

2019 Community Health Needs Assessment and Implementation Strategy



Missouri Baptist
SULLIVAN HOSPITAL

BJC HealthCare



MISSION: TO IMPROVE THE HEALTH OF THE PEOPLE AND COMMUNITIES WE SERVE.

Table of Contents

EXECUTIVE SUMMARY	3
COMMUNITY DESCRIPTION	4
2016 CHNA MEASUREMENT AND OUTCOMES RESULTS	8
CONDUCTING THE 2019 CHNA	9
Primary Data Collection: Focus Group.....	9
Secondary Data Summary	12
Internal Work Group Prioritization Meetings.....	17
APPENDICES.....	24
Appendix A: About Missouri Baptist Sullivan Hospital.....	24
Appendix B: 2018 Net Community Benefit.....	25
Appendix C: Crawford County Demographic.....	26
Appendix D: Focus Group Report.....	29
Appendix E: Focus Group Participants and Hospital Observers	38
Appendix F: Internal Work Group	39
Appendix G: Secondary Data.....	40
IMPLEMENTATION STRATEGY	54
Community Health Needs to be Addressed	55
Community Health Needs that Will Not be Addressed	59

EXECUTIVE SUMMARY

Missouri Baptist Sullivan Hospital, located in Sullivan, Missouri, provides high quality health care services to the residents of Franklin, Crawford, and Washington counties. The hospital has also established effective partnerships towards the goal of improving the health of the community. (See Appendix A for additional information)

Like all nonprofit hospitals, Missouri Baptist Sullivan Hospital is required by the Patient Protection and Affordable Care Act (PPACA) to conduct a community health needs assessment (CHNA) and create an implementation plan every three years. As part of the CHNA process, each hospital is required to define its community. Missouri Baptist Sullivan Hospital defined its community as Crawford County. Once the community is defined, input must be solicited from those who represent the broad interests of the community served by the hospital, as well as those who have special knowledge and expertise in the area of public health.

Missouri Baptist Sullivan Hospital conducted its 2019 assessment in two phases. The first phase consisted of a focus group discussion with key leaders and stakeholders representing the community. This group reviewed the primary data and community health need findings from 2016 and discussed changes that had occurred since 2016. Additionally, the focus group reviewed gaps in meeting needs, as well as identified potential community organizations for Missouri Baptist Sullivan Hospital to collaborate with in addressing needs.

During phase two, findings from the focus group meeting were reviewed and analyzed by a hospital internal work group of clinical and nonclinical staff. Using multiple sources, including Conduent Healthy Communities Institute and Truven Health Analytics, a secondary data analysis was conducted to further assess the identified needs. This data analysis identified some unique health disparities and trends evident in Crawford County when compared against data for the state and country.

At the conclusion of the comprehensive assessment process, Missouri Baptist Sullivan Hospital identified two health needs where focus is most needed to improve the health of the community it serves:

- Heart & Vascular: Heart Health
- Mental Health: Substance Abuse

The analysis and conclusions were presented, reviewed and approved by the Missouri Baptist Sullivan Hospital Board of Directors.

COMMUNITY DESCRIPTION

Missouri Baptist Sullivan Hospital (MBSH) is a member of BJC HealthCare, one of the largest, nonprofit health care organizations in the country. BJC HealthCare hospitals serve urban, suburban and rural communities through 15 hospitals and multiple community health locations primarily in the greater St. Louis, southern Illinois and mid-Missouri regions.

MBSH and the Crawford County Health Department are the primary facilities providing health care, screenings and education to the county. There are no other hospitals in Crawford County. The rural setting and limited access to health care facilities, coupled with the following demographic risk factors listed, create significant challenges in providing health care and health resources to county residents.

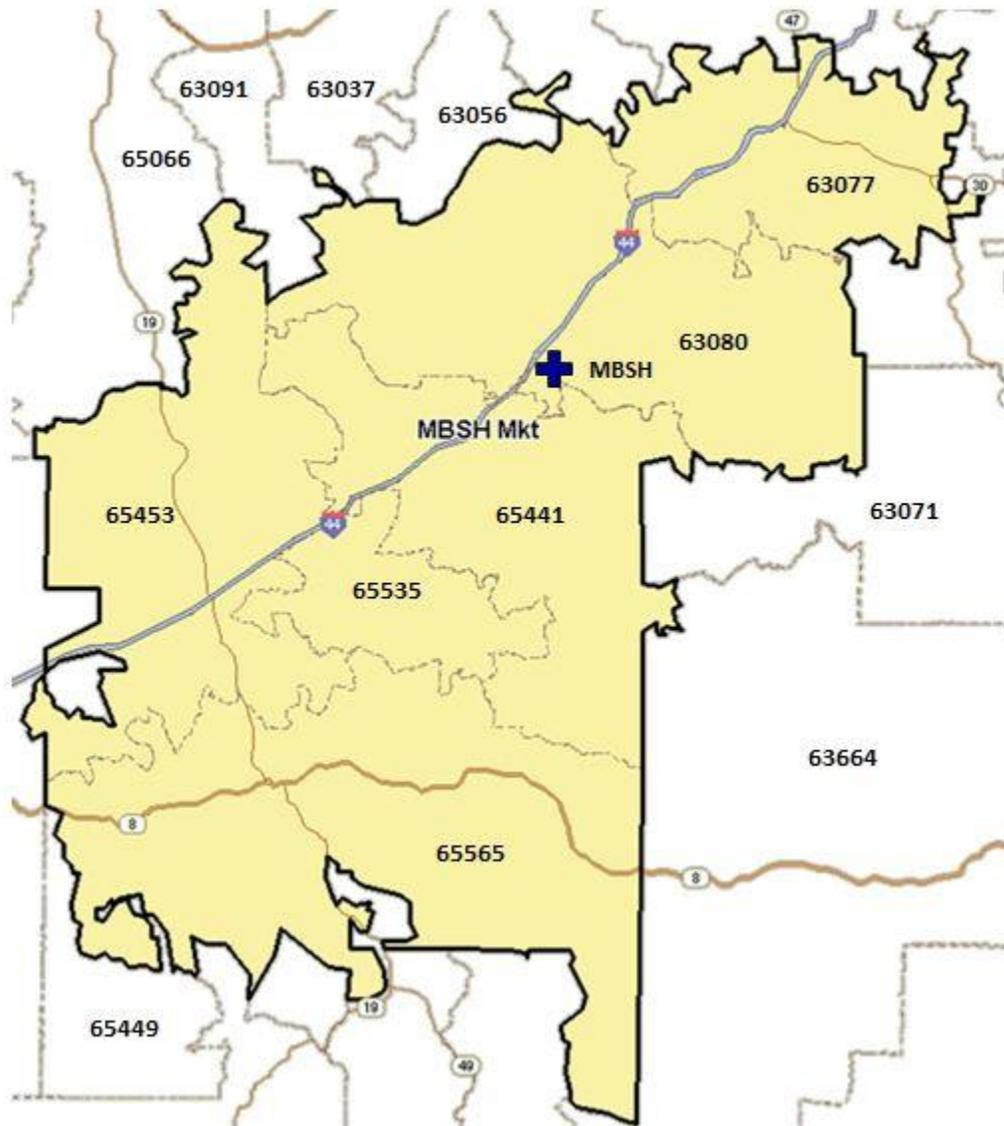
GEOGRAPHY

MBSH is located along Interstate Highway 44 in Sullivan, Missouri. The hospital also operates rural medical clinics in the Crawford County towns of Bourbon, Cuba and Steelville.



Located in Southeast Missouri, the land area of Crawford County includes 742.52 square miles with 33.3 persons per square mile (2010).

Missouri Baptist Sullivan Hospital 6-Zip Market Map



MBSH's primary service area is represented by the zip codes in the shaded area of the map: 63077, 63080, 65441, 65453, 65535 and 65565.

POPULATION

Population data are necessary to understand the health of the community and plan for future needs. Based on the 2017 census tract, the county includes 0.4 percent of Missouri's total population. In 2017, Crawford County reported a total population of 24,102 compared to the state population of 6,113,532. From 2010-2017, the county population decreased 2.2 percent while the state experienced a 2.1 percent increase in its population.

AGE

The age structure of a community is an important determinant of its health and the health services it will need. Crawford County reported 19.1 percent of persons 65 years and over compared to 16.5 percent in the state.

INCOME

The per capita money income reported compared the county income (\$20,799) and state income (\$28,282). Crawford County's median household income totaled \$39,171 while the state median household income equaled \$51,542. (2013-2017)

Federal poverty thresholds are set every year by the Census Bureau and vary by size of the family and ages of the family members. A high poverty rate is both a cause and a consequence of poor economic conditions. A high poverty rate indicates that local employment opportunities are not sufficient to provide for the local community. Through decreased buying power and decreased taxes, poverty is associated with lower-quality schools and decreased business survival. (Healthy Communities Institute).

Persons living below the poverty level in Crawford County totaled 20 percent compared to 14.6 percent in the state. (2013-2017)

The poverty rate of families living in Crawford County for the five-year period ending in 2017 (16.2 percent) decreased 14 percent compared to the five-year period ending 2014 (19.0 percent). The state also experienced a decrease of 7.2 percent for the same period.

The overall rate of Crawford County children living below the poverty level was 15 percent higher than the state and driven by the 6 and under age group and the 6 to 11 age group.

Seniors who live in poverty are an especially vulnerable group due to increased physical limitations, medical needs and social isolation. Seniors often live on a fixed income from pensions or other retirement plans and social security. If this income is insufficient in the face of increasing prescription costs and other costs of living, most seniors have no way to supplement their income. Retirement plans may be vulnerable to fluctuations in the stock market as well; the increasing reliance of retirees on stock market-based retirement plans may explain why more seniors nationwide are now slipping into poverty. (Healthy Communities Institute)

The rate of females 65 and over living in poverty in the county was 13.7 percent higher than males.

RACE AND ETHNICITY

In 2015, Crawford County reported 95.2 percent of its populations who identified as White alone, not Hispanic or Latino compared to 79.5 percent in the state. Additionally, 0.5 percent of its population identified as African American compared to 11.8 percent in the state.

EDUCATION

Individuals who do not finish high school are more likely than people who finish high school to lack the basic skills required to function in an increasingly complicated job market and society. Adults with limited education levels are more likely to be unemployed, on government assistance or involved in crime. The Healthy People 2020 national health target is to increase the proportion of students who graduate high school within four years of their first enrollment in ninth grade to 82.4 percent.

In Crawford County, 76.7 percent of the population age 25 and older had a high school diploma compared to 89.2 percent in the state. Additionally, 11.2 percent of the population age 25 and older had a bachelor's degree or higher compared to 28.2 percent in the state.

For many, having a bachelor's degree is the key to a better life. The college experience develops cognitive skills, and allows learning about a wide range of subjects, people, cultures and communities. Having a degree also opens up career opportunities in a variety of fields, and is often the prerequisite to a higher-paying job. It is estimated that college graduates earn about \$1 million more per lifetime than their non-graduate peers. (Healthy Communities Institute)

2016 CHNA MEASUREMENT AND OUTCOMES RESULTS

At the completion of the 2016 CHNA, MBSH identified Mental Health: Substance Abuse; Mental/Behavioral Health; and Heart & Vascular: Heart Health where focus was most needed to improve the health of the community served by the hospital. The following table details results, goals and current status of these community health needs.

TABLE 1: MISSOURI BAPTIST SULLIVAN HOSPITAL'S 2016 CHNA OUTCOMES		
MENTAL / BEHAVIORAL HEALTH: SUBSTANCE ABUSE	MENTAL / BEHAVIORAL HEALTH: MENTAL HEALTH	HEART AND VASCULAR: HEART HEALTH
PROGRAM GOALS	PROGRAM GOALS	PROGRAM GOALS
Increase access to resources and education for the prevention and treatment of substance abuse disorder	a. To increase awareness of community resources for mental health b. To establish protocol to provide community resource information for individuals presenting to the Emergency Department with self-harm behaviors	Improve cardiovascular health and quality of life through early detection and education of risk factors for heart attack and stroke to prevent cardiovascular events
PROGRAM OBJECTIVES	PROGRAM OBJECTIVES	PROGRAM OBJECTIVES
a. By January 2018, through pre/post testing, establish a baseline of the number of individuals who are aware of available substance abuse resources in the area b. By March 2018, develop a link on the MBSH website with substance abuse treatment resources in the community and surrounding areas c. Increase the percentage of individuals who are aware of available substance abuse resources in the area by 5 percent by the end of 2018 and thereafter by tracking the number of hits on the website d. By January 2018, through pre/post testing, establish a baseline of the number of individuals who are aware of ways to safely dispose of unused prescription medications e. Increase the percentage of individuals who are aware of ways to safely dispose of prescription medications by 5 percent by the end of 2018 and thereafter	a. Decrease the percentage of individuals who experience repeat visits to the ED for self-harm behavior by 5 percent by the end of 2018 and thereafter b. By March 2018, develop a link on the MBSH website with mental health resources in the community and surrounding areas c. Increase the percentage of individuals who are aware of available mental health resources in the area by 5 percent by the end of 2018 and thereafter by tracking the number of hits on the website d. By June 2018, establish a baseline of the number of individuals who have visited the ED for self-harm behavior e. Decrease the percentage of individuals who experience repeat visits to the ED for self-harm behavior by 5 percent by the end of 2018 and thereafter	a. By May 2017, establish a database of MBSH Health Fair participants with lipid panel, blood pressure, glucose and BMI above normal ranges b. By May 2017, establish a baseline of knowledge gained in heart health risk factors to participants of the MBSH Health Fair lipid panel, blood pressure, glucose and BMI above normal ranges c. Between 2018 and 2019, utilizing the database of participants, decrease the risk factors for heart disease in patients previously determined to have lipid panel, blood pressure, glucose and BMI above normal ranges by 10 percent d. Between 2018 and 2019, increase the percentage of knowledge gained in heart health risk factors to participants of the MBSH Health Fair with lipid panel, blood pressure, glucose and BMI above normal ranges by 5 percent
PROGRAM ACTION PLAN	PROGRAM ACTION PLAN	PROGRAM ACTION PLAN
Develop an online resource database accessible to all staff, patients and community members to assist with locating available substance abuse resources in Crawford County and the surrounding areas. Provide education to the community. Pre and post tests will be given to test knowledge level.	Develop an online resource database accessible to all staff, patients and community members to assist with locating available substance abuse resources in Crawford County and the surrounding areas. Resource package will be provided to all ED patients treated for self-harm behaviors.	Establish a set of normal range for heart and vascular health risk factors. Screen Crawford and surrounding community on the annual health fair for lipid panel, blood pressure, glucose and Body Mass Index (BMI). All participants within the abnormal range will be offered education on healthy behaviors twice a month.
CURRENT STATUS	CURRENT STATUS	CURRENT STATUS
2017 - Gathered information for developing online database and added to MBSH website 2018 - Established online resource database; held 2 Community Connections education events with 61 percent of attendees reporting increased awareness of substance abuse resources in the area 2019 - No Community Connections classes have been held yet for 2019	2017 - Gathered information for developing online database and added to MBSH website 2018 - Established online resource database; resource packets had not yet been finalized or implemented at this time due to changes in implementation plan in late 2018 2019 - 26 Packets have been distributed to ED patients treated for self-harm behaviors	2017 - established baseline of attendees who received lipid panel, blood pressure, glucose and BMI screenings; those identified at risk declined opportunity to receive additional education and chose to consult with their PCP 2018 - 23 of the individuals screened in 2017 were rescreened in 2018 and 98 percent either saw improvement or maintained risk level for heart disease 2019 - the 2019 MBSH Health Fair will be held on November 2, 2019

CONDUCTING THE 2019 CHNA

Primary Data Collection: Focus Group

To fulfill the PPACA requirements, MBSH conducted a single focus group with public health experts and those with a special interest in the health needs of Crawford County residents. Eleven invited participants representing various Crawford County organizations participated in the focus group. (See Appendix B). The focus group was held at the hospital on Dec. 5, 2018, with the following objectives identified:

- 1) Determine whether the needs identified in the 2016 hospital CHNA are still the right areas on which to focus
- 2) Explore whether there are any needs on the list that should no longer be a priority
- 3) Determine where there are the gaps in the plans to address the prioritized needs
4) Identify other organizations with whom the hospital should consider collaborating
- 4) Discuss what has changed since 2016 when these needs were prioritized, and whether there are new issues to be considered
- 5) Understand what other organizations are doing to impact the health of the community and how those activities might complement the hospitals' initiatives
- 6) Evaluate what issues the stakeholders anticipate becoming a greater concern in the future that we need to consider now

2019 FOCUS GROUP SUMMARY

A general consensus was reached that needs identified in the previous assessment should remain as focus areas for the hospital.

FEEDBACK ON NEEDS BEING ADDRESSED

School district representatives have seen an increase in pediatric mental health issues, including more children with behavioral issues, yet not enough resources.

Another provider felt access to insurance is still an issue for some children and families, and limits the ability to receive needed services.

The Department of Health representative reflected that all of the identified needs are inter-related. In her clinic, she sees women and children who present with infant and maternal health issues, as well as mental and behavioral health concerns. Many requests are related to access to services, coverage and transportation; however, most issues are related to substance abuse.

OTHER NEEDS THAT SHOULD BE ADDRESSED

The ambulance district representative expressed a need for urgent care services.

