

# 2016 Community Health Needs Assessment and Implementation Plan

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# I. Executive Summary

Barnes-Jewish St. Peters Hospital is a 127-bed hospital located in St. Charles County in the City of St. Peters, Missouri. Barnes-Jewish St. Peters Hospital opened its doors in 1980. Over the past 36 years, Barnes-Jewish St. Peters Hospital has delivered high quality health care services to patients in the St. Charles County region. The hospital has also established effective partnerships towards 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 on 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 conducted its 2016 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 2013 and discussed changes that had occurred since 2013. 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 a hospital internal work group of clinical and non-clinical staff. Using multiple sources, including Healthy Communities Institute and Truven Health Analytics, a secondary data analysis was conducted to further assess the identified needs. This data analysis identified some unique health disparities and trends evident in St. Charles County when compared against data for the state and country.

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

At the conclusion of the comprehensive assessment process, Barnes-Jewish St. Peters Hospital identified three health needs where focus is most needed to improve the health of the community it serves: Lung Cancer, Breast Cancer and Obesity.

## **II. Community Description**

Barnes-Jewish St. Peters Hospital is located in St. Charles County in the City of St. Peters, Missouri, and for the purpose of the CHNA, the hospital's defined community is St. Charles County.

## St. Charles County Map

Barnes-Jewish St. Peters Hospital is located along the Interstate 70 corridor in Eastern/Central St. Charles County.



## **About Us**

Barnes-Jewish St. Peters Hospital 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. Barnes-Jewish St. Peters Hospital and Progress West Hospital are the two BJC HealthCare hospitals located in St. Charles County.

While these hospitals serve the same community and offer a full range of medical services, each hospital specializes in unique services.

Progress West Hospital is recognized for its Birthing Center and OB/GYN services for area mothers-to-be and families. When emergency health care is needed, Progress West Hospital provides a pediatric ER with physicians from BJC's St. Louis Children's Hospital to provide children with the highest-rated pediatric care in St. Charles County and beyond.

The Advanced Wound Center on the campus of Progress West Hospital provides comprehensive care for a variety of wound conditions. The staff works with patients and their physicians to establish the best treatment plan to improve a patient's quality of life by managing chronic wounds so they heal quickly and completely.

At Barnes-Jewish St. Peters Hospital, the Siteman Cancer Center offers a satellite location, bringing world-class care closer to home for patients in St. Charles County. The facility offers surgical, medical and radiation oncology care; cancer education, screening and support programs; and access to leading-edge clinical research studies at Washington University School of Medicine (WUSM). The freestanding facility treats approximately 1,000 patients a year with comprehensive cancer care, including Infusion Therapy.

Barnes-Jewish St. Peters Hospital has plans to expand its Therapy Services to include In-Patient Rehabilitation. With an emphasis on education, wellness and injury prevention, each patient will receive individualized treatment plans.

## **Demographics**

Progress West and Barnes-Jewish St. Peters hospitals define their community as St. Charles County. St. Charles County has a population of 385,590 (2015 Census estimate). The county population is:

- 50.8 percent female
- 49.2 percent male
- 87.6 percent White
- 4.8 percent African American percent Asian
- 3.2 percent Hispanic or Latino
- 1.9 percent two or more races

Based on the 2015 Census, the county includes 6.3 percent of Missouri's total population. The population of the county and the state has grown since the 2010 Census. In 2010, St. Charles County reported a total population of 360,485 compared to the state population of 6,083,672. From 2010-2015, the county population grew 7 percent and the state experienced a 1.6 percent increase in its population.

Table 1: Demographic of St. Charles County vs Missouri						
GEOGRAPHY	St. Charles County	Missouri				
Land area in square miles, 2010	560.44	68,741.52				
Persons per square mile, 2010	643.20	87.1				
POPULATION						
Population, July 1, 2015 estimate	385,590	6,083,672				
Population, 2010 (April 1) estimates base	360,485	5,988,923				
Population, percent change - April 1, 2010 to July 1, 2015	7.0%	1.6%				
ETHNICITY						
White, percent, 2015	90.4%	83.5%				
White, not Hispanic or Latino, percent, 2015	87.6%	79.8%				
African American, percent, 2015	4.8%	11.8%				
Hispanic or Latino, percent, 2015	3.2%	4.1%				
Asian alone, percent, 2015	2.6%	2.0%				
Two or More Races, percent, 2015	1.9%	2.2%				
American Indian and Alaska Native alone, percent, 2015	0.3%	0.5%				
Native Hawaiian and Other Pacific Islander alone, percent, 2015	0.1%	0.1%				
LANGUAGE						
Language other than English spoken at home, percent 5+, 2010-2014	6.0%	6.1%				
Foreign born persons, percent 2010-2014	3.8%	3.9%				
AGE						
Persons under 5 years, percent, 2015	6.1%	6.2%				
Persons under 18 years, percent, 2015	24.1%	22.9%				
Persons 65 years and over, percent, 2015	13.7%	15.7%				
GENDER						
Female persons, percent, 2015	50.8%	49.1%				
Male persons, percent, 2015	49.2%	50.9%				

Source: US Census Bureau

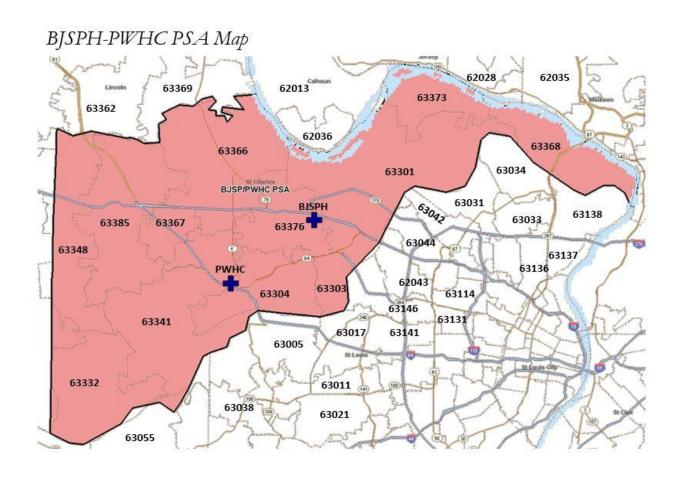
<sup>(</sup>a) Includes persons reporting only one race(b) Hispanics may be of any race, so also are included in applicable race categories(z) Value greater than zero but less than half unit of measure shown

Table 2: St. Charles County Demographic Including Education, Income, Housing vs. Missouri						
	St. Charles County	Missouri				
EDUCATION						
High school graduate or higher, percent of persons age 25+, 2010-2014	93.7%	88.0%				
Bachelor's Degree or higher, percent of persons age 25+, 2010-2014	35.5%	26.7%				
INCOME						
Per capita money income in the past 12 months (2011 dollars), 2010-2014	\$32,473	\$26,006				
Median household income (in 2014 dollars), 2010-2014	\$72,100	\$46,764				
Persons below poverty level, percent, 2010-2014	6.8%	15.5%				
HOUSING						
Housing units, 2014	149,648	2,746,599				
Owner-occupied housing unit rate, 2010-2014	80.0%	67.9%				
Housing units in multi-unit structures, percent, 2009-2013	15.6%	19.70%				
Median value of owner-occupied housing units, 2010-2014	173,000	136,700				
Households, 2010-2014	137,483	2,361,232				
Persons per household, 2010-2014	2.65	2.48				

Source: US Census Bureau

St. Charles County's median household income totaled \$72,100 (2010-2014) while the state median household income equaled \$46,764. Persons living below the poverty level in St. Charles County totaled 6.8 percent compared to 15.5 percent in the state. Home ownership was higher in St. Charles County (80 percent) versus 67.9 percent in the state.

For the purpose of the CHNA, the hospital identified St. Charles County as its focus area with emphasis on its primary service areas located in zip codes 63376, 63301, 63303 and 63366 and the following secondary zip codes: 63368, 63373, 63367, 63385, 63348, 63304, 63341 and 63332.



# III. Previous (2013) CHNA Measurement and Outcomes Results

At the completion of the 2013 CHNA, Barnes-Jewish St. Peters Hospital identified Health Literacy, Children's Health & Safety and Access where focus was most needed to improve the health of the community served by the hospital. The following table details results, goals and current status of these three community health needs. (See Full Report in Appendix D).

Table 3: Barnes Jewish St. Peters Hospital Measures of Success by Priority							
OBESITY	SMOKING CESSATION	ACCESS TO HEALTHCARE					
Success Measures	Success Measures	Success Measures					
Reduce the incidence of overweight and obese individuals in St. Charles County. Improve management of obesity-related diseases in individuals.	Increase the number of smokers that participate in a smoking cessation program. Increase the public's awareness about the harmful effects of second-hand smoke.	Provide access to under insured and uninsured individuals					
Increase Biggest Winner adult participation by five percent from the prior session.  Overall educational class score for pre- and post-knowledge test will increase by 10 percent.  Increase adult participation completion rate from 40 percent to 45 percent.  Increase group weight loss from two percent to three percent per session	Seventy-five percent or more of class participants will complete the four weeks.  Twenty-five percent or more of class participants that complete the four weeks will quit on their stop date.  Ten percent or more of class participants that complete the four weeks will remain successful by 30 days post session.	Maintain outside vendor service for determining insurance eligibility and facilitating the process. Provide 350 free flu shots to the community.  Conduct one health fair at Mid Rivers Mall in 2014 as part of the Heart Check program.					
	Provide a minimum of five public presentations annually about the harmful effects from smoking and second-hand smoke. Include messaging in all community calendars published by the hospital and direct mailed to 100,000 households in St. Charles County.	Maintain outside vendor service for determining insurance eligibility and facilitating the process. Provide 1500 free flu shots to the community. Conduct one health fair at Mid Rivers Mall in 2014 as part of the Heart Check program.					
Current Status:	Current Status:	Current Status:					
This program was discontinued with a replacement program set to start in Fall 2016 that will address overall wellness. At the start of 2017, the Head to Toe program will be offered to address obesity with a family focus.	Due to lack of participation the program was discontunued.	Continue to provide health insurance conselling to individuals that are eligible for insurance. The hospital conitnue to provide flu shot in clinic locations.					

## IV. Conducting the 2016 Needs Assessment

# A. Primary Data Collection

Barnes-Jewish St. Peters Hospital and Progress West Hospital collaborated in conducting a joint focus group with SSM St. Joseph Health Center (SJHC) and SSM St. Joseph West (SJW) 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-three of 29 invited participants representing various St. Charles County organizations participated in the discussion. (See Appendix B). The focus group was held on June 23, 2015 at the Spencer Library in St. Peters, Missouri, with the following objectives identified:

- 1. Determine whether the needs identified in the 2013 CHNA remain the correct focus areas
- 2. Explore whether any needs on the list should no longer be a priority
- 3. Determine where gaps exist in the plan to address the prioritized needs
- 4. Identify other potential organizations for collaboration
- 5. Discuss how the world has changed since 2013 when these participating hospitals firs identified these needs and whether there are new issues to consider
- 6. Evaluate what issues the stakeholders anticipate becoming a greater concern in the future to consider now

# **2016 CHNA Focus Group Summary**

All four hospitals identified Access to Care as a need each is addressing during the current implementation phase. The other needs being addressed in each hospital's implementation plan is provided in the table below:

Table 4: 2013 Health Needs Being Addressed by Each hospital								
Health Needs Being Addressed	Hospital N	Hospital Name						
	SJHC	SJW	BJSPH	PWH				
Access to Care	x	x	x	X				
Heart & Vascular Disease	х		x					
Respiratory Disease	х	X						
Obesity			x	X				
Smoking Cessation			x	X				
Substance Abuse	х							
Diabetes		X						
Public Safety				X				
Health Literacy				Х				

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

Health Literacy was specifically mentioned as one that involves many aspects of the health system, including knowledge of health insurance options, understanding a medical condition, treatment compliance and communication with health professionals.

