Skilled outreach personnel in each county provide one-on-one assistance to help older persons make informed choices.
- **Legal Services:** Educational presentations on legal issues of interest are provided to older adults, as well as individual legal assistance. Legal assistance is provided through the Legal Aid Services of Oklahoma.
- **Transportation:** Trips to the nutrition site, bank, doctor's office or grocery store allow older persons who no longer drive to remain independent in their communities.
- **Caregiver Assistance:** Services, education and support groups are available to family members who are caring for older persons.

Alliance for Healthier Generation – Healthy Schools Program

The Alliance for Healthier Generation Healthy Schools Program assists schools with completing an online assessment and creating an action plan that will work for their specific community. The plan includes strategies to improve snack policies, add physical activity breaks in the classroom, start active afterschool programs, and start employee wellness programs.

Schools for Healthy Lifestyles

The Schools for Healthy Lifestyles program 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. Schools are also provided the opportunity to participate in the adopt-a-doc/adopt-a-dentist program where a doctor/dentist may serve on the school health advisory committee, make classroom presentations, connect the school with health resources, or assist with required physical fitness testing and health education assessments.

Mental Health Association of Oklahoma

The Mental Health Association of Oklahoma offers statewide programs designed to help achieve victory over mental illness and prevent mental disorders. Programs include:

- Support groups for depression, anxiety, bipolar disorder, suicide, parents supporting parents, and strength and serenity.
- Legal outreach and resources to identify, evaluate, and diminish systemic barriers to access to justice for targeted disadvantaged populations.
- Recovery services programs that empower individuals with mental illnesses to engage in their communities.
- Trainings for psychological first aid, suicide prevention, and crisis intervention.
- Housing programs that offer short-term or transitional living options as well as some scattered site apartments for those that can live independently in the community.

United Way of Central Oklahoma

The United Way of Central Oklahoma works to provide access and critical funding to over 127 results-oriented programs at 61 accountable non-profits across central Oklahoma. Funded agencies provide services such as housing, mental health services, food, clothing, health clinics, advocacy, job placement, and drug and alcohol counseling.

Tulsa Area United Way

The Tulsa Area United Way works to advance the common good by focusing on the three building blocks of a better quality of life: education, health/safety, and financial stability. The Tulsa Area United Way served 505,000 people through 60 partner agencies in six counties of the Tulsa region in 2014. The service area includes Tulsa, Creek, Okmulgee, Osage, Rogers, and Wagoner counties.

Tribal Public Health Efforts

Oklahoma is home to 38 federally-recognized tribal nations.¹⁰ The State has an American Indian population of almost 350,000 persons, comprising nine percent of the state's population.¹⁴ Along with being citizens of the state, tribal members are citizens of their respective tribal nations. Tribal nations have inalienable self-governance of their 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 and have higher rates of heart disease and diabetes than other Oklahomans. Due to high rates of chronic disease and other health issues, it is important for the state to ensure healthcare transformation addresses the health needs of the American Indian population. However, this must be done within the context of the tribal nation's sovereignty. As such, the OSDH has utilized two outlets for respectfully communicating and collaborating with the tribal nations to address public health issues: the Office of the Tribal Liaison and Tribal Public Health Advisory Committee.

Office of the Tribal Liaison (OTL) within the Oklahoma State Department of Health

The OTL was created in 2012 to demonstrate a respect for the sovereignty and advocate for tribal nations while fostering inclusive partnerships using sound public health practices to achieve its vision.¹⁰ The OTL works with the 38 federally-recognized tribal nations in Oklahoma to seek consultation; establish relationships between tribal nations, state entities, health departments, and other stakeholders; increase cultural competency and implement culturally appropriate communications; and appropriately disseminate information from American Indian public health findings. The OTL functions as a vehicle that can be leveraged to engage tribal nations in the conversations about public health. Some of the more notable activities of the OTL are detailed below.