GAPS BETWEEN DEFINED NEEDS AND ABILITY TO ADDRESS

- need for a facility that will accept children with mental health issues
- difficulty in recruiting physicians to rural communities
- better communication among all of the organizations in the community

- limited number of inpatient detox and rehab facilities available
- greater dissemination of information about the safest way for opioid disposal
- need for an updated, organized list of community resources
- Individuals with disabilities have limited access to specialists and resources locally

OTHER ORGANIZATIONS WITH WHOM TO COLLABORATE

- Local law enforcement and The Ministerial Alliance are important stakeholders to include at future meetings.
- The Lighthouse Youth Center provides after-school programs to students through the use of community volunteers.

CHANGES SINCE THE 2016 CHNA

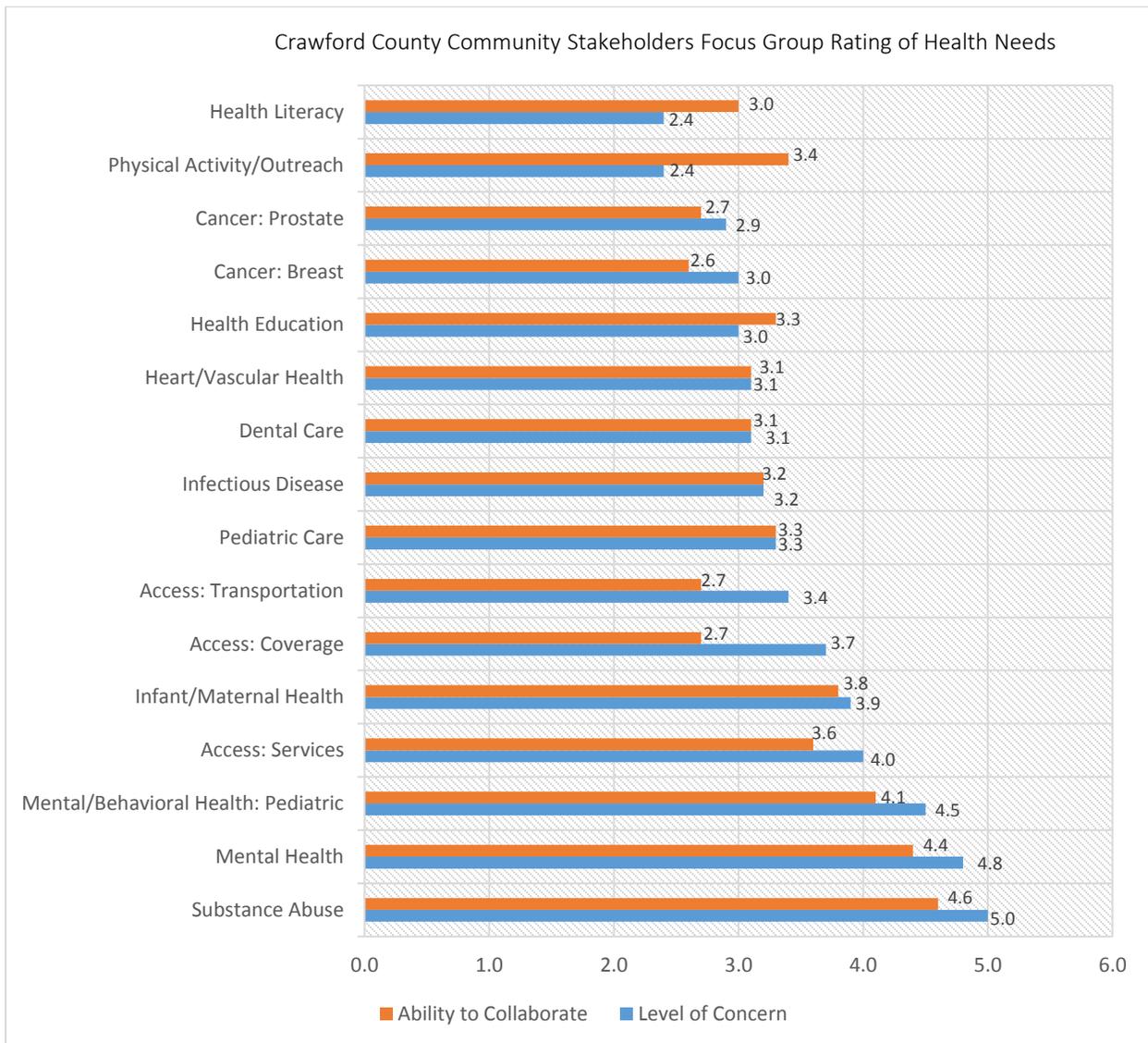
- First Steps, an organization that assists with children with developmental delays, projects an increase in the number of children with developmental delays from 2 percent to 4 percent per year to 4 percent to 6 percent. This organization is also seeing more children diagnosed with autism, now 1 in 40 children, and having more difficulty in finding resources in applied behavioral analysis to address their issues.
- The opioid crisis has reached a whole new level, sometimes affecting several generations within the same family. Although drugs remain a problem, new drugs on the scene such as bath salts and heroin, have replaced methamphetamine in terms of prevalence. Additionally, these drugs have expanded to younger age groups.
- A deterioration of functioning families exists with more single parent households, who need more support than is available. There are more grandparents and great grandparents raising grandchildren because their sons/daughters are unable to parent due to drugs.
- The Merrimac Mission has seen an increase in the homeless population using their services. Many are abusing substances and suffering from mental health issues. There are no homeless shelters in the local area; the closest are in St. Clair and Rolla. Approximately 60 students in the school districts are considered homeless, meaning that they may be living in the home of another family.

HEALTH CONCERNS FOR THE FUTURE

- increased use of the emergency room when a primary care or urgent care visit may be more appropriate
- larger role of hospital and other agencies in mass casualty planning
- increased infectious disease rates due to substance abuse, including Hepatitis C and HIV. Because of the difficulty in hiring health professions in rural communities, telehealth was suggested as a valuable alternative both for medical and mental health services.

RATING OF NEEDS

Participants were given the list of the needs identified in the 2016 assessment and directed to re-rank them on a scale of 1 (low) to 5 (high), based on their perceived level of community concern and the ability of community organizations to collaborate in addressing:



Substance Abuse rated highest in terms of level of concern followed by Mental Health. These same needs were seen as needs with the greatest opportunities for collaboration.

Secondary Data Summary

Based on the primary data reviewed by focus group members (see graph on previous page), key areas were identified for a secondary data analysis. These areas represent the most prevailing issues identified by the focus group. The majority of the analysis was completed comparing Crawford County, Missouri and the U.S. In order to provide a comprehensive analysis of disparity and to identify trends, the most up-to-date secondary data was included on the following needs:

- Access to Health Care
- Access to Transportation
- Cancer
- Heart & Vascular: Heart Health
- Maternal and Infant Health
- Infectious Disease /Influenza & Pneumonia
- Mental Health
- Substance Use and Abuse

While MBSH has identified two needs as its primary focus, the following needs will continue to be appropriately addressed by the hospital and other organizations in Crawford County.

ACCESS TO HEALTH CARE

The ability to access health services has a profound and direct effect on every aspect of a person's well-being. Beginning in 2010, nearly 1 in 4 Americans lacked a primary care provider (PCP) or health center to receive ongoing medical services. Approximately 1 in 5 Americans, children and adults under age 65, do not possess medical insurance.

Individuals without medical insurance are more likely to lack a traditional source of medical care, such as a PCP, and are more likely to skip routine medical care due to costs, therefore, increasing the risk for serious and debilitating health conditions. Those who access health services are often burdened with large medical bills and out-of-pocket expenses. Increasing access to both routine medical care and medical insurance are vital steps in improving the health of the community. (Healthy Communities Institute)

From 2010-2017, Crawford County, like Missouri, saw a slight dip in adults with health insurance in 2017. However, 2016 had the highest level of adults with health insurance at 83 percent in the county and 87.2 percent in the state. The Healthy People 2020 national health target is to increase the proportion of people with health insurance to 100 percent.

Males in Crawford County and Missouri had slightly less health insurance coverage respectively at 79.4 and 85.6 percent when compared to females with 84.3 and 88.0 percent.

From 2014-2017, the rate of children with health insurance in Crawford County remained relatively stable in the low 90 percent range. This rate has historically lagged behind children in Missouri by approximately two points.

Crawford County experienced a decline in the rate of primary care providers from 2010 through 2015 while the state saw an increase. The rate of primary care providers in the state was 17 times higher than the rate in the county.

Like Missouri, Crawford County saw an increase in non-physician care providers from 2013 through 2018; however, the county was significantly lower than the state.

The rate of primary care providers was significantly lower in Crawford County when compared to the state; only 4/100,000 providers per population in the county compared to 71/100,000 in the state.

There were 78 percent fewer dentists and 77 percent fewer mental health providers in the county than the state.

TRANSPORTATION

From 2013-2017, 3.4 percent of households in the county did not own a car compared to 7.0 percent in the state.

Owning a car has a direct correlation with the ability to access health care. Individuals with no car in the household make fewer than half the number of trips compared to those with a car and have limited access to essential local services such as, supermarkets, post offices, doctors' offices and hospitals. Most households with above-average income own a car while only half of low-income households have a car.

The percentage of workers commuting by public transportation in Crawford County is far below the rate of the state as well as the rate set by the Healthy People 2020. The Healthy People 2020 national health target is to increase the proportion of workers who take public transportation to work to 5.5 percent.

Lengthy commutes cut into workers' free time and can contribute to health problems such as headaches, anxiety and increased blood pressure. Longer commutes require workers to consume more fuel, which is both expensive for workers and damaging to the environment. (Healthy Communities Institute). Public transportation offers mobility to U.S. residents, particularly people without cars. Transit can help bridge the spatial divide between people and jobs, services and training opportunities. Public transportation is also beneficial because it reduces fuel consumption, minimizes air pollution and relieves traffic congestion.

CANCER

Cancer is a leading cause of death in the United States, with more than 100 different types of the disease. According to the National Cancer Institute, lung, colon and rectal, breast, pancreatic and prostate cancer lead in the greatest number of annual deaths.

The overall cancer incidence rate in the county for both genders was 516/100,000, higher than Missouri and the U.S. The incidence of cancer among males in Crawford County was slightly less when compared to Missouri and the U.S. Conversely, the rate of cancer among females in Crawford County was higher when compared to Missouri and the U.S.

Females in Crawford County had a significantly higher rate of all cancers versus Missouri (20.9 percent) and the U.S. (24.2 percent). Males in the county had a higher rate versus Missouri (8.8 percent) and the U.S. (10.1 percent).

The age-adjusted incidence rate due to cancer in the state slowly declined from the five-year period ending 2011 through the five-year period ending 2015. However in Crawford County, the rate increased during the five-year period ending in 2014 and again in the five-year period ending in 2015.

HEART & VASCULAR: HEART HEALTH

Heart disease and stroke are among the most preventable diseases in the U.S., yet are the most widespread and costly health conditions facing the nation today. Heart disease and stroke are the first and third leading causes of death for both women and men.

These diseases are also major causes of illness and disability and are estimated to cost the U.S. hundreds of billions of dollars annually in health care expenditures and loss of productivity. (CDC Division for Heart Division and Stroke Prevention).

The overall age-adjusted death rate due to heart disease in the county was higher than the rate in the state. Among females in Crawford County, the rate was nearly 55.5 percent higher (85.3 deaths per 100,000) than in Missouri; for males, the rate was 47.9 percent higher (116.7 deaths per 100,000) than the state.

While hospitalizations and emergency room visits for heart disease decreased in Crawford County from the three-year period ending in 2015 to the three-year period ending in 2017, heart disease deaths increased 8 percent.

MATERNAL AND INFANT HEALTH

The risk of maternal and infant mortality and pregnancy-related complications can be reduced by increasing access to quality preconception (before pregnancy) and inter-conception (between pregnancies) care. Moreover, healthy birth outcomes and early identification and treatment of health conditions among infants can prevent death or disability and enable children to reach their full potential. (Healthy People 2020)

In Crawford County, male babies with low birth rates were 57 percent higher when compared to the rate of male babies in the state. Babies born with low birth weight are more likely than babies of normal weight to have health problems and require specialized medical care in a neonatal intensive care unit. (Healthy Communities Institute)

In 2017, the rate of preterm births in Crawford County (11.1 percent) and Missouri (10.6 percent) were statistically equaled to the Healthy People 2020 national health target to reduce the proportion of infants who are born preterm to 11.4 percent.

INFECTIOUS DISEASES/INFLUENZA & PNEUMONIA

Influenza and pneumonia are a leading cause of death in the United States. The two diseases are traditionally reported together because pneumonia is frequently a complication of influenza. Influenza is a contagious disease caused by a virus. The number of influenza deaths can fluctuate considerably from one year to the next as influenza can be caused by more virulent virus strains in some years than others as the viruses constantly mutate. Typically there are more deaths from pneumonia than from influenza. Influenza vaccination is suggested for all individuals six months

and older, but influenza and pneumonia vaccination are especially recommended for persons most at risk, including the elderly, the very young and the immunocompromised. (Healthy Communities Institute)

The overall death rate due to influenza and pneumonia was lower in the county than the state. The female death rate in the county was 3 percent lower than the death rate of females in the state. The death rate of males in the county was 34 percent less than the death rate of males in the state.

MENTAL/BEHAVIORAL HEALTH: MENTAL HEALTH

In 2014, there were an estimated 9.8 million adults age 18 or older in the U.S. with serious mental illness. This number represented 4.2 percent of all U.S. adults. (National Institute of Mental Health)

The 10 to 13 age group reported the highest number of children in Crawford County who received clinical services from behavioral health psychiatric programs from 2015-2017, followed by the 6 to 9 age group.

The 45-49 age group reported the highest number of adults in Crawford County who received clinical services from behavioral health psychiatric programs from 2015-2017, followed by the 25-29 age group.

Mood disorder and anxiety disorder were the two most prevalent types of psychiatric services received in Crawford County in 2015, 2016 and 2017.

The age-adjusted death rate due to suicide in Crawford County increased 42 percent from the five-year period ending in 2012 through the period ending in 2017 compared to the rate in the state of 20 percent.

Suicide is a leading cause of death in the United States, presenting a major, preventable public health problem. More than 33,000 people kill themselves each year according to the Centers for Disease Control and Prevention, but suicide deaths only account for part of the problem. An estimated 25 attempted suicides occur per every suicide death, and those who survive suicide may have serious injuries, in addition to having depression and other mental problems. Men are about four times more likely than women to die from suicide, but three times more women than men report attempting suicide. Suicide occurs at a disproportionately higher rate among adults 75 years and older.

MENTAL/BEHAVIORAL HEALTH: SUBSTANCE USE AND ABUSE

The availability of county-level data on substance use and abuse is limited.

49.3 percent of youth believe that it would be easy to get standard cigarettes and 47.9 percent to get e-cigarettes

An estimated 43.1 percent of youth in Crawford County believe that it would be easy to get alcohol and 56.6 percent have friends who drink alcohol

41.6 percent of county youth said that marijuana is easy to get and 53.2 percent report having at least one friend that uses it

Alcohol and prescription drug misuse were the highest substances used among children in grades 6 -12 in Crawford County.

While alcohol use had the highest admittance rate into substance use treatment programs in Crawford County, heroin had a significant increase in 2017 compared to 2015 in Crawford County.

Internal Work Group Prioritization Meetings

MBSH chose 10 employees to participate on an internal CHNA work group from various hospital departments representing Dietary; Sullivan Clinics; Bourbon Clinic; Emergency Department; Public Relations; Patient Accounts; Community Health Education; Human Resources; and Risk Management (See Appendix C).

The work group met twice to analyze the primary and secondary data and to complete the priority ranking for the hospital's CHNA.

MEETING 1

The work group met as a team Feb. 5, 2019, to review the purpose for the CHNA, role of the work group and goals for the project. The team reviewed the key findings from the 2016 report and the current findings from the 2019 focus group. The 2019 focus group perceptions were then discussed.

Through discussion and consensus, the team removed Dental Care and Infectious Diseases from the list of the health needs. The team made its decision by reviewing resources available and other organizations in the community addressing these needs (Table 2).

TABLE 2: MISSOURI BAPTIST SULLIVAN HOSPITAL AND THE STAKEHOLDERS LIST OF PRIMARY HEALTH NEEDS

STAKEHOLDERS LIST OF PRIMARY COMMUNITY HEALTH NEEDS	INTERNAL WORK GROUP TOP 14 PRIMARY DATA FROM STAKEHOLDERS LIST
Maternal / Infant Health	Maternal Health / Infant Health
Dental Care	Cancer: Prostate
Cancer: Prostate	Heart & Vascular: Heart Health
Heart & Vascular: Heart Health	Mental/Behavioral Health: Mental Health
Mental/Behavioral Health: Mental Health	Mental / Behavioral Health: Substance Abuse
Mental / Behavioral Health: Substance Abuse	Cancer: Breast
Cancer: Breast	Mental / Behavioral Health: Pediatric
Infectious Diseases	Health Literacy
Mental / Behavioral Health: Pediatric	Access: Coverage
Health Literacy	Access: Transportation
Access: Coverage	Health Education
Access: Transportation	Access: Services
Health Education	Physical Activity/Outreach
Access: Services	Pediatric Care
Physical Activity/Outreach	
Pediatric Care	

MEETING 2

The work group met again Feb.19, 2019, for the purpose of reviewing the secondary data and discussing and prioritizing the top community health needs. The team reviewed all the available community health needs and held a discussion about the importance of each need and its effect on the community.