# **Considerations for Adding to the List of Priorities**

Mental health is one of the ambulance district's top priorities. Like many places across the state and the country, there are limited resources in the community for those who need mental health services and are uninsured. This is true for adults and children. Mental health issues which have not been addressed contribute to the growth in substance abuse.

Substance abuse is also a more pressing issue than it was several years ago, with an increase in prescription drug and heroin abuse. This is also one of the ambulance district's top three priorities.

Dental health providers are extremely limited for children and adults who have no insurance.

Seniors and children were identified as special populations with specific needs, with pediatric asthma noted as an important issue.

# **Gaps in Implementation Strategies**

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

- Access: Services
- Health Literacy
- Mental Health Services
- Social Determinants of Health
- Substance Abuse

#### **New Issues of Concern since 2013 CHNA**

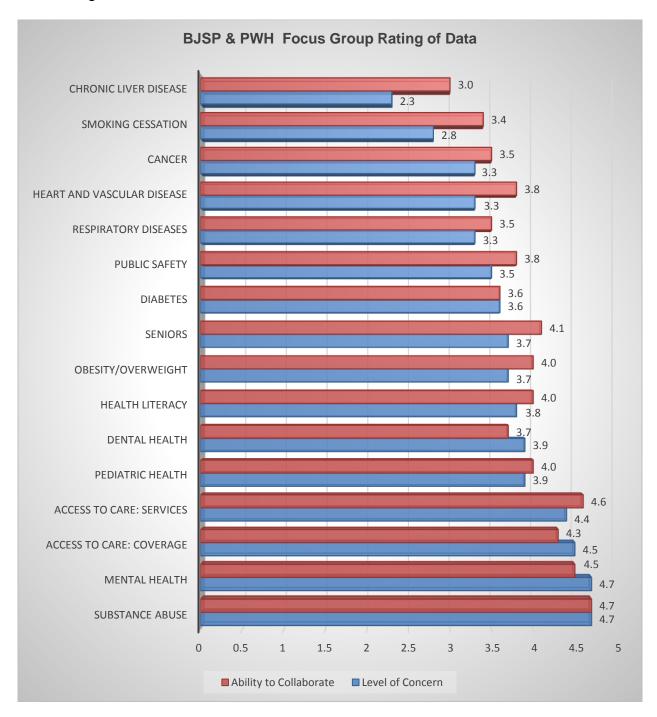
- Access to Transportation
- Population Changes
- Substance Abuse
- Access to Coverage
- Cancer
- Stigma Associated with Law Enforcement

# **Potential Partner Organizations**

A few organizations were identified as additional partners to consider in future collaborations and discussions, including the Community and Children's Resource Board of St. Charles; Preferred Family Healthcare; and United Way Ready by 21 St. Louis.

# **Rating of Needs**

Participants were given the list of the needs identified in the 2013 assessment and directed to re-rank them on a scale of 1 (low) to 5 (high), based on their perceived level of community concern and the ability of community organizations to collaborate in addressing:



Substance Abuse and Mental Health ranked highest in terms of level of concern as well as ability to collaborate. Access to Care: Coverage and Access to Care: Services ranked among the top needs. (See Appendix D for Complete Focus Group Report).

## **B. Secondary Data Analyses**

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.

Data sources used for the secondary data analysis included:

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/

**Hospital Industries Data Institute** (HIDI, 2014) is a data source that provides insight into the patterns and frequency of health care utilization in the hospital.

**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. (<a href="http://health.mo.gov/data/mica/MICA/County\_Level\_Study">http://health.mo.gov/data/mica/MICA/County\_Level\_Study</a>).

Centers for Disease Control and Prevention (CDC)/State Cancer Profiles is a web site that provide data, maps, and graphs to help guide and prioritize cancer control activities at the state and local levels. It is a collaboration of the National Cancer Institute and the Centers for Disease Control and Prevention. https://statecancerprofiles.cancer.gov

**Missouri Department of Mental Health** provides numerous comprehensive reports and statistics on mental health diseases, alcohol and drug abuse. <a href="http://dmh.mo.gov/ada/countylinks/saint\_louis\_county\_link.html">http://dmh.mo.gov/ada/countylinks/saint\_louis\_county\_link.html</a>

**Truven Health Analytics** offers health care data management, analytics and services and consulting to customers across the health care industry including hospitals and health systems, employers, health plans, life sciences companies, and state and federal government agencies. <a href="http://truvenhealth.com/">http://truvenhealth.com/</a>

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 Health & Stroke
- Obesity
- Asthma
- Mental Health/Behavioral Health
- Substance Use and Abuse
- Seniors

Following the secondary data analysis, a summary is provided that outlines observations noted in the disparities and trends for each of the above needs. (See Page 53). While Barnes-Jewish St. Peter's Hospital 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. Louis County.

## **Access to Health Care**

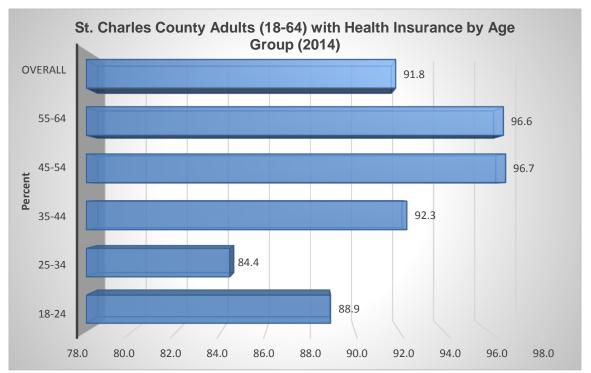
The ability to access health services has a profound and direct effect on every aspect of a person's well-being. Beginning in 2010, nearly 1 in 4 Americans lacked a primary care provider (PCP) or health center to receive ongoing medical services. Approximately 1 in 5 Americans, children and adults under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

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

Table 5: Access to Health Care							
Health Indicators	St. Charles County	Missouri					
Adults with Health Insurance in Percent: Age 18-64 (2014)	91.8	83.9					
Children With Health Insurance in Percent (2014)	94.5	92.8					
Primary Care Providers Rate / 100,000 (2012)	47	71					
Dentist Rate/100,000 (2013)	53	54					
Mental Health Providers Rate/100,000 (2014)	113	167					
Non-Physicians Primary Care Providers Rate / 100,000 (2015)	34	66					
Preventable Hospital Stays. Discharges / 1000 Enrollees (2013)	55	59					

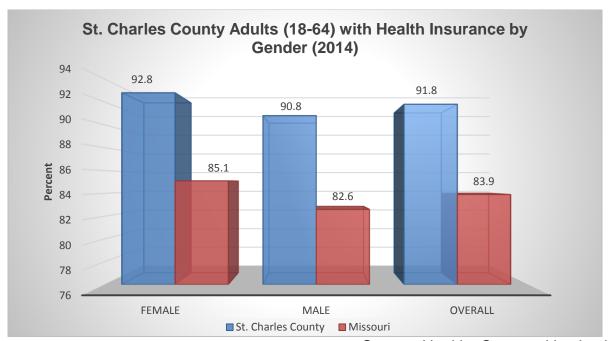
Source: Healthy Communities Institute

The rate of adults and children with health insurance in St. Charles County in 2014 was higher than the rate of the same age group in Missouri. The rate of primary care providers and mental health providers in the state was one and one-half times higher than the rate when compared to St. Charles County; the rate of dentists was statistically the same. The rate of non-physician primary care providers in the state was nearly double the rate when compared to the county. The rate of preventable hospital stays was lower in the county than in the state.



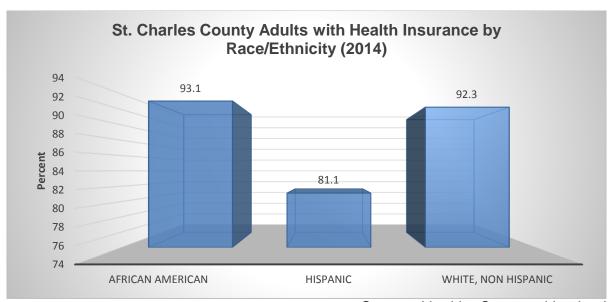
Source: Healthy Communities Institute

The overall rate of adults with health insurance living in St. Charles County was 91.8 percent, lower than the 100 percent national health target rate set by the Healthy People 2020. Of the total number of insured adults, the 45-54 age group and the 55-64 age group had the highest rate, followed by the 35-44 age group.



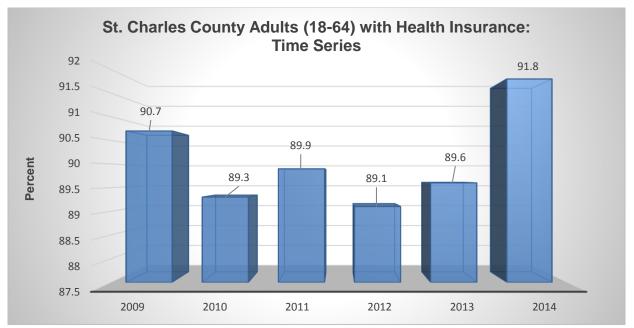
Source: Healthy Communities Institute

Females had a higher percentage of health insurance than males in both the county and state.



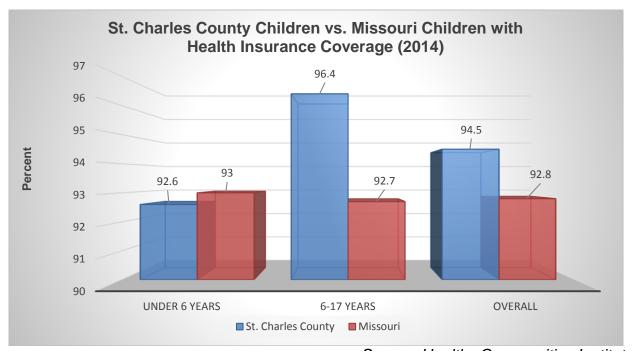
Source: Healthy Communities Institute

African Americans had the highest percentage of health insurance in St. Charles County.



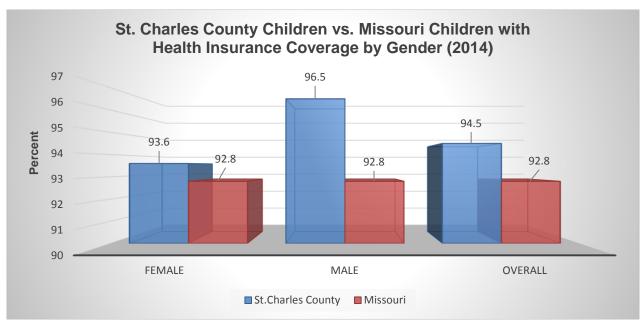
Source: Healthy Communities Institute

The rate of adults in St. Charles County with health insurance has remained relatively stable over time.



