

2019
Community Health Needs Assessment
and Implementation Strategy



BARNES-JEWISH
St. Peters Hospital

BJC HealthCare



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

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EXECUTIVE SUMMARY

Barnes-Jewish St. Peters Hospital is a 127-bed facility located in St. Charles County in the city of St. Peters, Missouri. Barnes-Jewish St. Peters Hospital opened its doors in 1980. Since then, the hospital has delivered high quality health care services to patients in the St. Charles County region. The hospital has also established effective partnerships toward the goal of improving the health of the community.

Like all nonprofit hospitals, Barnes-Jewish St. Peters 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. Barnes-Jewish St. Peters Hospital completed its first CHNA and implementation plan Dec. 31, 2013. The report was posted to the hospital's website to ensure easy access to the public.

Each hospital is required to define its community. 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.

Barnes-Jewish St. Peters Hospital, Progress West Hospital and the SSM Health St. Joseph Hospitals in St. Charles, Lake St. Louis and Wentzville first partnered to conduct a stakeholder assessment in 2016 and agreed to work together again.

Barnes-Jewish St. Peters 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 Barnes-Jewish St. Peters Hospital to collaborate with in addressing needs.

During phase two, findings from the focus group meeting were reviewed and analyzed by an internal work group of clinical and nonclinical hospital staff. Using multiple sources, including Healthy Communities Institute and Centers for Disease Control and Prevention (CDC)/State Cancer Profiles, a secondary data analysis was conducted to further assess the identified needs. This data analysis identified some unique health disparities and trends evident in St. Charles County when compared against data for the state and country.

At the conclusion of the comprehensive assessment process, Barnes-Jewish St. Peters Hospital will focus its efforts on two health needs to improve the health of the community it serves: Obesity and Diabetes Management.

The analysis and conclusions were presented, reviewed and approved by the Barnes-Jewish St. Peters Hospital Board of Directors.

COMMUNITY DESCRIPTION

GEOGRAPHY

Barnes-Jewish St. Peters Hospital (BJSPH) is located in St. Charles County in the city of St. Peters, Missouri, and for the purpose of the CHNA, the hospital defined its community as St. Charles County.

BJSPH 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. BJSPH and Progress West Hospital (PWH) are the two BJC HealthCare hospitals located in St. Charles County.

BJSPH is located along the Interstate 70 corridor in Eastern/Central St. Charles County.



DEMOGRAPHICS

Population and demographic data are necessary to understand the health of the community and plan for future needs. In 2017, St. Charles County reported a total population estimate of 395,504 compared to the state population of 6,113,532. St. Charles County comprised 6.5 percent of the state of Missouri's total population.

The population of the county and the state has grown since the 2010 census. From 2010-2017, the county population increased 9.7 percent and the state experienced a 2.1 percent increase in population.

TABLE 1: MADISON COUNTY VS. ILLINOIS POPULATION BY GENDER AND RACE/ETHNICITY		
	ST. CHARLES COUNTY	MISSOURI
TOTAL POPULATION	395,504	6,113,532
PERCENT POPULATION BY GENDER		
GENDER	ST. CHARLES COUNTY	MISSOURI
Female	50.8	50.9
Male	49.2	49.1
PERCENT POPULATION BY RACE/ETHNICITY		
RACE/ETHNICITY	ST. CHARLES COUNTY	MISSOURI
White	87.2	79.5
African American	5.0	11.8
Hispanic or Latino	3.3	4.2
Two or More Races	2.0	2.3
Asian	2.6	2.1
American Indian & Alaska Native	0.3	0.6
Native Hawaiian & other Pacific Islander	0.1	0.1

St. Charles County's median household income totaled \$78,380 (2013-2017) while the state median household income equaled \$51,542. Persons living below the poverty level in St. Charles County totaled 5.7 percent compared to 14.6 percent in the state. Homeownership was higher in St. Charles County (76.2 percent) than in the state (57.8 percent).

2016 CHNA MEASUREMENT AND OUTCOMES RESULTS

At the completion of the 2016 CHNA, BJSPH identified Breast Cancer, Lung Cancer and Obesity where focus was most needed to improve the health of the community served by the hospital. The following table details goals, objectives, action plans and current status of these community health needs.

TABLE 2: BARNES-JEWISH ST. PETERS HOSPITAL 2016 MEASURE OF SUCCESS BY PRIORITY		
CANCER: BREAST	CANCER: LUNG	OBSESITY
PROGRAM GOAL	PROGRAM GOAL	PROGRAM GOAL
Reduce new breast cancer cases, including illness, disability and death caused by lung cancer.	Reduce new lung cancer cases, including illness, disability and death caused by lung cancer.	Increase knowledge, skill in leading a healthy lifestyle among families by offering multi-disciplinary approach to weight management.
PROGRAM OBJECTIVES	PROGRAM OBJECTIVES	PROGRAM OBJECTIVES
1) Increase number of screening mammograms by 10% over 3 years 2) Schedule follow-up appointments for those with abnormal mammograms who need a primary care provider.	1) Educate 300 individuals about lung capacity; consequences of smoking; available resources to quit; increasing that number by 10% annually 2) Improve knowledge of health behaviors, including effects of smoking by 10% between pre- and post-test assessments 3) Make follow-up calls to at least 2% to maintain health behaviors.	1) Provide education on nutrition, physical activity and emotional health to 30 children/year. 2) Increase knowledge of nutrition, physical activity, emotional health among participants by 5% from pre- to post-test.
PROGRAM ACTION PLAN	PROGRAM ACTION PLAN	PROGRAM ACTION PLAN
1) Schedule mammogram van at 5 community events 2) Communicate the importance of early detection, screening 3) Host Pretty in Pink event to educate women 4) Promote Show Me Healthy Women that supports free mammograms for uninsured women.	1) Identify 10 businesses to host health fairs, provide spirometer testing 2) Identify 5 community health fairs, provide spirometer testing.	Expand SLCH's Head to Toe program to St. Charles County. Train a BJSPH/PWH employee to facilitate 12 intensive group sessions supported by dietitians, social workers and health promotion staff.
PROGRAM CURRENT STATUS	PROGRAM CURRENT STATUS	PROGRAM CURRENT STATUS
Held 9 mammogram van events; 3 Pretty in Pink events with more than 200 participants; and 19 Show Me Healthy Women referrals.	Held 12 business health fairs and attended 6 community health fairs with spirometry testing; educated and screened more than 650 individuals; improved knowledge by 11% pre- and post test assesments; and conducted follow-up calls to at least 6% of participants.	Held 12 sessions supporting 6 families and a total of 8 children.

CONDUCTING THE 2019 NEEDS ASSESSMENT

Primary Data Collection

BJSPH and PWH collaborated in conducting a joint focus group with the SSM Health St. Joseph Hospitals in St. Charles, Lake St. Louis and Wentzville to solicit feedback from community stakeholders, public health experts and those with a special interest in the health needs of St. Charles County residents. Twenty-two invited participants representing various St. Charles County organizations participated in the discussion. Although a St. Charles County Department of Health representative was scheduled to attend, a last-minute conflict forced a cancellation. Feedback from the representative was received in writing on August 1, 2018, and incorporated into this report with those from the focus group. (See Appendix D). The focus group was held July 25, 2018, at the Spencer Library in St. Peters, Missouri, with the following objectives identified:

- 1) Determine whether the needs identified in the 2016 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 gaps in the plan to address the prioritized needs
- 4) Identify other organizations with whom these hospitals should consider collaborating
- 5) Discuss what has changed since 2015/2016 when these needs were prioritized, and whether there are new issues that should be considered
- 6) Understand what other organizations are doing to impact the health of the community and how those activities might complement the hospital's initiatives
- 7) Evaluate what issues the stakeholders anticipate becoming a greater concern in the future that we need to consider now

CHNA FOCUS GROUP SUMMARY

A general consensus was reached that needs identified in the previous assessment should remain as focus areas for BJSPH. Nothing was identified to remove from the list of prioritized needs.

CONSIDERATIONS FOR ADDING TO THE LIST OF PRIORITIES

Stakeholders believed that Substance Abuse, especially the use of opioids, should be made a higher priority. From the Public Health Department's point of view, more work is especially needed on Mental Health and Substance Abuse, including opioid misuse and heroin.

Many also felt that addressing Mental Health issues should be made a higher priority, especially among school-age children. Also suggested was the need to take a broader perspective to address the social and emotional needs of this population, including the trauma that many students face because of issues occurring at home.

SPECIAL GROUPS FOR CONSIDERATION

- St. Charles County has a large volume of in-migration from other communities and new residents may not be familiar with the available health care services and how to access

them. Representatives from the school districts agreed, noting this as a significant issue for their students and their families.

- While data show a high level of affluence in St. Charles County, the poor who live there are very poor. Many are homeless, and 40 percent are children or families with children, primarily single mothers.
- Discussion was limited on the needs of seniors, although the aging of the population and the potential growth in the health needs of that segment were mentioned. Another participant stated the unique issues faced by grandparents who care for grandchildren.

GAPS IN IMPLEMENTATION STRATEGIES

Gaps were identified in the ways needs are being addressed, including:

- Dental care
- Referral resources for children who need immunizations
- Education about assistance programs for health-care bills for low-income patients
- Resources to address mental health emergencies among adults
- More efforts to prevent unintentional injuries and traumatic brain injuries in children

POTENTIAL PARTNER ORGANIZATIONS

Telehealth was suggested as a way to address Mental Health. Compass Health is the largest psychiatric telemedicine group in the state and Mercy is actively exploring telehealth as a way to bring care to people, especially in rural communities.

Other considerations raised included:

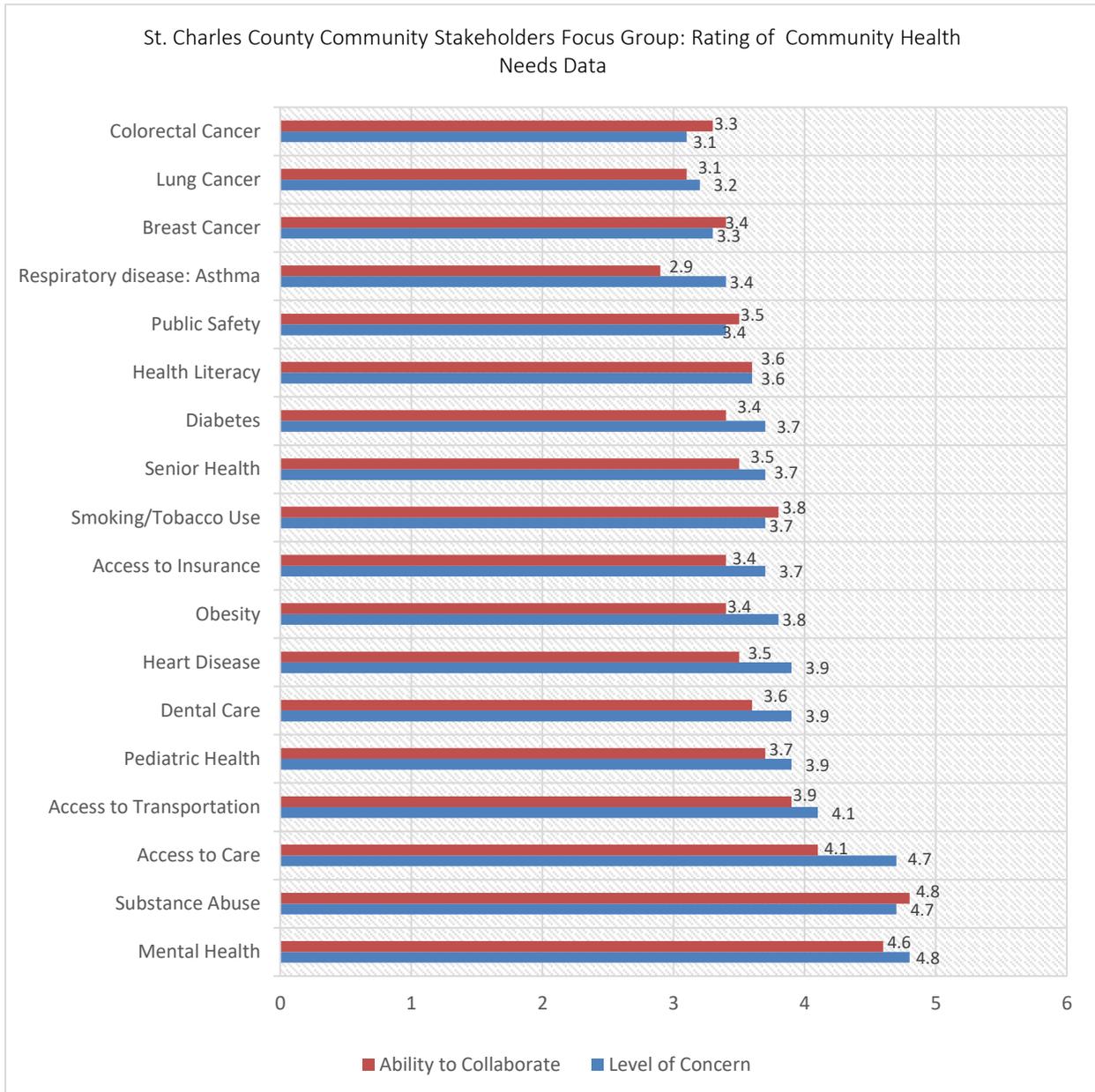
- More opportunities to collaborate with St. Louis Children's Hospital and Cardinal Glennon to bring pediatric services to St. Charles County
- Engage treatment providers such as Preferred Family Health and Bridgeways to address the opioid crisis. While positive collaboration continues with CRUSH, BJC and SSM, a suggestion included an evaluation of the entire picture and the partners to identify what is missing
- Consider local government representatives in future conversations on the health of our community

NEW ISSUES OF CONCERN SINCE 2016 CHNA

- Widespread use of Juuls among teenagers
- Trauma-informed care is more common now. Recent research suggests that 70 percent of those with a serious mental illness have experienced some form of trauma.
- The Department of Health noted the number of overdoses and deaths due to heroin and fentanyl have increased during the last two years

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:



Mental Health and Substance Abuse ranked highest in terms of ability to collaborate and level of concern. Access to Care ranked the next highest need. (See Appendix B for Focus Group Report)

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 St. Charles 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
- Diabetes
- Heart & Vascular Disease
- Obesity
- Respiratory Diseases
- Behavioral Health/Mental Health
- Substance Use and Abuse

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

ACCESS TO HEALTH CARE

Individuals without medical insurance are more likely to lack a traditional source of medical care, such as a primary care provider, 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 St. Charles County community. (Conduent Healthy Communities Institute)

The rate of adults and children with health insurance in St. Charles County in 2017 was 8.53 and 2.74 percent (respectively) higher than the rate of the same age group in Missouri. In 2016, the rate of primary care providers was 38.03 percent lower than the rate in the state. In 2018, the rate of mental health providers was 28.89 percent lower than the rate of the state. The rate of dentists in 2017 was statistically the same. The rate of non-physician primary care providers in the county was 43 percent lower the rate of the state in 2018. In 2015, the rate of preventable hospital stays was lower by 1.77 percent in the county than in the state.

ACCESS TO TRANSPORTATION

Owning a car has a direct correlation with the ability to travel. 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. (Conduent Healthy Communities Institute)

From 2013-2017, 97 percent of households owned a vehicle in St. Charles County, which was 4.1 percent higher than the rate in the state.

CANCER

Cancer is among the leading causes of death worldwide. In 2012, there were 14.1 million new cases and 8.2 million cancer-related deaths worldwide. In the United States, the overall cancer death rate has declined since the early 1990s. The most recent cancer statistic released in April 2018 shows that cancer death rates decreased by 1.8 percent per year among men from 2006 to 2015; 1.4 percent per year among women from 2006 to 2015; and 1.4 percent per year among children ages 0–19 from 2011 to 2015. The overall cancer death rate in the United States fell 26 percent. Although death rates for many individual cancer types have also declined, rates for a few cancers have stabilized or even increased.

The overall rate of cancer in St. Charles County and the state declined from the five-year-period ending in 2010 to the five-year-period ending in 2015.

The incident rate of all cancers in St. Charles County was higher when compared to the state and the U.S. This higher rate was driven by males in the county who had a 6.82 percent higher rate compared to males in the state and a 8.12 percent higher rate when compared to males in the U.S. The county female rate was below the state female rate and 1.16 percent higher than the U.S.

St. Charles County, the incidence rate among African Americans was 11.72 percent lower than the rate in the state. The incidence rate among the White population in the county was 3.75 percent higher than the rate of the same population in the state and 8.74 percent higher than African Americans in the county. Hispanics had a lower rate in the county and in the state followed by the Asian /Pacific Islander population.

COLORECTAL CANCER

The incidence rate of males with colorectal cancer in the county was 43.52 percent higher than the rate of females in the county.

The incidence rate of colorectal cancer among African Americans in the county was 46.31 percent higher than the rate of Whites and 3.12 percent higher than the rate of African Americans in the state.

LUNG AND BRONCHUS CANCER

The age-adjusted death rate of males in the county was 52.79 percent higher than the rate of females. The rate of females was 10.45 percent lower in the county when compared to the state.

The incidence rate of lung and bronchus cancer in the White population in St. Charles County was 13.6 percent higher than the rate of the African American population and 3.66 percent lower than the White population in the state. The rate of African Americans in the county was 23.69 percent lower than the rate in the state.

BREAST CANCER

In St. Charles County, the incidence rate of breast cancer in the White population was 9.89 percent higher than the rate among African Americans and 21.18 percent higher when compared to the Asian/Pacific Islander population.

When comparing the five-year-period ending in 2010 to the five-year-period ending in 2015, the breast cancer death rate in the county decreased 13.68 percent and the rate in the state decreased 8.26 percent.

DIABETES

Diabetes is a leading cause of death in the United States. According to the Centers for Disease Prevention and Control (CDC), more than 25 million people have diabetes, including both diagnosed and undiagnosed cases. This disease can have a harmful effect on most of the organ systems in the human body; it is a frequent cause of end-stage renal disease, non-traumatic lower-extremity amputation, and a leading cause of blindness among working-age adults. Persons with diabetes are also at increased risk for ischemic heart disease, neuropathy and stroke.

Diabetes disproportionately affects minority populations and the elderly, and its incidence is likely to increase as minority populations grow and the U.S. population becomes older. (Conduent Healthy Communities Institute)

The overall rate of age-adjusted death due to diabetes in St. Charles County was lower than the rate in the state. When comparing the rate by gender, males in the county and in the state had a higher rate than females of both populations. Females in the county had a 31.33 percent lower rate compared to men.

The rate of hospitalization and ER visits due to diabetes among African Americans in the county and state was higher when compared to the rate of Whites. The hospitalization and ER rates were 128.21 and 333.76 percent higher (respectively) in the county among the African American population compared to the White population. African Americans in the county had a 61.15 percent lower rate of hospitalization compared to those in the state and a 43.39 percent lower rate in ER visits in the county compared to the state. The White population had lower rates in the county when comparing rates of deaths, hospitalizations and ER visits due to diabetes.