Inclusive Governance

The five civilized tribes of Oklahoma (Cherokee, Choctaw, Muskogee-Creek, Chickasaw, and Seminole) have come together to create a plan for public health integration and establish their own code of public health. Under the model of inclusive governance, the different tribes have created partnerships that allow for larger scale problem-solving and resource-sharing. Some examples include:

- **Immunization program**: The Choctaw Nation partnered with the Pittsburgh County Health Department to improve influenza (flu) vaccination rates in the region after noting increased hospitalizations and school closures due to flu cases in the previous year. Through the

partnership, the Choctaw Nation provided 32,000 vaccinations and the county health department supplied the staff and items (needles, bandages, etc.) to administer the doses. Additional tribal nations are now looking to partner with their local county health department to establish similar programs.

- Emergency Response initiative: The OSDH is working with the Chickasaw Nation to create an emergency preparedness plan that creates a dual incident command structure in case of an emergency (such as a large-scale food-borne illness outbreak at a casino).
- Tribal Cessation Workgroup: The Oklahoma Hospital Association is working with several tribal nations to improve access to and utilization of electronic referrals to tobacco cessation at both tribal health centers and Federal Indian Health Services.

Communities of Practice

The OTL is also creating workgroups with various tribal nations and other public health and state entities to create communities of practice related to improving the collection and reporting of tribal public health data; improving cultural intelligence for state agency workers and potential tribal partners; and performing motivational interviewing related to tobacco and other health risk behaviors.

Tribal Public Health Advisory Committee

The Tribal Public Health Advisory Committee (TPHAC)'s primary purpose is to seek consensus, exchange views, share information, provide advice and/or recommendations, or facilitate any other collaborative interaction related to public health responsibilities or implementation of programs.¹⁵ This purpose is accomplished through forums, meetings, and conversations between state public health officials and health directors representing tribal nations, tribal-serving urban clinics, health boards, and other individuals.

Special Diabetes Program for Indians (SDPI)¹¹⁷

In Oklahoma, numerous tribal governments operate their own tribal health systems or partner with the federal Indian Health Service (IHS) for direct services to tribal citizens. Nationally, IHS has accelerated its use of the Patient-Centered Medical Home (PCMH) model to provide primary care services as part of the agency's effort to provide patient-centric, quality care to Native American populations. While only 38 IHS sites used PCMH models in 2009, 172 sites had implemented these models by 2014.¹¹⁸ Additionally, IHS funds programs designed to develop or enhance diabetes treatment and prevention programs for American Indian populations. Since 1998 these programs have been central to the IHS mission to improve the health of Native Americans by addressing the disproportionate negative impact that diabetes can have on Native American communities. Oklahoma tribes, including the Cherokee, Seminole, and Chickasaw Nations, received SDPI grants to implement preventive and clinical programs to address diabetes in the Northeast and South-Central areas of the state.¹¹⁹ ¹²⁰ The most recent report from the Department of Health and Human Services indicates that funding has been authorized to continue the program into FY 2016 and FY 2017.

CURRENT DEMONSTRATION PROJECTS AND WAIVER EFFORTS

Federal Health and Human Services Initiatives

Comprehensive Primary Care Initiative¹²¹

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. As of August 2015, 67 primary care practices, including 264 individual primary care providers, have participated in the Greater Tulsa metropolitan area. Across these practices, 316,097 individual patients are participating in this project.¹²² The CPC Initiative also requires 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.¹²³

Table 10: 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.¹²⁴ 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 (FQHCs) are an integral part of the care delivery system, particularly for lower-income patients. FQHCs are designated by 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 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)¹²⁵

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.¹²⁶ 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.¹²⁷

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. Oklahoma’s Medicaid program (referred to as SoonerCare) is the state’s largest public payer for healthcare with approximately 826,700 enrolled members in 2015. Oklahoma’s largest program under the 1115 waiver, known as SoonerCare Choice, has an estimated enrollment of 548,162 as of June 2015.^{128,129}

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.