During the second meeting, the work group also reviewed the criteria to rank all the top health needs. The criteria (Table 3) for prioritizing the needs identified by the focus group was agreed upon by the work group.

TABLE 3: CRITERIA FOR PRIORITY RANKING

	RATING	WEIGHT	SCORE
How many people are affected by the problem?			
What are the consequences of not addressing this problem?			
Are existing programs addressing this issue?			
How important is this problem to community members?			
How does this problem affect vulnerable populations?			
THE TOTAL SCORE			

Source: Catholic Health Association

The work group used a ranking process to assign weight to criteria by using the established criteria for priority setting above. Criteria of overriding importance were weighted as “3,” important criteria were weighted as “2,” and criteria worthy of consideration, but not a major factor, were weighted as “1.” Health needs were then assigned a rating ranging from one (low need) to five (high need) for each criteria. The total score for each need was calculated by multiplying weights by rating. This process was done individually.

TABLE 4: COMMUNITY HEALTH NEEDS ASSESSMENT INTERNAL WORK GROUP RANKING

RANK	COMMUNITY HEALTH NEEDS RANKED HIGHEST TO THE LOWEST	TOTAL SCORE
1	Mental/Behavioral Health: Mental Health	548
2	Mental / Behavioral Health: Substance Abuse	541
3	Mental / Behavioral Health: Pediatric	484
4	Access: Coverage	454
5	Infant / Maternal Health	382
6	Access toCare: Services	377
7	Heart & Vascular: Heart Health	363
8	Access: Transportation	339
9	Health Education	291
10	Health Literacy	254
11	Physical Activity/Outreach	245
12	Cancer: Breast	232
13	Pediatric Care	230
14	Cancer: Prostate	196

Through dialogue and consensus, the team ranked the list of the health needs from the focus group (Table 4). Participants were then encouraged to discuss how and why each arrived at the ranking. A summary of the discussion follows:

Maternal and Infant Health:

- Surprised no data available regarding prenatal and smoking
- 60 percent of social work OB consults lack adequate prenatal care; day of delivery inquiries regarding WIC and Medicare
- Many avoid prenatal care due to drug screen requirement and fear DFS involvement
- OB offers Mother/Baby classes; Cuba and Washington offer crisis nurseries
- Providers consistent in informing patients that drug testing occurs again at delivery
- Drug treatment protocol varies by facility and most patients are required to pay up front for detox. Temporary Medicaid or pregnancy coverage must be enforced
- DFS intervenes only for crisis assessment of infant’s basic needs

Other discussion of needs:

- Surprised that Heart Health did not rank higher
- Expectation that Access to Services to rank above Access to Coverage
- Noted similarities between focus group ranking and internal work group ranking

Additionally, the group compared its results to the external team ranking. (Table 5)

TABLE 5: MISSOURI BAPTIST SULLIVAN HOSPITAL DATA VS. CRAWFORD COUNTY COMMUNITY STAKEHOLDERS RANKING

RANK	MISSOURI BAPTIST SULLIVAN HOSPITAL RANKING	CRAWFORD COUNTY COMMUNITY STAKEHOLDERS RANKING
1	Mental / Behavioral Health: Mental Health	Mental / Behavioral Health: Substance Abuse
2	Mental / Behavioral Health: Substance Abuse	Mental / Behavioral Health: Mental Health
3	Mental / Behavioral Health: Pediatric	Mental / Behavioral Health: Pediatric
4	Access: Coverage	Access: Services
5	Maternal Health / Infant Health	Maternal Health / Infant Health
6	Access: Services	Access: Coverage
7	Heart & Vascular: Heart Health	Access: Transportation
8	Access: Transportation	Pediatric Care
9	Health Education	Infectious Disease
10	Health Literacy	Dental Care
11	Physical Activity / Outreach	Heart / Vascular: Heart Health
12	Cancer: Breast	Health Education
13	Pediatric Care	Cancer: Breast
14	Cancer: Prostate	Cancer: Prostate
15		Physical Activity / Outreach
16		Health Literacy

Next, the work group reviewed results of the secondary data using the Healthy Communities Institute (HCI) Data Scoring Tool, which compares data from similar communities in the nation. The tool provides a systematic ranking of indicators for the county and helps prioritize the needs. The scoring is based on how a county compared to other similar counties within the state, U.S. and Healthy People 2020 targets depending on data availability. The team reviewed the scores by indicators.

PRIMARY AND SECONDARY RATING SUMMARY

The table below shows:

- primary data from the focus group ranking
- needs identified by the internal work group ranking
- results of HCI scoring tools

TABLE 6: HEALTH NEED ASSESSMENT MBSH INTERNAL WORK GROUP RANKING VS. CRAWFORD COUNTY STAKEHOLDERS AND SECONDARY DATA

MBSH INTERNAL WORK TEAM RANKING	CRAWFORD COUNTY COMMUNITY STAKEHOLDERS	CONDUENT HEALTHY COMMUNITIES INSTITUTE
Mental / Behavioral Health: Mental Health	Mental / Behavioral Health: Substance Abuse	Depression: Medicare Population
Mental / Behavioral Health: Substance Abuse	Mental / Behavioral Health: Mental Health	Primary Care Provider Rate
Mental / Behavioral Health: Pediatric	Mental / Behavioral Health: Pediatric	Colorectal Cancer Incidence Rate
Access: Coverage	Access: Services	All Cancer Incidence Rate
Maternal / Infant Health	Maternal / Infant Health	Breast Cancer Incidence Rate
Access: Services	Access: Coverage	Families Living Below Poverty Level Lung and Bronchus Cancer Incidence Rate
Heart & Vascular: Heart Health	Access: Transportation	People 25+ with a Bachelor's Degree or Higher
Access: Transportation	Pediatric Care	People 65+ Living Below Poverty Level
Health Education	Infectious Disease	Adults 20+ who are Sedentary Age-Adjusted Death Rate due to Suicide
Health Literacy	Dental Care	Alcohol-Impaired Driving Deaths
Physical Activity / Outreach	Heart & Vascular: Heart Health	Cancer: Medicare Population Chronic Kidney Disease: Medicare Population
Cancer: Breast	Health Education	People Living Below Poverty Level Poor Mental Health: Average Number of Days
Pediatric Care	Cancer: Breast	
Cancer: Prostate	Cancer: Prostate	
	Physical Activity / Outreach	
	Health Literacy	

- Mental/Behavioral Health; (and related conditions) and Cancer (and various types) were ranked by all three groups.
- The internal work group and stakeholder group had identical rankings.

After reviewing the secondary data, the team discussed the health disparity among the various populations in Crawford County. Additionally, members considered needs based on impact on the community and if other organizations were already addressing a particular need. The work group also reviewed hospital resources available, including staffing, program availability and hospital service lines to meet the need. Final ranking decisions included the following notations:

Heart & Vascular: Heart Health: As MBSH has been working diligently on Stroke/STEMI education and prevention, it was determined to keep Heart & Vascular: Heart Health on the list as the group felt this is a need where MBSH can have impact due to availability of resources.

Infant/Maternal Health: Removed from list since programs to help parents track infant growth and development are under review for ability to implement. Additionally, this is a focus area for BJC HealthCare overall and needs of Sullivan area residents will be considered through that process.

Mental/Behavioral Health: Mental Health: Removed from list; while MBSH recognizes importance, resources are not available to make impact.

Mental/Behavioral Health: Substance Abuse: Decision made to keep Mental Health: Substance Abuse as a need to address.

Participants reviewed and discussed the differences among all rankings and were provided the opportunity to change their rankings. However, the team decided to keep the initial ranking. Individual rankings were totaled to yield a composite ranking.

CONCLUSION

At the conclusion of the comprehensive assessment process to determine the most critical needs in the Crawford County community, Missouri Baptist Sullivan Hospital identified three health needs where focus is most needed to improve the health of the community it serves:

- Mental/Behavioral Health: Substance Abuse
- Heart & Vascular: Heart Health

APPENDICES

Appendix A: About Missouri Baptist Sullivan Hospital

Missouri Baptist Sullivan Hospital is a critical access hospital committed to providing quality health care services to the residents in Crawford, Franklin and Washington counties. The hospital's physicians and staff members offer excellent medical care and take pride in their community service.

In recent years, the hospital has improved and expanded the health care services available to the greater Sullivan community. In the early 1990s, a new and expanded Emergency Department was added along with updated admitting, and renovated Cardiac Rehabilitation and Physical Rehabilitation departments. In 1995, a new 12,000-square-foot Medical Office Building opened, home to numerous primary care physicians, and a variety of visiting medical and surgical specialists from the St. Louis area.

The latest accomplishment is completion of the facility replacement project. On December 15, 2010, an open house and ribbon cutting was held to celebrate the completion of the final \$6 million, 25,000 square-foot wing. Since 2002 the original 1962 building has been removed and replaced with a brand-new facility. This represents an investment of nearly \$35 million by BJC HealthCare to build the new hospital in the community.

In 2017, Missouri Baptist Sullivan Hospital provided \$7,452 in financial assistance and programs serving 29,369 persons. This total includes:

- \$3,340,992 in financial assistance and means-tested programs serving 8,747 individuals
- 12,865 individuals on Medicaid at a total net benefit of \$1,466,570

Missouri Baptist Sullivan Hospital also provided a total of \$2,664,890 to 16,504 persons in other community benefits including, community health improvement services, subsidized health services and in-kind donations. (See Appendix B for Community Benefit Expenses)

Appendix B: 2018 Net Community Benefit

MISSOURI BAPTIST SULLIVAN HOSPITAL: 2018 TOTAL NET COMMUNITY BENEFIT EXPENSES		
CATEGORY	PERSONS SERVED	TOTAL NET BENEFIT
FINANCIAL ASSISTANCE AND MEANS-TESTED PROGRAMS		
Financial Assistance at Cost	8,747	\$3,340,992
Medicaid	12,865	\$1,466,570
TOTAL FINANCIAL ASSISTANCE AND MEANS-TESTED PROGRAMS	12,865	\$4,807,562
OTHER COMMUNITY BENEFITS		
Community Health Improvement Services	11,317	\$307,363
Health Professional	0	\$0
Subsidized Health Services	5,187	\$2,349,044
In-Kind Donation		\$8,483
TOTAL OTHER COMMUNITY BENEFITS	16,504	\$2,664,890
GRAND TOTAL	29,369	\$7,472,452

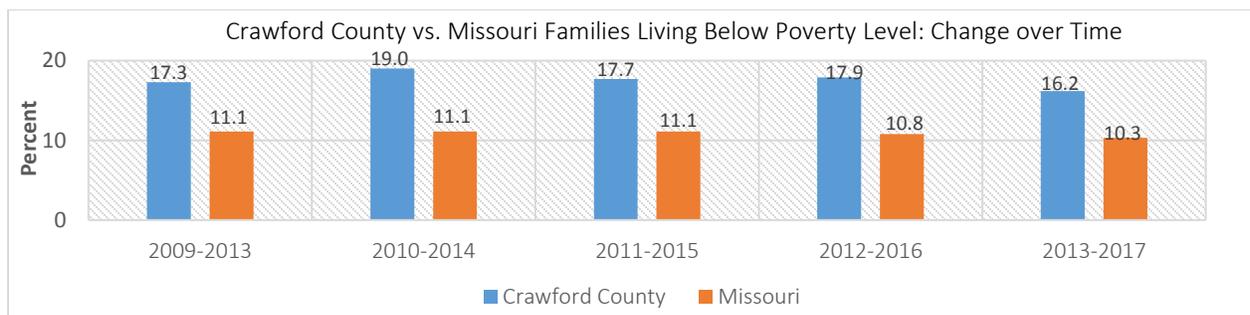
Appendix C: Crawford County Demographic

DEMOGRAPHIC OF CRAWFORD COUNTY VS MISSOURI		
	CRAWFORD COUNTY	MISSOURI
GEOGRAPHY		
Land area in square miles, 2010	742.52	68,741.52
Persons per square mile, 2010	33.3	87.1
POPULATION		
Population, 2017	24,102	6,113,532
Population, 2010	24,650	5,988,927
Population, Percent Change, 2010 - 2017	-2.22	2.08
AGE		
Population Under Age 5, Percent, 2017	6	6.1
Population Under Age 18, Percent, 2017	23.1	22.6
Population Over Age 65, Percent, 2017	19.1	16.5
GENDER		
Female Population, Percent, 2017	50.5	50.9
Male Population, Percent, 2017	49.5	49.1
RACE / ETHNICITY		
White Alone, Percent, 2017	96.9	83.1
White Alone, not Hispanic or Latino, Percent, 2017	95.2	79.5
Hispanic or Latino, Percent, 2017	2	4.2
Two or More Races, Percent, 2017	1.5	2.3
American Indian and Alaska Native alone, Percent, 2017	0.7	0.6
African American Alone, Percent, 2017	0.5	11.8
Asian Alone, Percent, 2017	0.3	2.1
Native Hawaiian and Other Pacific Islander alone, Percent, 2017	0.1	0.1
LANGUAGE		
Foreign Born Persons, Percent, 2011-2017	0.7	4

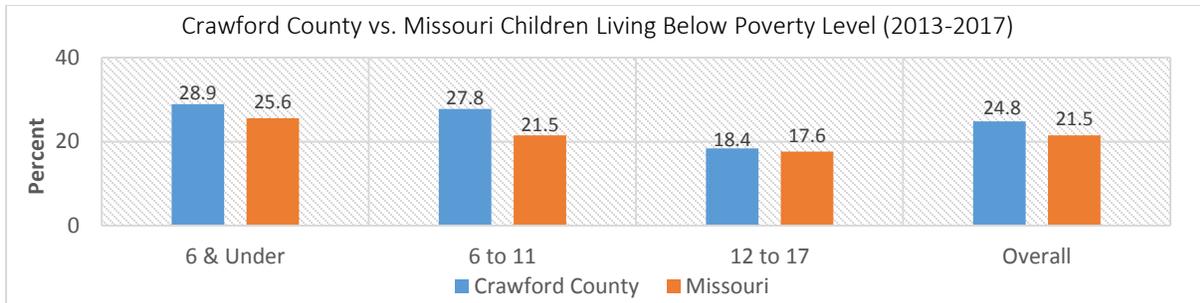
Source: Conduent Healthy Communities Institute

CRAWFORD COUNTY DEMOGRAPHIC INCLUDING EDUCATION / INCOME / HOUSING VS MISSOURI		
	CRAWFORD	MISSOURI
HOUSING		
Housing Units, 2017	12,067	2,792,506
Homeownership, 2015-2017	55.2	57.8
Median Housing Units Value, 2013-2017	116,100	145,400
FAMILY & LIVING ARRANGEMENTS		
Households, 2013-2017	9,286	2,386,203
Average Household Size, 2013-2017	2.6	2.48
EDUCATION		
High School Graduate or Higher, Percent of Persons Age 25+, 2013-2017	76.7	89.2
Bachelor's Degree or Higher, Percent of Persons Age 25+, 2013-2017	11.2	28.2
INCOME		
Per Capital Income, 2013-2017	20,799	28,282
Median Household Income, 2013-2017	37,171	51,542
People Living Below Poverty Level, Percent, 2013-2017	20	14.6

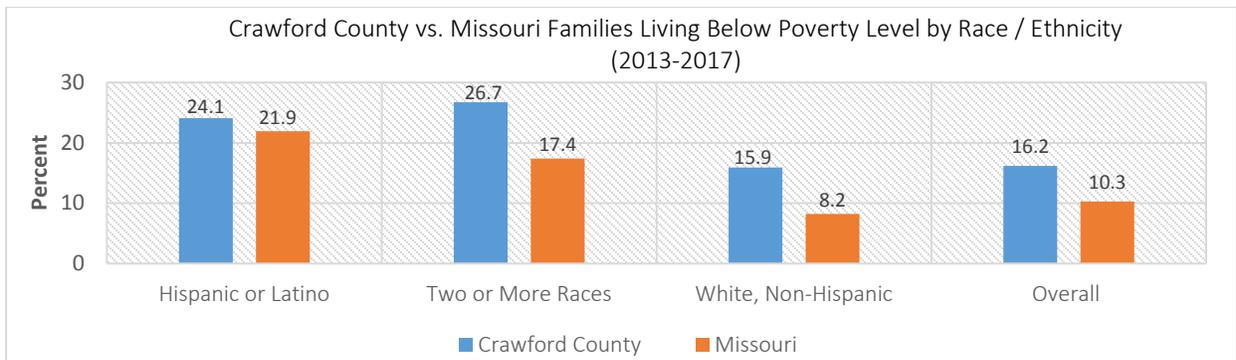
Source: Conduent Healthy Communities Institute