When comparing the risk factors for complications among adults with diabetes, preventive care practices were higher in St. Charles County than the state, however; the rate of those that were overweight with diabetes was higher in the county than the state. Rates of physical inactivity, current smoking and obesity were all higher in the state than in St. Charles County.

HEART & VASCULAR DISEASE

Heart disease is the leading cause of death in the United States, killing more than 600,000 people each year. It is the No. 1 killer of women in the United States. There are many modifiable risk factors for heart disease including tobacco smoking, obesity, sedentary lifestyle and high levels of low-density lipoprotein in blood serum. 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)

Death, hospitalizations and ER visit rates due to heart disease, ischemic heart disease and stroke and other cerebrovascular disease in St. Charles County were lower when compared to the rates in Missouri except for hospitalizations from stroke and other cerebrovascular disease, which was slightly higher than the state. The death rate from stroke and other cerebrovascular disease was 25.15 percent lower in the county than the state. Overall, the rates in St. Charles County were lower than the rates in Missouri.

The heart disease and stroke rates among African Americans were higher when compared to Whites in the county. The rates of deaths, hospitalization and ER visits among African Americans in the county were higher compared to the White population. However, African Americans had lower rates in the county when compared to the state. The rate of stroke hospitalization among African Americans was higher than the rate of Whites and the death rate was nearly 59 percent higher than Whites in the county.

From 2007 to 2016, a 43.46 percent increase in the high blood pressure prevalence rate occurred in the county while the state reported a 57.78 percent increase.

The 2007 rate of high cholesterol prevalence among adults 35+ in the county was lower than the rate in the state. In 2016, both the county and state rate almost doubled when compared to the 2007 rate.

OBESITY

The percentage of obese adults is an indicator of the overall health and lifestyle of a community. Obesity increases the risk of many diseases and health conditions including heart disease, type 2 diabetes, cancer, hypertension, stroke, liver and gallbladder disease, respiratory problems and osteoarthritis. (Conduent Healthy Communities Institute)

The rate of obesity in the county increased by 6.9 percent from 2007 to 2016 while the state rate increased by 5.3 percent during the same period.

When comparing adult fruit and vegetable consumption from 2007 to 2016, a 65 percent decrease occurred in St. Charles County and Missouri experienced a 49 percent decrease.

RESPIRATORY DISEASES

ASTHMA

The prevalence of asthma has increased since 1980. However, deaths from asthma have decreased since the mid-1990s. Currently more than 25 million people in the United States have asthma. Approximately 14.8 million adults have been diagnosed with Chronic Obstructive Pulmonary Disease (COPD), and approximately 12 million people have not yet been diagnosed. The burden of respiratory diseases affects individuals and their families, schools, workplaces, neighborhoods, cities and states. (Healthy People 2020)

St. Charles County experienced an increase from 3 deaths in the period of 2013-2015 to 9 deaths from 2015-2017, while there was a steady decline in the hospitalization rate. The ER visits rate remained relatively flat within the same period. The county had fewer hospitalization and ER visits when compared to the state.

The rate of asthma in the Medicare population remained stable from 2010-2014 followed by an increase in 2015. In 2015, a 74.47 percent increase occurred in the county, similar to the increase in the state. From 2015-2017, the county increased by 37.8 percent and the state by 48.8 percent.

African American asthma hospitalizations and ER visits rates were higher in the county compared to Whites and lower compared to the same race in the state. The death rate in the county was less than 20 cases, therefore, no rate was available for comparison.

CHRONIC OBSTRUCTIVE PULMONARY DISEASE

Chronic Obstructive Pulmonary Disease (COPD) is a condition that restricts airflow into the lungs, making it difficult to breathe. COPD is most commonly a mix of chronic bronchitis and emphysema, and usually results from tobacco use, although it can also be a result of pollutants in the air, genetic factors and respiratory infections. (Conduent Healthy Communities Institute)

COPD death rates in the county and the state were stable. However, the county had lower rates than the state when comparing the rates of hospitalization and ER visits.

When comparing the rate of hospitalizations in the county and the state, African Americans had a lower rate than Whites. Conversely, African Americans had a higher ER visits rate than Whites.

CHRONIC LOWER RESPIRATORY DISEASE

Chronic Lower Respiratory Disease (CLRD) refers to a diverse group of disorders characterized by airway obstruction, causing shortness of breath and impaired lung function, and includes asthma, emphysema, bronchitis and chronic obstructive pulmonary disease. CLRD is a leading cause of death and generally occurs among older adults. While mortality rates of other leading causes of death have decreased, deaths due to CLRD continue to rise. Smoking cigarettes as well as exposure to secondhand smoke and chemical irritants are important risk factors. (Conduent Healthy Community Institute)

The CLRD death rate in the county was 33.33 percent lower than the state.

MENTAL/BEHAVIORAL HEALTH: MENTAL HEALTH

Mental disorders are among the most common causes of disability. The resulting disease burden of mental illness is among the highest of all diseases. In any given year, an estimated 18.1 percent (43.6 million) of U.S. adults age 18 years or older suffered from any mental illness and 4.2 percent (9.8 million) suffered from a seriously debilitating mental illness.

Neuropsychiatric disorders are the leading cause of disability in the United States, accounting for 18.7 percent of all years of life lost to disability and premature mortality. Moreover, suicide is the 10th leading cause of death in the United States, accounting for the deaths of approximately 43,000 Americans in 2014. (Healthy People 2020)

In 2016, 3,103 residents received treatment, a decline of 225. In 2017, 2,878 St. Charles County residents received treatment for serious mental illness at publicly-funded facilities. An individual client may have had more than one admission within a year. Declines in all psychiatric services occurred from 2016 to 2017 except for adjustment disorder. While data exists on those who receive treatment, statistics on mental health in the general population is very limited. This is especially true at the local level.

SUICIDE

The suicide rate in St. Charles continues to increase steadily. Suicide is the second leading cause of death for ages 10-34 in Missouri. In 2016, 65 St. Charles County residents died by suicide.

Typically, white males are most at risk of suicide. Approximately 12.5 percent of youth had considered suicide in the last year, 8.6 percent made a plan, and 1.0 percent actually attempted, resulting in an injury. (Missouri Department of Mental Health, 2018 Behavioral Health Profile)

The death rate of suicide in St. Charles County among males was more than three times the rate of females. The overall rate in the county was lower than the rate in the state. The rate was also lower among both genders when compared to the state.

DEPRESSION

Depression is a chronic disease that negatively affects a person's feelings, behaviors and thought processes. Depression has a variety of symptoms, the most common being a feeling of sadness, fatigue and a marked loss of interest in activities that used to be pleasurable. According to the National Comorbidity Survey of mental health disorders, people over the age of 60 have lower rates of depression than the general population — 10.7 percent in people over the age of 60 compared to 16.9 percent overall. The Center for Medicare Services estimates that depression in older adults occurs in 25 percent of those with other illnesses, including: arthritis, cancer, cardiovascular disease, chronic lung disease and stroke.

There was an 18.95 percent increase in the rate of depression among the Medicare population in the county from 2012-2017. When comparing rates, the county had a higher rate than the state.

MENTAL/BEHAVIORAL HEALTH: SUBSTANCE USE AND ABUSE

The availability of county-level data on substance use and abuse is limited. In 2015, St. Charles County residents had a total of 264 alcohol-related and 257 drug-related hospitalizations. In addition, there were 643 alcohol-related and 559 drug-related ER visits that did not include treatment. In 2017, 910 individuals were admitted into Substance Abuse Treatment programs. A total of 366 were primarily due to alcohol, 151 were primarily due to marijuana, and 30 were primarily due to prescription drugs. In 2017, St. Charles County had 1,468 DWI arrests, 136 liquor law violations and 2,216 drug-related arrests. There were no methamphetamine laboratory seizures in St. Charles County in 2017. Alcohol-related traffic crashes decreased from 329 in 2015 to 293 in 2016. Alcohol-related crashes are more likely to produce fatalities and injuries compared to non-alcohol-related crashes. (Missouri Department of Mental Health)

Cigarette use, in both standard and electronic forms, is of concern across the state. For St. Charles County youth, the rate of e-cigarette use was higher than the rate of standard cigarette use and higher than the rate in the state. E-Cigarettes and alcohol were the substance most used among those in grades 6-12 in the county.

In St. Charles County in 2016, 17.0 percent of adults smoked and 22 percent drank excessively.

Internal CHNA Work Group Prioritization Meetings

BJSPPH chose 14 employees to participate on an internal CHNA work group from various hospital departments representing Community Health Education, Marketing and Communications, Case Management, Finance, Patient Access, Emergency Department, Diabetic Education and Medical Oncology. (See Appendix D)

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

MEETING 1

The work group gathered Sept. 28, 2018, 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 CHNA report and the current findings from the 2018 community stakeholders (Table 3).

TABLE 3: LIST OF PRIMARY DATA BY COMMUNITY STAKEHOLDERS

COMMUNITY HEALTH NEEDS					
1	Access: Insurance Coverage	7	Substance Abuse	13	Diabetes
2	Access: Transportation	8	Mental Health	14	Dental Health
3	Access to Care	9	Pediatric Health	15	Health Literacy
4	Cancer: Breast	10	Obesity	16	Senior Health Care
5	Cancer: Colorectal	11	Public Safety	17	Smoking/Tobacco Use
6	Cancer: Lung	12	Respiratory Disease: Asthma	18	Heart Disease

After discussion, all Cancer (Breast, Colorectal and Lung) and Heart & Vascular: Stroke were added to the list by the internal work team.

TABLE 4: LIST OF PRIMARY DATA BY BARNES-JEWISH ST. PETERS & PROGRESS WEST HOSPITAL

COMMUNITY HEALTH NEEDS					
1	Access: Insurance Coverage	8	Substance Abuse	15	Diabetes
2	Access: Transportation	9	Mental Health	16	Dental Health
3	Access to Care	10	Pediatric Health	17	Health Literacy
4	Cancer: Breast	11	Obesity	18	Senior Health Care
5	Cancer: Colorectal	12	Public Safety	19	Smoking/Tobacco Use
6	Cancer: Lung	13	Respiratory Disease: Asthma	20	Heart Disease
7	All Cancer	14	Heart & Vascular: Stroke		

During this meeting, the work group also reviewed the criteria to rank the top 20 health needs. The criteria for prioritizing the needs identified by the focus group was agreed upon by the work group (Table 5).

	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?			
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.

MEETING 2

The work group met again Nov. 29, 2018 and discussed results of the ranking of health needs (Table 6) as well as the ranking from the community stakeholders. Following this discussion, the group compared the ranking of these two groups (Tables 7).

RANK	HIGHEST-LOWEST RANKED COMMUNITY HEALTH NEEDS	TOTAL SCORES	RANK	HIGHEST-LOWEST RANKED COMMUNITY HEALTH NEEDS	TOTAL SCORES
1	Substance Abuse	727	11	Health Literacy	500
2	Mental Health	709	12	Heart Disease / Stroke	493
3	Obesity	707	13	Smoking & Tobacco Education	480
4	Diabetes	685	14	Pediatric Health	451
5	Cancer: Lung	572	15	Heart & Vascular	440
6	Seniors Health Care	559	16	Access to Care: Services	422
7	All Cancer	539	17	Dental	417
8	Cancer: Breast	534	18	Asthma	339
9	Cancer: Colorectal	508	19	Access to Care: Transportation	325
10	Access to Care: Insurance Coverage	506	20	Public Safety	266

TABLE 7: COMMUNITY STAKEHOLDERS VS. BJSPH & PWH INTERNAL WORK TEAM PRIMARY DATA RANKING

RANK	COMMUNITY STAKEHOLDERS COMMUNITY HEALTH NEEDS RANKING	BJSPH & PWH INTERNAL WORK GROUP COMMUNITY HEALTH NEEDS RANKING
1	Mental Health	Substance Abuse
2	Substance Abuse	Mental Health
3	Access to Care	Obesity
4	Access to Transportation	Diabetes
5	Pediatric Health	Cancer: Lung
6	Dental Care	Seniors Care
7	Heart Disease	All Cancer
8	Obesity	Cancer: Breast
9	Access to Insurance	Cancer: Colorectal
10	Smoking / Tobacco Use	Access to Care: Insurance Coverage
11	Senior Health	Health Literacy
12	Diabetes	Heart Disease / Stroke
13	Health Literacy	Smoking & Tobacco Education
14	Public Safety	Pediatric Health
15	Respiratory dx: Asthma	Heart & Vascular
16	Breast Cancer	Access to Care: Services
17	Lung Cancer	Dental Care
18	Colorectal Cancer	Respiratory dx: Asthma
19		Access to Care: Transportation
20		Public Safety

Next, the work group reviewed results of the secondary data using the Conduent 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 St. Charles 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. The team reviewed the scores by indicators.

TABLE 8: ST. CHARLES COUNTY SECONDARY DATA BY CONDUENT HEALTHY COMMUNITIES INSTITUTE

ST. CHARLES COUNTY TOP 20 COMMUNITY HEALTH NEEDS: HIGHEST-LOWEST

1	Atrial Fibrillation: Medicare Population	11	Age-Adjusted Death Rate due to Unintentional Injuries
2	Chronic Kidney Disease: Medicare Population	12	Hyperlipidemia: Medicare Population
3	Depression: Medicare Population	13	Osteoporosis: Medicare Population
4	Alzheimer's Disease or Dementia: Medicare Population	14	Prostate Cancer Incidence Rate
5	Cancer: Medicare Population	15	Asthma: Medicare Population
6	Stroke: Medicare Population	16	Diabetic Monitoring: Medicare Population
7	Alcohol-Impaired Driving Deaths	17	Death Rate due to Drug Poisoning
8	Adults who Drink Excessively	18	Breast Cancer Incidence Rate
9	Primary Care Provider Rate	19	Adults who are Overweight
10	Rheumatoid Arthritis or Osteoarthritis: Medicare Population	20	Preterm Births

PRIMARY AND SECONDARY RATING SUMMARY

The table on the next page shows:

- primary data from the focus group ranking
- needs identified by the internal work group ranking
- results of the secondary data using Conduent Healthy Communities Institute scoring tools that compared data from similar communities in the nation

TABLE 9: COMMUNITY HEALTH NEEDS: PRIMARY & SECONDARY DATA RANKING COMPARISON: HIGHEST-LOWEST

RANK	COMMUNITY STAKEHOLDERS FOCUS GROUP RANKING	BJSPPH & PWH INTERNAL WORK GROUP RANKING	CONDUENT HEALTHY COMMUNITIES INSTITUTE
1	Mental Health	Substance Abuse	Atrial Fibrillation: Medicare Population
2	Substance Abuse	Mental Health	Chronic Kidney Disease: Medicare Population
3	Access to Care	Obesity	Depression: Medicare Population
4	Access to Transportation	Diabetes	Alzheimer's Disease or Dementia: Medicare Population
5	Pediatric Health	Cancer: Lung	Cancer: Medicare Population
6	Dental Care	Seniors Care	Stroke: Medicare Population
7	Heart Disease	All Cancer	Alcohol-Impaired Driving Deaths
8	Obesity	Cancer: Breast	Adults who Drink Excessively
9	Access to Insurance	Cancer: Colorectal	Primary Care Provider Rate
10	Smoking / Tobacco Use	Access to Care: Insurance Coverage	Rheumatoid Arthritis or Osteoarthritis: Medicare Population
11	Senior Health	Health Literacy	Age-Adjusted Death Rate due to Unintentional Injuries
12	Diabetes	Heart Disease / Stroke	Hyperlipidemia: Medicare Population
13	Health Literacy	Smoking & Tobacco Education	Osteoporosis: Medicare Population
14	Public Safety	Pediatric Health	Prostate Cancer Incidence Rate
15	Respiratory dx: Asthma	Heart & Vascular	Asthma: Medicare Population
16	Breast Cancer	Access to Care: Services	Diabetic Monitoring: Medicare Population
17	Lung Cancer	Dental Care	Death Rate due to Drug Poisoning
18	Colorectal Cancer	Respiratory dx: Asthma	Breast Cancer Incidence Rate
19		Access to Care: Transportation	Adults who are Overweight
20		Public Safety	Preterm Births

- The external focus group and internal team rankings were similar. The internal group listed Access to Care: Insurance Coverage and All Cancer. The focus group listed Smoking/Tobacco Use while the internal team listed Smoking & Tobacco Education.

- Community health needs ranked by Conduent Healthy Communities Institute and not ranked by the external or internal groups include: Chronic Kidney Disease: Medicare Population; Alzheimer’s Disease or Dementia: Medicare Population; Alcohol-Impaired Driving Deaths; Primary Care Provider Rate; Rheumatoid Arthritis or Osteoarthritis: Medicare Population; Age-Adjusted Death Rate due to Unintentional Injuries; Osteoporosis: Medicare Population; Asthma: Medicare Population; Death Rate due to Drug Poisoning; and Preterm Births.

CONCLUSION

The team decided to remove breast and lung cancer from the BJSPH plan after a comprehensive discussion. While breast and lung cancer were part of the 2016 plan, team members concluded that obesity is a root cause of several diseases, including cancer. Therefore, the focus on obesity can also help reduce the risk of cancer. By continuing with the obesity program already in place from the 2016 plan, additional outcomes and impact can be demonstrated. Further, the team will focus efforts on expanding the diabetes program from PWH to BJSPH.

It was agreed by all to focus on Obesity and Diabetes Management as goals for BJSPH.

APPENDICES

Appendix A: About Barnes-Jewish St. Peters Hospital

Since 1980, Barnes-Jewish St. Peters Hospital has served the acute health care needs of St. Charles County. The hospital specializes in a broad range of services, which include emergency care, surgery, cardiology, pulmonology, women's health, endoscopy and much more. Access to the award-winning Siteman Cancer Center is also on its campus, just steps away from the hospital. The staff of almost 900 employees and more than 400 physicians consider themselves part of the community.

At Barnes-Jewish St. Peters Hospital, our vision is to be the premier health care organization serving St. Charles, Lincoln and Warren counties. To realize that vision, our physicians and employees are constantly focusing on ways to improve the health of the people and communities we serve.

As our community has changed and grown, so have we. With recent expansions to our hospital, we have added a new bed tower, pharmacy and medical office space. Yet while our structure and landscape may have changed, our delivery of services has not. Our patients continue to enjoy the intimacy, friendliness and respect of their community hospital, while benefiting from our affiliation with BJC HealthCare and its expansive connection to a world-class network of physicians, technology and resources.

Our employees and medical staff understand that caring for our community doesn't stop at our hospital campus. Each year we reach out to the people in the communities we serve through ongoing programs, screenings, support groups and educational opportunities. Each year, our employees touch the lives of more than 20,000 individuals -- adults and children -- through their community-focused efforts.