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.

Table 11: Section 1115 Waiver Programs

Waiver Programs	Waiver Program Description
<p>SoonerCare Choice</p> <p>FY 2014 Total Expenditures: \$1,876,473,885</p> <p>FY 2014 Provider Network: 2,454 PCPs</p> <p>FY 2014 Total Enrollment: 548,162</p> <p>FY 2014 Children: 443,990</p> <p>FY 2014 Adults: 104,172</p>	<p>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.</p> <p>SoonerCare Health Access Networks are providers affiliated with networks, allowing for broader coordination of care for patients with high-risk conditions.</p> <p>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.).</p>
<p>Insure Oklahoma Employer Plan</p> <p>FY 2014: Expenditures: \$45,117,052</p> <p>FY 2014: Participating Employers: 3,796</p> <p>FY 2014: Employer Coverage Plan</p>	<p>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</p>

Enrollment: 13,527	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.
Individual Plan	
FY 2014: Expenditures: \$49,492,609	
FY 2014: Individual Plan Enrollment: 4,396	
Combined	
FY 2014: Total Enrollment; 17,923	
FY 2014: Expenditures: \$94,609,661	

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 23,000¹³⁰ 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.¹³¹ 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.¹³²

Table 12: 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 Unduplicated 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 Unduplicated 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 Unduplicated 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	Adults: Provides support services in the home or DHS foster home, including daily living supports,

<p>Children and Adults Program Number: 0351.R03.00 and 0343.R03.00 Combined Programs FY 2014 Total Expenditures: \$23,896,415 FY 2014 Unduplicated Members Served 1,828</p>	<p>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.</p>
<p>OK Medically Fragile Program Number: 0811.R01.00 FY 2014 Expenditures: \$3,236,144 FY 2014 Unduplicated Members Served: 57</p>	<p>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.</p>

Oklahoma SIM Efforts

The Oklahoma SIM project leveraged the stakeholder workgroup structure that was established by the OHIP Coalition as vehicles to accomplish the goals of the initiative. Through the Oklahoma SIM project, the workgroups participated in the planning and development of the SHSIP. Specifically, workgroups helped to formulate the objectives and goals of the project and provided feedback on deliverable reports created by vendors, as well as feedback on all sections of the SHSIP.

Below is a description of the four workgroups.

The Health Efficiency and Effectiveness Workgroup

The workgroup was responsible for the direction, creation, and vetting of the Population Health Needs Assessment. This report identified and described the most prevalent health problems across Oklahoma, gaps and strengths in healthcare services, and suggested interventions needed to improve the population's health. The workgroup also reviewed a report outlining current population health initiatives occurring across the state in an effort to determine what health needs were being addressed through current programs and where gaps existed.

The Health Workforce Workgroup

The workgroup developed a workforce data catalog to identify healthcare provider gaps and assess the state's capacity to meet current and future healthcare demands. As access to care can have a major impact on the population's health, the workgroup worked on plans to address healthcare shortage areas through policies that include telehealth, workforce redesign, recruitment and retention, and providers practicing at the top of their license.

The Health Information Technology Workgroup

The workgroup evaluated reports on the state's current EHR and health information exchange utilization by healthcare providers. Along with these reports, the workgroup vetted a report that created a road map

for the creation and implementation of a Value-Based Analytics (VBA) tool for the state. Through these reports, the workgroup outlined how the VBA tool, along with HIT interoperability, can shape interventions and reduce costs related to population health.

The Health Finance Workgroup

The workgroup worked with an actuarial contractor to develop a plan to integrate new value-based payment models based on pay-for-performance with the goal of covering as many healthcare payments under a value-based system as possible. This group assessed the current state of healthcare insurance coverage as well as what populations and services are most costly to the state. This group also helped shape the financial analysis of the SIM model.

CONCLUSION

(This section of the SHSIP will be updated at a future date.)