Source: Healthy Communities Institute

The rate of health insurance for children living in St. Charles County was above the rate of the state except for those under 6 years of age.



Source: Healthy Communities Institute

This graph shows a higher rate of both female children and male children living in St. Charles County with health insurance when compared to the state.

Access: Transportation

# **Access: Transportation**

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

Public transportation offers mobility to U.S. residents, particularly people without cars. Transit can help bridge the spatial divide between people and jobs, services and training opportunities. Public transportation is also beneficial because it reduces fuel consumption, minimizes air pollution and relieves traffic congestion.

Table 6: Access: Transportation (2010-2014)					
Health Indicators	St. Charles County	Missouri			
Households Without a Vehicle in Percent	3.6	7.4			
Workers Commuting by Public Transportation in Percent	0.2	1.5			
Mean Travel Time to Work; Age 16+	24 minutes	23.1			

Source: Healthy Communities Institute

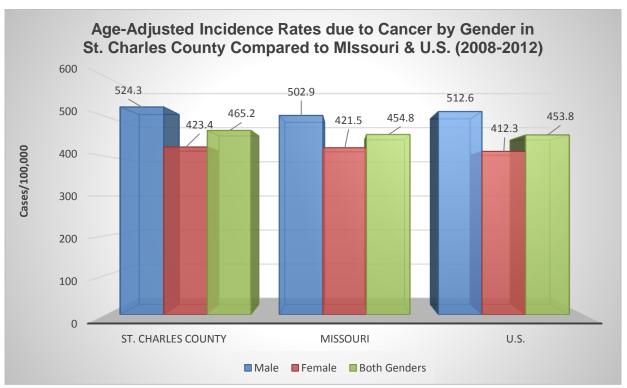
The Healthy People 2020 national health target is to increase the proportion of workers who take public transportation to work to 5.5 percent. Lengthy commutes cut into workers' free time and can contribute to health problems such as headaches, anxiety and increased blood pressure. Longer commutes require workers to consume more fuel, which is both expensive for workers and damaging to the environment. (Healthy Communities Institute).

The percentage of workers commuting by public transportation in St. Charles County is far below the rate of the state as well as the rate set by the Healthy People 2020.

## Cancer

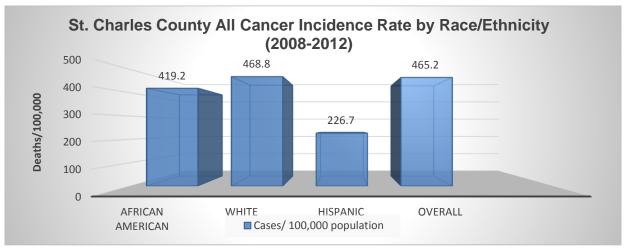
Cancer is a leading cause of death in the United States, with more than 100 different types of the disease. According to the National Cancer Institute, lung, colon and rectal, breast, pancreatic and prostate cancer lead in the greatest number of annual deaths.

St. Charles County elected to focus its analysis on all cancer rates as well as colon and rectum, breast and lung cancer.



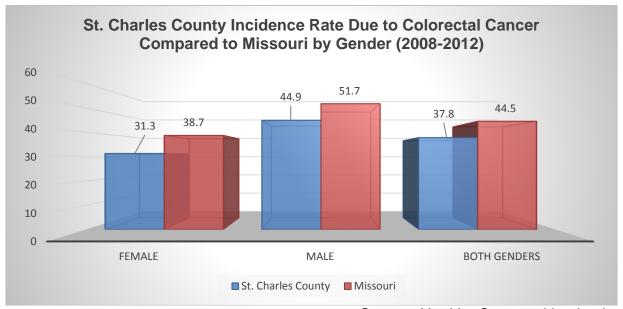
Source: CDC Cancer Profile

The cancer rate of males among the three populations was higher than the rate of females. St. Charles County had a higher rate of cases of both genders compared to Missouri and the U.S.



Source: Healthy Communities Institute

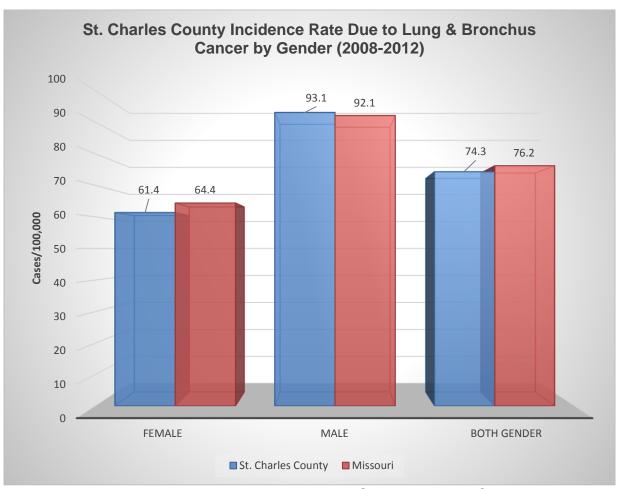
The all cancer incidence rate was higher among Whites in St. Charles County when compared to the rate of African Americans and more than twice the rate of Hispanics.



Source: Healthy Communities Institute

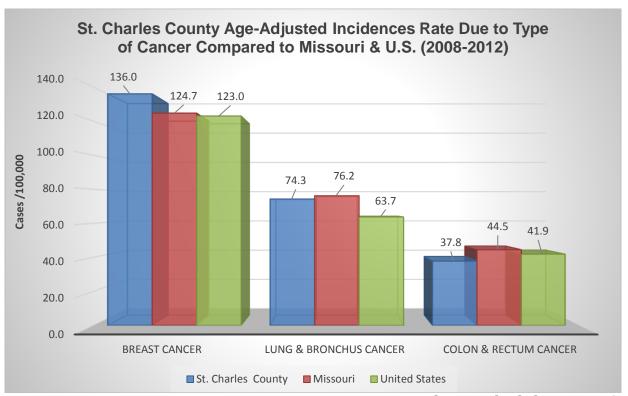
The incidence rate due to colorectal cancer was higher among males compared to females in the county as well as in the state. The overall rate in the county was below the rate of the state.

Cancer



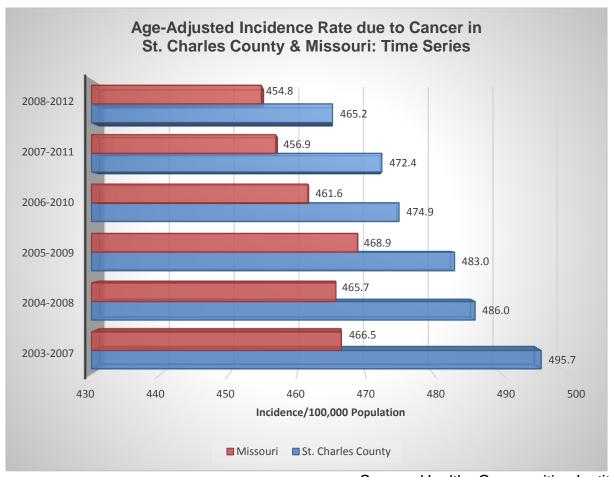
Source: Healthy Communities Institute

When comparing both genders, the overall incidence rate in the county was slightly lower than the rate in the state. The rate among females was lower in the county when compared to the state. The rate of males in the county and in the state was statistically the same.



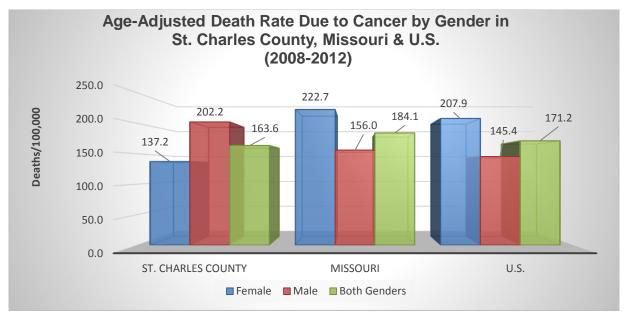
Source: CDC Cancer Profile

The breast cancer incidence rate in the county was higher than the rate in the state and the country. The rate of lung and bronchus cancer in the county was less than the state, but higher than the U.S. For colon and rectum cancer, the county rate was lower than both the state and the U.S.



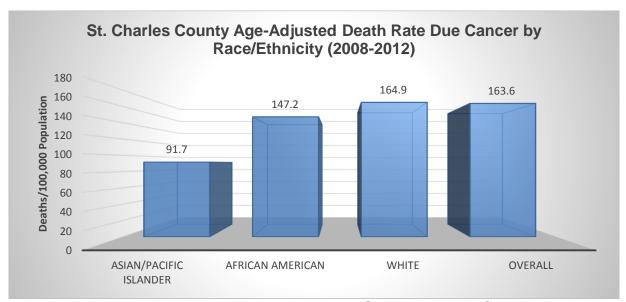
Source: Healthy Communities Institute

From 2003-2012, the cancer rate in St. Charles declined to 6.2 percent compared to 2.5 percent in Missouri.



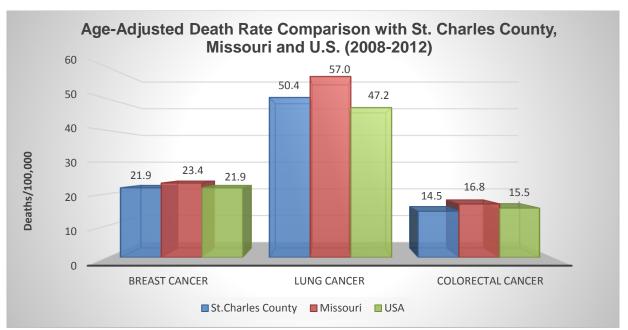
Source: CDC Cancer Profile

The overall age-adjusted death rate due to cancer for both genders was lower in St. Charles County than the rate in the country and the state. The death rate among females in the county was lower than the rate in the state and country. The state rate of females was almost one and one-half times the rate of the county. When comparing the rate of males, the county had a higher rate than the state and the country.



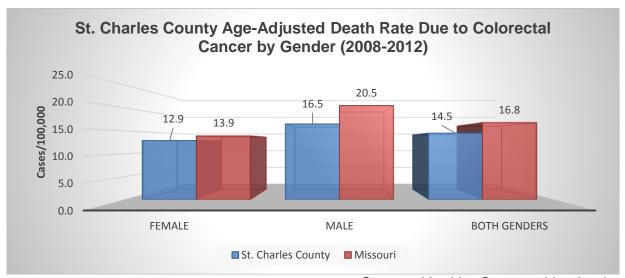
Source: Healthy Communities Institute

Whites in St. Charles County had a higher age-adjusted death rate due to cancer followed by African Americans and then Asians.



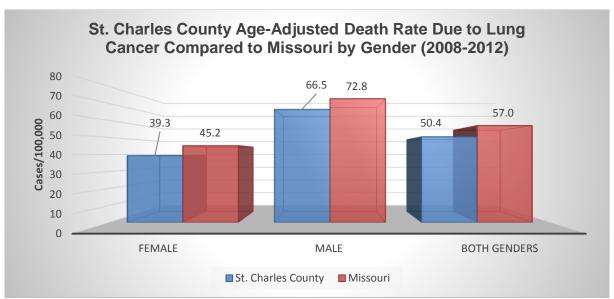
Source: CDC Cancer Profile

The rate of breast cancer death was statistically equal in the county and the U.S., while the rate in the state was slightly higher. When comparing the rate of lung cancer, the state had the highest rate. For colorectal cancer, the rate in the county was lower than the other two populations.