In 2018 Barnes-Jewish St. Peters Hospital provided a total of \$6,495,082.00 to 53,736 persons in community benefits including, financial assistance, Medicaid, community health improvement services, subsidized health services and in-kind donations. (See Appendix B for Community Benefit Expenses)

Appendix B: 2018 Net Community Benefit Expenses

BARNES-JEWISH ST. PETERS HOSPITAL: 2018 TOTAL NET COMMUNITY BENEFIT EXPENSES		
CATEGORY	PERSONS SERVED	TOTAL NET BENEFIT
FINANCIAL ASSISTANCE AND MEANS-TESTED PROGRAMS		
Financial Assistance at Cost	2,765	\$3,460,859
Medicaid	4,288	\$973,860
TOTAL FINANCIAL ASSISTANCE AND MEANS-TESTED PROGRAMS	7,053	\$4,434,719
OTHER COMMUNITY BENEFITS		
Community Health Improvement Services	20,178	\$174,499
Health Professional	30	\$197,019
Subsidized Health Services	26,475	\$1,628,253
In-Kind Donation		\$60,592
TOTAL OTHER COMMUNITY BENEFITS	46,683	\$2,060,363
GRAND TOTAL	53,736	\$6,495,082

Appendix C: St. Charles County Demographic

ST. CHARLES COUNTY VS. MISSOURI DEMOGRAPHIC		
	ST. CHARLES COUNTY	MISSOURI
GEOGRAPHY		
Land area in square miles, 2010	560.44	68,741.52
Persons per square mile, 2010	643.2	87.1
POPULATION		
Population, Percent, 2010	360,485	5,988,923
Population, Percent, 2017	395,504	6,113,532
Population, Percent Change - 2010 - 2017	9.7	2.1
AGE		
Persons Under 5 Years, Percent, 2017	6.1	6.1
Persons Under 18 Years, Percent, 2017	23.6	22.6
Persons 65 Years and Over, Percent, 2017	14.7	16.5
GENDER		
Female Persons, Percent, 2017	50.8	50.9
Male Persons, Percent, 2017	49.2	49.1
ETHNICITY		
White, Percent, 2017	90.4	83.1
White, not Hispanic or Latino, Percent, 2017	87.2	79.5
African American, Percent, 2017	5.0	11.8
Hispanic or Latino, Percent, 2017	3.3	4.2
Asian Alone, Percent, 2017	2.6	2.1
Two or More Races, Percent, 2017	2.0	2.3
American Indian and Alaska Native Alone, Percent, 2017	0.3	0.6
Native Hawaiian and Other Pacific Islander Alone, Percent, 2017	0.1	0.1
Foreign Born Persons, Percent, 2013-2017	4.0	3.9
LANGUAGE		
Population Age 5+ with Language Other than English Spoken at Home, Percent, 2013-2017	6.2	6.0

Source: Conduent Healthy Communities Institute

ST. CHARLES COUNTY VS. MISSOURI DEMOGRAPHIC INCLUDING HOUSING/ EDUCATION / INCOME		
	ST. CHARLES COUNTY	MISSOURI
HOUSING		
Housing Units, 2017	154,489	2,792,506
Homeownership, Percent, 2013-2017	76.2	57.8
Median Housing Units, 2013-2017	198,500	145,400
FAMILY & LIVING ARRANGEMENTS		
Households, 2013-2017	142,554	2,386,203
Persons Per Household, Percent, 2013-2017	2.7	2.5
EDUCATION		
High School Graduate or Higher, Persons Age 25+, Percent, 2013-2017	94.5	89.2
Bachelor's Degree or Higher, Persons Age 25+, Percent, 2013-2017	37.1	28.2
INCOME & POVERTY		
Median Household Income, 2013-2017	\$78,380	\$51,542
Per Capita Money Income in the Past 12 months, 2013-2017	\$35,628	\$28,282
People Living Below Poverty Level, Percent, 2013-2017	5.7	14.6

Source: *Conduent Healthy Communities Institute*

Appendix D: St. Charles County Stakeholders Focus Group Report

PERCEPTIONS OF THE HEALTH NEEDS
OF ST. CHARLES COUNTY RESIDENTS
FROM THE PERSPECTIVES OF COMMUNITY LEADERS

PREPARED BY:

Angela Ferris Chambers
Director, Market Research & CRM
BJC HealthCare

AUGUST 30, 2018

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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 need 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.

Even though the hospitals are on different timelines for completing their CHNAs, Barnes-Jewish St. Peters Hospital (BJSPH), Progress West Hospital (PWH), and the SSM Health St. Joseph Hospitals in St. Charles, Lake St. Louis and Wentzville have chosen to collaborate on this process. This is their second time working together; the first was in 2015.

The hospitals continue to be on different timelines with this iteration. The SSM Health hospitals' next CHNA is due by the end of December 2018, while BJSPH and PWH will finalize theirs by the end of December 2019. However, they continue to cooperate on soliciting community feedback to be incorporated into each individual assessment.

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 St. Charles County.

Specifically, the discussion focused around the following ideas:

- 1) Determine whether the needs identified in the 2015/2016 CHNAs 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 these hospitals should consider collaborating
- 5) Discuss what has changed since 2015/2016 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, the hospitals conducted a single focus group that included those with a special interest in the health needs of St. Charles County residents. It was held on July 25, 2018, in the Community Commons at the Spencer Road Library in St. Charles. The group was facilitated by Angela Ferris Chambers of BJC HealthCare. The discussion lasted about two hours.

22 individuals representing various St. Charles County organizations participated in the discussion. (See Appendix)

Although a representative from the St. Charles County Department of Health was scheduled to attend, a last-minute conflict forced her to cancel. Her feedback was received in writing on August 1, 2018. Her comments have been incorporated into this report with those from the focus group.

Lisle Westcott, SSM Health President of St. Joseph St. Charles, Lake St. Louis and Wentzville, welcomed participants at the beginning of the meeting. Those who were observing on behalf of the sponsoring hospitals were also introduced. At the conclusion of the meeting, Chris Watts, President of BJSPH and PWH, thanked everyone for sharing their perspectives.

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 hospitals move forward in this next phase of the need assessment process.

The moderator shared the demographic and socioeconomic profile of St. Charles County. In addition, she reminded the stakeholders of the needs prioritized by the hospitals in their most recent assessments, and the highlights of each hospital’s implementation plan.

Because the SSM and BJC hospitals sometimes referred to the same needs by different names, some changes were made in the nomenclature to ensure that the same health need was being referenced. This was based on work that BJC HealthCare conducted in 2015 and 2016 to develop a common nomenclature to use among all of its hospitals.

The following health needs (based on the revised nomenclature) were identified in the 2015/2016 hospital CHNAs and implementation plans.

Needs Being Addressed	BJSPH	PWH	St. Joseph Lake St.	St. Joseph St.
Access to care			X	X
Cancer: breast	X			
Cancer: lung	X			
Diabetes		X		
Heart disease				X
Obesity	X	X	X	
Substance abuse			X	X

Other health needs were identified in the 2015/2016 plans, but not addressed, due to factors such as lack of expertise and limitations in resources. These included:

Needs Not Being Addressed
Access to insurance coverage
Access to transportation
Cancer: colorectal
Dental health*
Health literacy
Mental health
Pediatric health
Public safety
Respiratory disease: asthma
Senior health care
Smoking/tobacco use**

*Being addressed by SSM Lake St. Louis as part of access

** Being addressed by BJSPH as part of lung cancer

The moderator also shared several pieces of information to help further identify the health needs of St. Charles County. These were based on comparisons between publically available St. Charles County health data and state/national measures. They included the following:

- 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, infectious disease rates (including STDs), public safety and drug poisoning.

At the end of the presentation, the community stakeholders were asked to rate the identified needs based on their perceived level of concern in the community, and the ability of the community to collaborate around them.

KEY FINDINGS

FEEDBACK ON THE NEEDS BEING ADDRESSED:

After hearing about the needs that the St. Charles County hospitals have chosen to address, one stakeholder felt that the hospitals would have a greater impact if they focused on issues that were specific to the services and care that they currently provide.

Another felt that it is important for the hospitals to explore whether disparities exist in how the health of different populations is impacted. The data shows that the county is fairly affluent and well educated, but there may still be segments that are not as healthy as others.

Some of the tactics in the hospital implementation plans described referring patients to Volunteers in Medicine. One stakeholder noted that it is a very small organization. She suggested that the hospitals should focus more on their ability to provide uncompensated care through their own physician networks to those who are un- or under insured.

The Public Health Department representative commented that breast cancer support is still important but is also being provided by other organizations. Obesity, heart disease, mental health and substance abuse are currently the most crucial areas on which to focus.

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:

Although one stakeholder mentioned that the hospitals should continue to work to reduce the impact of deaths related to alcohol use, he also noted that deaths due to alcohol are down in St. Charles County. Substance abuse, especially the use of opioids, should be made a higher priority. That feeling was supported and repeated by many of the stakeholders.

- Another contributor noted that part of the reason for the opioid crisis in St. Charles County is due to the access that many residents have to health providers and the overprescribing that has resulted. If the hospitals were able to better track and monitor the number of opioid prescriptions, it might reduce access to these drugs.
- The representative from the ambulance district noted that both SSM and BJC have done a good job having these conversations with their healthcare providers in the hospitals and the emergency rooms about how to talk to patients who are seeking drugs. He suggested that it now time to take that training to primary care providers. They need the tools to be able to address these patients in the office setting. He suggested that what has been done in the ER should be taken out to community healthcare providers.

Many also felt that addressing mental health issues should be made a higher priority, especially among school age children. There is also a need to take a broader perspective and address the social and emotional needs of this population, including the trauma that many students are facing, because of issues that are happening at home.

- Many of the school districts are seeing more students physically acting out, requiring more disciplinary action referrals than in the past.
- A recent survey of middle school students in St. Charles County reported that between 6%- 8% had attempted suicide, and higher rates had considered it.
- Others reported that there is a deficit of pediatric psychiatric care that makes it difficult to make referrals and provide access to services expeditiously. In addition, there are fewer students enrolling in training programs to provide mental health services.
- There are several hypotheses about why there is an increased prevalence in mental health issues in children. Those mentioned included changes in parenting styles, more parents within a household working full time, the impact of electronic devices and children always being “connected,” and an increase in family trauma.

From the Public Health Department's point of view, more work is definitely needed on mental health and substance abuse, including opioid misuse and heroin.

SPECIAL POPULATIONS FOR CONSIDERATION:

St. Charles County is a market in which there is a large volume of in-migration from other communities. New residents may not be familiar with the available healthcare services and how to access them. Representatives from the school districts noted that this a large issue for their students and their families.

Several stakeholders noted that, although the data show the high level of affluence in St. Charles County, the poor who live there are very poor. Many are homeless, and 40% are children or families with children, primarily single mothers. They face many issues which affect their ability to access health care, including transportation and safe housing. Although the discussion on this day was focused on St. Charles County, several individuals mentioned how large the needs are in Lincoln, Warren and Montgomery counties.

- Another stakeholder expressed concern that those who are low income do not really understand how to access healthcare when they need it. If they do end up in the hospital, they don't understand that they can or should talk to a social worker about how to pay their bill, and what special arrangements or programs are available to help them with that.

The needs of seniors were not discussed much during the meeting, although there was mention of the aging of the population and the potential growth in the health needs of that segment. Another participant mentioned grandparents who were caring for their grandchildren and the unique issues that they may be facing.

GAPS BETWEEN DEFINED NEEDS AND OUR ABILITY TO ADDRESS THEM:

One stakeholder mentioned the low level of understanding around the impact of the lack of dental care. Those who suffer from poor dental health are more susceptible to heart disease, infectious disease and other health issues. There is a lack of dental services for low income individuals who can't afford to pay. There used to be a dental clinic in St. Charles County where one could receive services on a sliding scale, but it has closed. The dentists who will provide services are willing to do extractions, but few will provide restorative care.

School department officials noted that there is a lack of places to refer children who need immunizations. Even though they are offered at the Health Department, it is often overwhelmed with requests and not everyone can get there. The Volunteer in Medicine representative noted that they take individuals beginning at age 18, assuming that there would be other forms of access for children who are on Medicaid. But the clinics associated with Cardinal Glennon or St. Louis Children's Hospital are located in St. Louis City, which can be a transportation challenge for many.

The representative from the Crisis Nursery mentioned that they will provide medical exams to St. Charles County children who are with them, who are generally under age five. 90% of the children to whom they have provided a physical exam have not seen a physician in over a year.

- Several noted that school-based clinics might be one way to address these issues, as well as mental health. The hospitals could play a large role in these conversations, whether it's about staffing, financing or partnerships. There are some health care centers currently located in some schools, but they are more for staff than students. Research has shown that school-based clinics have a positive impact by reducing absenteeism.

One stakeholder felt that hospitals need to do a better job letting low income patients know that there are resources and programs available to help them with their bills. After discharge, it is often too late, especially when accounts get turned over to a collection's agency. That can have a devastating impact on the family.

When it comes to mental health services, among all adults, there is a lack of resources to address mental health emergencies. The first response is often to call the police who then transport the individual to one of the local community hospitals. But the hospitals do not always have the expertise to handle these crisis situations.

The Department of Public Health noted that although the majority of unintentional injuries are related to substance abuse, more efforts could be directed to preventing unintentional injuries and traumatic brain injuries in children.

OTHER ORGANIZATIONS WITH WHOM TO COLLABORATE:

In addressing mental health, one stakeholder suggested using telehealth. He recognized that Compass Health is the largest psychiatric telemedicine group in the state. He also mentioned that Mercy is actively exploring telehealth as a way to bring care to people, especially in rural communities. He suggested that SSM and BJC should do the same.

Another stakeholder suggested that there could more opportunities to collaborate with St. Louis Children's Hospital and Cardinal Glennon and bring some of their pediatric services out to St. Charles County.

When it comes to the opioid crisis, another stakeholder mentioned that the county needs to engage some of the treatment providers, like Preferred Family Health and Bridgeways. Although there has been a positive collaboration with CRUSH, BJC and SSM, there needs to be an evaluation of the entire picture and all of the partners to identify what is missing.

Another stakeholder mentioned that there is a role for our local government representatives in this discussion and we should consider including them in future conversations on the health of our community.

CURRENT COLLABORATIONS THAT WERE HIGHLIGHTED:

The Department of Public Health acknowledged the critical work of SCCAD (St. Charles County Ambulance District) related to overdose calls and follow-up education, and its positive impact on the community.

Those who are involved with the Continuum of Care and Coordinated Entry programs discussed the tools they use to assess the needs of homeless residents of St. Charles, Lincoln and Warren Counties. They perform an initial assessment that ranks their vulnerability based on their

physical health, mental health and access to safe/secure housing. They then work with community partners to pull together resources to address the most urgent needs first.

The Catholic Diocese of St. Louis is supporting the development of a mobile medical clinic which is focused on outreach in rural areas, targeting Washington County first. In whatever county they visit, they look for volunteers to help support this effort. This might be one option to consider when looking for ways to provide immunizations to children in need.

Another school official mentioned the clinic they developed for staff in partnership with BJC. Because the school district is self-insured, they pay for all expenses when a staff member uses this clinic. There are no co-pays, medication or ancillary charges.

Another stakeholder mentioned that Neighbors Helping Neighbors just celebrated their five-year anniversary. There is the Care to Learn program in the school district, and the We Love St. Charles outreach group. He noted that it is important that all of these organizations be connected to our healthcare providers so they can help support addressing our community's health as well.

The Department of Public Health offers heart, diabetes and STD screenings at very low cost for those with and without insurance. They plan to roll out substance abuse disorder training and education in the fall of 2018 and will focus on strategies to prevent substance abuse in adolescents. The Department plans to increase chronic disease education in 2019.

CHANGES SINCE THE 2015/2016 CHNA:

The school representatives noted that a major issue they are seeing among students is related to smoking, and the use of Juuls. He noted that it is becoming an epidemic and is out of control. [Juuls are a type of flavored e-cigarette that are small enough to fit in the palm of your hand. They can be charged when plugged into a laptop's USB port, making it easy for students to pass them off as flash drives in class. They are basically a system for dispensing nicotine that vaporizes into the air after being inhaled. They are specifically being marketed to teenagers.] Although students have been well educated about the dangers of tobacco and smoking cigarettes, they seem to feel that "Juul-ing" is okay.

Discussions around trauma-informed care are more common now than they were three years ago. Recent research suggests that "70% of those with a serious mental illness have experienced some form of trauma." Comments from the school representatives about the amount of trauma they are seeing in their students suggests that they will have a higher need for mental health services. Mental health clinicians are now being trained to deliver services through a "trauma-informed lens."

The Department of Health noted the number of overdoses and deaths due to heroin and fentanyl have increased during the last two years.

HEALTH CONCERNS FOR THE FUTURE:

The health impacts of vaping and juuling will be continuing to be a major concern. Several wondered about the legality of these purchases, and the role of legislators in helping to address regulations and policies around this issue.

The Department of Public Health believes that depression and other mental health diagnosis are often the underlying cause of many other negative health issues. More efforts directed at improving mental health can drastically reduce morbidity and mortality in other areas.

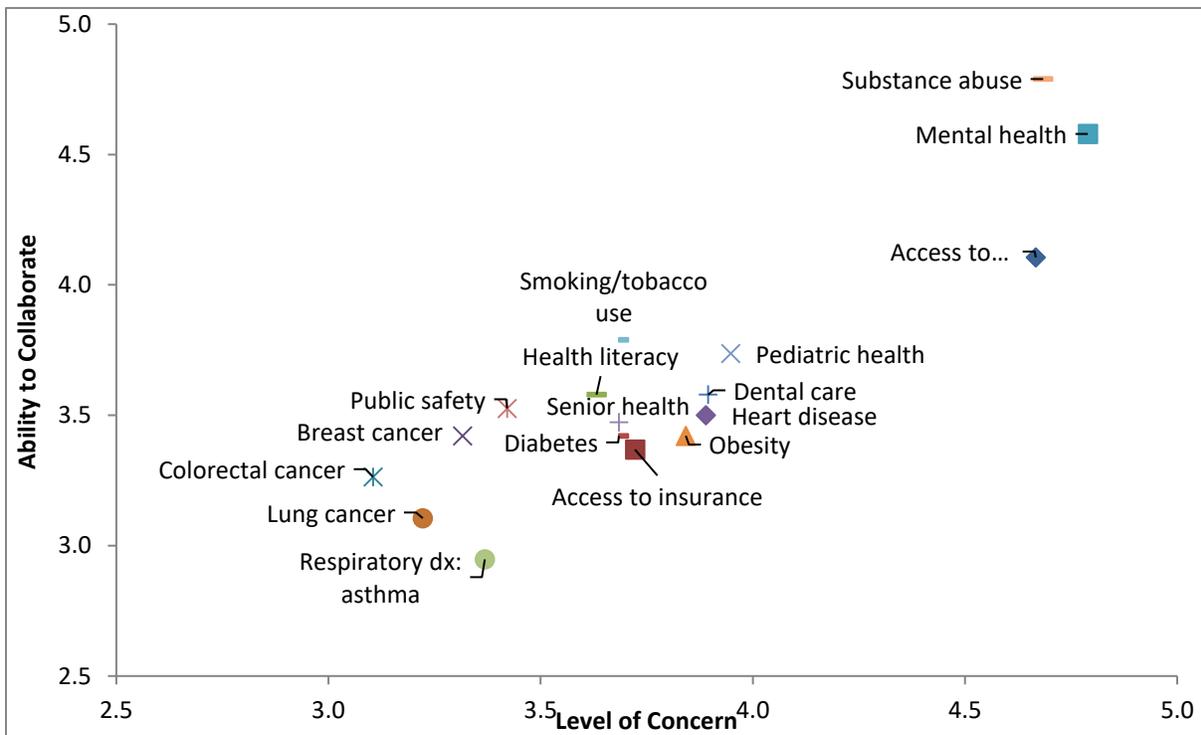
WORKING TOGETHER TO IMPROVE THE HEALTH OF ST. CHARLES COUNTY:

Several stakeholders felt that it was important to continue to periodically have these types of discussions for the hospitals to share information about what they are doing, and for the stakeholders to share what they are seeing among the communities they serve.