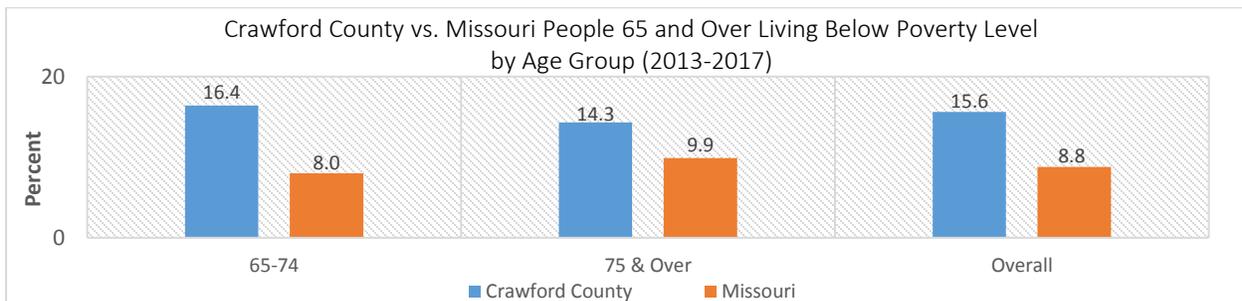
Source: Conduent Healthy Communities Institute



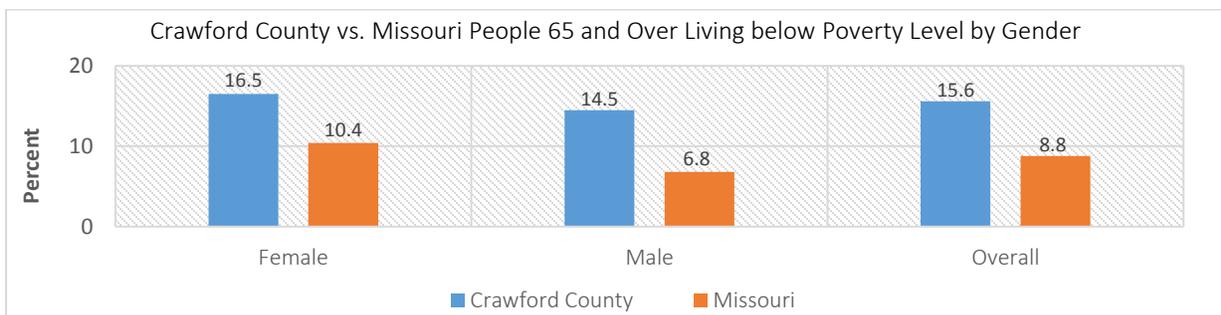
Source: Conduent Healthy Communities Institute



Source: Conduent Healthy Communities Institute



Source: Conduent Healthy Communities Institute



Source: Healthy Communities Institute

Appendix D: Focus Group Report

PERCEPTIONS OF THE HEALTH NEEDS
OF CRAWFORD COUNTY RESIDENTS
FROM THE PERSPECTIVES OF COMMUNITY LEADERS

PREPARED BY:

Angela Ferris Chambers
Director, Market Research & CRM
BJC HealthCare

January 22, 2019

TABLE OF CONTENTS

BACKGROUND2
RESEARCH OBJECTIVES2
METHODOLOGY2
KEY FINDINGS5
RATING OF NEEDS9
NEXT STEPS.....10

BACKGROUND

In the Patient Protection and Affordable Care Act (PPACA) passed in March 2010, non-profit hospitals were mandated to conduct a community-based health needs assessment (CHNA) every three years. As a part of that process, each hospital is required to solicit input from those who represent the broad interests of the community served by the hospital as well as those who have special knowledge and expertise in the area of public health and underserved populations.

Missouri Baptist Sullivan Hospital (MBSH) conducted its first assessment in 2013, followed by a second in 2016. The next iteration is due in December 2019.

RESEARCH OBJECTIVES

The main objective of this research is to solicit feedback on the health needs of the community from experts and those with special interest in the health of the community served by the hospitals of Crawford County.

Specifically, the discussion focused around the following ideas:

- 1) Determine whether the needs identified in the 2016 hospital CHNA are still the right areas on which to focus
- 2) Explore whether there are there any needs on the list that should no longer be a priority
- 3) Determine where there are the gaps in the plans to address the prioritized needs
- 4) Identify other organizations with whom the hospital should consider collaborating
- 5) Discuss what has changed since 2016 when these needs were prioritized, and whether there are new issues to be considered
- 6) Understand what other organizations are doing to impact the health of the community and how those activities might complement the hospitals' initiatives
- 7) Evaluate what issues the stakeholders anticipate becoming a greater concern in the future that we need to consider now

METHODOLOGY

To fulfill the PPACA requirements, MBSH conducted a single focus group with public health experts and those with a special interest in the health of Crawford County residents. It was held on December 5, 2018, at the hospital in Sullivan, MO. The group was facilitated by Angela Ferris Chambers of BJC HealthCare. The discussion lasted about ninety minutes.

11 individuals representing various Crawford County organizations participated in the discussion. (See Appendix)

Lisa Lochner, Vice President for Operations at Missouri Baptist Sullivan Hospital, welcomed participants at the beginning of the meeting. Those observing on behalf of the sponsoring hospital were also introduced.

During the group, the moderator reminded the community leaders why they were invited - that their input on the health priorities of the community is needed to help the hospital move forward in this next phase of the needs assessment process.

The moderator shared the demographic and socioeconomic profile of Crawford County. Information on the needs prioritized by the hospital in its most recent assessment, and the highlights of the hospital’s implementation plan were also presented during the discussion.

The following health needs (based on the revised nomenclature) were identified in the 2016 hospital CHNA and implementation plan.

Identified Needs	Being Addressed	Not Addressed
Access to care: coverage		X
Access to care: services		X
Access to care: transportation		X
Cancer: Breast		X
Cancer: Prostate		X
Dental care		X
Health education		X
Health literacy		X
Heart and vascular: heart health	X	
Infant/maternal health		X
Infectious disease		X
Mental/behavioral health: pediatric		X
Mental/behavioral health: mental health	X	
Mental/behavioral health: substance abuse	X	
Pediatric care		X
Physical activity/outreach		X

The moderator also shared several pieces of information to help further identify the health needs of Crawford County, including:

- the best performing health indicators
- the best performing social determinants of health
- the worst performing health indicators
- the worst performing social determinants of health

Other health indicators were shared describing access to health insurance, access to healthcare providers, and infectious disease rates (including STDs).

At the end of the presentation, the community stakeholders rated the identified needs based on their perceived level of concern in the community, and the ability to collaborate to address them. Tony Schwarm, hospital president, thanked everyone for participating in the discussion.

KEY FINDINGS

FEEDBACK ON THE NEEDS BEING ADDRESSED:

The details of the needs being addressed by MBSH were reviewed by the moderator.

In reference to mental health, several of the school district representatives felt that they have seen an increase in pediatric mental health issues, about which they continue to be concerned. They are seeing more kids with behavioral issues, including self-harm, explosive behaviors, anxiety and depression. There are not enough resources available to which to direct parents for help.

- Since the school districts exist within three individual counties, the services available and the requirements to qualify for services vary depending on where the child goes to school. One stakeholder suggested that if the hospital were to offer these services, they could be made available to everyone and these differing requirements would not be a barrier.
- There is also a need for additional psychologists and psychiatrists to whom to refer parents. Appointments are often scheduled several months out, and the parents are unable to get access to medication or other services in the interim. In addition, parents must travel to either St. Louis or Springfield for those services, as there are limited resources available locally.

Another provider felt that access to insurance is still an issue for some children and families, and limits their ability to get the services they need.

The representative from the Department of Health reflected that all of the identified needs are inter-related. In her clinic, she is seeing women and children who present with infant and maternal health issues, as well as mental and behavioral health concerns. Many of their requests are related to access to services, coverage and transportation. But most issues are related to substance abuse.

- They are seeing more newborns being placed in foster care because the mom tested positive for drugs at the screening performed at delivery. She suggested that more education is needed earlier in the pregnancy, even though most moms self-report receiving prenatal care.
- The Department of Health priorities include child injury prevention and neglect related to parental substance use/abuse.

NEEDS THAT SHOULD BE REMOVED FROM THE LIST:

Stakeholders agreed that the needs being addressed should remain, and nothing should be removed from the list.

OTHER NEEDS THAT SHOULD BE ADDRESSED:

The representative of the ambulance district felt that there is a need for urgent care services locally. Making them available would reduce the stress that he sees on the MBSH emergency room (ER) where many patients go with lower acuity medical issues. The ER congestion makes it

difficult when they transport a true medical emergency because the staff are overwhelmed. He suggests that offering urgent care or separating the patients who need urgent care might help alleviate the inappropriate use of the ER.

GAPS BETWEEN DEFINED NEEDS AND OUR ABILITY TO ADDRESS THEM:

The representative of the ambulance district complemented MBSH on how compassionately their emergency room staff cares for patients with mental health issues. He recognized that the hospital does a good job with New Hope (psychiatric services for individuals over age 50), but that there is still a need for a facility that will accept children with mental health issues.

He also acknowledged how difficult it is to recruit physicians to rural communities because their families do not want to live here.

One stakeholder felt that better communication between all of the organizations in the community, including the hospital, would increase awareness of what services the hospital provides and how there can be better collaboration and coordination of services.

- An example was given as to clarifying how the hospital deals with a newborn who is suspected of being opioid-exposed during pregnancy. Knowing the hospital's process might help identify opportunities for community organizations to work together to address the issue.

In the area of substance abuse, there are only a limited number of inpatient detox and rehab facilities available. This is true not only in Crawford County but throughout the area.

- There is a need for greater dissemination of information to the average citizen about the safest way for opioid disposal so the drugs don't get into the wrong hands.
- A better job can also be done to monitor the prescribing of opioid medications by physicians to limit multiple prescriptions being written to the same individual.
 - The stakeholders noted that the PDMP (Prescription Drug Monitoring Program) went live in Crawford County on December 1st, 2018. Although it's not required, a physician can proactively check whether their patients have recently been written prescriptions by other physicians. Pharmacies are required to report when a prescription has been filled, however, and they can check on others that have been filled as well.
 - The St. Louis County Department of Public Health sent out correspondence about the program to pharmacies and physicians during the month of October 2018.

One stakeholder commented that there is a need for an updated, organized list of community resources to which both individuals and organizations can refer. She suggested it be updated and published in the local newspaper every quarter. She felt it would be an easy way to get the information out to those who really need it. Many of those in need don't have access to cell phones or computers, making it difficult for them to find the information online.

Individuals with disabilities like cerebral palsy have limited access to specialists and resources locally. It is also expensive to provide those services in rural communities.

OTHER ORGANIZATIONS WITH WHOM TO COLLABORATE:

The perspective of law enforcement, such as the sheriff's department or local police department, would be an important one to include at future meetings.

The Ministerial Alliance is another organization who would have valuable insights to share.

The Lighthouse Youth Center provides after school programs to students through the use of community volunteers.

CURRENT COLLABORATIONS THAT WERE HIGHLIGHTED:

The Crawford County Department of Health reported that they have a three year block grant to address maternal/child health issues.

- They also sponsor a satellite WIC clinic in Bourbon twice a month.

Another stakeholder suggested that having more discussions like this one would lead to some potential solutions and opportunities to work together.

CHANGES SINCE THE 2016 CHNA:

The representative of First Steps, an organization that deals with children who have developmental delays, projects an increase in the number of children with developmental delays from 2% - 4% per year, to 4% to 6%. They are also seeing more kids diagnosed with autism, now one in 40 children. They are also having a more difficult time finding the resources in applied behavioral analysis to address their issues.

Several stakeholders commented on how the opioid crisis has reached a whole new level, sometimes affecting several generations within the same family. Although drugs have always been a problem, there are new drugs on the scene like bath salts; heroin has replaced methamphetamine in terms of prevalence. In addition, the use of these drugs has been expanding to younger age groups.

Another commented that when her organization goes into homes to provide services, they have seen a deterioration of functioning families. There are more single parent households, who need more support than what is available. There are more grandparents and great grandparents raising their grandchildren because their sons/daughters are unable to care for them due to drugs.

The Merrimac Mission has seen an increase in the homeless population using their services. Many of them are abusing substances, and are also suffering from mental health issues.

- There are no homeless shelters in the local area. The closest ones are in St. Clair and Rolla.
- There are also about 60 students in the school districts who are considered homeless, meaning that they may be living in the home of another family.

HEALTH CONCERNS FOR THE FUTURE:

As was stated earlier in the discussion, the representative of the ambulance district was concerned about the increased use of the emergency room when a primary care or urgent care visit may be more appropriate.

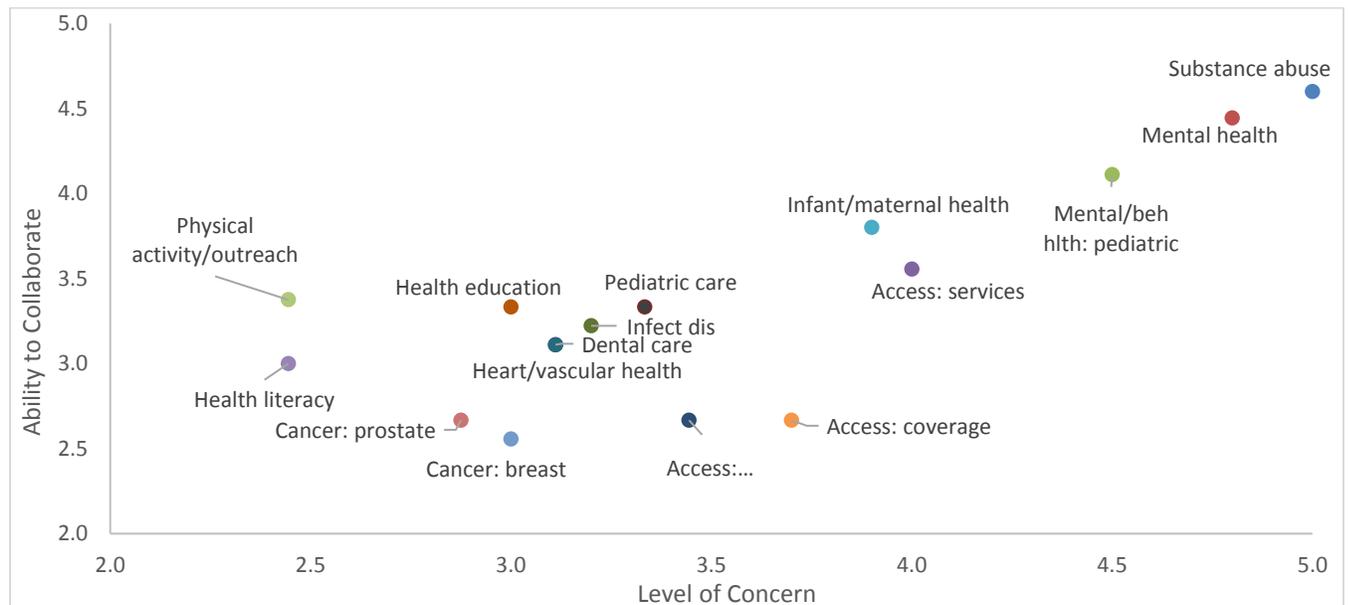
He also suggested that he would like to see the hospital to play a bigger role in the mass casualty planning in Crawford County. If a situation arises where transportation by ambulance or helicopter is hindered, and access to major trauma centers is limited, the hospital will be the only place available to bring injured patients. He would like all cooperating agencies do a better job of planning, because none of them alone has enough resources to deal with a major disaster.

There is also a concern about increased infectious disease rates due to substance abuse, including Hepatitis C and HIV.

Because of the difficulty in hiring health professions in rural communities, one stakeholder suggested that a telehealth option would be a valuable alternative both for medical and mental health services. She suggested that local residents would be open to it as it would address the transportation issues they often face, and might be more affordable than an in-person visit.

RATING OF NEEDS

Participants rated the needs identified in the 2016 assessment on a scale of 1 (low) to 5 (high), based on their perceived level of community concern and the ability of community organizations to collaborate around them.



The issues of substance abuse and mental health were rated the highest in terms of level of concern and ability to collaborate. Concerns about pediatric mental/behavioral health were not far behind.

Health Need	Level of Concern	Ability to Collaborate
Substance abuse	5.0	4.6
Mental health	4.8	4.4
Mental/beh health: pediatric	4.5	4.1
Access: services	4.0	3.6
Infant/maternal health	3.9	3.8
Access: coverage	3.7	2.7
Access: transportation	3.4	2.7
Pediatric care	3.3	3.3
Infectious disease	3.2	3.2
Dental care	3.1	3.1
Heart/vascular health	3.1	3.1
Health education	3.0	3.3
Cancer: breast	3.0	2.6
Cancer: prostate	2.9	2.7
Physical activity/outreach	2.4	3.4
Health literacy	2.4	3.0

NEXT STEPS

Using the input received from community stakeholders, Missouri Baptist Sullivan Hospital will consult with its internal workgroup to evaluate this feedback. They will also consider other secondary data, and determine whether/how their priorities should change. The final needs assessment and implementation plan is due by December 31, 2019.