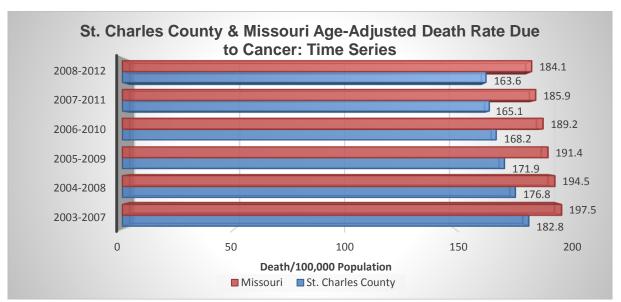
Source: Healthy Communities Institute

The Healthy People 2020 national health target is to reduce the colorectal cancer death rate to 14.5 deaths per 100,000 population. The death rate in the county due to colorectal cancer was equal to the national set target and was lower than the rate in the state. Females had lower rates than males in the county and in the state.



Source: Healthy Communities Institute

Males had a higher rate of lung cancer death than females in both the county and the state. Females had a lower rate in the county compared to the state. Neither the county nor the state met the Healthy People 2020 national health target of 45.5 per 100,000 population.



Source: Healthy Communities Institute

When comparing the death rate due to cancer, this graph shows a decline from 182.8 /100,000 during 2003-2007 to 163.6 /100,000 during 2008-2012. The rate of decline was statistically the same for both the state and the county. The St. Charles County rate was slightly higher than the Healthy People 2020 target, which is to reduce the overall cancer death rate to 161.4 deaths per 100,000 population.

## **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.

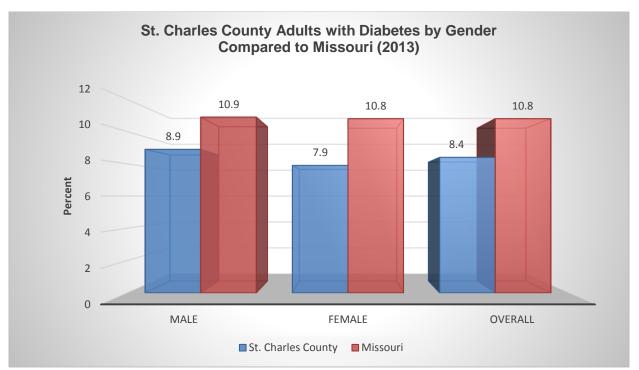
This disease can have a harmful effect on most of the organ systems in the human body; it is a frequent cause of end-stage renal disease, non-traumatic lower-extremity amputation, and a leading cause of blindness among working-age adults. Persons with diabetes are also at increased risk for ischemic 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. (Healthy Communities Institute).

Table 7: St. Charles County Three Years Moving Diabetes Mellitus Average Rates Compared to Missouri								
Health Indicators 2009-2011 2010-2013 2011-20								
Diabetes Mellitus	St. Charles County	Missouri	St. Charles County	Missouri	St. Charles County	Missouri		
Death / 100,000 population	15.28	20.49	15.26	20.42	15.49	20.23		
Hospitalizations /10, 000 population	11.25	17.20	11.17	17.27	12.09	17.39		
ER Visits/ 1000 population	0.92	1.75	0.85	1.76	0.82	1.80		

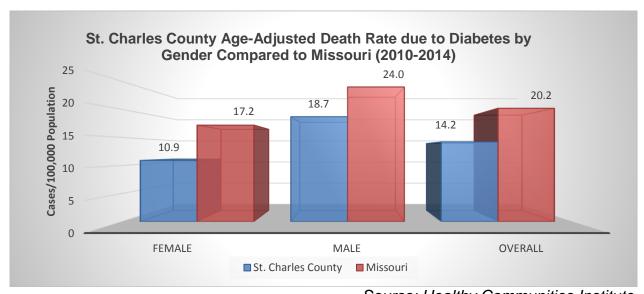
Source: Missouri Department of Health & Senior Services

This table represents the trend of diabetes mellitus in the last five years by using a three-year moving average. This provides information about the direction of diabetes. In St. Charles County, there was a steady rate of diabetes death. Hospitalizations reported a slight increase in the period ending 2014, while ER visits slightly declined. In the state, no appreciable change occurred during the past five years.



Source: Healthy Communities Institute

The overall rate of 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 for both populations.



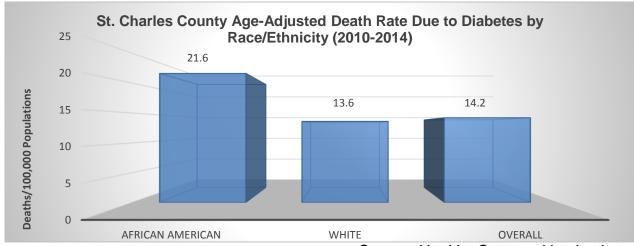
Source: Healthy Communities Institute

The overall diabetes death in the county was lower than the rate of the state. Males in the county rated higher than females in the county. Overall, both genders rated lower in the county than in the state.

Table 8: St. Charles County Diabetes Mellitus by Ethnicity / Race Compared to Missouri								
	St. (	Charles County	Missouri					
Health Indicators	White	African American	White	African American				
Diabetes Mellitus								
Deaths / 100,000 (2003-2013)	16	28.5	20.1	43.4				
Hospitalizations / 10,000 (2009-2012)	12.1	22.3	14.6	46.1				
ER Visits / 1,000 (2009-2013	0.8	2.2	1.5	4.9				

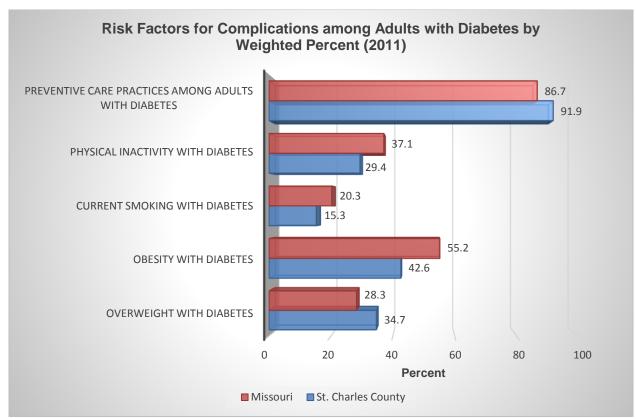
Source: Missouri Department of Health & Senior Services

The diabetes rate of death, hospitalization and ER visits among African Americans in the county and state was higher when compared to the rate of Whites. The death rate of African Americans in the county was one and one-half times lower than the rate of African Americans in the state; and more than one and one-half times higher than the rate of Whites in the county. The hospitalization rate of African Americans was almost twice the rate of Whites in the county and more than twice the rate in the state.



Source: Healthy Communities Institute

The overall death rate due to diabetes was 14.2 per 100,000 population. The death rate among African Americans was more than one and one-half times higher than the rate of Whites in the county.



Source: Healthy Communities Institute

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 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).

Table 9: Heart Disease & Stroke: St. Charles County vs. Missouri Age-Adjusted Rate Comparison							
Health Topics St. Charles County Misso							
Heart Disease							
Deaths / 100,000 (2003-2013)	172.4	216.8					
Hospitalizations / 10,000 (2009-2013)	113.3	123.1					
ER Visits / 1,000 (2009-2013)	11.9	14.7					
Ischemic Heart Disease							
Deaths / 100,000 (2003-2013)	119.8	144.7					
Hospitalizations / 10,000 (2009-2013)	34.9	38.3					
ER Visits / 1,000 (2009-2013)	0.2	0.6					
Stroke / Other Cerebrovascular Disease							
Deaths / 100,000 (2003-2013)	35.7	47.8					
Hospitalizations / 10,000 (2009-2013)	29.1	28.8					
ER Visits / 1,000 (2009-2013)	0.6	0.8					

Source: Missouri Department of Health & Senior Services

Based on Table 10, death, hospitalizations and ER visit rates due to heart disease in St. Charles County were lower when compared to the rates in Missouri. However, the hospitalization rate from stroke and other cerebrovascular disease was slightly higher in the county than the state. Overall, the rates in St. Charles County were lower than the rates in Missouri.

Table 10: St. Charles County Heart Disease & Stroke by Ethnicity / Race									
Health Topic	White	African American	White	African American					
Heart Disease	Heart Disease								
Deaths / 100,000 (2003-2013)	172.8	189.3	212.7	264.6					
Hospitalizations / 10,000 (2009-2013)	111.5	151.8	115.4	180.8					
ER Visits / 1,000 (2009-2013)	11.3	21.7	13.1	24.7					
Ischemic Heart Disease									
Deaths / 100,000 (2003-2013)	120.2	133.8	143.1	168.6					
Hospitalizations / 10,000 (2009-2013)	34.5	39.9	37.9	36.9					
ER Visits / 1,000 (2009-2013)	0.2	0.2	0.6	0.4					
Stroke / Other Cerebrovascular Disease									
Deaths / 100,000 (2003-2013)	35.4	50.9	46.4	60.9					
Hospitalizations / 10,000 (2009-2013)	28.5	41	26.7	44.7					
ER Visits / 1,000 (2009-2013)	0.6	0.7	0.7	0.7					

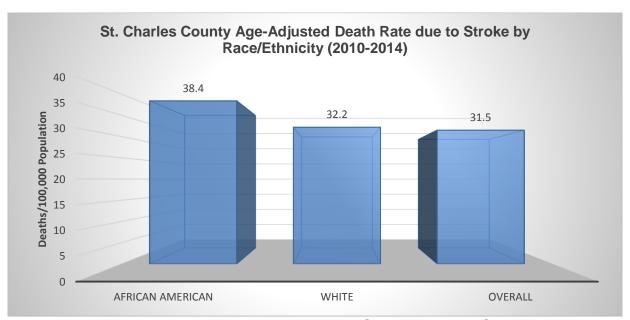
Source: Missouri Department of Health & Senior Services

In St. Charles County, Whites had a lower death, hospitalization and ER visit rate for heart disease, ischemic heart disease and stroke ischemic when compared to African Americans. In the state, Whites had lower rates when compared to African Americans in all categories except for ischemic heart disease, hospitalizations and ER visits.

Table 11: St. Charles County Three-Year Moving Heart Disease Average Rates Compared to Missouri								
Health Topic	2009-2011		2010-2012		2011-2013			
	St. Charles County	Missouri	St. Charles County	Missouri	St. Charles County	Missouri		
Heart Disease								
Deaths / 100,000	163.23	200.75	158.71	196.22	152.63	194.11		
Hospitalizations / 10,000	147.48	151.84	139.29	142.91	132.44	136.57		
ER Visits / 1,000	11.86	13.06	11.61	13.07	11.52	13.63		
Ischemic Heart Disease								
Deaths / 100,000	111.06	132.55	106.13	128.05	96.40	122.38		
Hospitalizations / 10,000	55.01	55.14	48.67	49.38	44.00	45.21		
ER Visits / 1,000	1.30	0.84	0.83	0.73	0.44	0.67		
Stroke / Other Cerebrovas	cular Disease							
Deaths / 100,000	34.99	43.90	32.79	42.83	30.99	41.73		
Hospitalizations / 10,000	29.49	30.42	29.83	29.55	30.18	29.51		
ER Visits / 1,000	0.73	0.81	0.69	0.79	0.64	0.77		

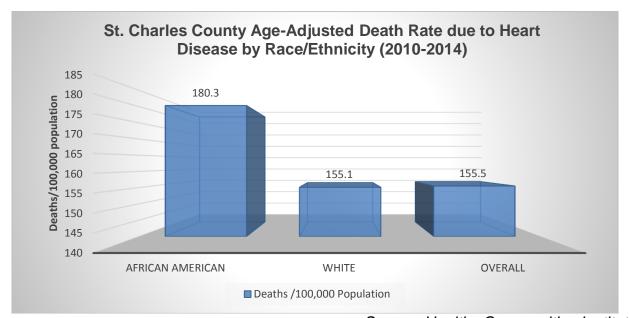
Source: Missouri Department of Health & Senior Services

This table represents the trend of heart disease by using a three-year moving average. This provides information about the direction of heart disease. From 2009-2013, a decrease was noted in both the county and the state with the exception of hospitalizations for stroke in the county and ER visits for heart disease in the state.