The Department of Public Health would like to see more coordination around the use of funds among different organizations to allow them to have a greater impact. More collaboration on a grass roots level will help coordinate programming and better support the priorities of multiple organizations at one time.

RATING OF NEEDS

Participants rated the needs identified in the 2015/2016 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 issue of mental health was rated the highest in terms of level of concern. Substance abuse was identified as the need around which the community has the greatest ability to collaborate. Access to care were not far behind.

The table on the next page shows the actual ratings for each need that was evaluated.

Average Scores

Health Need	Level of Concern	Ability to Collaborate
Mental Health	4.8	4.6
Substance Abuse	4.7	4.8
Access to Care	4.7	4.1
Access to Transportation	4.1	3.9
Pediatric Health	3.9	3.7
Dental Care	3.9	3.6
Heart Disease	3.9	3.5
Obesity	3.8	3.4
Access to Insurance	3.7	3.4
Smoking/Tobacco Use	3.7	3.8
Senior Health	3.7	3.5
Diabetes	3.7	3.4
Health Literacy	3.6	3.6
Public Safety	3.4	3.5
Respiratory disease: Asthma	3.4	2.9
Breast Cancer	3.3	3.4
Lung Cancer	3.2	3.1
Colorectal Cancer	3.1	3.3

NEXT STEPS

Using the input the hospitals received from community stakeholders, Barnes-Jewish St. Peters Hospital, Progress West Hospital and SSM St. Joseph Hospitals in St. Charles, Lake St. Louis and Wentzville will consult with their internal workgroups to evaluate this feedback. They will consider other secondary data they may review and determine whether/how their priorities should change.

The needs assessments and associated implementation plans must be completed by December 31, 2018 for the SSM hospitals and by December 31, 2019 for the BJC facilities.

Appendix E: Focus Group Participants and Hospital Observers

ST. CHARLES COUNTY COMMUNITY STAKEHOLDERS FOCUS GROUP PRATICIPANTS			
LAST NAME	FIRST NAME	ORGANIZATION	ATTENDANCE
Barnes	Todd	Community Council	X
Cain	Curtis	Wentzville School District	X
Estlund	Amy	Lindenwood University	X
DuBray	Bernie	Fort Zumwalt School District	X
Heebner	Laura	Crider Health Center	X
Griffith	Allison	St. Charles City-County Library District	X
Heisse	Beth	Youth in Need	X
Hendricks-Harris	Mary	Francis Howell School District	X
Hustedde	Christine	Mid-East Area on Aging	X
Knight	Leslie	CRUSH	X
Lewis	Dave	SCCAD	X
Liebel	Denise	United Services	X
Lipin	Jack	St. Joachim & Ann Care Services	X
Meers	Dave	Fellowship of Christian Athletes	X
Miller	Matt	Calvary Church	X
Moellenhoff	Cheryl	Volunteers in Medicine	X
Muzzy	Tom	Orchard Farm School District	X
Mahan	Miriam	Sts. Joachim & Ann Care Service	X
Moellenhoff	Cheryl	Volunteers in Medicine	X
Sefrit	Jason	St. Charles School District	X
Snyder	Gary	United Way of Greater St. Louis	X
Trotter	Kristin	Lindenwood University	X
Woodson	Hope	St. Charles County Department of Health*	
* Comment Received in Writing			

ST. CHARLES COUNTY HOSPITALS' OBSERVERS / FACILITATOR

LAST NAME	FIRST NAME	HOSPITAL
Akinade	Omowunmi	BJC HealthCare
Chambers	Angela	BJC HealthCare / Faciliator
Daly	Theresa	Barnes-Jewish St. Peters & Progress West Hospitals
Dinman	Michele	OASIS
King	Karley	BJC HealthCare
Smith	Tanner	SSM Health
Watts	Chris	Barnes-Jewish St. Peters & Progress West Hospitals
Williams	Kristin	Barnes-Jewish St. Peters & Progress West Hospitals
Wuench	Bethany	Barnes-Jewish St. Peters & Progress West Hospitals
Wescott	Lisle	SSM Health

Appendix F: BJSPH & PWH Internal Work Group

BJSPH & PWH COMMUNITY HEALTH NEEDS ASSESSMENT INTERNAL WORK GROUP			
LAST NAME	FIRST NAME	TITLE	DEPARTMENT
Williams	Kristin	Foundation Director	General Administration
Daly	Theresa	Supervisor	Community Education & Events
Fienup	Jessica	Patient Access Supervisor	Admitting
Gibsons	Vicky	Assistant Nurse Manager	Emergency Room / Progress West Hospital
Hill	Rebecca	Clinical Dietician	Dietary
Gross	Cynthia	Finance Manager	Financial Services
Jackson	Nikki	Patient Access Supervisor	Admitting
Jackson	Sarah	Assistant Nurse Manager	R & B
McCracken	Adriana	Clinical Documentation Supervisor	Emergency Dept
Livers	Kerrie	Patient Care Manager	Emergency Department
Rosenthal	Robyn	Diabetes Educator	TQM / CQI
Cluster	Sandra	Registered Nurse	Laboratory-Cardiac Rehabilitation
Kettle-Singleton	Heather	Team-Lead / Charge Nurse	R & B Surgical
King	Karley	Community Benefit Manager	Corporate Communication & Marketing

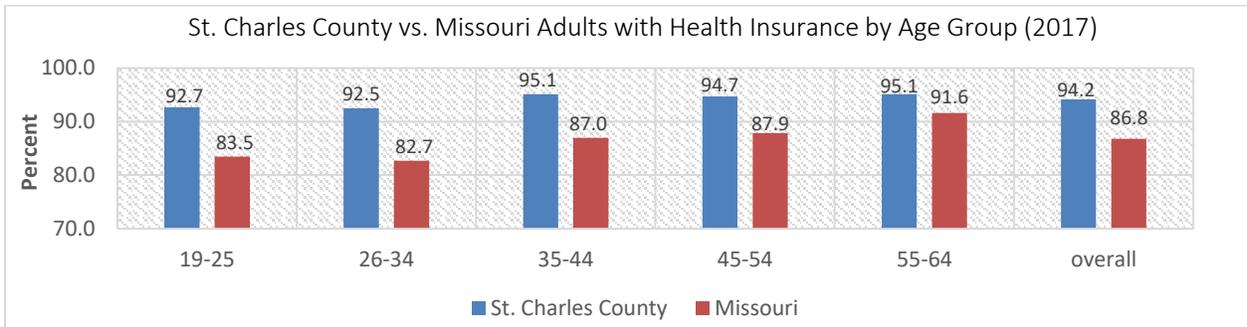
Appendix G: St. Charles County Secondary Data

Access to Health Care

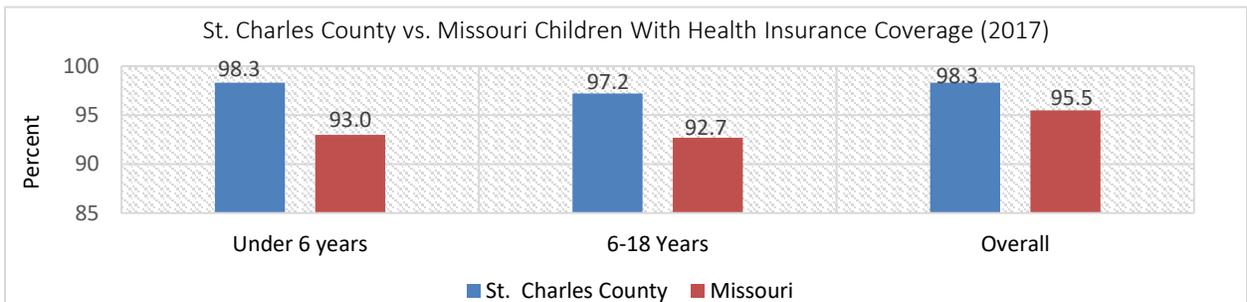
Due to the implementation of the Affordable Care Act (ACA), changes were made to the definition of a "qualifying child." According to the ACA, a qualifying child is 19 at the close of the calendar year. Therefore, age categories used to measure health insurance now define those age 18 as children.

ST. CHARLES COUNTY VS. MISSOURI ACCESS TO HEALTH CARE RATES		
HEALTH INDICATORS	ST. CHARLES COUNTY	MISSOURI
Percent Adults with Health Insurance (2017)	94.2	86.8
Percent Children with Health Insurance (2017)	97.5	94.9
Primary Care Providers Rate / 100,000 (2016)	43	71
Dentist Rate/100,000 (2017)	55	57
Mental Health Providers Rate/100,000 (2018)	128	180
Non-Physicians Primary Care Providers Rate / 100,000 (2018)	45	79
Preventable Hospital Stays. Medicare Population: Discharges/1000 Enrollees (2015)	55.6	56.6

Source: Conduent Healthy Communities Institute

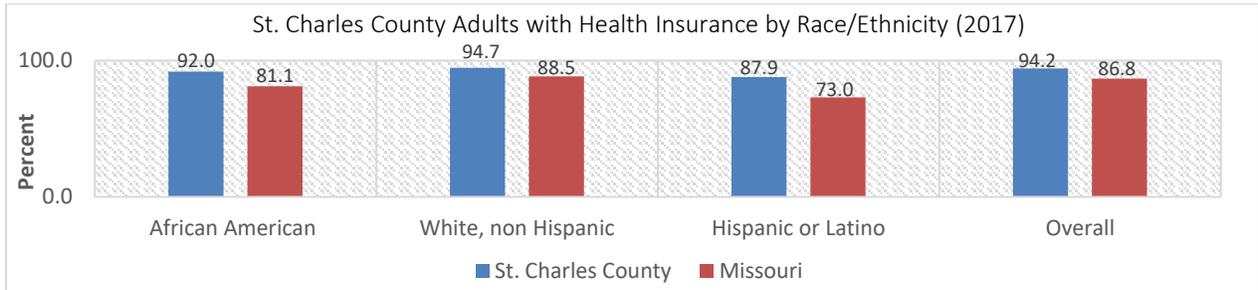


Source: Conduent Healthy Communities Institute

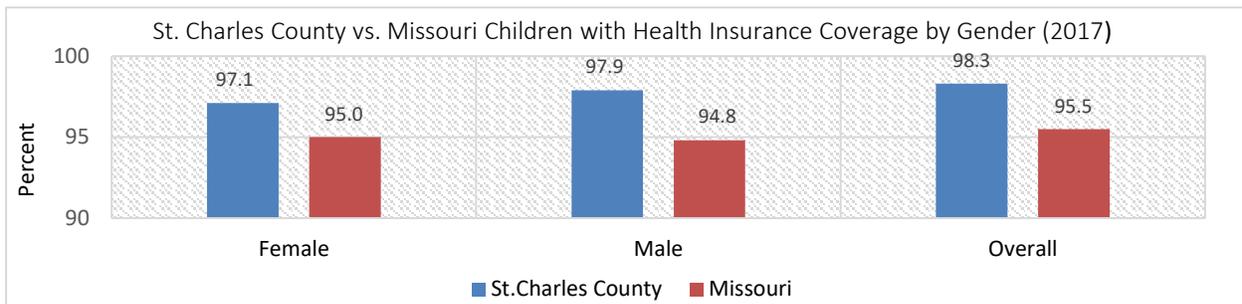


Source: Conduent Healthy Communities Institute

ACCESS TO HEALTH CARE



Source: Conduent Healthy Communities Institute

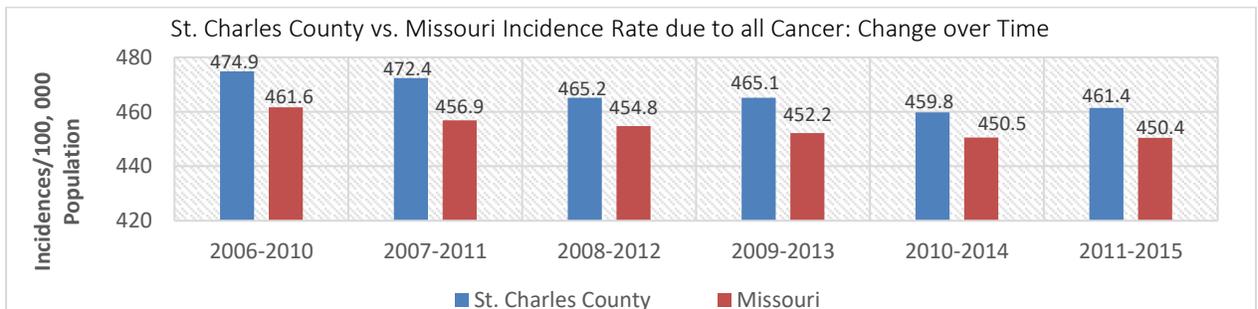


Source: Conduent Healthy Communities Institute

ST. CHARLES COUNTY VS. MISSOURI ACCESS TO TRANSPORTATION RATE (2013-2017)		
HEALTH INDICATORS	ST. CHARLES COUNTY	MISSOURI
Percent Households without a Vehicle	2.9	7
Percent Workers Commuting by Public Transportation	0.2	1.5
Mean Travel Time to Work; Age 16+	25.5 minutes	23.5 minutes

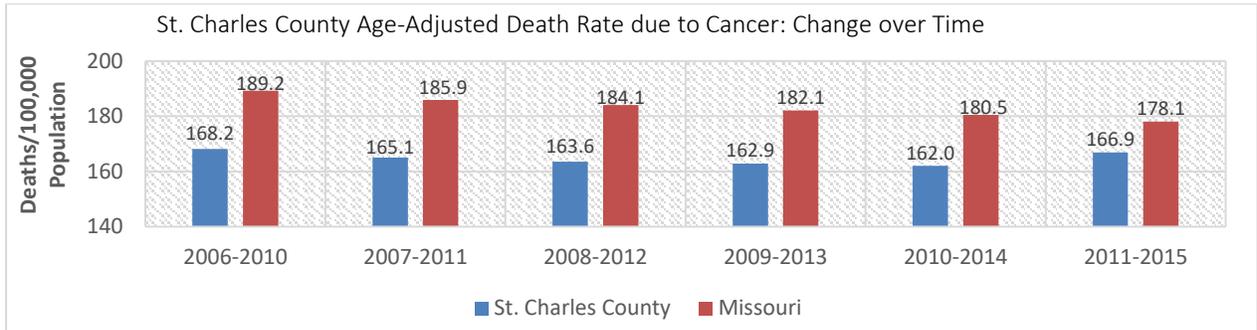
Source: Conduent Healthy Communities Institute

CANCER

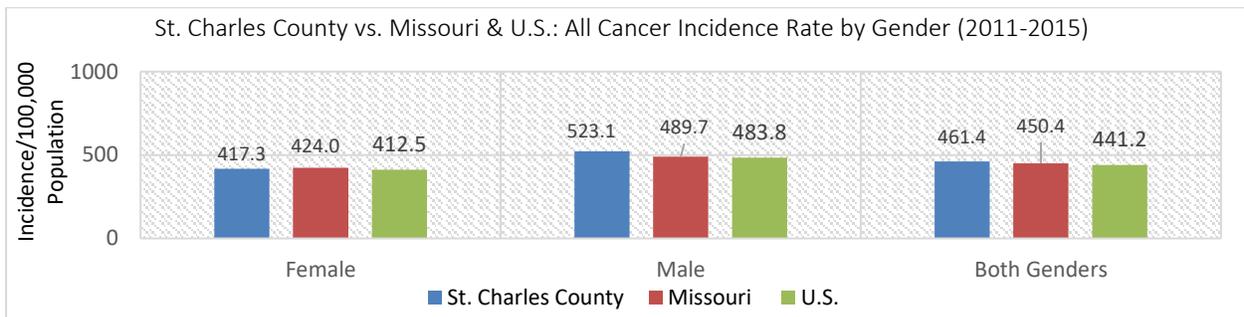


Source: Conduent Healthy Communities Institute

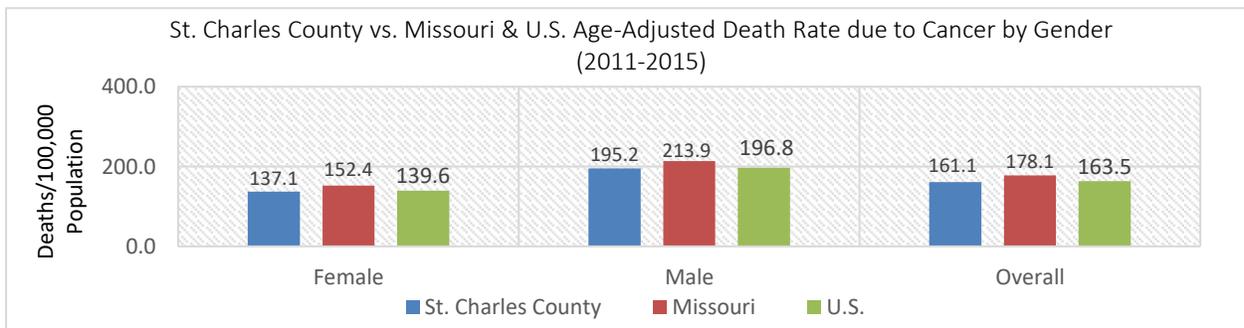
CANCER



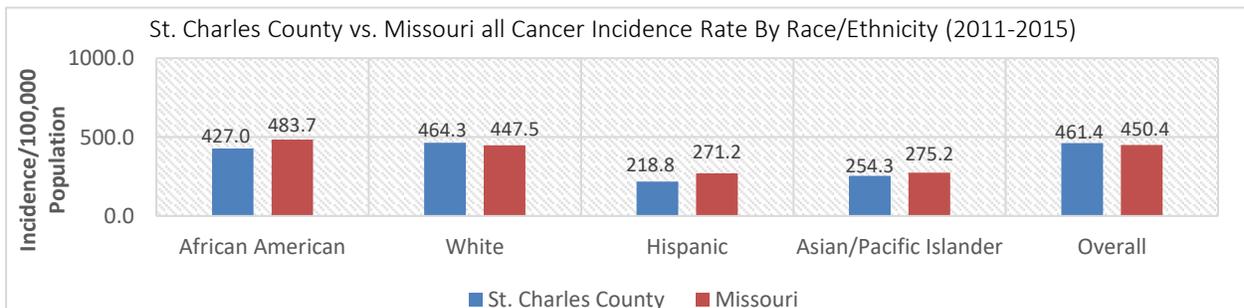
Source: Conduent Healthy Communities Institute