Appendix E: Focus Group Participants and Hospital Observers

COMMUNITY STAKEHOLDERS FOCUS GROUP PARTICIPANTS AND HOSPITAL OBSERVERS

CRAWFORD COUNTY STAKEHOLDERS FOCUS GROUP PARTICIPANTS

LAST NAME	FIRST NAME	ORGANIZATION
Carey	Cindy	Sullivan School District
Dace	Chris	Meramec Community Mission
Evansr	Honor	Crawford County Health Department
Hainline	Darleen	DSFC/ABiLITY
Negretti	Grace	Crawford Co R-1 School District
Patt	Bill	Steelville Ambulance District
Payne	Judy	Developmental Services of Franklin County
Schmidt, Dr.	Jennifer	Sullivan School District
Shoemaker	Marie	Crawford Co R-2 School District
Speaks	Shawna	Sullivan Area Chamber of Commerce
Thornsberry, Dr.	Jana	Sullivan School District

MISSOURI BAPTIST SULLIVAN HOSPITAL FOCUS GROUP OBSERVERS

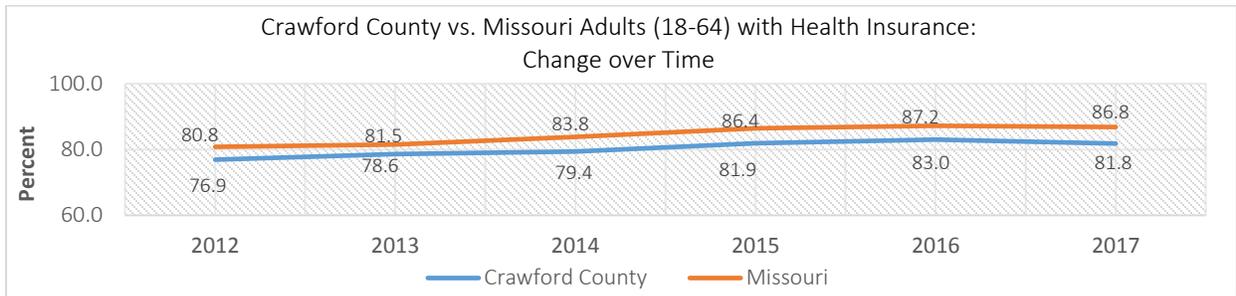
LAST NAME	FIRST NAME	ORGANIZATION
Counts	Natalie	MBSH
King	Karley	BJC HealthCare
Lochner	Lisa	MBSH
Reed	Kathleen	MBSH
Schwarm	Tony	MBSH

Appendix F: Internal Work Group

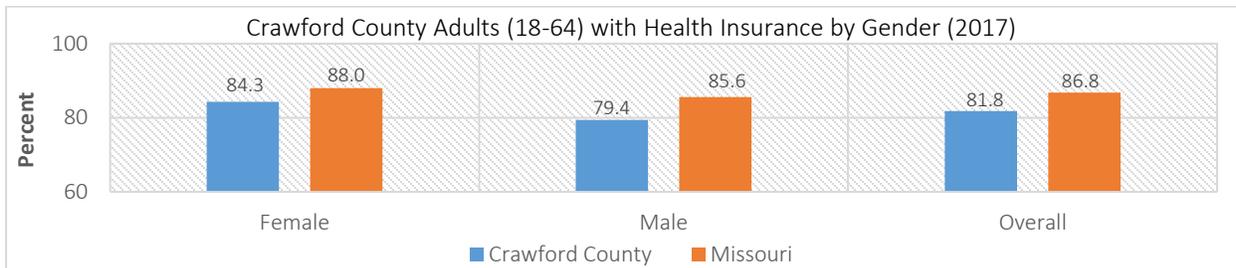
MISSOURI BAPTIST SULLIVAN HOSPITAL COMMUNITY HEALTH NEED ASSESSMENT INTERNAL WORK GROUP			
LAST NAME	FIRS NAME	TITLE	DEPARTMENT
Paneitz	Kelly	Manager, Support Services	Dietary
Anderson	Tracy	Manager	Sullivan Clinics
Hedges	Robyn	Nurse Practitioner	Bourbon Clinic
Carpenter	Johsna	STEMI Coordinator	Emergency Department
Dace	Stacey	Spec, Communication & Marketing	Public Relations
Reeves	Teresa	Manager, Patient Access	Patient Accounts
Counts	Natalie	Community Health Educator	Community Health Education
Reed	Kathy	Human Ressources	Human Resources Manager
Wildhaber	Amy	Quality Compliance & Risk Manager	Risk Management
King	Karley	Program Manager, Community Benefit	Corporate Communications & Marketing

Appendix G: Secondary Data

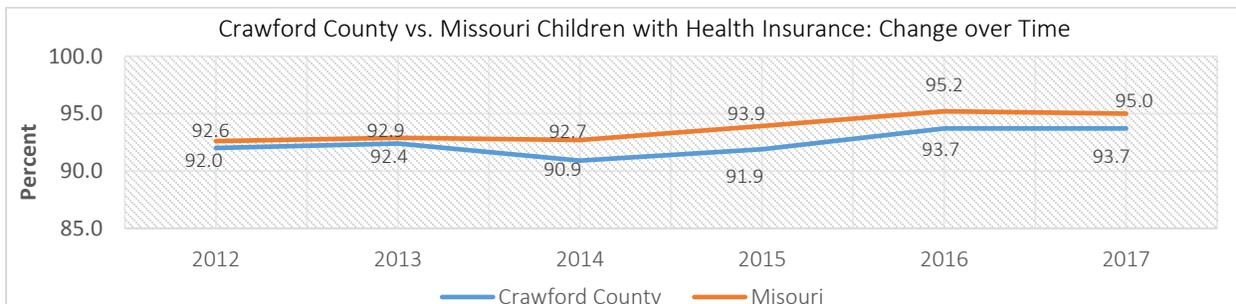
ACCESS TO HEALTH CARE



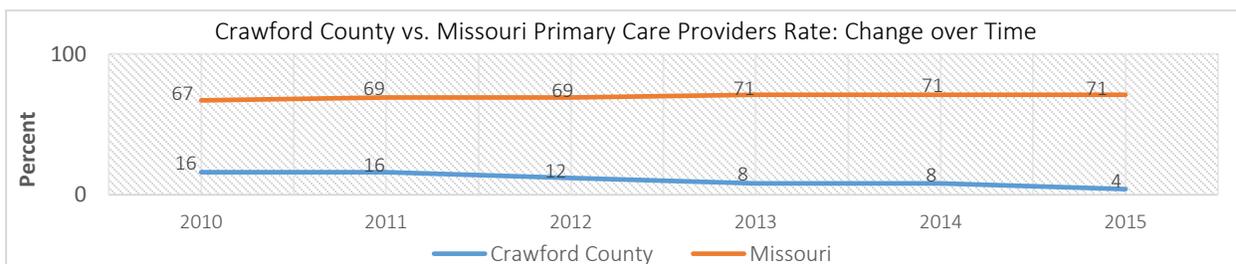
Source: Conduent Healthy Communities Institute



Source: Conduent Healthy Communities Institute



Source: Conduent Healthy Communities Institute

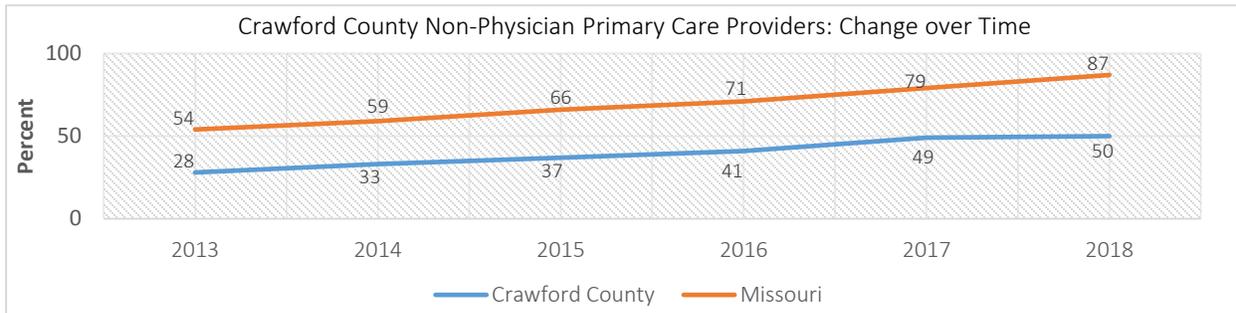


Source: Conduent Healthy Communities Institute

ACCESS TO HEALTH CARE

CRAWFORD COUNTY ACCESS TO HEALTH CARE		
HEALTH INDICATORS	CRAWFORD COUNTY	MISSOURI
Percent Adults with Health Insurance: Age 18-64 (2017)	81.8	86.8
Percent Children with Health Insurance (2017)	93.7	95
Primary Care Providers Rate / 100,000 (2015)	4	71
Dentist Rate/100,000 (2017)	12	57
Mental Health Providers Rate/100,000 (2018)	41	180
Non-Physicians Primary Care Providers Rate / 100,000 (2018)	50	87
Preventable Hospital Stays. Discharges / 1000 Enrollees (2015)	61.7	56.6

Source: Conduent Healthy Communities Institute

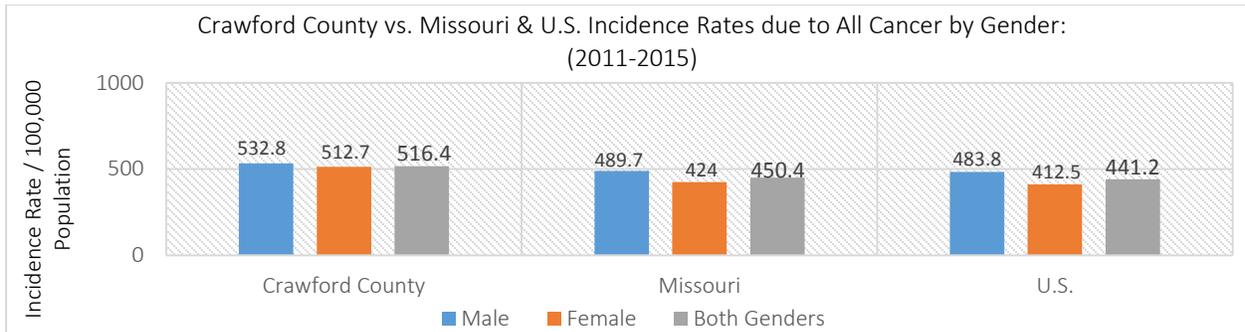


Source: Conduent Healthy Communities Institute

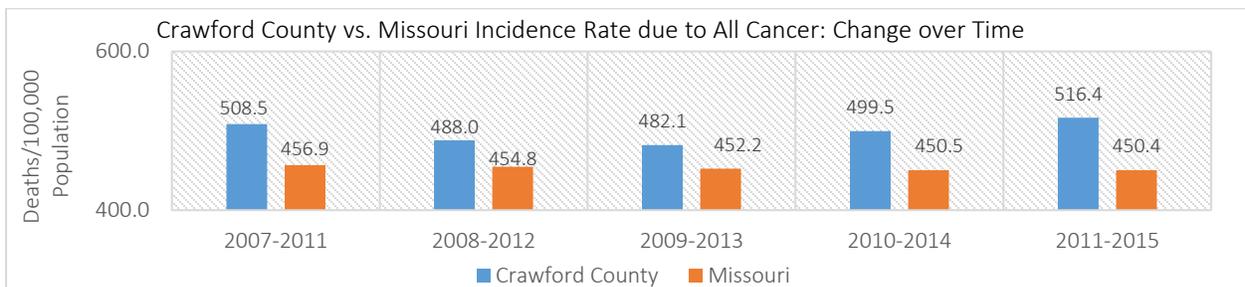
CRAWFORD COUNTY ACCESS: TRANSPORTATION (2013-2017)		
HEALTH INDICATORS	CRAWFORD COUNTY	MISSOURI
Percent Households Without a Vehicle	3.4	7
Percent Workers Commuting by Public Transportation	0.4	1.5
Mean Travel Time to Work; Age 16+	26.8 Minutes	23.5 Minutes

Source: Conduent Healthy Communities Institute

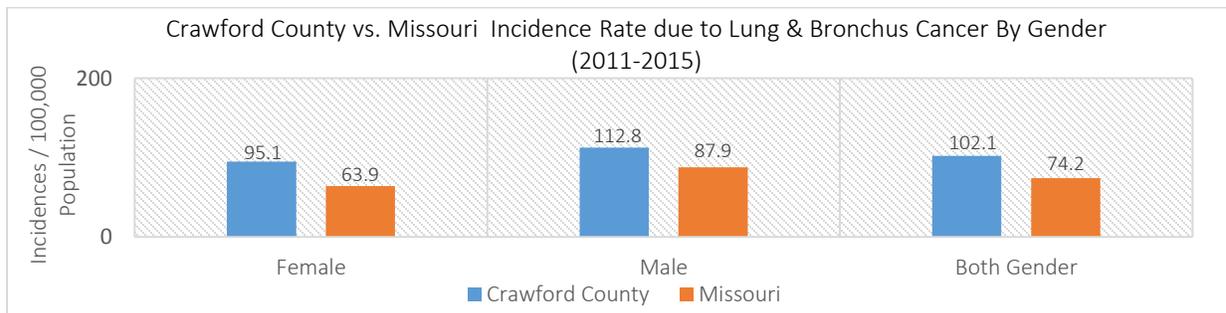
CANCER



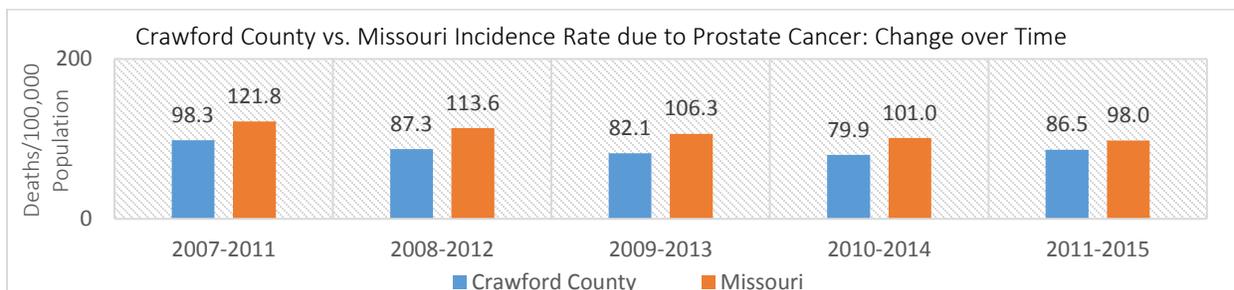
Source: Conduent Healthy Communities Institute



Source: Conduent Healthy Communities Institute

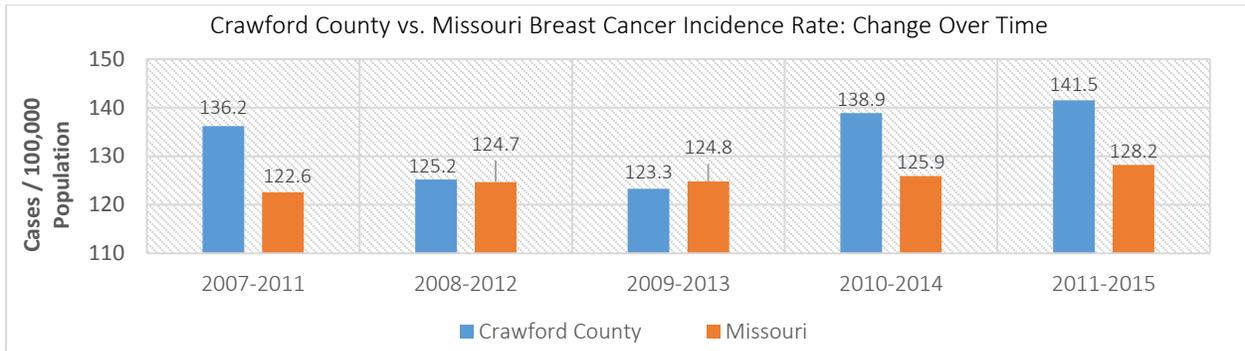


Source: Conduent Healthy Communities Institute

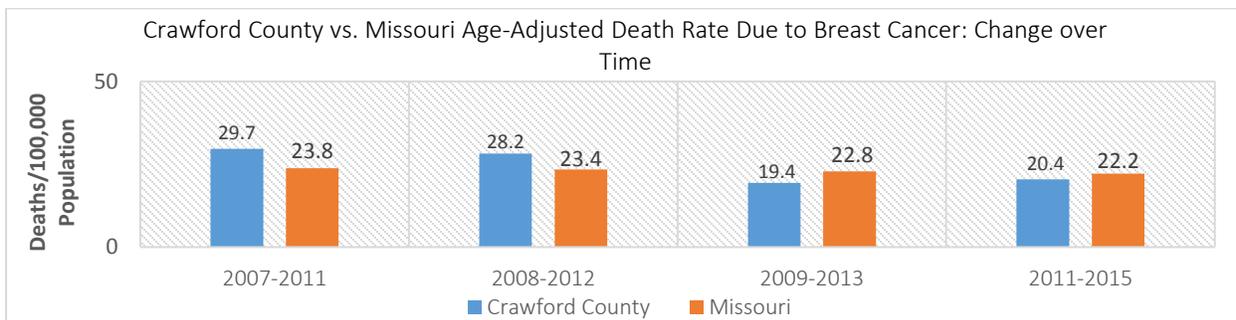


Source: Conduent Healthy Communities Institute

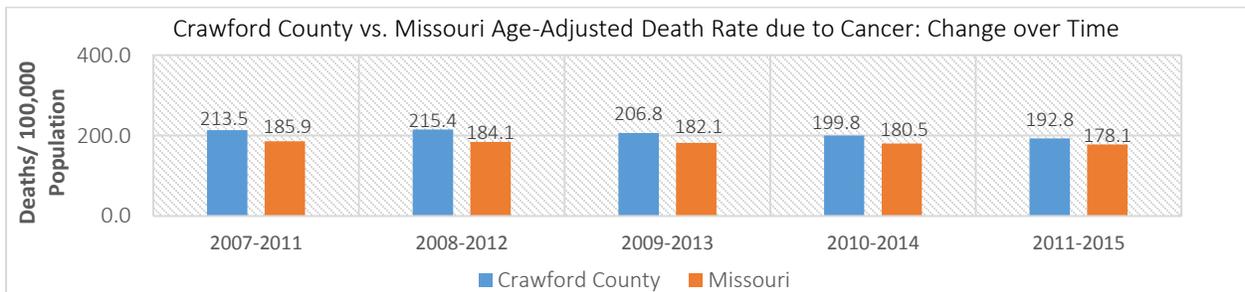
CANCER



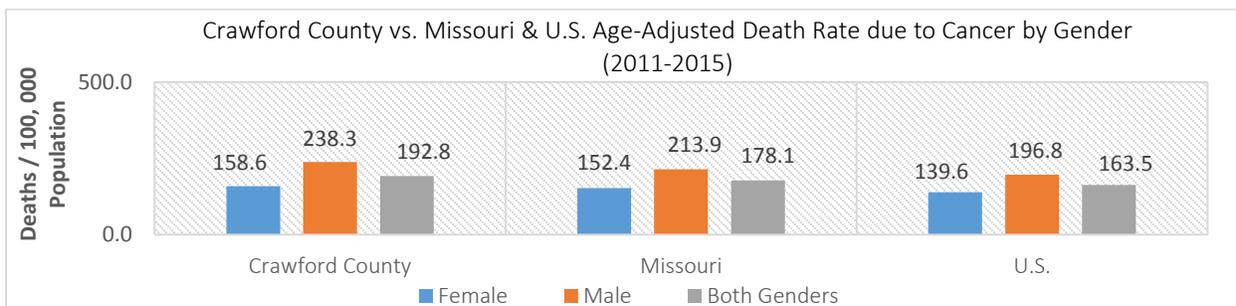
Source: Conduent Healthy Communities Institute