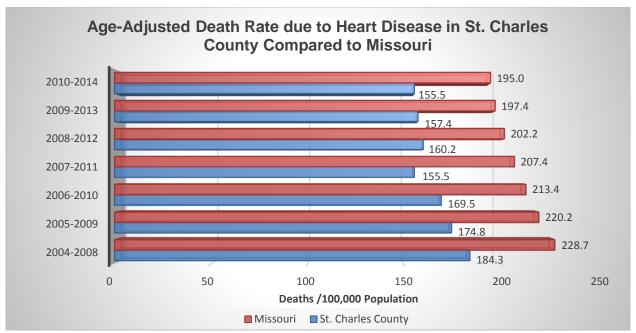
Source: Healthy Communities Institute

African Americans in St. Charles County had a higher death rate due to stroke when compared to Whites. The overall death rate due to heart disease was 31.5 per 100,000, lower than the rate of Healthy People 2020 national health target of 34.8 deaths per 100,000 population.



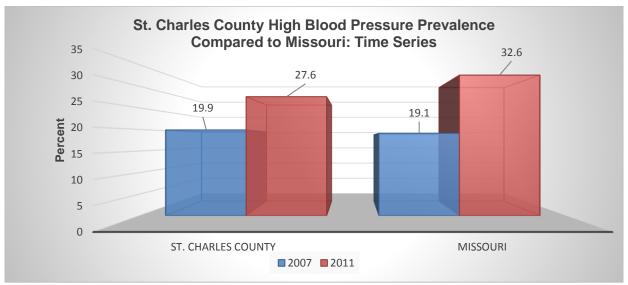
Source: Healthy Communities Institute

The overall death rate due to heart disease in St. Charles County was 155.5 per 100,000. When compared between race and ethnicity, African Americans had the highest rate.



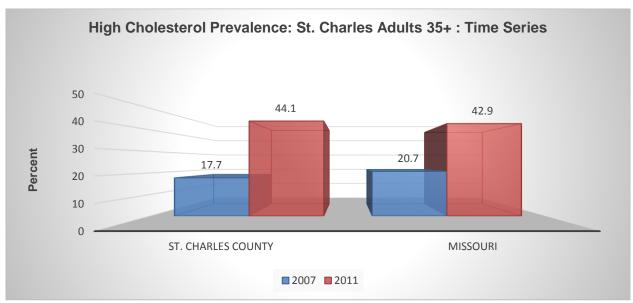
Source: Healthy Communities Institute

When comparing the death rate over the last decade in the county and the state, the graph indicates a steady decrease in the death rate due to heart disease in the state and the county. However, the rate in the county experienced an increase during the period of 2008-2012. Even though the state saw a decrease over the years, the rate in the county was lower than the rate in the state.



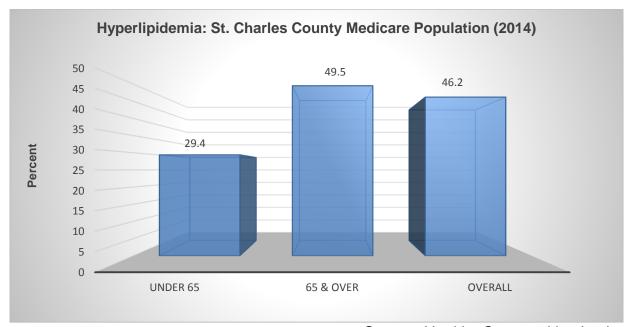
Source: Healthy Communities Institute

From 2007-2011, a 39 percent increase in the high blood pressure rate occurred in the county while the state reported a 71 percent increase.



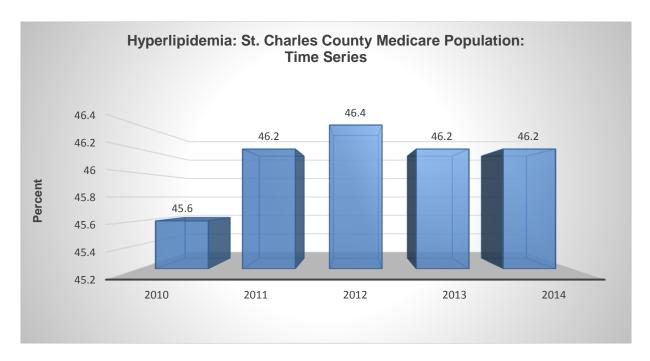
Source: Healthy Communities Institute

The 2007 rate of high cholesterol prevalence among adults 35+ in the county was lower than the rate in the state. In 2011, both the county and state rate more than doubled when compared to the 2007 rate.



Source: Healthy Communities Institute

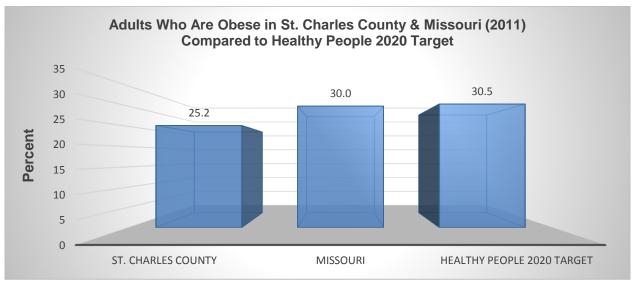
The rate of hyperlipidemia among the Medicare population was lower among those under 65 who qualified for Medicare compared to those 65 and over.



The rate of hyperlipidemia among the Medicare population reported a steady rate from 2011 to 2014.

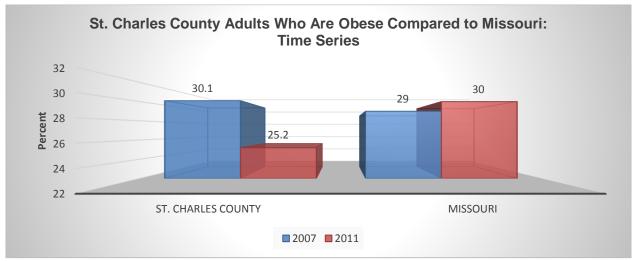
#### Obesity

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. (Healthy Communities Institute).



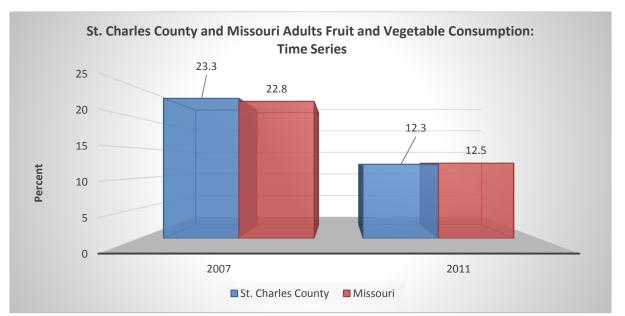
Source: Healthy Communities Institute

The rate of adults who were obese in both St. Charles County and Missouri was lower than the national rate set by Healthy People 2020. The county rate was lower than the rate of the state.



Source: Healthy Communities Institute

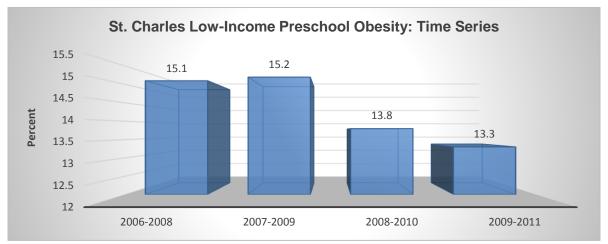
The rate of obesity in the county declined from 2007 to 2011 while the state rate slightly increased.



Source: Healthy Communities Institute

When comparing adult fruit and vegetable consumption, a 47 percent decrease occurred in St. Charles County and Missouri experienced a 45 percent decrease from 2007 to 2011.

It is essential to eat a fresh, healthy and balanced diet in order to maintain a healthy weight and prevent chronic disease. The USDA currently recommends four and one-half cups (nine servings) of fruits and vegetables daily for a 2,000-calorie diet, with higher or lower amounts depending on the caloric level. (Healthy Communities Institute).



Source: Healthy Communities Institute

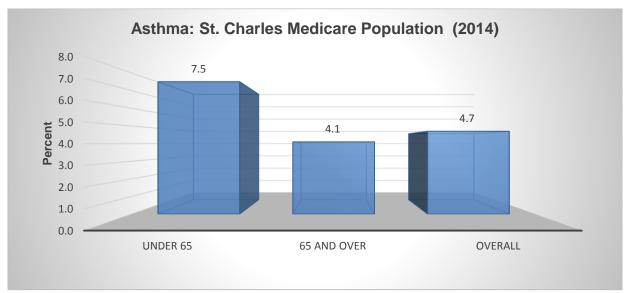
The St. Charles County low-income preschool obesity rate experienced a decrease from 2007-2009 to 2009-2011.

#### **Asthma**

Table 12: St. Charles County Three-Year Moving Asthma Average Rates Compared to Missouri						
Health Indicators	2009-2011 2010-2012			2011-2013		
	St. Charles County	Missouri	St. Charles County	Missouri	St. Charles County	Missouri
Asthma Death / 100,000 population	0.623348	1.08	0.6726	1.03	0.362596	0.9
Asthma Hospitalizations /10, 000 population	8.412714	13.38	8.394603	13.5	8.470	13.64
Asthma ER Visits/ 1000 population	3.325737	5.15	3.177433	5.2	3.055083	5.22

Source: Missouri Department of Health & Senior Services

The rates in St. Charles County remained steady over the five-year period with the exception of a 42 percent decrease in the asthma death rate in the period ending 2013. For the state, all rates for the period ending 2013 remained steady with the exception of a 16 percent decline in the asthma death rate.



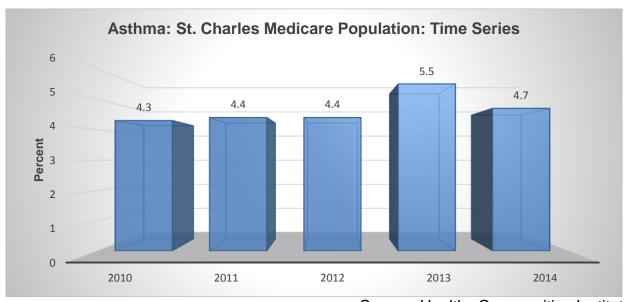
Source: Healthy Communities Institute

The Medicare population who are under 65 had a higher rate of asthma than those who are 65 and over.