Source: Conduent Healthy Communities Institute & U.S. State Cancer Profile

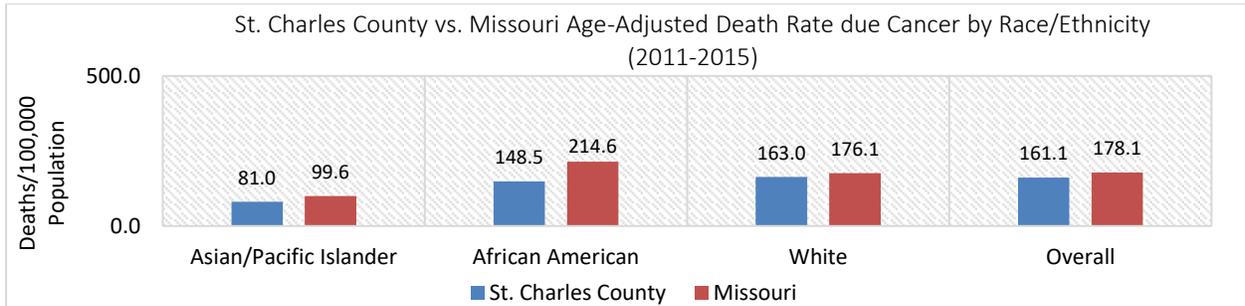


Source: Conduent Healthy Community Institute & U. S. State Cancer Profile



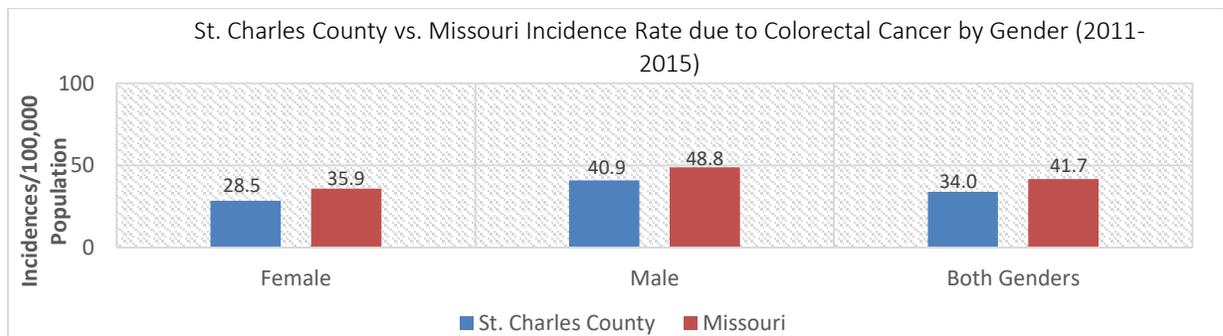
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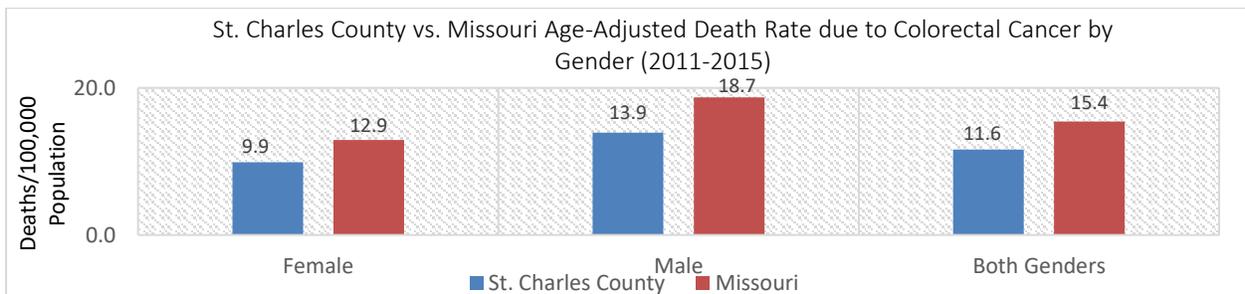


Source: Conduent Healthy Communities Institute

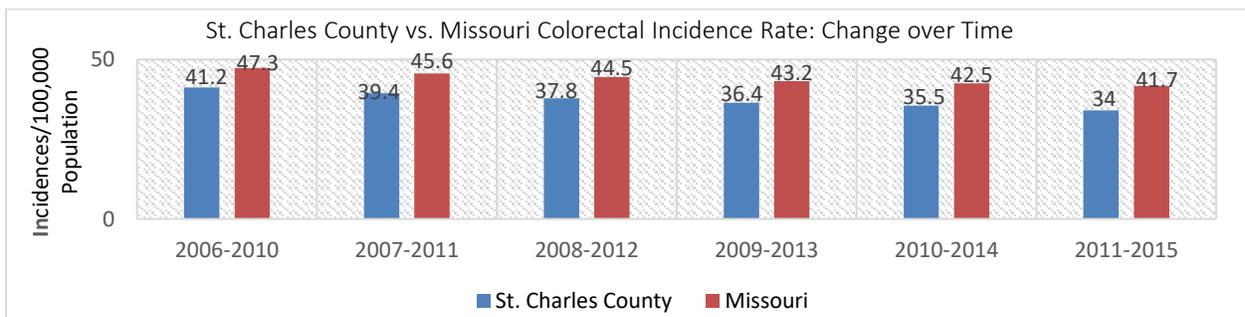
COLORECTAL CANCER



Source: Conduent Healthy Communities Institute

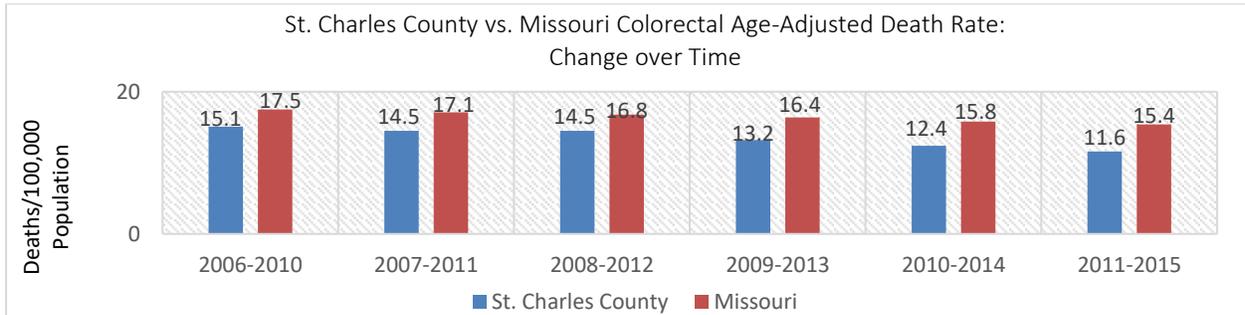


Source: Conduent Healthy Communities Institute

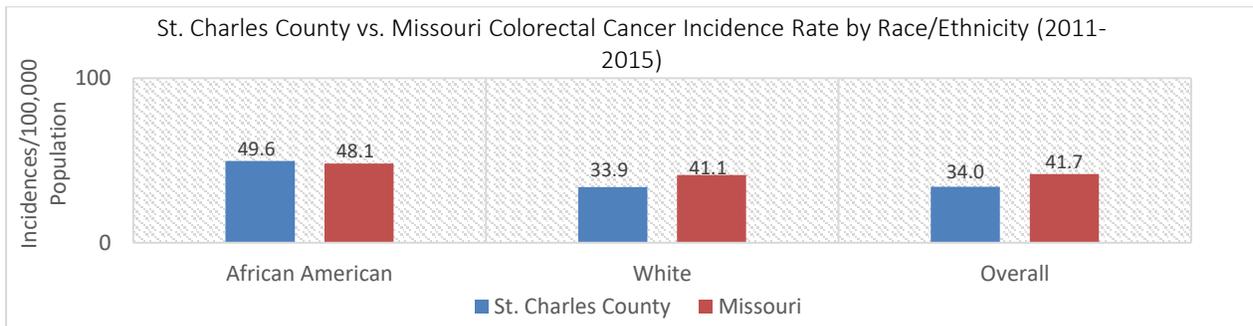


Source: Conduent Healthy Communities Institute

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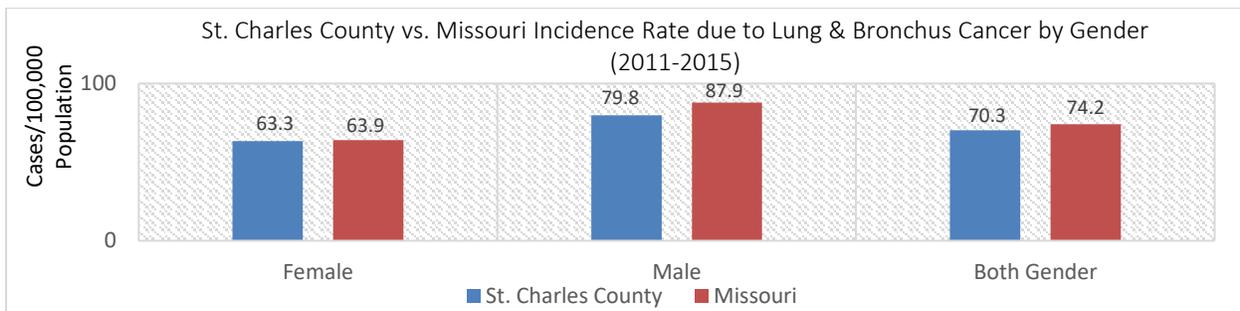


Source: Conduent Healthy Communities Institute

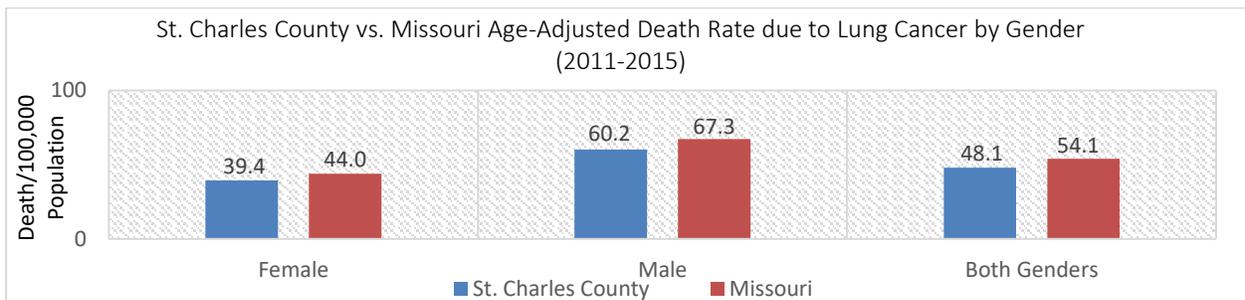


Source: Conduent Healthy Communities Institute

LUNG & BRONCHUS CANCER

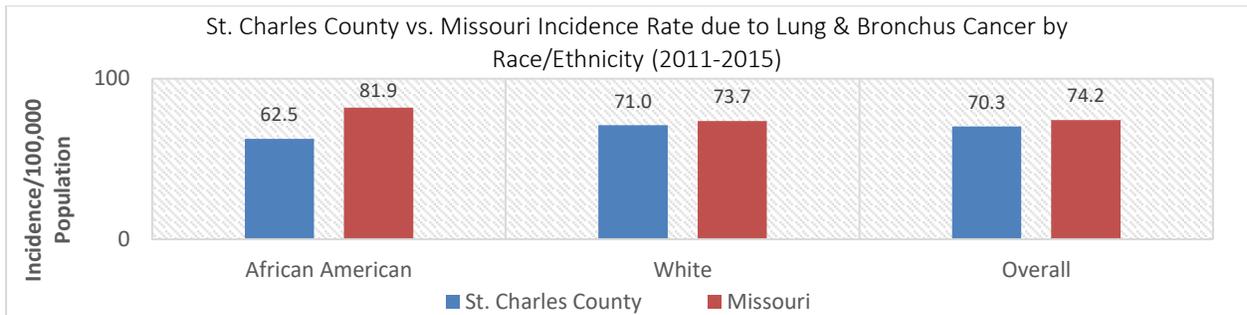


Source: Conduent Healthy Communities Institute

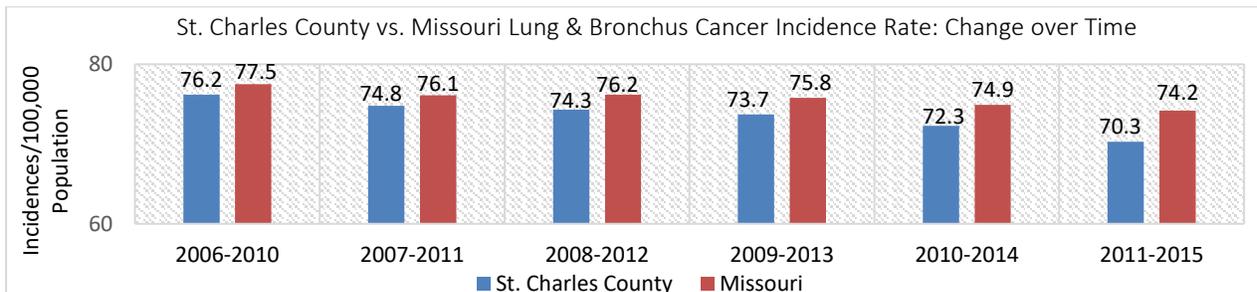


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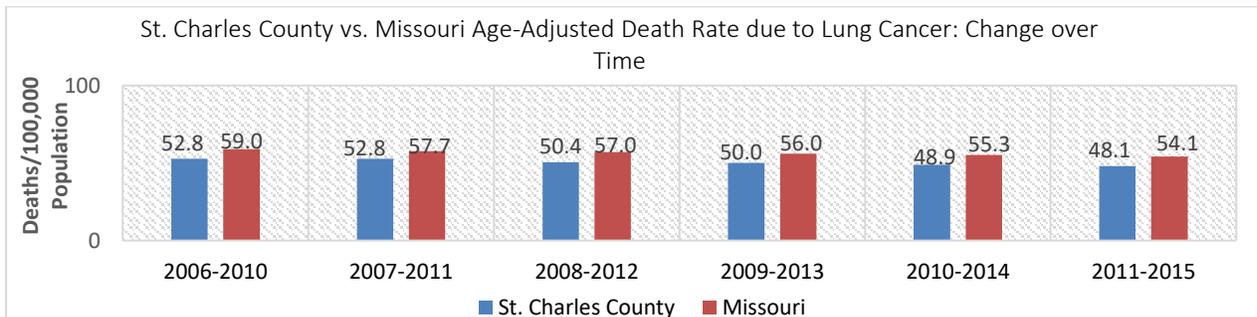
LUNG & BRONCHUS CANCER



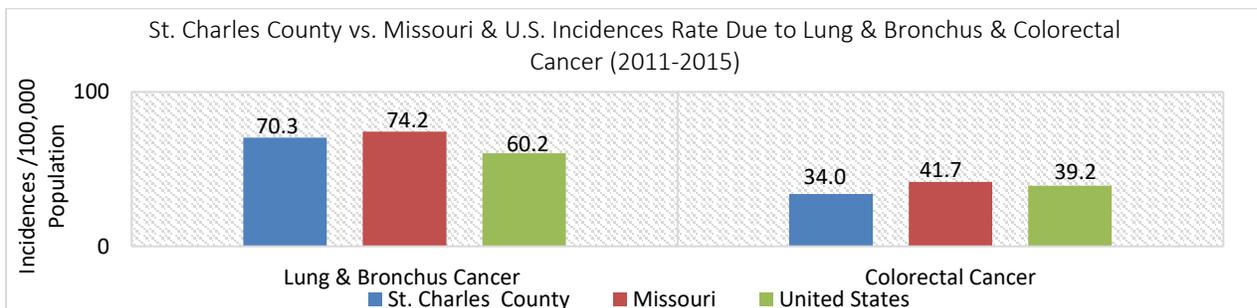
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Source: Conduent Healthy Communities Institute

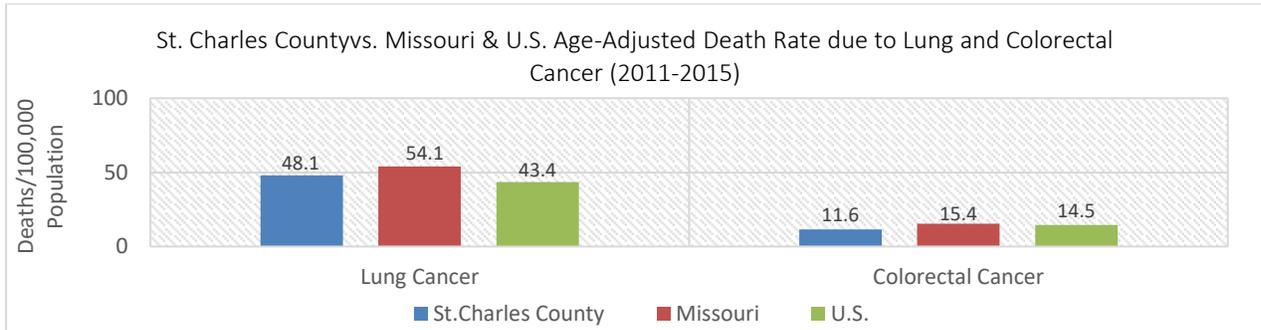


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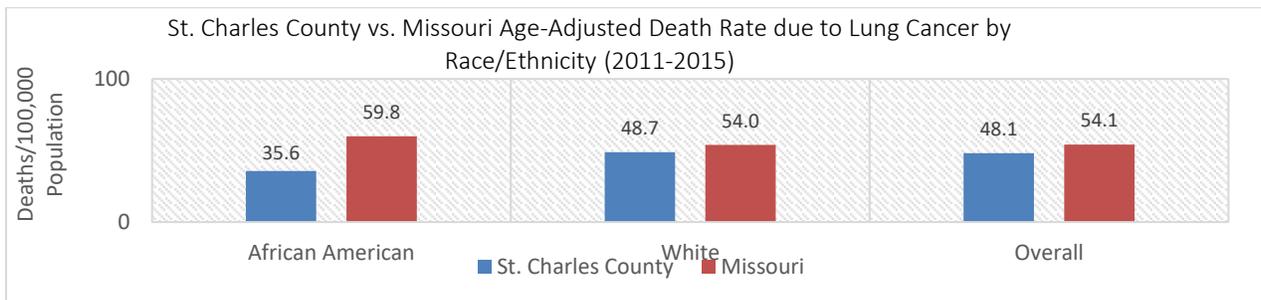