Source: Conduent Healthy Communities Institute

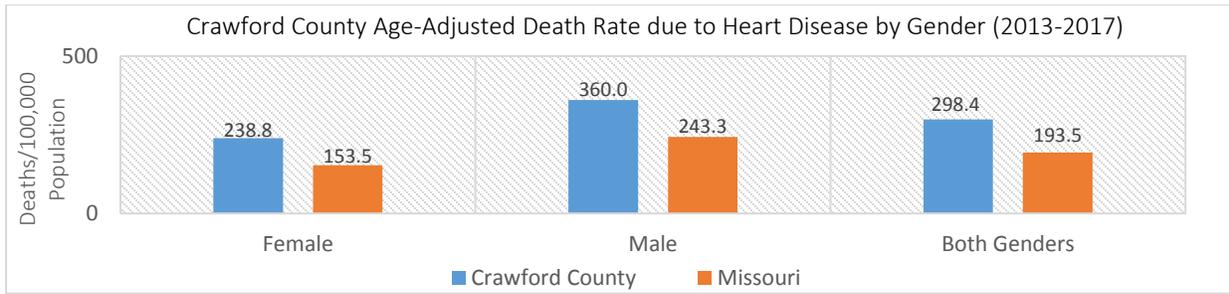


Source: Conduent Community Healthies Institute

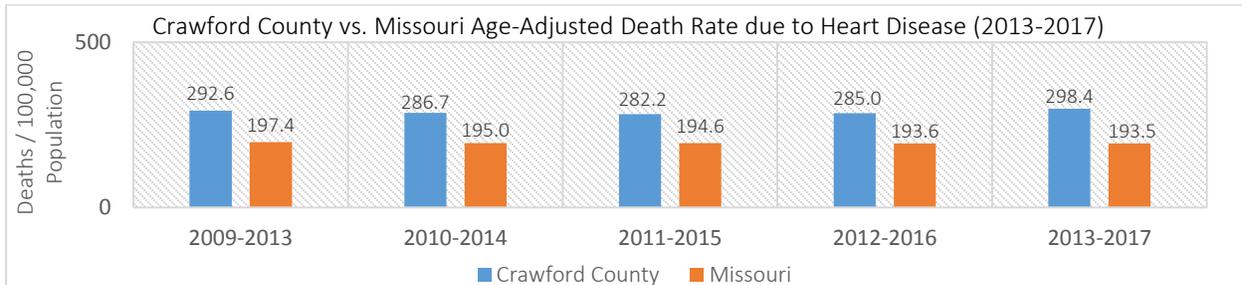


Source: CDC National Cancer Profile & Conduent Healthy Communities Institute

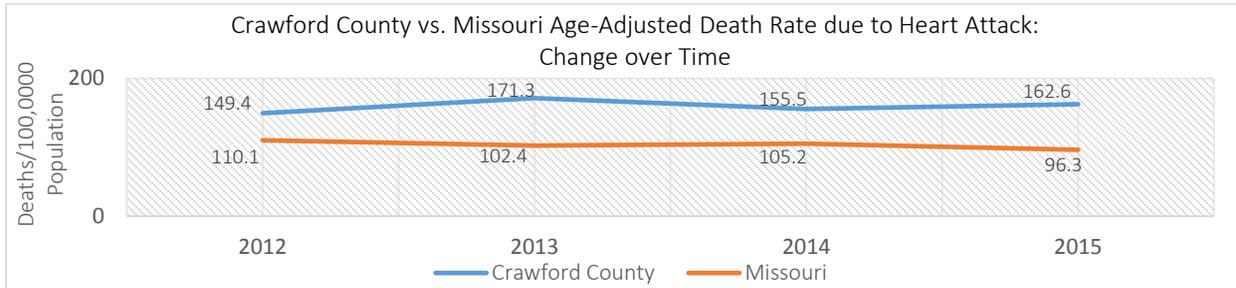
HEART & CARDIOVASCULAR DISEASES



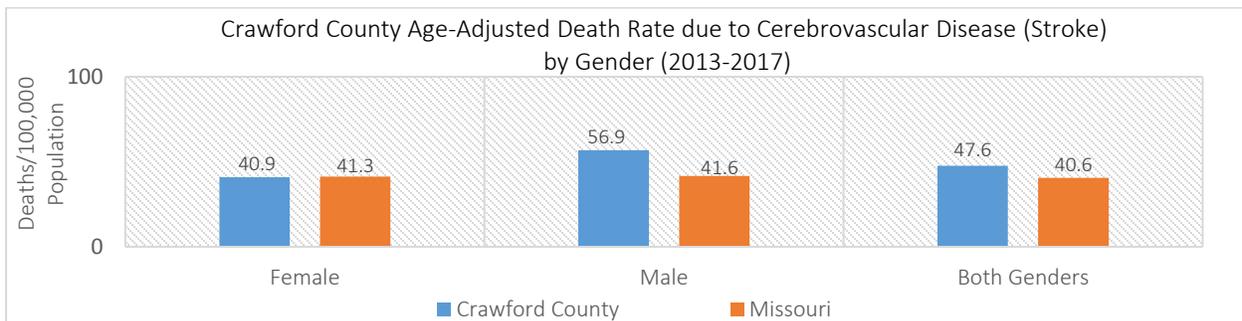
Source: Conduent Healthy Communities Institute



Source: Conduent Healthy Communities Institute

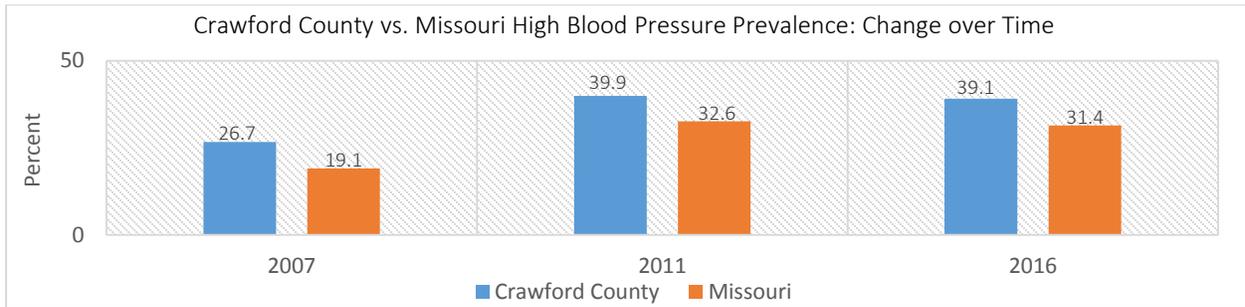


Source: Conduent Healthy Communities Institute

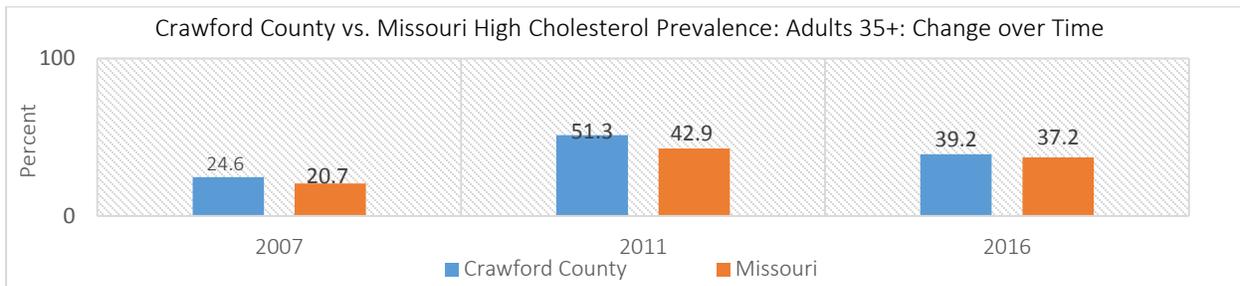


Source: Conduent Healthy Communities Institute

HEART & CARDIOVASCULAR DISEASES



Source: Conduent Healthy Communities Institute

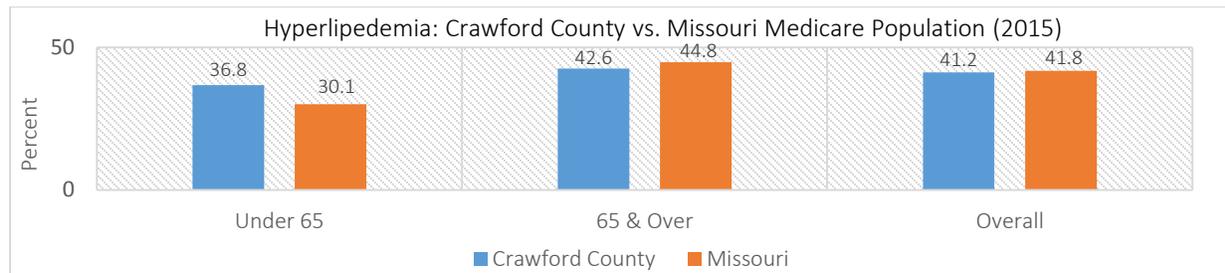


Source: Conduent Healthy Communities Institute

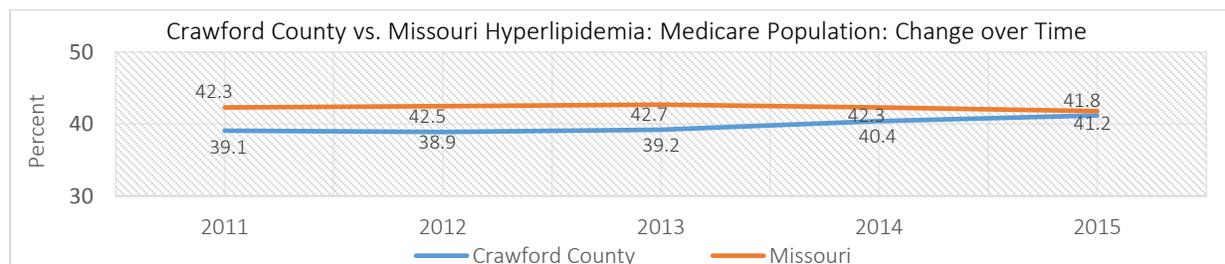
CRAWFORD COUNTY THREE-YEAR MOVING HEART DISEASE AVERAGE RATES COMPARED TO MISSOURI						
HEALTH TOPICS	CRAWFORD COUNTY	MISSOURI	CRAWFORD COUNTY	MISSOURI	CRAWFORD COUNTY	MISSOURI
DEATHS / 100,000 POPULATION	2013-2015		2014-2016		2015-2017	
Heart Disease	283.12	194.78	297.03	194.15	306.33	193.5
Ischemic Heart Disease	209.22	114.21	221.78	111.17	229.18	108.36
Stroke / Other Cerebrovascular Disease	52.26	40.56	51.6	40.55	38.91	40.65
HOSPITALIZATION / 10,000 POPULATION	2011-2013		2012-2014		2013-2015	
Heart Disease	107.48	115.58	100.27	108.12	99.47	102.68
Ischemic Heart Disease	38.24	34.89	35.5	31.91	36.05	30.04
Stroke / Other Cerebrovascular Disease	26.18	28.44	26.22	27.47	25.81	27.16
ER VISITS / 1,000 POPULATION	2011-2013		2012-2014		2013-2015	
Heart Disease	22.56	15.25	21.09	15.1	20.23	14.97
Ischemic Heart Disease	2.58	0.6	2.34	0.57	2.17	0.54
Stroke / Other Cerebrovascular Disease	1.85	0.78	1.66	0.76	1.52	0.75

Source: Missouri Department of Health & Senior Services

HEART & CARDIOVASCULAR DISEASES



Source: Conduent Healthy Communities Institute



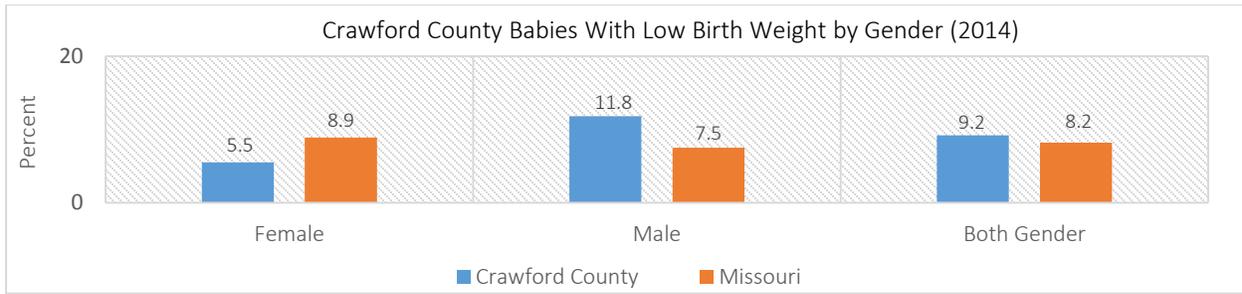
Source: Conduent Healthy Communities Institute

HEART DISEASE & STROKE: CRAWFORD COUNTY VS MISSOURI AGE-ADJUSTED RATE

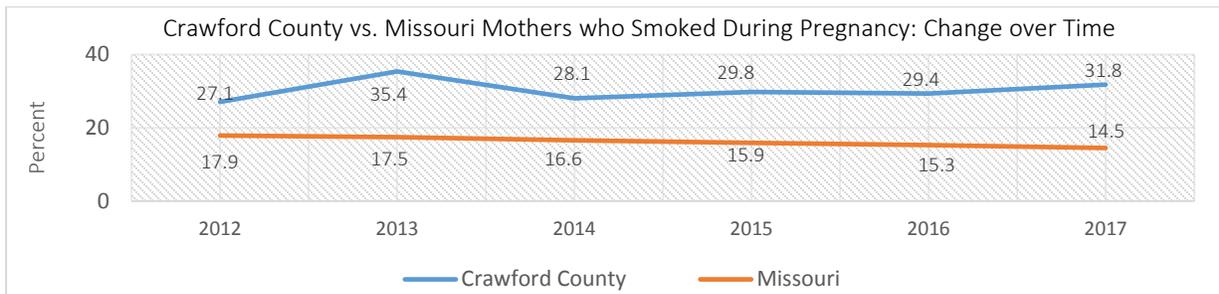
HEALTH TOPICS	CRAWFORD COUNTY	MISSOURI
HEART DISEASE		
Deaths / 100,000 Population (2007-2017)	298.14	199.32
Hospitalizations / 10,000 Population (2011-2015)	103.83	109.46
ER Visits / 1,000 Population (2011-2015)	21.42	15.12
ISCHEMIC HEART DISEASE		
Deaths / 100,000 Population (2007-2017)	230.71	124.16
Hospitalizations / 10,000 Population (2011-2015)	36.42	32.53
ER Visits / 1,000 Population (2011-2015)	2.39	0.57
STROKE / OTHER CEREBROVASCULAR DISEASE		
Deaths / 100,000 Population (2007-2017)	49.9	43.02
Hospitalizations / 10,000 Population (2011-2015)	26.93	27.85
ER Visits / 1,000 Population (2011-2015)	1.67	0.77