Table 13: St. Charles County Asthma Rate Compared to Missouri				
Health Indicators St. Charles County Missouri				
	Rate	Rate		
Asthma Death / 100,000 Populaton 2003-2013	0.5	1.1		
Asthma Hospitalizations / 10,000 Population 2009-2013	7.7	12.5		
Asthma ER Visits / 1,000 Population 2009-2013	3.0	5.3		

Source: Missouri Department of Health & Senior Services

The rate of asthma death, hospitalization and ER visits in St. Charles County was lower than the rate in the state.



Source: Healthy Communities Institute

The rate of asthma in the Medicare population remained stable from 2010-2012 followed by an increase in 2013. Although the rate decreased in 2014, the rate was higher than the rate observed from 2010 to 2012.

Table 14: Asthma Rate in St. Charles County & Missouri State by Ethnicity / Race				
Health Indicators	St. Charles County Missouri			Missouri
	White	African American	White	African American
Death / 100,000 (2003-2013)	0.6	0.0	0.9	3
Hospitalizations / 10,000 (2009-2013)	7	15.9	8.2	39.2
ER Visits / 1,000 (2009-2013)	2.4	10.4	3.1	17.4

Source: Missouri Department of Health & Senior Services

In Missouri during 2003-2013, the death rate among African Americans was three times higher than the rate of Whites. In St. Charles County, African Americans reported a zero death rate in the county while the death rate of Whites was 0.6 per 100,000 population. The hospitalization and ER visit rates for both Whites and African Americans were less in the county than in the state during 2009-2013.

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. (Healthy Community Institute).

Asthma

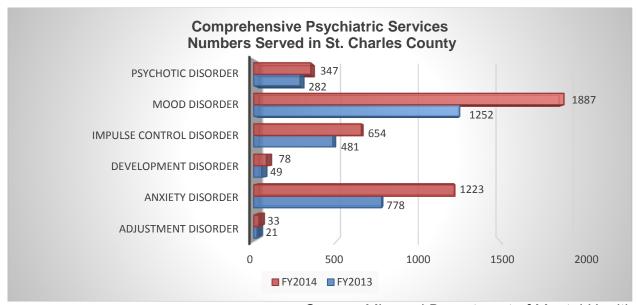
Table 15: St. Charles Respiratory Diseases Rates Compared to Missouri				
Health Indicators	St. Louis County	Missouri		
Adults with Current Asthma in Percent (2011)	6.2	10.1		
Age-Adjusted Death Rate due to Chronic Lower				
Respiratory Disease /100,000 Population (2010-2014)	36.5	51.7		
Asthma: Medicare Population in Percent (2014)	4.7	4.8		
COPD: Medicare Population in Percent (2014)	11.5	13.2		

Source: Missouri Department of Health & Senior Services

The Chronic Lower Respiratory Disease (CLRD) rate in the county had a 30 percent lower rate than the state. The rate of asthma among the Medicare population was similar in the county and the state. The rate of COPD in the Medicare population was lower in the county than the state.

#### **Behavioral Health/Mental Health**

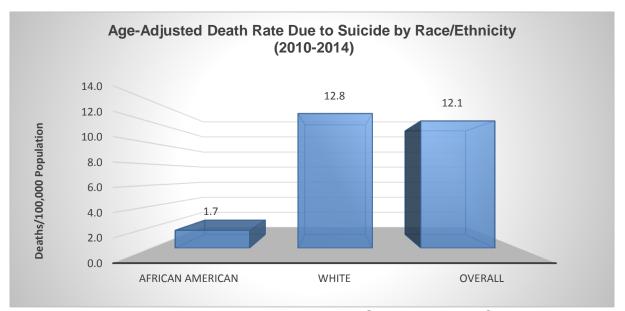
In 2014, there was an estimated 9.8 million adults age 18 or older in the U.S. with a serious mental illness. This number represented 4.2 percent of all U.S. adults. (National Institute of Mental Health).



Source: Missouri Department of Mental Health

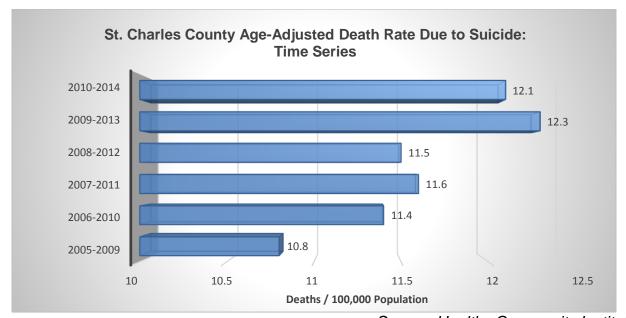
The graph above indicates the number of clients seen with each diagnosis in 2013 and 2014. An individual client may have had more than one admission within a year. Increases in all psychiatric services occurred from 2013 (2,863) to 2014 (4,222) in St. Charles County with the largest increase seen in mood disorders followed by anxiety disorders. (Missouri Department of Mental Health, 2014).

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



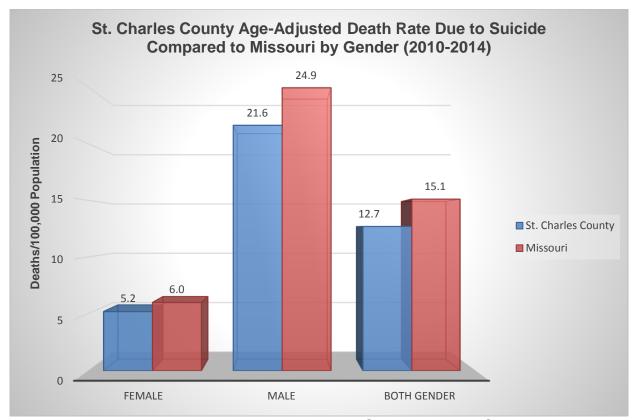
Source: Healthy Communities Institute

The Healthy People 2020 national health target is to reduce the suicide rate to 10.2 deaths per 100,000 population. The overall rate in St. Charles County was 12.1 per 100,000 population, which is higher than the national target rate. The death rate of suicide among Whites was more than seven and one-half times the rate of African Americans.



Source: Healthy Community Institute

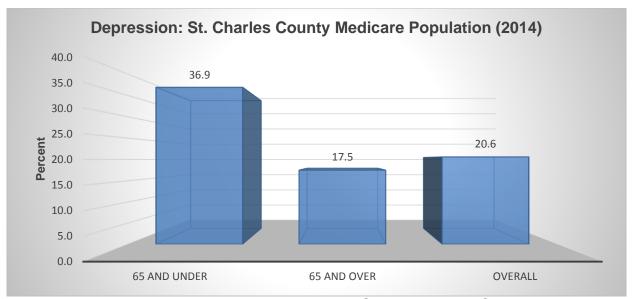
In the last decade, a noted increase occurred in the suicide rate in the county, a major public health concern.



Source: Healthy Communities Institute

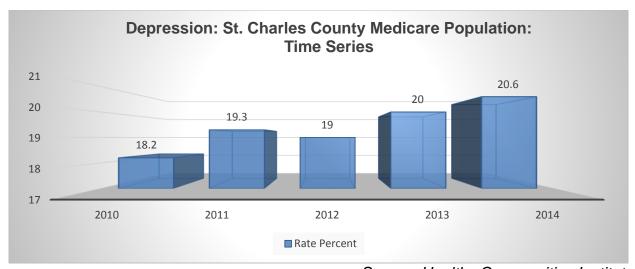
The death rate of suicide in St. Charles County among males was more than four times the rate of females. The overall rate in the county was lower than the rate in the state. The rate was also lower among both genders when compared to the state.

Depression 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.



Source: Healthy Communities Institute

The rate of depression among the population under 65 in St. Charles County was higher than the rate of the Medicare population 65 and over.

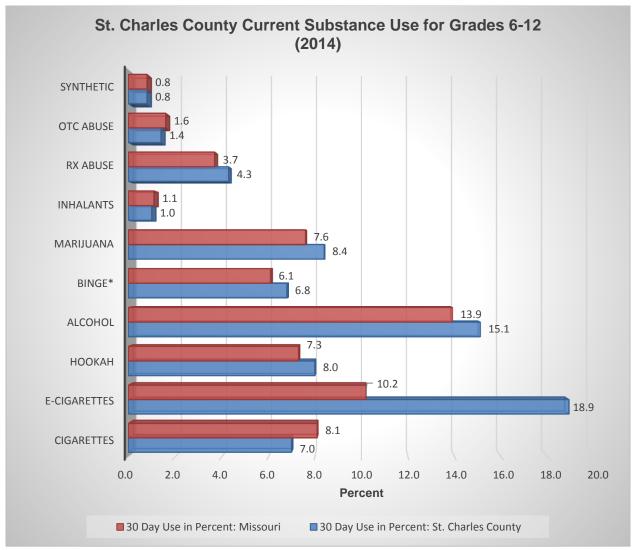


Source: Healthy Communities Institute

The rate of depression among the Medicare population in the county increased from 2010 to 2011, followed by a slight decrease in 2012. From 2013 to 2014, the rate increased.

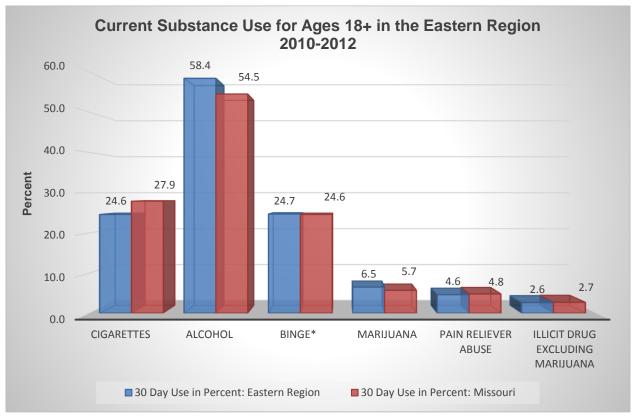
#### **Substance Use and Abuse**

The availability of county-level data on substance use and abuse is limited. In 2012, St. Charles County residents had a total of 180 alcohol-related and 128 drug-related hospitalizations. In addition, there were 528 alcohol-related and 414 drug-related ER visits that did not include a hospital stay. In 2014, 1,069 individuals in St. Charles County were admitted into substance abuse treatment programs. A total of 561 were primarily due to alcohol while marijuana was the reason for 213 admissions. (Missouri Department of Mental Health).



Source: Missouri Department of Mental Health

E-Cigarettes and alcohol were the substance most used among those in grades 6-12 in the county. The use of most substances in the county was higher than the use in the state. Cigarette use was higher in the state than in the county.



Source: Missouri Department of Mental Health

Alcohol and marijuana use were slightly higher in the Eastern Region than Missouri, yet cigarettes, binge drinking (\*5+ drinks on a single occasion in last 30 days), pain reliever abuse and illicit drug use excluding marijuana use rates were lower in the Eastern Region than the state.

Tobacco is the agent most responsible for avoidable illness and death in America today. Tobacco use brings premature death to almost half a million Americans each year, and it contributes to profound disability and pain in many others. Approximately one-third of all tobacco users in this country will die prematurely because of their dependence on tobacco. Areas with a high smoking prevalence will also have greater exposure to secondhand smoke for non-smokers, which can cause or exacerbate a wide range of adverse health effects, including cancer, respiratory infections and asthma. (Healthy Communities Institute).