Source: Conduent Healthy Communities Institute & U. S. State Cancer Profile

LUNG & BRONCHUS CANCER

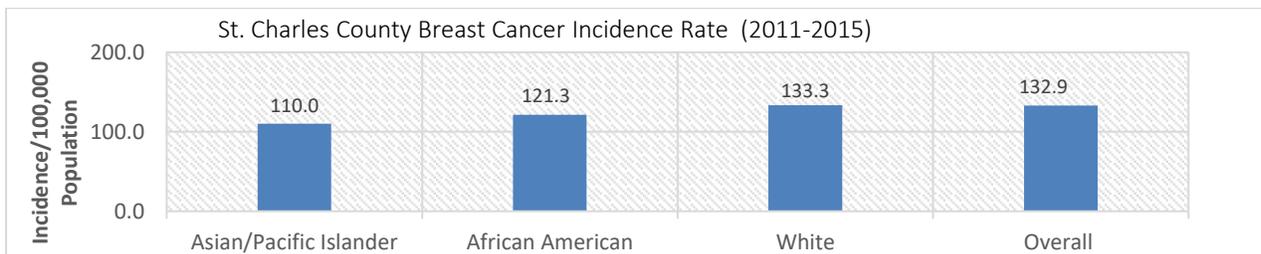


Source: Conduent Healthy Communities Institute & U.S. State Cancer Profile

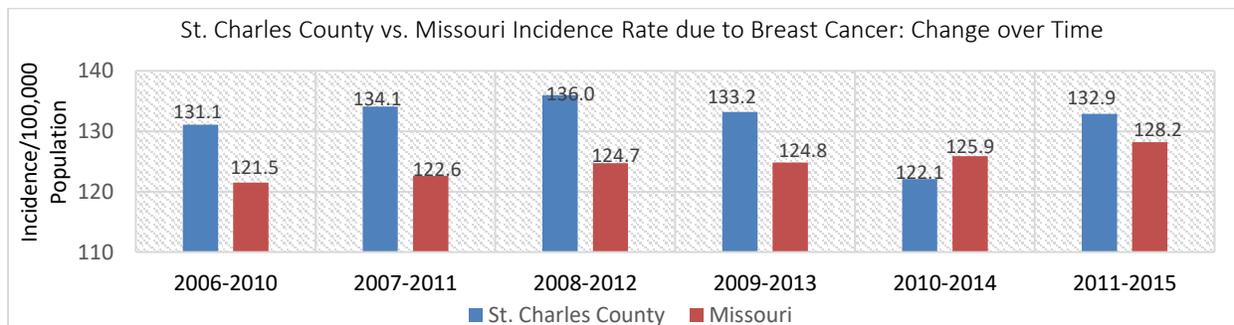


Source: Conduent Healthy Communities Institute

BREAST CANCER

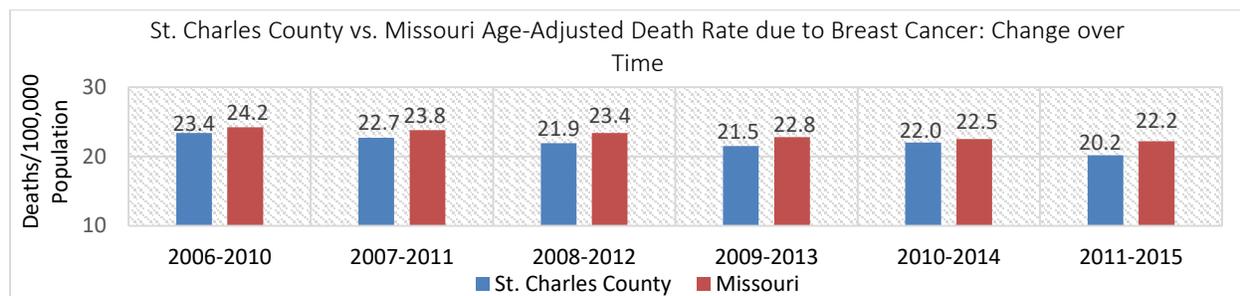


Source: Conduent Healthy Communities Institute



Source: Conduent Healthy Communities Institute

BREAST CANCER

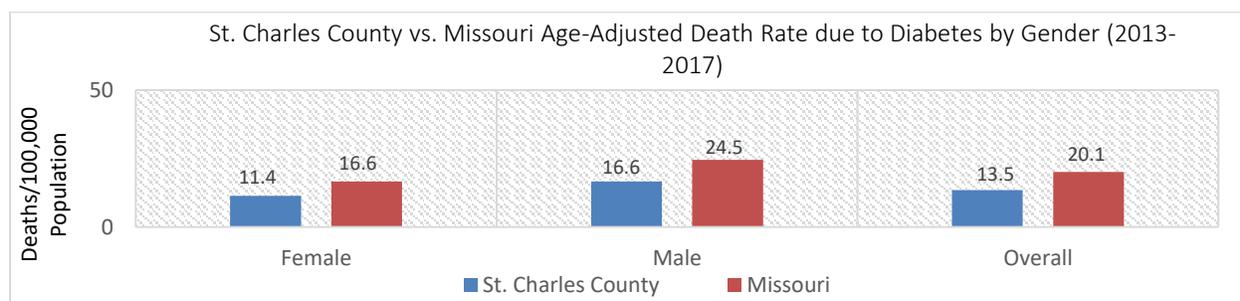


Source: Conduent Healthy Communities Institute

DIABETES

HEALTH INDICATORS						
DIABETES MELLITUS	ST. CHARLES COUNTY		MISSOURI		ST. CHARLES COUNTY	
THREE YEARS MOVING AVERAGE RATE	2013-2015		2014-2016		2015-2017	
Death /100,000 Population	13.51	19.8	13.49	19.67	13.89	20.24
THREE YEARS MOVING AVERAGE RATE	2011-2013		2012-2014		2013-2015	
Hospitalizations /10,000 Population	12.33	18.5	13.08	18.63	13.53	18.97
ER Visits / 1,000 Population	0.961	1.92	1.02	1.96	1.08	1.99

Source: Missouri Department of Health & Senior Services

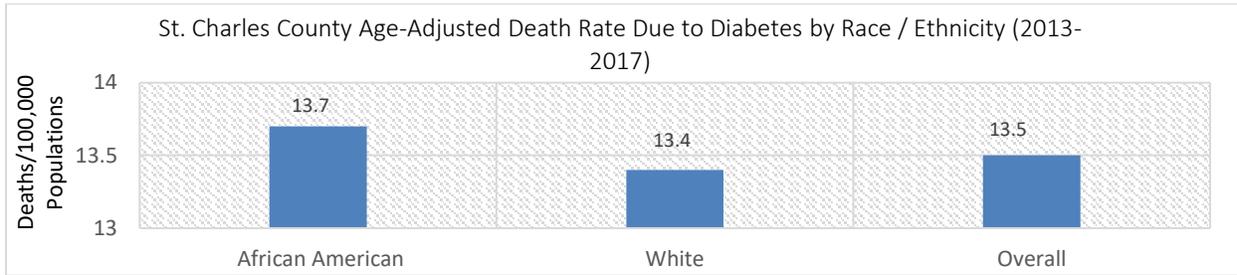


Source: Conduent Healthy Communities Institute

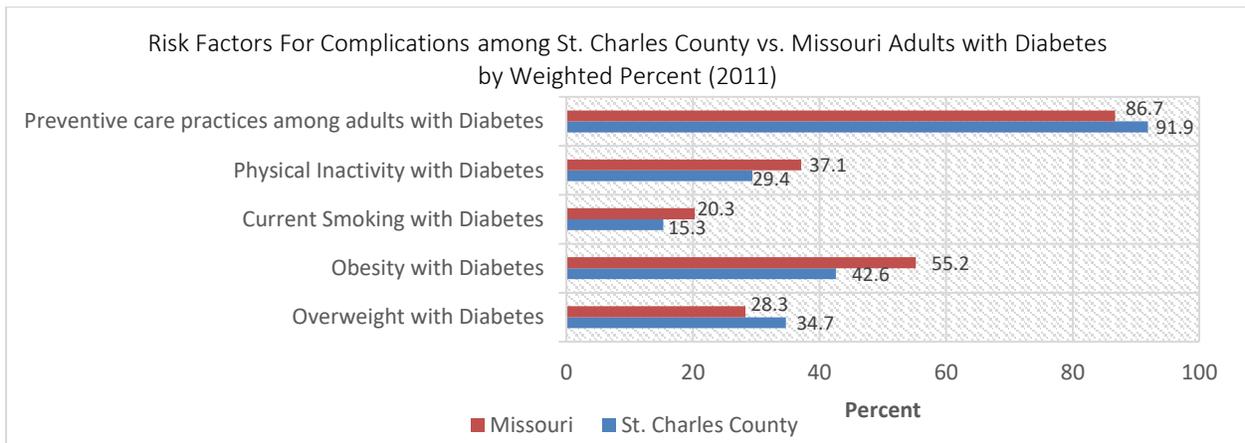
ST. CHARLES COUNTY VS. MISSOURI DIABETES MELLITUS BY ETHNICITY / RACE				
ETHNICITY / RACE	WHITE		AFRICAN AMERICAN	
	ST. CHARLES COUNTY	MISSOURI	ST. CHARLES COUNTY	MISSOURI
Deaths / 100,000 Population (2007-2017)	0.58	0.83	0	3.08
Hospitalizations / 10,000 Population (2011-2015)	6.06	7.13	13.83	35.59
ER Visits / 1,000 Population (2011-2015)	2.37	3.02	10.28	18.16

Missouri Department of Health & Senior Services

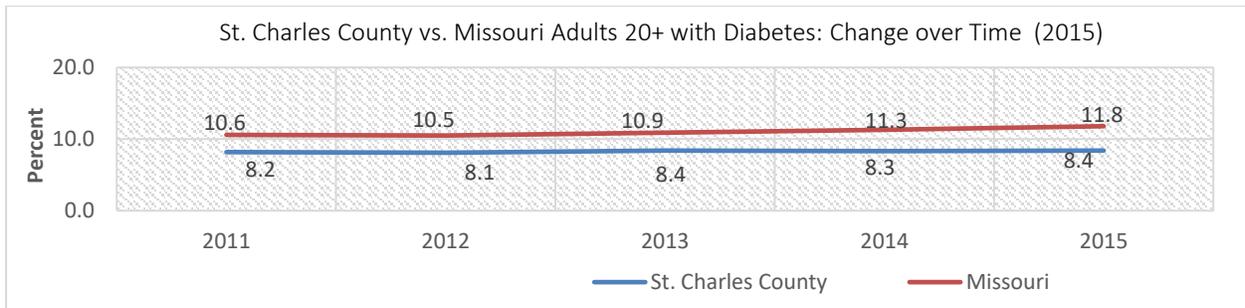
DIABETES



Source: Conduent Healthy Communities Institute



Source: Missouri Department of Health and Senior Services

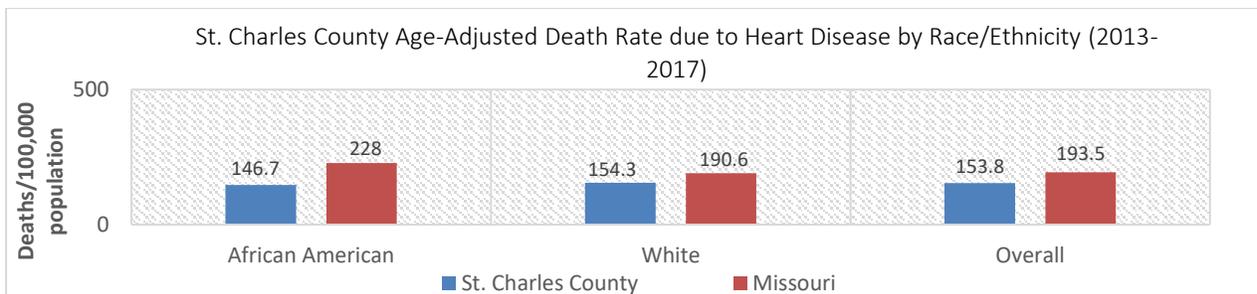


Source: Conduent Healthy Communities Institute

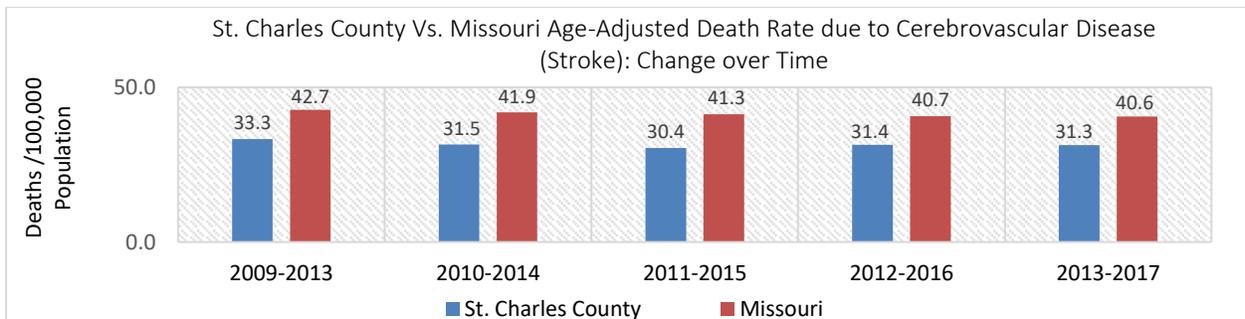
HEART & VASCULAR DISEASE

ST. CHARLES COUNTY VS. MISSOURI AGE-ADJUSTED RATE: HEART DISEASE & STROKE		
	ST. CHARLES COUNTY	MISSOURI
HEART DISEASE		
Deaths / 100,000 Population (2007-2017)	157.98	199.32
Hospitalizations / 10,000 Population (2011-2015)	96.69	109.46
ER Visits / 1,000 Population (2011-2015)	11.62	15.12
ISCHEMIC HEART DISEASE		
Deaths / 100,000 Population (2007-2017)	101.12	124.16
Hospitalizations / 10,000 Population (2011-2015)	28.68	32.53
ER Visits / 1,000 Population (2011-2015)	0.13	0.57
STROKE / OTHER CEREBROVASCULAR DISEASE		
Deaths / 100,000 Population (2007-2017)	32.2	43.02
Hospitalizations / 10,000 Population (2011-2015)	27.9	27.85
ER Visits / 1,000 Population (2011-2015)	0.51	0.77

Source: Missouri Department of Health & Senior Services



Source: Conduent Healthy Communities Institute

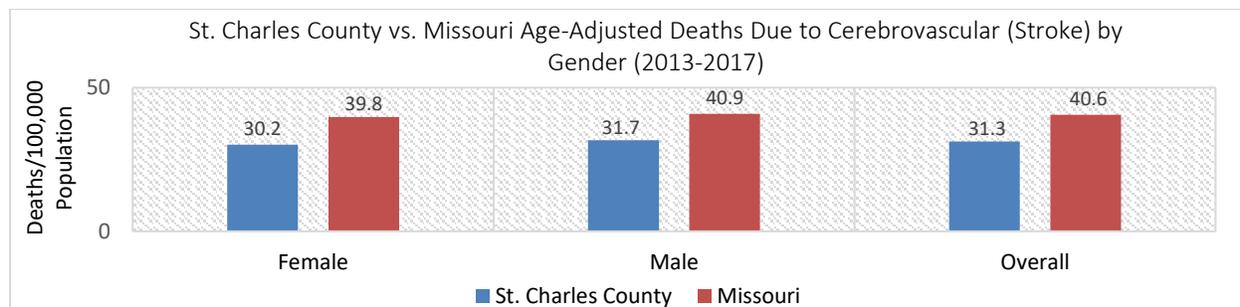


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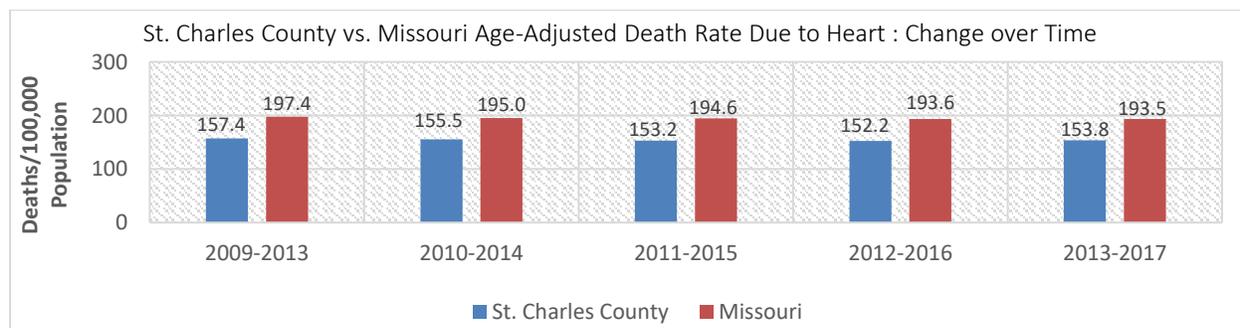
HEART & VASCULAR DISEASE

ST. CHARLES COUNTY VS. MISSOURI HEART DISEASE & STROKE RATE BY ETHNICITY / RACE				
ETHNICITY / RACE	WHITE		AFRICAN AMERICAN	
	ST. CHARLES COUNTY	MISSOURI	ST. CHARLES COUNTY	MISSOURI
HEART DISEASE				
Deaths / 100,000 Population (2007-2017)	158.3	196.24	171.09	235.6
Hospitalizations / 10,000 Population (2011-2015)	95.39	102.13	115.39	164.99
ER Visits / 1,000 Population (2011-2015)	11.08	13.48	21.38	25.7
ISCHEMIC HEART DISEASE				
Deaths / 100,000 Population (2007-2017)	101.36	123.1	115.92	141.23
Hospitalizations / 10,000 Population (2011-2015)	28.53	32.06	25.55	33.04
ER Visits / 1,000 Population (2011-2015)	0.13	0.59	0.13	0.35
STROKE / OTHER CEREBROVASCULAR DISEASE				
Deaths / 100,000 Population (2007-2017)	31.77	41.62	50.44	56.71
Hospitalizations / 10,000 Population (2011-2015)	27.28	25.66	40.51	44.57
ER Visits / 1,000 Population (2011-2015)	0.5	0.77	0.69	0.69