Source: Missouri Department of Health & Senior Services

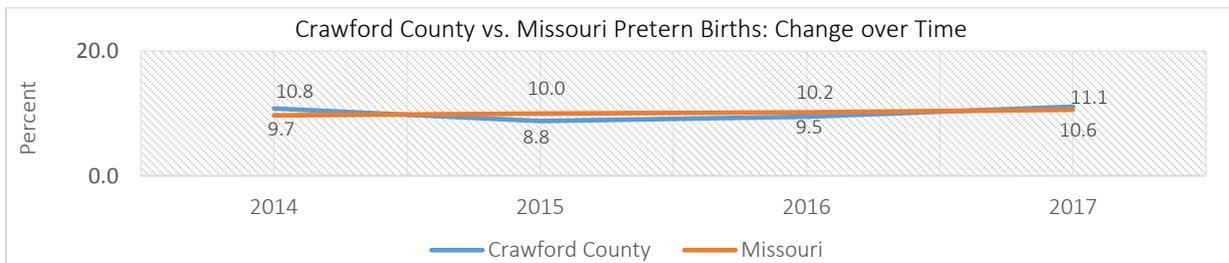
MATERNAL AND INFANT HEALTH



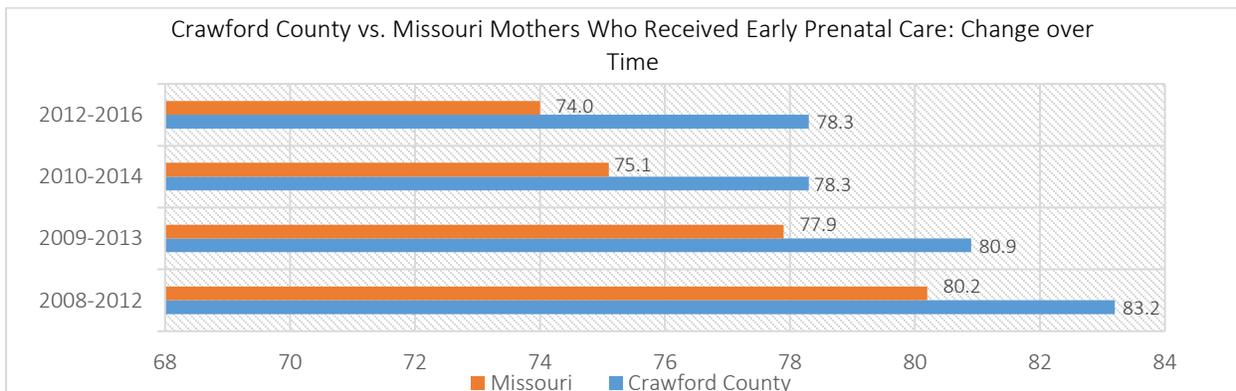
Source: Conduent Healthy Communities Institute



Source: Conduent Healthy Communities Institute

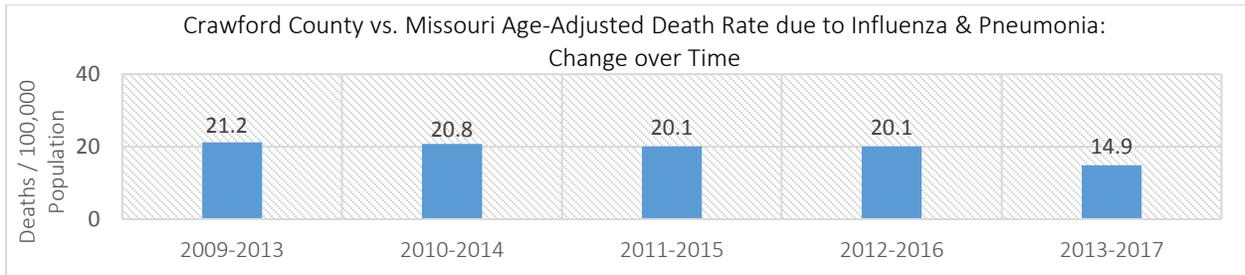


Source: Conduent Healthy Communities Institute

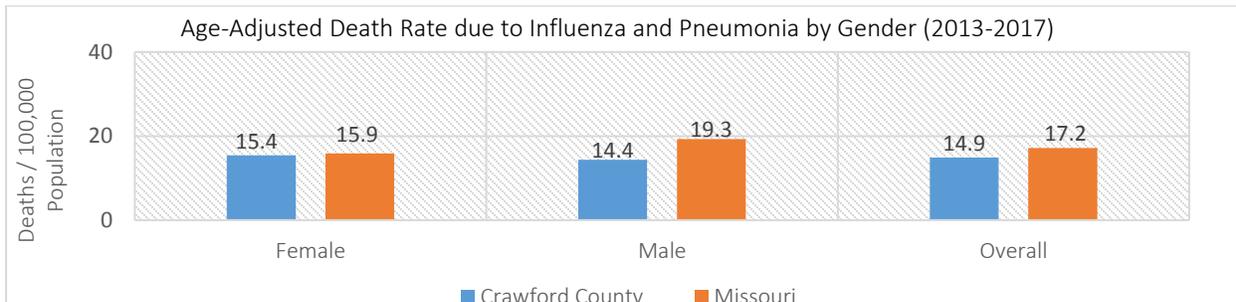


Source: Conduent Healthy Communities Institute

INFECTIOUS DISEASES/INFLUENZA & PNEUMONIA

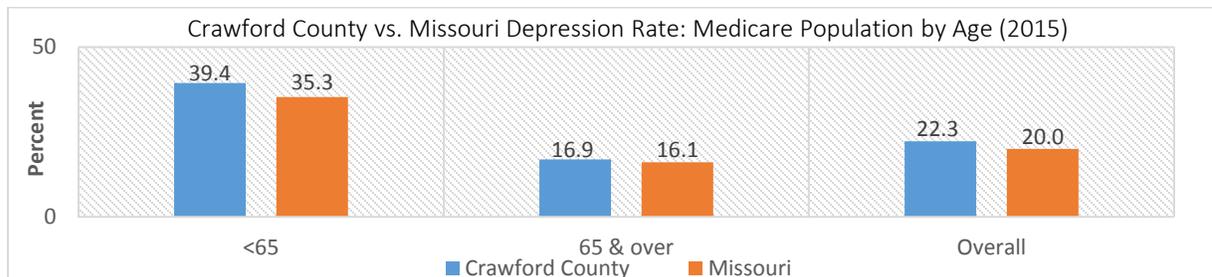


Source: Conduent Healthy Communities Institute

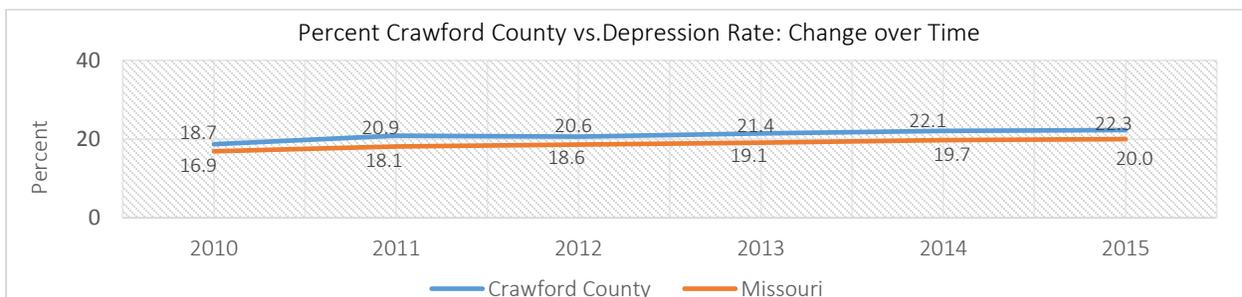


Source: Conduent Healthy Communities Institute

MENTAL / BEHAVIORAL HEALTH: MENTAL HEALTH

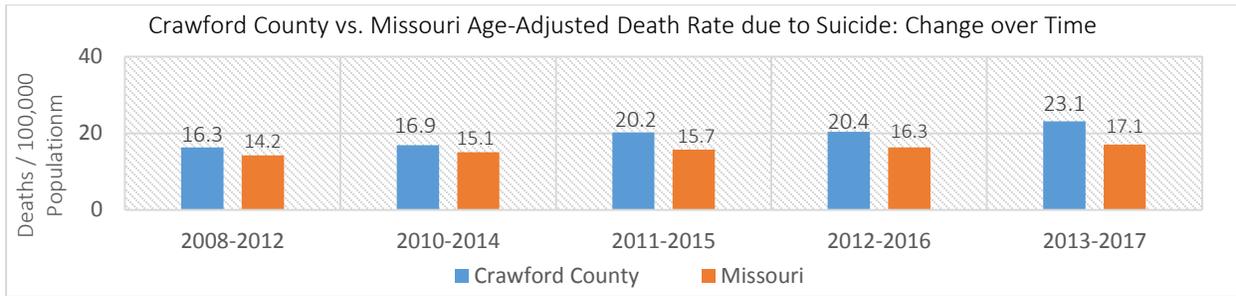


Source: Conduent Healthy Communities Institute

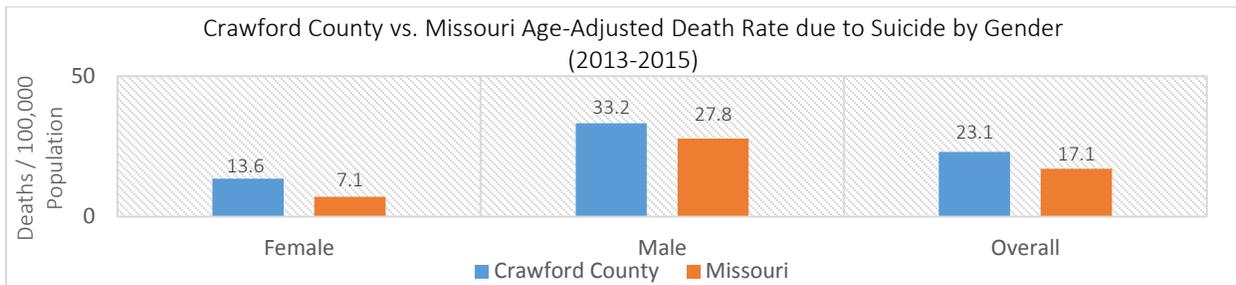


Source: Conduent Healthy Communities Institute

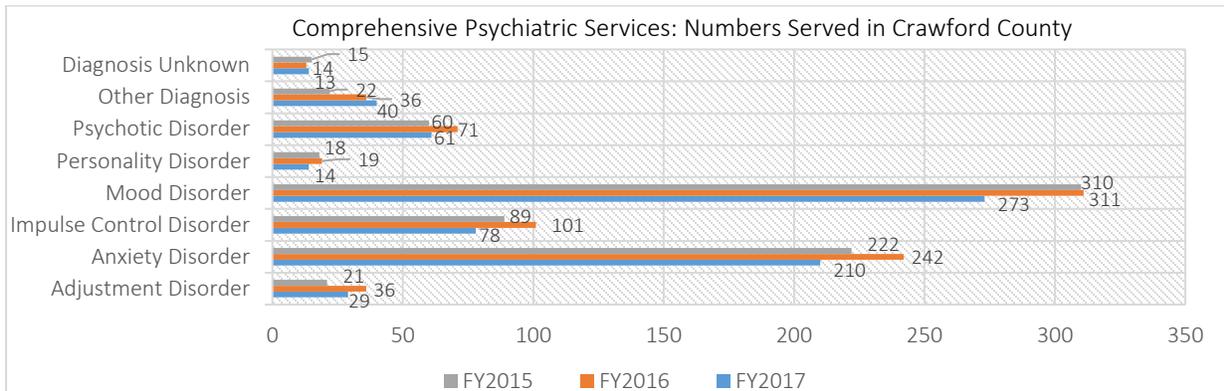
MENTAL / BEHAVIORAL HEALTH: MENTAL HEALTH



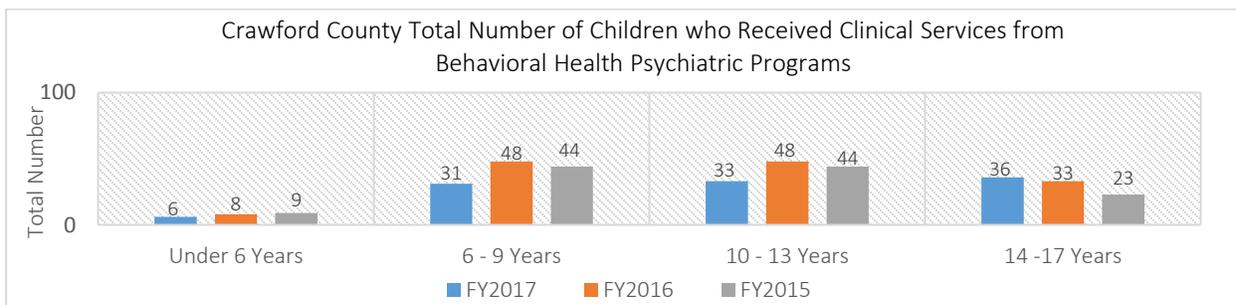
Source: Conduent Healthy Communities Institute



Source: Conduent Healthy Communities Institute

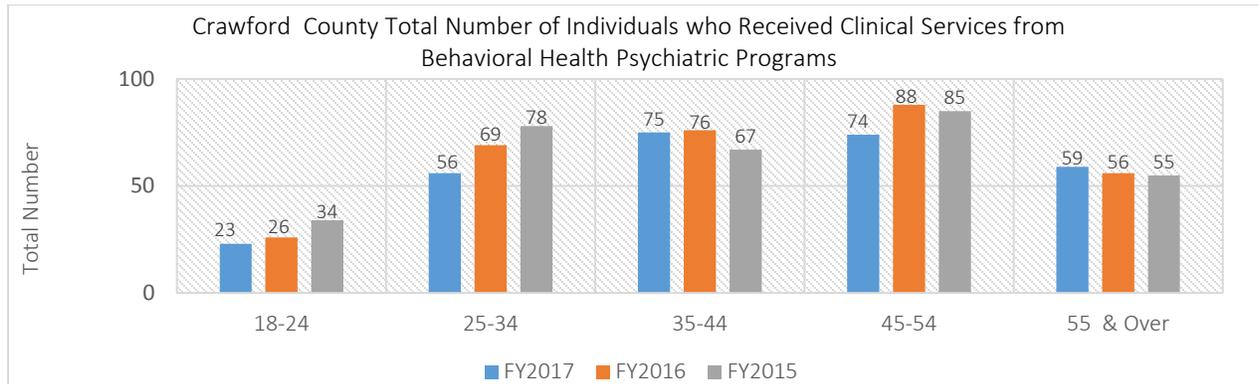


Source: Missouri Department of Mental Health



Source: Missouri Department of Mental Health

MENTAL / BEHAVIORAL HEALTH: MENTAL HEALTH



Source: Mo Department of Mental Health

MENTAL/BEHAVIORAL HEALTH: SUBSTANCE USE AND ABUSE

The Missouri Student Survey provides estimates for youth in most Missouri counties. This survey is administered in even-numbered years to 6th-12th-grade students in participating school districts. (Missouri Department of Mental Health). For Crawford County (2018):

SMOKING

- 49.3 percent of youth believe that it would be easy to get standard cigarettes and 47.9 percent to get e-cigarettes
- 44.8 percent have friends who smoke
- An estimated 27.7 percent of youth believe there is slight or no risk to smoking standard cigarettes, while 45.0 percent believe there is slight or no risk to smoking e-cigarettes

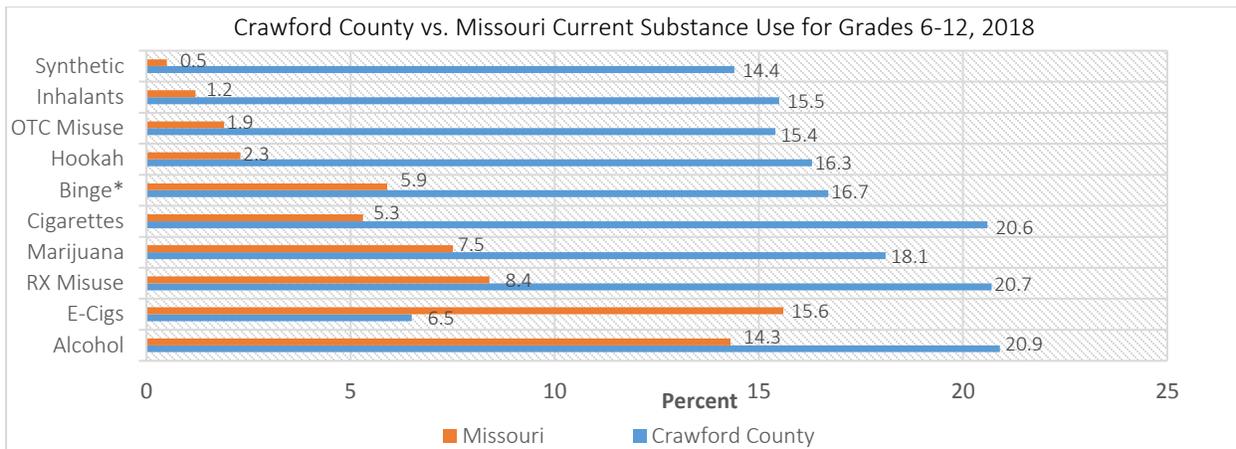
ALCOHOL

- An estimated 43.1 percent of youth in Crawford County believe that it would be easy to get alcohol
- An estimated 51.9 percent believe that using alcohol presents only slight or no risk of harm.
- Approximately 50.9 percent of youth believe there is slight or no risk of harm in binge drinking once or twice a week
- 56.6 percent have friends who drink alcohol