The Healthy People 2020 national health target is to reduce the proportion of adults age 18 years and older who smoke cigarettes to 12.0 percent; 16.4 percent of adults currently smoke in St. Charles County.

#### **Secondary Data Summary**

The collection of secondary data available about St. Charles County revealed a number of findings:

- The rate of primary care providers and mental health providers in the state was one and one-half times the rate when compared to St. Charles County. The rate of non-physician primary care providers in the state is nearly double the rate when compared to the county.
- From 2003-2012, the cancer rate in St. Charles declined to 6.2 percent compared to 2.5 percent in Missouri. The all cancer incidence rate was higher among Whites in St. Charles County when compared to the rate of African Americans and more than twice the rate of Hispanics. The breast cancer incidence rate in the county was higher than the rate in the state and the country.
- When comparing the risk factors for complications among adults with diabetes, preventive care practices are higher in St. Charles County than the state.
   However, the rate of those that are overweight with diabetes is higher in the county than the state. The death rate of African Americans in the county was one and one-half times lower than the rate of African Americans in the state; and more than one and one-half times higher than the rate of Whites in the county.
- African Americans in St. Charles County have the highest death rate due to stroke when compared to Whites. In 2011, both the county and state rate more than doubled when compared to the 2007 rate. From 2007-2011, a 39 percent increase in the high blood pressure rate occurred in the county while the state reported a 71 percent increase.
- When comparing adult fruit and vegetable consumption, a 47 percent decrease occurred in St. Charles County and Missouri experienced a 45 percent decrease from 2007 to 2011. The rate of obesity in the county declined from 2007 to 2011 while the state rate slightly increased.
- In the last decade, a noted increase occurred in the suicide rate in the county. The death rate of suicide in St. Charles County among males was more than four times the rate of females.
- Increases in demand for all psychiatric services occurred from 2013 to 2014 in St. Charles County with the largest increase seen in mood disorders followed by anxiety disorders. In 2014, 1,069 individuals in St. Charles County were admitted into substance abuse treatment programs; 561 were primarily due to alcohol while 213 admissions were for marijuana use.
- E-Cigarettes and alcohol lead the substance most used among those in grades 6-12 in the county.

#### C. Internal CHNA Work Group Prioritization Meetings

Progress West and Barnes-Jewish St. Peters hospitals 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 C).

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 as a team on Dec. 4, 2015 and reviewed the purpose for the CHNA, role of the work group and goals for the project. The team reviewed the key findings from the 2013 report and the current findings from the 2015 focus group. The 2015 focus group perceptions were then reviewed and discussed.

Through discussion and consensus, the team narrowed the list of the health needs from 15 to 10 health needs. The team made its decision by reviewing resources available including staffing, program availability and hospital service lines.

Table 16: BJSP & PWH List of Primary Data	
Stakeholders Focus Group: List of Community Health Needs	BJSP & PWH CHNA Work Group: Top 10 Community Health Needs
Smoking	Diabetes
Diabetes	Obesity
Obesity	.Health Literacy
Health Literacy	Access
Access	Breast Cancer
Breast Cancer	.Lung Cancer
Lung Cancer	Colorectal Cancer
Colorectal Cancer	Mental Health
Lifestyle/Sedentary/Nutrition	Asthma
Mental Health	Substance Abuse
Asthma	
Seniors	
Dental Health Care	
Substance Abuse	
Pediatric Health	

Highlighted above in red are the needs the work group decided not to include in its top list. The right column lists the top 10 community health needs the work group selected in rank order.

- Smoking The hospital tried to address smoking in the community in 2013, but failed due to lack of community participation.
- Lifestyle/Sedentary/Nutrition The hospital will continue to address with nutritional counseling to those referred to nutritionist by PCP.
- Seniors This group was not considered a health need, but rather a population that needs focus when addressing needs in the community.
- Dental Health Care The hospital does not provide dental services, therefore, the hospital does not believe it can make an impact on this need.

BJC developed common, system-wide nomenclature guidelines to ensure that each hospital uses the same terminology in its CHNA and implementation plan when referring to community health needs. As a result, the internal work group made changes to its list of top identified needs prior to prioritization. In the table below, health needs are listed followed by an expanded break down of the health need.

Table 17: Community Health Needs List for Ranking including Nomenclature Revisions
Obesity
Health Literacy
Diabetes
Mental/Behavioral Health: Substance Abuse
Opioid
Heroin
Meth
Alcohol Use & Abuse
Mental / Behavioral Health: Mental Health Disorder
Depression
Suicidal
Anxiety
Schizophrenia
Bi-Polar
Acces to Health care
Access: Coverage
Access: Services
Access: Transportation
Cancer
Colorecta
Breast
Lung
Asthma

Following the nomenclature revision, the internal work group list of top community health needs expanded from 10 to 19 shown in the right column in the table below.

Table 18: List of Primary Data Collection By Focus Group & BJSP & PWH Internal Team After Nomenclatures Revision				
Stakeholders Focus Group: List of Community Health Needs	BJSP & PWH Center CHNA Work Group: Top 19 Community Health Needs			
Smoking	Obesity			
Diabetes	Health Literacy			
Obesity	Diabetes			
Health Literacy	Opiod			
Access	Heroin			
Breast Cancer	Meth			
Lung Cancer	Alcohol Use & Abuse			
Colorectal Cancer	Depression			
Lifestyle/Sedentary/Nutrition	Suicide			
Mental Health	Anxiety			
Asthma	Schizophrenia			
Seniors	Bi-Polar			
Dental Health Care	Access: Coverage			
Substance Abuse	Access: Services			
Pediatric Health	Access: Transportation			
	Colorectal			
	Breast			
	Lung			
	Asthma			

#### Meeting 2

The work group met again Jan. 6, 2016 for the purpose of reviewing the secondary data and discussing and prioritizing the top 19 community health needs. The work group reviewed all health needs and held a discussion about the importance of each need and its effect on the community.

During the second meeting, the work group also reviewed the criteria to rank the top 19 health needs. The criteria for prioritizing the needs identified by the focus group was agreed upon by the internal work group.

Table 19: Criteria For Priority Setting			
	Rating	Weight	Score
How many people are affected by the problem?			
What are the consequences of not addressing this problem?			
Are existing programs addressing this issue?			
How important is this problem to community members?			
How does this problem affect vulnerable populations?			
The total score			

Source: Catholic Health Association

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

Participants were encouraged to discuss how and why each arrived at the ranking. The internal work group ranked Obesity as the highest community health need followed by Health Literacy. Bi-Polar scored the lowest of all the needs.

Table 20: BJSP & PWH Internal Work Group: Ranking of Top 19 Community  Health Needs		
Highest to the Lowest Needs	Total Scores	
Obesity	485	
Health Literacy	449	
Diabetes	447	
Opiod	416	
Depression	401	
Heroin	386	
Access: Coverage	373	
Colorectal	368	
Suicidal	365	
Breast	348	
Alcohol	343	
Access: Services	338	
Lung	322	
Meth	320	
Access: Transportation	297	
Anxiety	291	
Asthma	286	
Schizophrenia	174	
Bi-Polar	168	

After the work group discussed its ranking, members also compared these results to the external focus group ranking. (See Page 13). The internal team discussed the ranking level of each need by the team as well by the focus group.

Next, the work group reviewed results of the secondary data using the Healthy Communities Institute (HCI) Data Scoring Tool, which compares data from similar communities in the nation. The tool provides a systematic ranking of indicators for 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.

#### **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 HCI scoring tools

Rank	Table 21: Community Health	Needs: Primary & Secondary	Data Ranking Comparaison
1	Top Needs by Focus Group	Top Needs By BJSP / PWH Internal Team	HCI Scoring Based on all Available National Data
2	Substance Abuse	Obesity	Workers who Drive Alone to Work
3	Mental Health	Health Literacy	Cancer: Medicare Population
4	Access to Care: Coverage	Diabetes	Chronic Kidney Disease: Medicare Population
5	Access to Care: Services	Opiod	Alzheimer's Disease or Dementia: Medicare Population
6	Pediatric Health	Depression	Breast Cancer Incidence Rate
7	Dental Health	Heroin	Depression: Medicare Population
8	Health Literacy	Access: Coverage	Atrial Fibrillation: Medicare Population
9	Obesity/Overweight	Colorectal Cancer	Adults who Drink Excessively
10	Seniors	Suicidal	Alcohol-Impaired Driving Deaths
11	Diabetes	Breast Cancer	Social Associations
12	Public Safety	Alcohol	Stroke: Medicare Population
13	Respiratory Diseases	Access: Services	Workers Commuting by Public Transportation
14	Heart and Vascular Disease	Lung Cancer	Osteoporosis: Medicare Population
15	Cancer	Meth	Hyperlipidemia: Medicare Population
16	Smoking Cessation	Access: Transportation	Farmers Market Density
17		Anxiety	Non-Physician Primary Care Provider Rate
18		Asthma	Children With Low Access to a Grocery Store
19		Schizophrenia	Grocery Store Density
20		Bi-Polar	Rheumatoid Arthritis or Osteoarthritis: Medicare

- Substance Abuse, Cancer and Mental Health, and related conditions of each, were ranked by all three groups. The focus groups ranked Substance Abuse 1<sup>st</sup> and Mental Health 2<sup>nd</sup>.
- Obesity was ranked 1st by the internal work group and 8th by the focus group.
- Health Literacy was ranked 2<sup>nd</sup> by the internal group and 8<sup>th</sup> by the focus group.

- Access to Care: Coverage was ranked 4<sup>th</sup> by the focus group and 8<sup>th</sup> by the internal group.
- Access to Care: Services was ranked 5<sup>th</sup> by the focus group and 13<sup>th</sup> by the internal group.
- Diabetes was ranked 10<sup>th</sup> by the focus group and 3rd by the internal work group.
- Heart Disease, and related conditions, was listed 13<sup>th</sup> by the focus group and 7<sup>th</sup> by HCI.

After reviewing the secondary data, the team discussed all of the information provided and compared the information to its core competencies as well as the resources available. The group looked at how the hospitals could affect change successfully based on the issues presented through the rankings.

Additionally, members considered needs based on impact on the community and if other organizations were already addressing a particular need. The work group also reviewed available hospital resources, including staffing, program availability and hospital service lines to meet the need.

Participants reviewed and discussed the differences among all rankings and were provided the opportunity to change their rankings. Individual rankings were totaled to yield a composite ranking.

At the conclusion of the comprehensive assessment process, Barnes-Jewish St. Peters Hospital identified three health needs where focus is most needed to improve the future health of the community it serves: Lung Cancer, Breast Cancer and Obesity.