Source: Missouri Department of Health & Senior Services



Source: Conduent Healthy Communities Institute

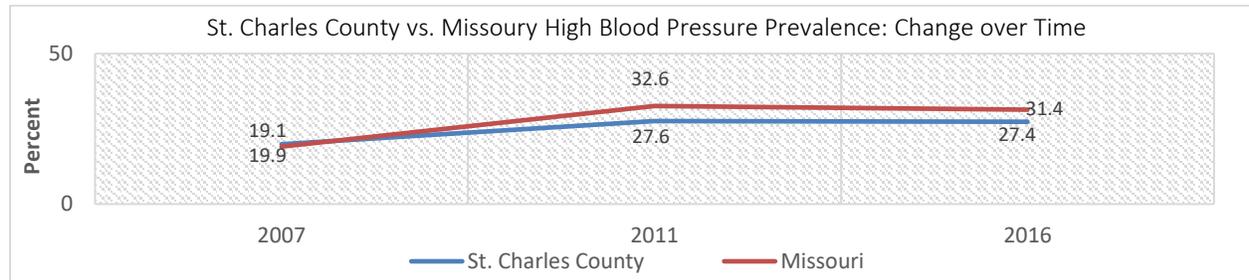


Source: Conduent Healthy Communities Institute

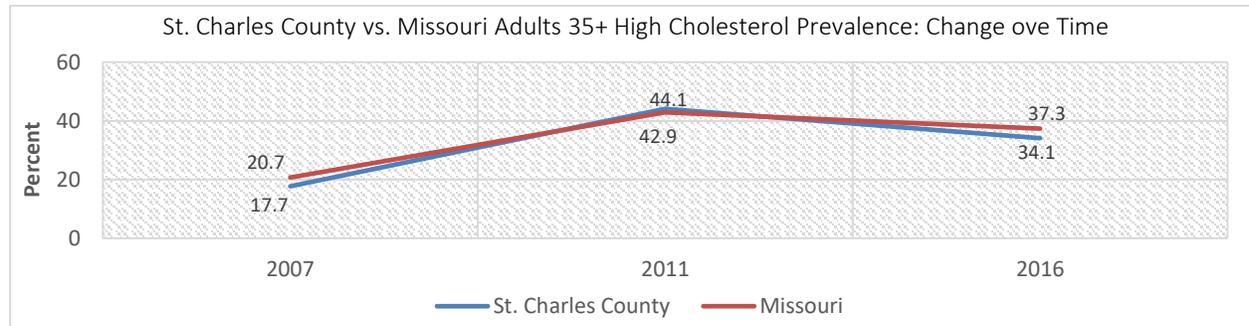
HEART & VASCULAR DISEASE

ST. CHARLES COUNTY VS. MISSOURI THREE-YEAR MOVING HEART DISEASE AVERAGE RATES						
HEART DISEASE	ST. CHARLES COUNTY	MISSOURI	ST. CHARLES COUNTY	MISSOURI	ST. CHARLES COUNTY	MISSOURI
THREE-YEAR MOVING RATE	2013-2015		2014-2016		2015-2017	
Deaths / 100,000 Population	153.23	194.78	153.64	194.15	155.5	193.5
THREE-YEAR MOVING RATE	2011-2013		2012-2014		2013-2015	
Hospitalizations / 10,000 Population	102.94	115.58	94.72	108.12	90.75	102.68
ER Visits / 1,000 Population	11.99	15.25	11.64	15.1	11.46	14.97
ISCHEMIC HEART DISEASE						
THREE-YEAR MOVING RATE	2013-2015		2014-2016		2015-2017	
Deaths / 100,000 Population	91.96	114.21	90.2	111.17	91.1	108.36
THREE-YEAR MOVING RATE	2011-2013		2012-2014		2013-2015	
Hospitalizations / 10,000 Population	30.52	34.89	27.81	31.91	26.89	30.04
ER Visits / 1,000 Population	0.13	0.6	0.11	0.57	0.11	0.54
STROKE / OTHER CEREBROVASCULAR DISEASE						
THREE-YEAR MOVING RATE	2013-2015		2014-2016		2015-2017	
Deaths / 100,000 Population	30.35	40.56	31.47	40.55	32.15	40.65
THREE-YEAR MOVING RATE	2011-2013		2012-2014		2013-2015	
Hospitalizations / 10,000 Population	28.27	28.44	27.24	27.47	27.37	27.16
ER Visits / 1,000 Population	0.54	0.78	0.5	0.76	0.48	0.75

Source: Missouri Department of Health & Senior Services

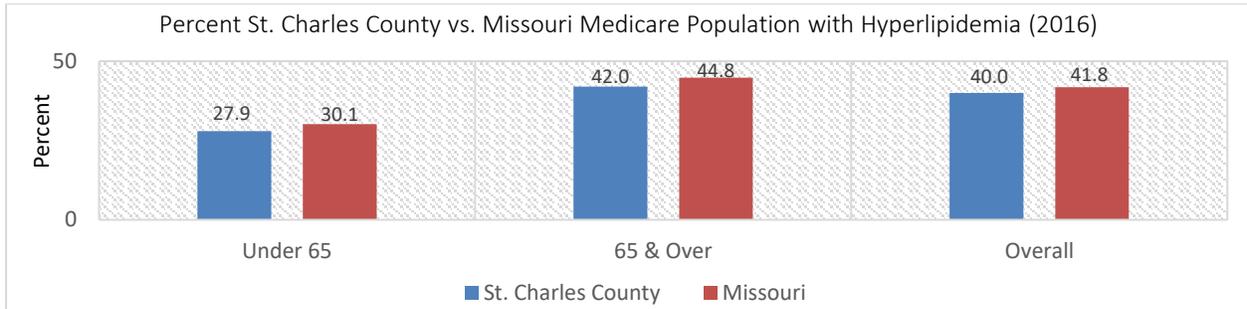


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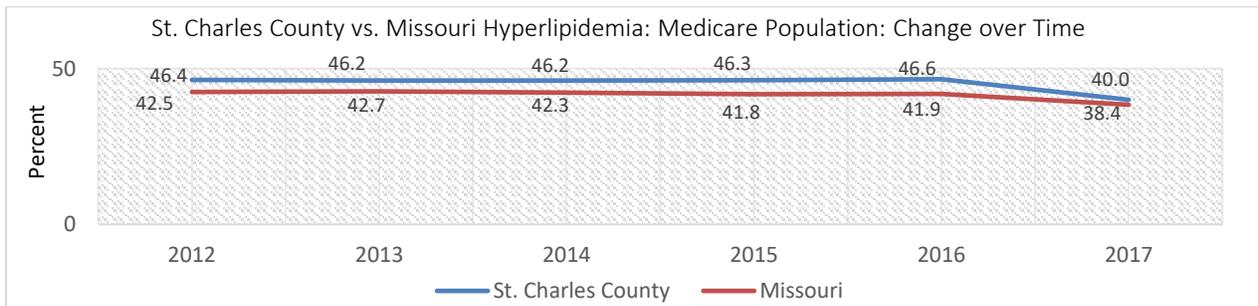


Source: Conduent Healthy Communities Institute

HEART & VASCULAR DISEASE

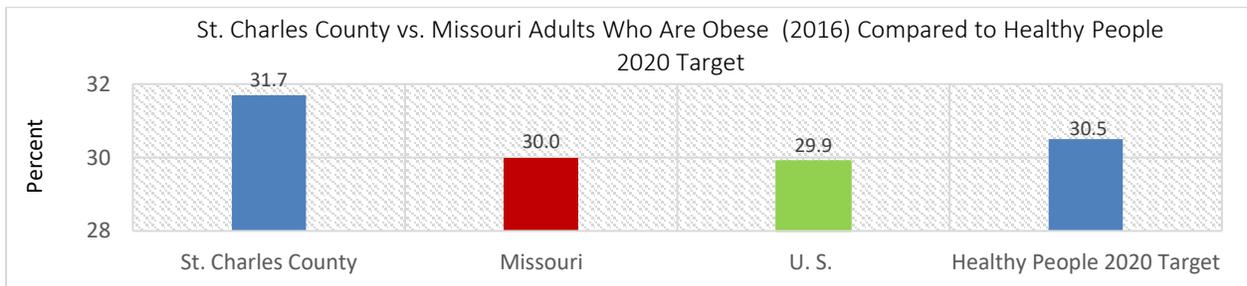


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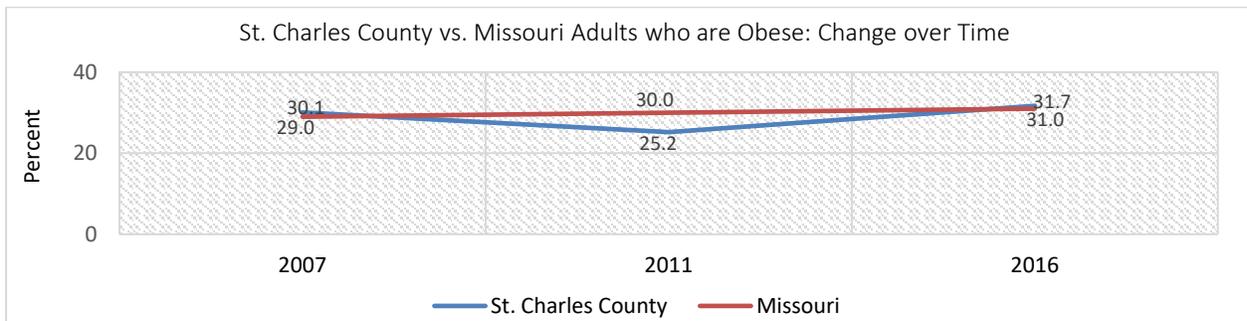


Source: Conduent Healthy Communities Institute

OBESITY

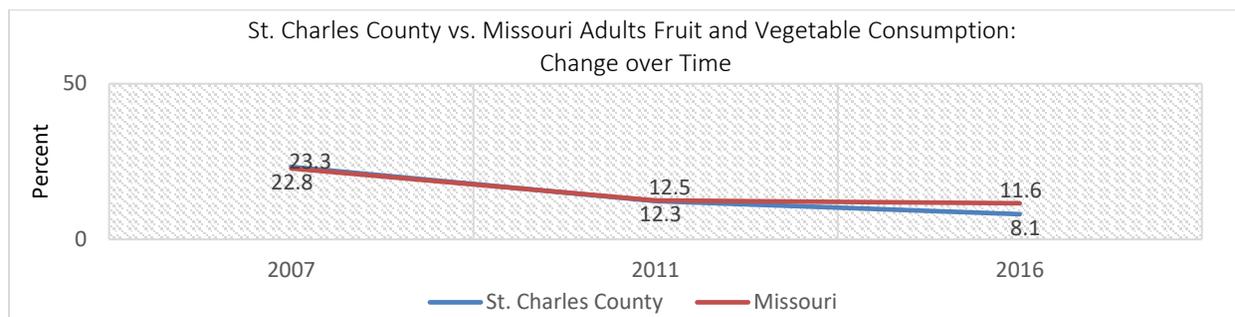


Source: Conduent Healthy Communities Institute



Source: Conduent Healthy Communities Institute

HEART & VASCULAR DISEASE

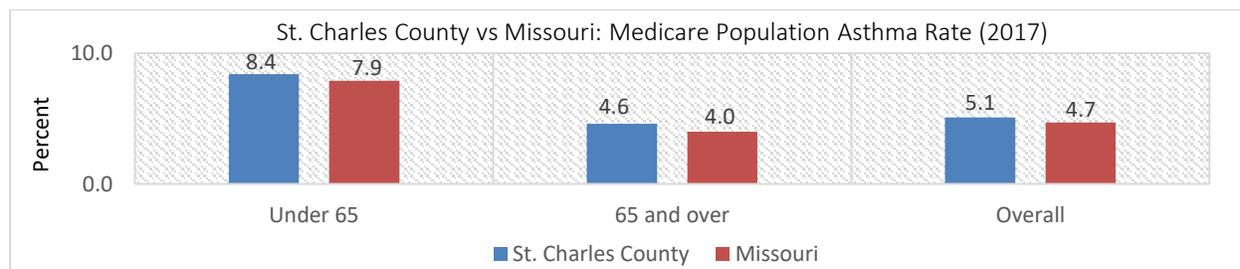


Source: Conduent Healthy Communities Institute

RESPIRATORY DISEASES

ST. CHARLES COUNTY VS. MISSOURI THREE-YEAR MOVING ASTHMA AVERAGE RATES						
	ST. CHARLES COUNTY		MISSOURI		ST. CHARLES COUNTY	
	2013-2015		2014-2016		2015-2017	
Asthma Death Counts	3 Deaths	207 Deaths	5 Deaths	228 Deaths	9 Deaths	212 Deaths
	2011-2013		2012-2014		2013-2015	
	ST. CHARLES COUNTY	MISSOURI	ST. CHARLES COUNTY	MISSOURI	ST. CHARLES COUNTY	MISSOURI
Asthma Hospitalizations /10, 000 Population	7.19	11.74	6.67	11.44	5.82	10.65
Asthma ER Visits/ 1000 Population	2.95	5.39	3.01	5.47	2.99	5.34

Source: Missouri Department of Health & Senior Services

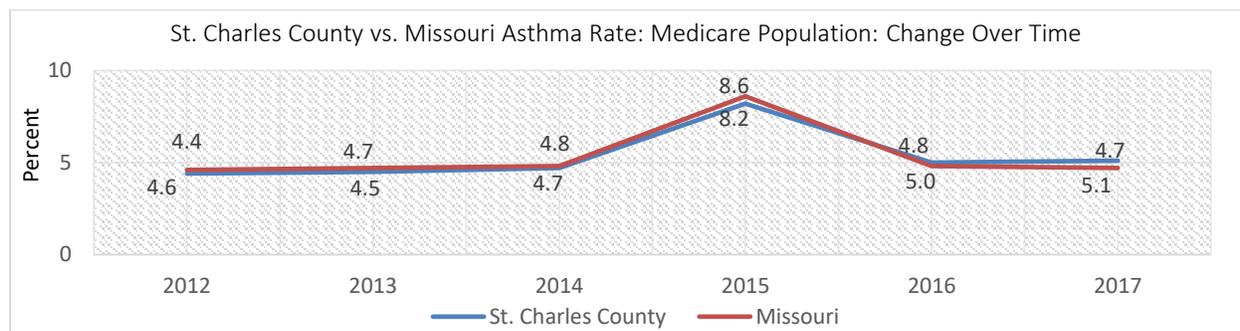


Source: Conduent Healthy Communities Institute

ST. CHARLES COUNTY VS. MISSOURI ASTHMA RATE		
	ST. CHARLES COUNTY	MISSOURI
Asthma Death / 100,000 Population (2007-2017)	0.55	1.1
Asthma Hospitalizations / 10,000 Population (2011-2015)	6.68	11.27
Asthma ER Visits / 1,000 Population (2011-2015)	2.95	5.39

Source: Missouri Department of Health & Senior Services

RESPIRATORY DISEASES



Source: Conduent Healthy Communities Institute

ST. CHARLES COUNTY VS. MISSOURI ASTHMA RATE BY ETHNICITY / RACE				
	WHITE		AFRICAN AMERICAN	
	ST. CHARLES COUNTY	MISSOURI	ST. CHARLES COUNTY	MISSOURI
Asthma Death / 100,000 Population (2015-2017)	0.58	0.83	0	3.08
Asthma Hospitalizations / 10,000 Population (2013-2015)	6.06	7.13	13.83	35.59
Asthma ER Visits / 1,000 Population (2013-2015)	2.37	3.02	10.28	18.16

Source: Missouri Department of Health & Senior Services

CHRONIC OBSTRUCTIVE PULMONARY DISEASE

ST. CHARLES COUNTY VS. MISSOURI THREE-YEAR MOVING CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD) EXCLUDING ASTHMA								
	ST. CHARLES COUNTY		MISSOURI		ST. CHARLES COUNTY		MISSOURI	
	2013-2015		2014-2016		2015-2017			
THREE-YEAR MOVING AVERAGE RATE	2013-2015		2014-2016		2015-2017			
COPD Deaths Rate/100,000 Population	33.87	51.16	34.47	50.77	34.14	50.72		
THREE-YEAR MOVING AVERAGE RATE	2011-2013		2012-2014		2013-2015			
	ST. CHARLES COUNTY		MISSOURI		ST. CHARLES COUNTY		MISSOURI	
COPD Hospitalizations/10,000 Population)	12.74	21.86	11.63	20.27	11.29	19.3		
COPD ER Visits / 1,000 Population	2.24	5.57	2.33	5.62	2.38	5.45		

Source: Missouri Department of Health & Senior Services

CHRONIC OBSTRUCTIVE PULMONARY DISEASE

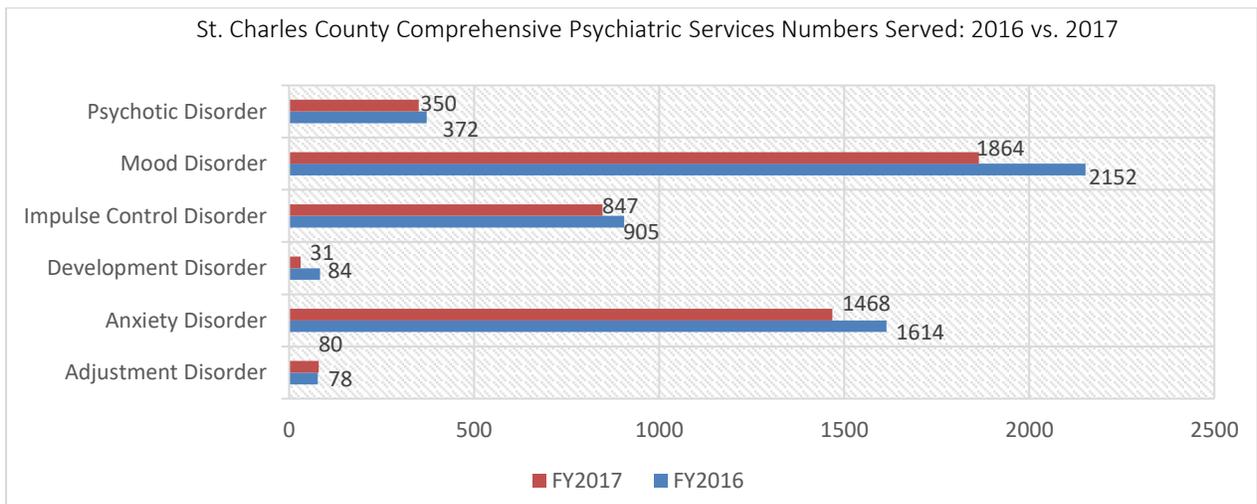
ST. CHARLES COUNTY VS. MISSOURI CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD) RATE BY ETHNICITY / RACE				
	WHITE		AFRICAN AMERICAN	
	ST. CHARLES COUNTY	MISSOURI	ST. CHARLES COUNTY	MISSOURI
Death / 100,000 Population (2007-2017)	36.45	52.81	7.02	30.8
Hospitalizations / 10,000 Population (2011-2015)	12.2	20.45	7.74	23.23
ER Visits / 1,000 Population (2011-2015)	2.2	5.27	4.5	7.23