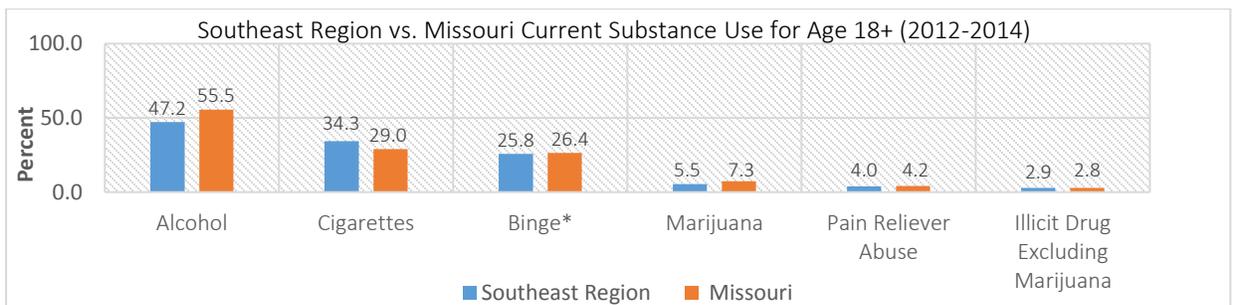
DRUGS

- 41.6 percent of county youth said that marijuana is easy to get
- 53.2 percent report having at least one friend that uses it
- 46.9 percent said that smoking marijuana is slight or no risk of harm
- 34.1 percent of youth believe that it would be easy to get prescription drugs

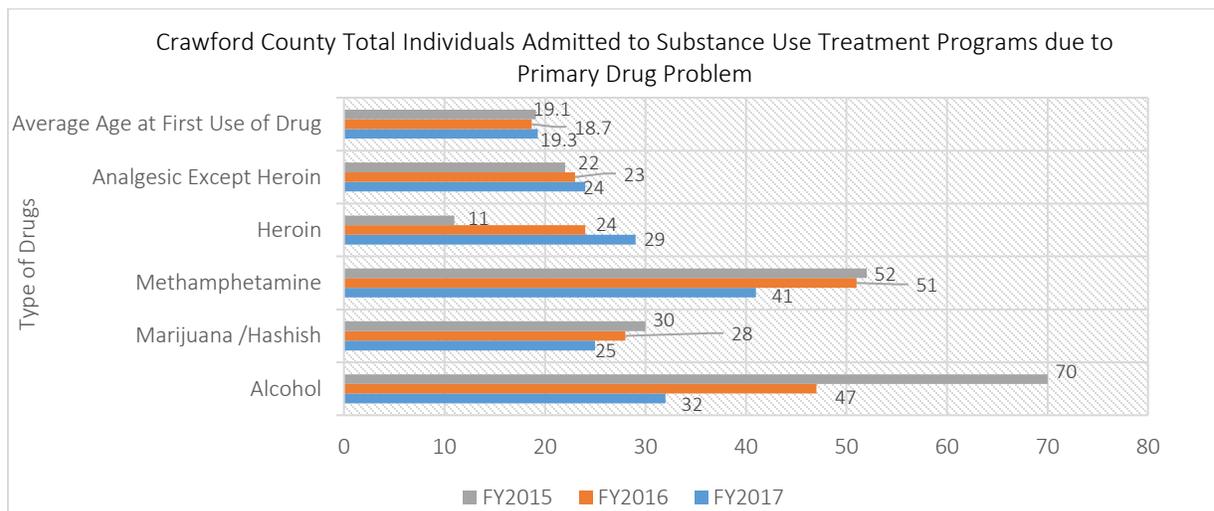
MENTAL/BEHAVIORAL HEALTH: SUBSTANCE USE AND ABUSE



Source: Missouri Department of Mental Health

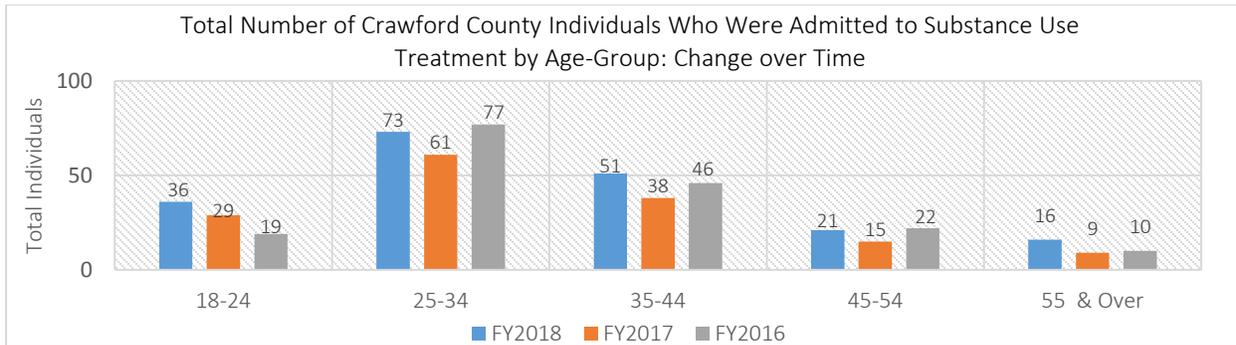


Source: Missouri Department of Mental Health

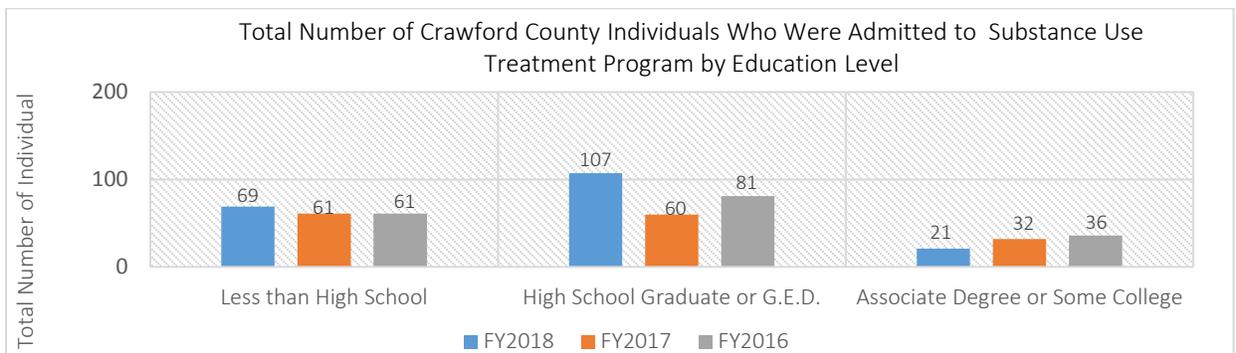


Source: Missouri Department of Mental Health

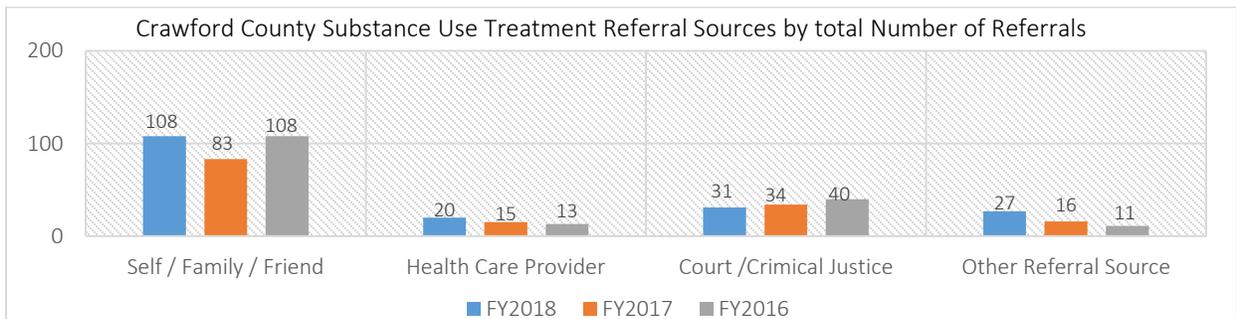
MENTAL/BEHAVIORAL HEALTH: SUBSTANCE USE AND ABUSE



Source: Missouri Department of Mental Health



Source: Mo Department of Mental Health



Source: Mo Department of Mental Health

DATA SOURCES USED FOR THE SECONDARY DATA ANALYSIS INCLUDED THE FOLLOWING DESCRIBED BELOW:

CONDUENT HEALTHY COMMUNITIES INSTITUTE, an online dashboard of health indicators for St. Louis County, offers the ability to evaluate and track the information against state and national data and Healthy People 2020 goals. Sources of data include the National Cancer Institute; Environmental Protection Agency; U.S. Census Bureau; U.S. Department of Education, and other national, state and regional sources. <https://healthycities.zendesk.com>

CENTERS FOR DISEASE CONTROL AND PREVENTION (CDC)/STATE CANCER PROFILES is a website that provides data, maps and graphs to help guide and prioritize cancer control activities at the state and local levels. It is a collaboration of the National Cancer Institute and the Centers for Disease Control and Prevention. <https://statecancerprofiles.cancer.gov>

MISSOURI DEPARTMENT OF MENTAL HEALTH provides numerous comprehensive reports and statistics on mental health diseases, alcohol and drug abuse. http://dmh.mo.gov/ada/countylinks/crawford_link.html

MISSOURI INFORMATION FOR COMMUNITY ASSESSMENT (MICA) is an online system that helps to prioritize diseases using publicly available data. The system also provides for the subjective input of experts to rank their perceived seriousness of each issue.

IMPLEMENTATION STRATEGY



Community Health Needs to be Addressed

MENTAL/BEHAVIORAL HEALTH: SUBSTANCE ABUSE

Community Health Need Rationale

Substance abuse continues to be a problem in Crawford County with 154 individuals admitted into substance abuse treatment programs in 2017. There are limited resources for family members of those dealing with substance abuse to provide them with the resources needed to assist their loved one with continuing care. Up to 50 percent of individuals who complete an addiction treatment program will later relapse with the highest risk of relapse in the first 60 days following discharge from treatment. Individuals who receive continued care after treatment are less likely to relapse. (Source: 2018 Status Report on Missouri's Substance Abuse and Mental Health; <https://dmh.mo.gov/ada/rpts/documents/status2018-crawford.pdf>)

Strategy Goal

Increase access to resources and education for the prevention and treatment of substance abuse disorder

Strategy Objectives

- Increase the percentage of individuals who are aware of available substance abuse resources in the area by 5 percent by the end of 2021 by tracking the number of hits on the MBSH Community Resources website page
- By May 2020, establish a baseline of the number of maternal health patients who present to MBSH Labor and Delivery with positive drug screens during pregnancy and seek treatment post-partum
- Increase the percentage of maternal health patients presenting to MBSH Labor and Delivery with positive drug screens during pregnancy who seek treatment post-partum by 5 percent

Program Action Plan

MBSH will continue to update and maintain a link on its website to an online resource database accessible to all staff, patients and community members to assist in locating available substance abuse resources in Crawford County and the surrounding areas. This online database will also be promoted to staff, patients and their family members seeking information on substance abuse treatment through social media.

To further provide support for individuals who present to MBSH Labor and Delivery with a history of positive drug screen during pregnancy, MBSH Medical Stabilization will facilitate a follow-up call to determine if treatment was sought post-partum and/or if additional information on available resources is needed.

Program Expected Outcomes

Increase community awareness of substance abuse disorder resources, risks and prevention as well as increase the number of Labor and Delivery patients with positive drug screens who receive treatment, post-partum.

Program Outcomes Measurement

Program success will be measured by tracking the number of hits on the online resource database as well as by tracking the number of Labor and Delivery patients with positive drug screens who report seeking and receiving treatment post-partum.

II. HEART & VASCULAR: HEART HEALTH

Community Health Need Rationale

Heart Disease was the leading cause of death in Crawford County from 2016-2017 at the rate of 2319.83 (per 100,000), which is significantly higher than the Missouri rate of 191.53 (per 100,000). Along with elevated mortality rates, the number of Emergency Department visits for heart disease is higher than those found at the state level. While many of the factors contributing to heart disease can be positively affected through proper nutrition, physical activity, refraining from smoking and maintaining a healthy weight, there are some factors such as genetic predisposition that can also increase risk. Early detection and prevention are key in reducing the long term effects of heart disease. (Sources: MICA, <https://healthapps.dhss.mo.gov>) If left untreated, long-term effects of heart disease can include heart attack, stroke, pulmonary embolism, heart failure, cardiac arrest, peripheral artery disease and death. (Sources: <http://www.cdc.gov>)

Strategy Goal

Improve cardiovascular health and quality of life through early detection and education of risk factors for heart attack and stroke to prevent cardiovascular events

Strategy Objectives

- Between 2020 and 2022, utilizing the previously established database of participants, decrease the risk factors for heart disease in patients previously determined to have lipid panel, blood pressure, glucose and BMI above normal ranges by 10 percent
- Between 2020 and 2022, increase the percentage of knowledge gained in heart health risk factors to participants of the MBSH health fair with lipid panel, blood pressure, glucose and BMI above normal ranges by 5 percent
- Between 2020 and 2022, increase the percentage of knowledge gained in heart health risk factors to participants of Community Connections STEMI/Stroke Education events by 5 percent

Strategy Action Plan

Utilize normal ranges previously set by an MBSH for four heart and vascular health risk factors below to assess incidence of heart disease risk:

- Lipid panel
- Blood pressure
- Glucose
- BMI

At the annual MBSH health fair, screenings for the four identified cardiovascular risk factors will be offered at a minimum charge to all participants. Individuals with test results that fall outside of the established normal range will be invited to participate in a program to provide education and tools to decrease risk factors for cardiovascular disease. These monthly educational sessions will be led by a collaboration between the MBSH Cardiac Rehabilitation department, MBSH STEMI/Stroke Team and MBSH Community Health Educator.

Participants will be asked to repeat the cardiovascular health risk screenings at each annual health fair to determine changes in each of the four identified risk factors.

Host free STEMI/Stroke educational events throughout the community with Community Connections events led by the MBSH STEMI/Stroke Team.

Expected Outcomes

Decrease the incidence of heart disease related occurrences in Crawford County

Outcomes Measurement

The database established from health factor screenings at the 2017-2018 MBSH health fair will be reevaluated annually to determine if and how much risk factors have moved towards normal ranges. All educational programs will be evaluated with pre/post testing completed by participants to measure any increase in knowledge for program objectives. MBSH will also track the number and content of programs implemented and the number of participants versus the number of health fair participants who were identified as at-risk for cardiovascular disease to evaluate program impact.

Community Health Needs that Will Not be Addressed

MENTAL/BEHAVIORAL HEALTH: MENTAL HEALTH

MBSH currently has insufficient resources and facilities to address this need. There are a limited number of practicing psychiatrists in the area, which makes addressing this need especially challenging. Compass Health Network is an existing organization in place to help address mental health issues in the community.

MENTAL/BEHAVIORAL HEALTH (PEDIATRIC)

MBSH currently has insufficient resources and facilities to address this need. There are a limited number of practicing psychiatrists in the area, which makes addressing this need especially challenging. Organizations are in place to address mental health issues in children, although some of these organizations are in neighboring communities:

- Child Advocacy Center (CAC)
- Court Appointed Special Advocates (CASA)
- Crider Center
- St. Louis Children's Hospital
- Compass Health Network

ACCESS: COVERAGE

Due to the implementation of the Affordable Health Care Act, many previously uninsured patients have been able to receive health care coverage through the Marketplace, privatized insurance or Medicaid/Medicare. MBSH will continue to assist uninsured patients with resources to help obtain benefits if they have not already done so.

INFANT/MATERNAL HEALTH

MBSH currently has insufficient resources to address the socioeconomic factors and other risk factors that contribute to poor infant and maternal health outcomes. However, the hospital currently provides free childbirth education classes and is developing a new program to help parents track infant growth and development. The hospital's Mother/Baby Unit also collaborates with St. Louis Children's Hospital to offer telehealth consultations with neonatologists on an as-needed basis.

ACCESS: SERVICES

While MBSH's specialty clinic offers a variety of services, the hospital does not have sufficient resources to expand any program at this time. Patients in need of services unavailable in Sullivan can be referred to other BJC facilities.

ACCESS: TRANSPORTATION

While MBSH does recognize transportation to and from appointments as a hindrance for

patients, at this time the hospital does not have sufficient resources to provide transportation for patients.

HEALTH EDUCATION

MBSH will continue to address Health Education through our annual health fair, educational events held at the hospital, social media, school and employer partnerships, as well as presentations within the community.

HEALTH LITERACY

While MBSH does not have sufficient resources for a formal health literacy program for patients, the hospital is currently looking into ways it can increase awareness about health literacy issues among its physicians and staff.

PHYSICAL ACTIVITY/OUTREACH

MBSH will continue to provide events and education on the importance of staying physically active such as the annual Kids on Track summer program and the Sullivan School District and Cuba School District partnerships.

CANCER: BREAST

MBSH will offer mammograms at the annual health fair, however mammograms will not be provided free of charge.

PEDIATRIC CARE

MBSH currently has staff pediatricians who accept Medicaid patients, in both the Sullivan and Cuba clinics. The hospital does not have sufficient resources to expand its pediatric program at this time. Patients in need of services unavailable in Sullivan can be referred to St. Louis Children's Hospital.

CANCER: PROSTATE

MBSH will continue to provide free PSA screenings at the annual health fair.