Source: Missouri Department of Health & Senior Services

ST. CHARLES COUNTY VS. MISSOURI RESPIRATORY DISEASES RATES		
	ST. CHARLES COUNTY	MISSOURI
Adults with Current Asthma in Percent (2016)	8.7	9.7
Age-Adjusted Death Rate due to Chronic Lower Respiratory Disease /100,000 Population (2013-2017)	34.6	51.9
Asthma: Medicare Population/Percent (2017)	5.1	4.7
COPD: Medicare Population in Percent (2017)	12	13.9

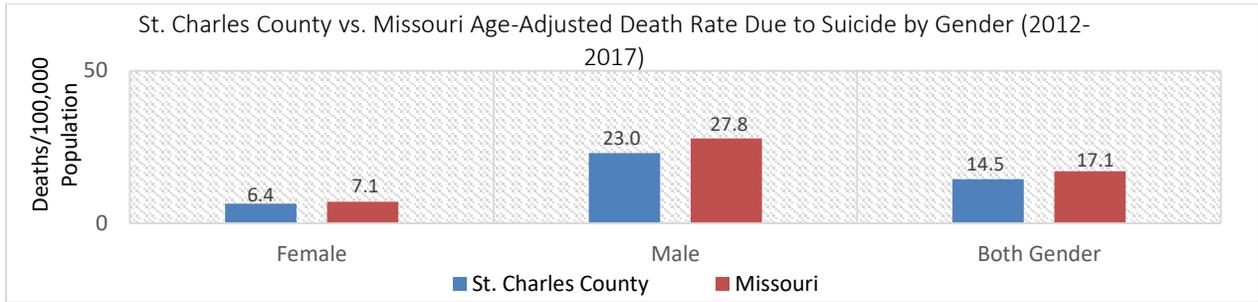
Source: Conduent Healthy Communities Institute

MENTAL/BEHAVIORAL HEALTH: MENTAL HEALTH

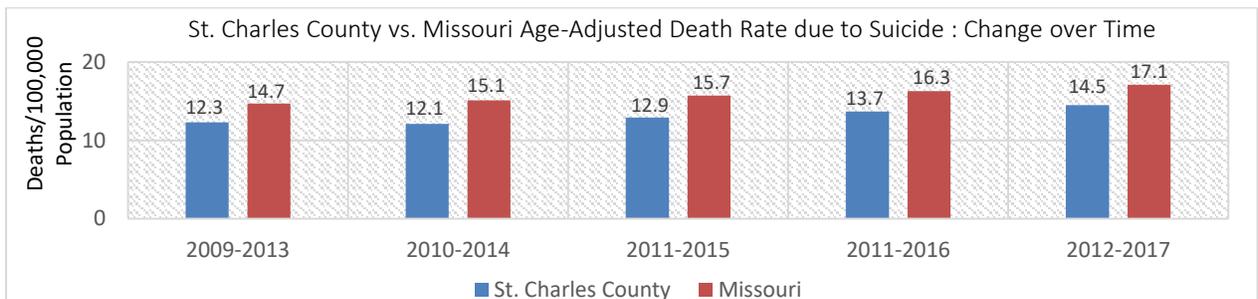


Source: Missouri Department of Mental Health

MENTAL/BEHAVIORAL HEALTH: SUICIDE

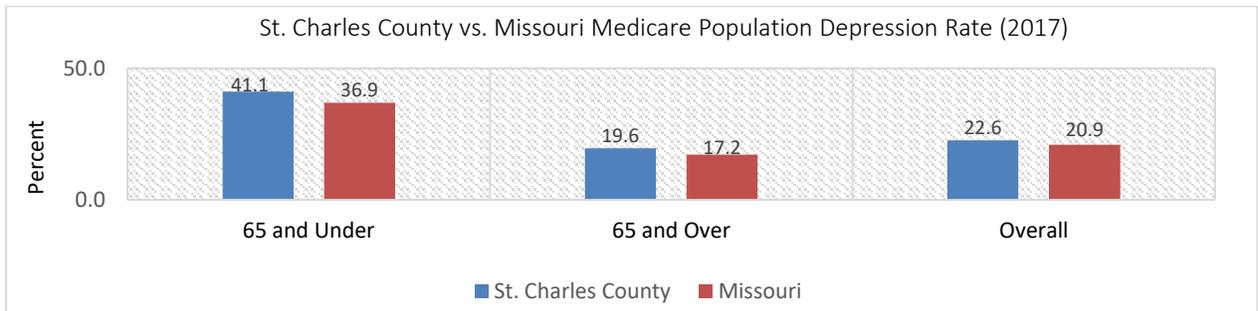


Source: Conduent Healthy Communities Institute

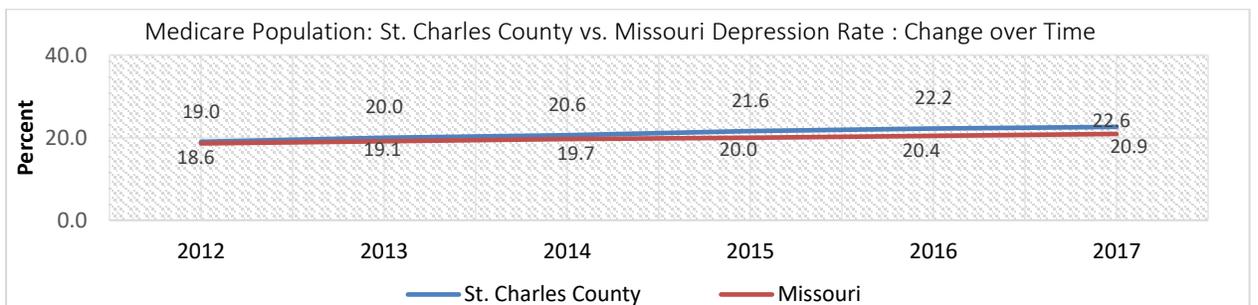


Source: Conduent Healthy Community Institute

MENTAL/BEHAVIORAL HEALTH: DEPRESSION

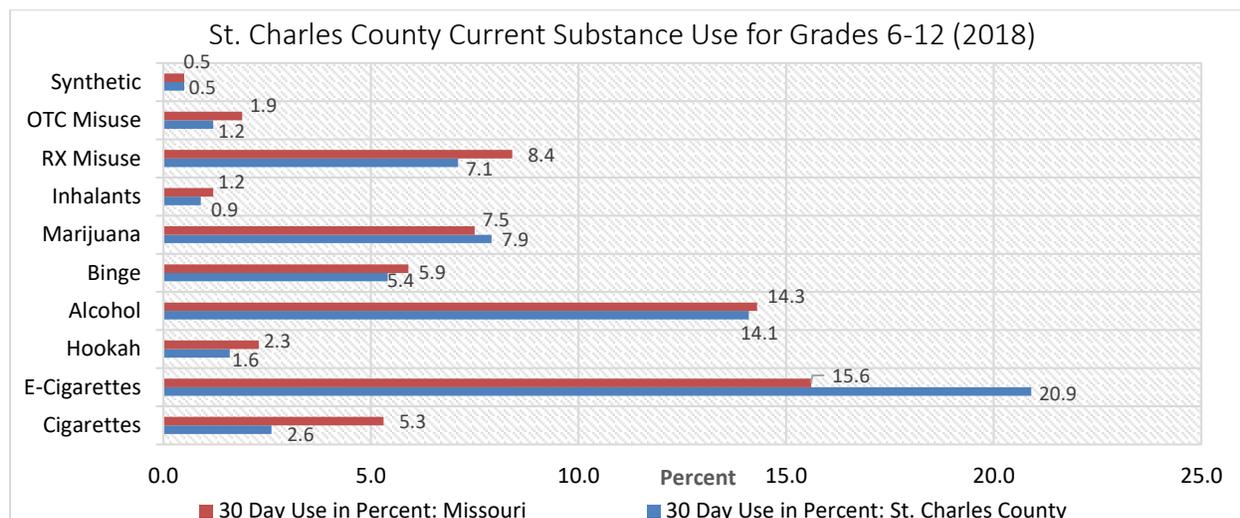


Source: Conduent Healthy Communities Institute

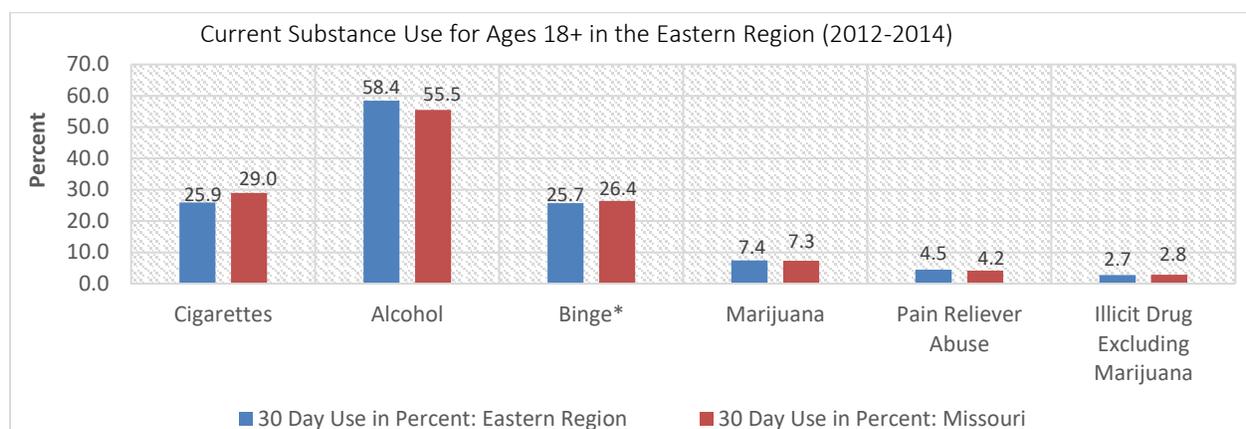


Source: Conduent Healthy Communities Institute

MENTAL/BEHAVIORAL HEALTH: SUBSTANCE USE AND ABUSE



Source: Missouri Department of Mental Health



Source: Missouri Department of Mental Health

ST. CHARLES COUNTY VS. MISSOURI & U.S. SUBSTANCE ABUSE RATE			
	ST. CHARLES COUNTY	MISSOURI	U.S.
Percent Adults who Smoke (2016)	16.8	22.1	17.1
Percent Adults who Drink Excessive (2016)	21.5	19.5	18.0
Percent Alcohol-Impaired Driving Deaths (2012-2016)	41.4	30.5	29.3
Death Rate due Drug-Poisoning / 100,000 Population (2015-2017)	20.6	20.8	19.3

Source: Conduent Healthy Communities Institute

DATA SOURCES USED FOR THE SECONDARY DATA ANALYSIS INCLUDED:

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>

CONDUENT HEALTHY COMMUNITIES INSTITUTE (HCI), 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. <http://www.healthycommunitiesinstitute.com/>

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/saint_louis_county_link.html

MISSOURI INFORMATION FOR COMMUNITY ASSESSMENT (MICA) is a 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. http://health.mo.gov/data/mica/MICA/County_Level_Study.

IMPLEMENTATION STRATEGY



Community Health Needs to Address

OBESITY

Due to COVID-19 all in-person classes and programs were cancelled, and virtual offerings will begin in December 15, 2020.

Community Health Need Rationale

Obesity now affects 17 percent of all children and adolescents in the U.S. — triple the rate from just one generation ago, according to the Centers for Disease Control. Childhood obesity can have a harmful effect on the body and lead to a variety of adult-onset diseases in childhood such as high blood pressure, high cholesterol, diabetes, breathing problems, socio-emotional difficulties and musculoskeletal problems.

Strategy Goal

To improve knowledge and skill in leading a healthy lifestyle among children and their families by offering a multi-disciplinary approach to weight management

Strategy Objectives

- a) Provide intensive group educational sessions that focus on nutrition, physical activity and emotional health to 30 children per year
- b) Increase knowledge of nutrition, physical activity and emotional health among participants by a 5 percent increase in average knowledge score among participants at post-test compared to pre-test at the end of 12 intensive group sessions

Strategy Action Plan

- I. St. Louis Children's Hospital currently provides the Head to Toe program twice annually to serve children from within St. Louis City as well as the surrounding community who have a written recommendation from their physician stating their need for the program. Expanding this program to St. Charles County will allow families to have access to the program closer to home.
- II. A Barnes-Jewish St. Peters & Progress West Hospital staff member will be trained, under the guidance of the Child Health Advocacy and Outreach department of St. Louis Children's Hospital, to facilitate 12 intensive group sessions on topics regarding physical activity, nutrition and emotional health. A committee comprised of a registered dietician, social worker and health promotion professionals will provide support.

Strategy outcomes

Participants learn skills and techniques that will help them incorporate heart healthy behavior into their lifestyles.

Strategy Outcomes Measurement

This program is evaluated by measuring improvements in physical activity, nutrition, self-image, family relationships and healthy behaviors. The tools used to measure these outcomes capture changes in behavior, knowledge, skill and readiness to change assessment tools. Progress will be

evaluated by measuring the number of sessions and the number of participants who complete pre- and post-assessment tools.

DIABETES

Due to COVID-19 all in-person classes and programs were cancelled. However, individual consultations and personal 1:1 class are in place. Additionally, virtual offerings in collaboration with Oasis began in June 2020 to provide education to the community.

Community Health Need Rationale

Diabetes is a leading cause of death in the United States. According to the Centers for Disease Prevention and Control (CDC), more than 25 million people have diabetes, including both diagnosed and undiagnosed cases. This disease can have a harmful effect on most of the organ systems in the human body; it is a frequent cause of end-stage renal disease, non-traumatic lower-extremity amputation, and a leading cause of blindness among working-age adults. Persons with diabetes are also at increased risk for ischemic heart disease, neuropathy and stroke. Diabetes disproportionately affects minority populations and the elderly, and its incidence is likely to increase as minority populations grow and the U.S. population becomes older. (Healthy Communities Institute). Therefore, the hospital will provide education and training to newly diagnosed patients and community members in need of additional support through the Diabetes Self-Management Education (DSME) program.

Strategy Goal

To increase the survival skill knowledge of adults with type 2 diabetes

Strategy Objectives

- a) Continual annual 10 percent increase of 2019 number of DSME participants
- b) Improve overall knowledge of 80 percent of the participants' survival skills assessment by an average of 10 percent from pre- to post testing
- c) Improve the participants' Hemoglobin A1C by an average of 5 percent from initial Hemoglobin A1C test provided by physician prior to program enrollment to the six-month Hemoglobin A1C test post enrollment

Strategy Action Plan

- a) Provide Diabetes Self-Management Education coached by a trained member of the Barnes-Jewish St. Peters Hospital and Progress West Hospital Diabetes Management Education Team (DMET) to educate participants during a four- week course.
- b) This class is for adult individuals in the community who have been diagnosed with Type II diabetes. In addition, one-on-one consultations can be scheduled for persons with Gestational, Type I or Type II Diabetes. Sessions are led by a certified diabetes educator and a registered dietitian who cover a multitude of topics related to care and self-management guidelines for this disease.
- c) Once diagnosed, the patient's physician would provide an order for the patient to attend the DSME class.
- d) Under the guidance of the BJSP/PWH DMET, staff will facilitate three sessions per month on the topics of DSME. The team is made up of a registered nurse diabetes educator and registered dietitian.

The clinical measurable point – as defined by ADA Guidelines:

- Decrease in Hemoglobin A1C

The Pre-Hemoglobin A1C will be sent to the DMET staff along with the physician's order for the patient to participate in the DSME class. The patient would then take a pre-test to determine the current diabetes survival skills knowledge at the first diagnosis of the disease. After the class, the patient would receive a post test to determine progression of education.

The patient's Hemoglobin A1C would be tested 3 months post class end to note progress of DSME results.

Knowledge to be tested for:

Survival skills - pre and posttest:

- a) Meal planning
- b) Medications
- c) Hypoglycemia awareness
- d) Blood Sugar monitoring
- e) Outpatient education

Education topics include:

- a) Diet
- b) Medications
- c) Exercise
- d) Prevention of low and high blood sugars, as part of the ADA Guidelines
- e) Prevention of chronic diabetes complications such as heart disease and stroke
- f) Blood sugar monitoring

Strategy Outcomes

Healthy behavior modification will reduce the risk of chronic complications.

Program Outcomes Measurement

Progress will be evaluated by measuring the number of survival skills assessed by patients who complete pre- and post-assessment tests. Further laboratory results both pre- and post-education can measure the clinical application of survival skill knowledge.

Community Health Needs that will not Be Addressed

BEHAVIORAL/MENTAL HEALTH & SUBSTANCE ABUSE

Barnes-Jewish St. Peters Hospital does not offer a behavioral health program. Community organizations are in place to address mental health and/or substance abuse issues. Although not a priority, the hospital is collaborating with SSM to set up a county-wide registry and will continue to refer and partner with mental health providers in the region.

- Bridgeway Behavioral Health
- Crider Health Center County Health Department
 - St. Charles County Drug Task Force
- Preferred Family Care

DENTAL HEALTH

Barnes-Jewish St. Peters Hospital does not provide preventive dental services while the hospital does recognize that this is a serious health concern for those lacking dental care. Patients that are seen in the emergency department are referred to a dentist, but this is often a difficult process as the county lacks providers willing to care for the underinsured or uninsured.

PEDIATRIC HEALTH

Barnes-Jewish St. Peters Hospital's partner hospital, Progress West Hospital will be addressing pediatric services and programs.

ACCESS: COVERAGE

The hospital will continue to assist patients to enroll them in any insurance coverage they are qualified for.

ACCESS: TRANSPORTATION

Barnes-Jewish St. Peters Hospital will continue to utilize partners to promote existing services to our patients. Transportation partners include iTN, Eastern Missouri Transportation Coordinating Council, OATS, local cab companies and others. Additionally, for health literacy the hospital partners with St. Charles City-County Library District and OASIS to bring programming to the community.

ASTHMA

Barnes-Jewish St. Peters Hospital will continue to offer education and support programs to its community; however, the hospital does not have the capacity to begin new initiatives.

HEALTH LITERACY

Although not a priority, Barnes-Jewish St. Peters Hospital continue to address this need through education initiatives already in place.

CANCER: BREAST/COLORECTAL/LUNG

Barnes-Jewish St. Peters Hospital will continue to partner with Siteman Cancer Center.