#### V. 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.

# Apppendix B

## Focus Group Participants and Hospitals' Observants

**Focus Group Participants** 

Focus Group Participants				
Last Name	First Name	Organization		
Curran	Jo	Woman's Place (Sts. Joachim & Ann)		
Drabelle	Tom	City of O'Fallon		
Drachnick	Scott	Economic Development Center		
DuBray	Bernie	Fort Zumwalt School District		
Glenn	John	United Way of Greater St. Louis		
Griffith	Allison	St. Charles City-County Library District		
Gongaware	Nancy	Crider Health Center		
Heise	Beth	Youth in Need		
Hirsch	Terri	Mid-East Area on Aging		
Hockett	Anita	Volunteers in Medicine		
Hutchison	Mary	Community Council		
Joyce	Ту	Renauld Spirit Center		
Kohrs	Lori	United Services		
Kruse	Paul/Lana	First Steps Back Home		
Lewis	Dave	St. Louis Charles County Ambulance District		
Leykam	Joann	St. Charles County Government		
Mack	Rose	Alderwoman, City of O'Fallon		
Mahan	Miriam	Sts. Joachim & Ann Care Service		
Moellenhoff	Cheryl	Volunteers in Medicine		
Mueller	Julie	Lindenwood University		
Neff	Curt	Cavalry Church		
Pyatt	Kevin	City of Wentzville		
Raines	Doug	Central County Fire & Rescue		
Somogyi	Jill	Crisis Nursery		
Tate	Scott	St. Charles Chamber of Commerce		
Thurman	Cheri	Wentzville School District		
Wilson	Juan	St. Charles County Drug Task Force		
Woodson	Hope	St. Charles County Department of Health		

Hospitals' Observants			
Last Name	First Name	Hosptals	
Bakker	Kim	SSM	
Chambers	Angela	BJC HealthCare	
Bowers	Mike	SSM	
Dabrowski	Jack	BJC Healthcare	
Hayes	Keeley	SSM	
Haney	Kenya	BJC HealthCare	
Pestle	Janet	SSM	
King	Karley	BJC HealthCare	
Wescott	Lisle	SSM	
McLaughlin	Karen	BJC HealthCare	
Williams	Kristin	BJC HealthCare	
Nagasako, MD	Elna	BJC HealthCare	
Livers	Kerrie	BJC HealthCare	
Goldstein	Kaylan	BJC HealthCare	

### **Appendix C**

# PERCEPTIONS OF THE HEALTHCARE NEEDS OF ST. CHARLES COUNTY RESIDENTS FROM THE VIEWPOINT OF COMMUNITY LEADERS

## Prepared by:

Angela Ferris Chambers
Manager, Market Research & CRM
BJC HealthCare

## **Prepared for:**

Jack Dabrowski
Director, Marketing and Communications
Barnes-Jewish St. Peters Hospital
Progress West Hospital

Kim Bakker Director, Civic Affairs SSM Health

**August 9, 2015** 

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#### BACKGROUND

The Patient Protection and Affordable Care Act (PPACA, March 2010) requires that non-profit hospitals conduct a community health needs assessment (CHNA) every three years. As 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.

Barnes-Jewish St. Peters Hospital (BJSPH) and Progress West Hospital (PWH) agreed to collaborate with SSM St. Joseph Health Center (SJHC) and SSM St. Joseph West (SJW) on their next round of community health needs assessments. The two SSM hospitals completed their first needs assessment at the end of 2012, and are in the final year of their implementation plan to address those prioritized needs. BJSPH and PWH completed their first needs assessment at the end of 2013, and are now in the middle of implementation, which runs through the end of 2016.

All four hospitals are in the process of preparing their next CHNA, and agreed to collaborate to solicit feedback from those community stakeholders who have an interest in the health of St. Charles County residents.

#### RESEARCH OBJECTIVES

The main objective for this research is to solicit input from healthcare experts and those who have a special interest in the healthcare needs of St. Charles County served by both SSM hospitals and both BJC hospitals. In its first assessment, SJHC focused primarily on the eastern part of the county while St. Josephs West focused on the west. The BJC hospitals evaluated the county in its entirety when evaluating the community's health needs.

Specifically, the discussion focused around the following objectives:

- 1) Determine whether the needs identified in the 2012/2013 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 plan to address the prioritized needs
- 4) Identify other organizations with whom we should consider collaborating
- 5) Discuss how the world has changed since 2012/2013 when these four hospitals first identified these needs and whether there are there new issues they should consider
- 6) 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 four hospitals conducted a single focus group with public health experts and those with a special interest in the health needs of St. Charles County. It was held on June 23, 2015 at the Spencer Library in St. Peters, Missouri and was facilitated by Angela Ferris Chambers, Manager of Market Research & CRM for BJC HealthCare. The discussion lasted ninety minutes.

23 individuals representing various St. Charles County organizations participated in the discussion. Six others were invited, but were unable to attend (Appendix A).

Larry Tracy, President of BJSPH and SJHC, Lisle Westcott, President of St. Joseph West, and Mike Bowers, President of St. Joseph Health Center, welcomed participants at the beginning of the meeting. Those who were observing on behalf of SSM and BJC introduced themselves to the group (Appendix A).

The moderator reminded the community leaders why they were invited - that their input is needed to help each hospital move forward in this next phase of the needs assessment process. She shared the needs prioritized by each hospital in the first assessment and discussed where each hospital is in its implementation plan. She also mentioned that each system is working to standardize the language for identifying prioritized needs so that impact can be measured consistently.

All four hospitals identified Access to Care as a need each is addressing during the current implementation phase. The other needs being addressed by each hospital in their implementation plans are show in the table below:

	SJHC	SJW	BJSPH	PWH
Access to Care	Х	Х	Х	Х
Heart & Vascular	Х		Х	
Disease				
Respiratory Disease	Х	Х		
Obesity			Х	Х
Smoking Cessation			Х	Х
Substance Abuse	Х			
Diabetes		Х		
Public Safety				Х
Health Literacy				Х

In the 2012/203 needs assessments, other community health needs were identified but not addressed in any hospital's implementation plan. These included:

- Cancer
- Pediatric health
- Chronic liver disease
- Dental health
- Mental health (both pediatric and adult)
- Seniors

After the discussion, the participants were asked to rank these identified needs based on their level of concern and ability to address them via community collaboration.

#### **KEY FINDINGS**

#### PERCEPTION OF 2012/2013 PRIORITIES:

There was general consensus that the needs identified in the previous assessment are still those on which these hospitals should focus. Nothing was identified that should come off the list.

 Health literacy was specifically called out as one that involves many aspects of the health system, including knowledge of health insurance options, understanding their medical condition, treatment compliance and communication with health professionals.

#### ADDITIONAL CONSIDERATION FOR IMPLEMENTATION

- Mental health should be given additional consideration. It is one of the
  ambulance district's top priorities. There are limited resources in the community
  for those who need mental health services and are uninsured, both adults and
  children. Mental health issues which have not been addressed contribute to the
  growth in substance abuse.
- Substance abuse is also a more pressing issue than it was several years ago, with an increase in prescription drug and heroin abuse. This is also one of the ambulance district's top three priorities. They see the scope of the problem growing beyond anything they can control. And it's not simply that the numbers are increasing it is appealing to a younger population and the mortality associated with it is "going through the roof."
- Dental health providers are extremely limited for children and adults who have no insurance.

#### **GAPS IN IMPLEMENTATION STRATEGIES:**

Although nothing was identified that should come off the list of prioritized needs, gaps were cited in the ways in which they are being addressed.

#### **ACCESS: SERVICES:**

- "Prenatal care is desperately needed in our community," especially for low-income women. The need is greater than the services that are available.
- There is an opportunity to do better on coordination of care for the person who is discharged from the hospital. They should be linked to additional follow-up services and referrals so that they won't end up in the emergency room again for the same condition.
- A focus on prevention should be considered for all of the diseases that have been prioritized, including heart and vascular, respiratory and diabetes.
   Prevention is third of the ambulance districts top three priorities. 20% of their requests for services are due to falls by elderly residents.

#### **HEALTH LITERACY:**

 Although many people now have access to health insurance due to the Affordable Care Act, there are those who don't understand how to use it because they have never had insurance before, or are afraid to use it because they have high co-pays and/or deductibles.

#### **MENTAL HEALTH SERVICES:**

- Although there are special programs for children under the age of five who
  have behavioral and mental health issues, there are limited services available
  within the school district. Where will these children go to continue to get help
  once they start school?
- There are more children presenting with mental health issues at younger ages, and there are not enough services to address their needs. There is a lack of child and adolescent psychiatrists in the area, regardless of whether a parent has insurance or not. It may take six months to get an appointment with a psychiatrist.

#### **SOCIAL DETERMINANTS OF HEALTH:**

- Issues of poverty and homelessness contribute to a lack of health. There are limited resources for those who are discharged from the hospital but have nowhere to go.
- There is a particular interest in linking vulnerable populations to other resources they may need. A person needs stable housing to be able focus on their health. Who are the other social service providers that need to be brought into the equation?
- Domestic violence is an issue for which a woman may be screened when she
  presents in the emergency department. But are hospitals prepared to take the
  next step, should a woman admit that she feels unsafe at home? This is an
  opportunity for hospitals to partner with other community agencies to ensure
  that there is a well-defined next step.

#### **SUBSTANCE ABUSE:**

- There has been a rise in smoking as the economy has improved.
- Missouri is also the only state in the U.S. that does not have a data base for controlled substances. If we could influence our state legislators to consider this, it might be an additional tool to access for addressing the issue.

#### **SPECIAL POPULATIONS:**

**PEDIATRIC HEALTH:** If health care and health education were available to address the needs of children when they were young, many of the adult diseases identified as needs would be avoided.

**Pediatric asthma** is a major issue and many children are absent from school because it is not under control. Mold in the home is exacerbating asthma attacks, resulting in higher rates of emergency room usage.

**SENIORS:** Seniors represent a segment of the population that is a growing percentage of the St. Charles population. Hospitals need to consider not only the diseases that are more often seen in this segment, like Alzheimer's and dementia, but the impact that they have on their caregivers.

- Falls among Seniors represent 20% of the ambulance district's service requests, and the number is growing. They are focusing their efforts on preventing falls among seniors.
- There is an initiative, Seniors Count that would allocate a percentage of tax revenue to services for seniors, similar to an initiative that already exists for children's services. St. Charles County community stakeholders should consider advocacy for this proposal.
- Other issues that are of concern among Seniors include having access to adequate nutrition, housing, being able to navigate the health care system and the need for more assistance to allow them to stay in their homes.

#### CHANGES SINCE 2012/2103 and NEW ISSUES OF CONCERN:

**ACCESS TO TRANSPORTATION:** There are concerns for those who are unable to access services because they have no viable transportation options. Consideration should also be given to providing mobile services in those communities where access is an issue.

Transportation is not only a major issue for those who need medical services but in getting mental health and substance abuse treatment

**POPULATION CHANGES:** The population of St. Charles County has continued to grow over the last three years. We have reached our capacity in terms of the population that our services are intended to reach.

There is also more affluence in St. Charles County than there ever was. But at the same time, the poor are getting poorer, and the gap between the rich and the poor is widening. One participant noted that 55% of families who are in the St. Charles City school district fall beneath the federal poverty level.

The aging of the population and the growth in that segment has also caused an increase in the need to address certain disease conditions, like cancer.

**SUBSTANCE ABUSE:** The use of heroin in St. Charles has expanded to the affluent segment of our population. Users are also younger than they ever were – children in fifth and sixth grades are experimenting with this drug. There were thirty deaths in St. Charles County last year due to drug overdoses – more than in the previous ten years.

The increased use of mind-altering substances can be linked to an increase in **mental health issues** among young people and their inability to deal with stress and trauma in their lives. This was identified as a larger need in the eastern half of St. Charles County.

**ACCESS TO COVERAGE:** Even though the Affordable Care Act has made health insurance available through the federal exchange, the state of Missouri failed to pass the expansion of Medicaid. Health care is more expensive than ever, and the ability to raise funds through grants and donations is becoming more difficult. There are fewer resources available to help those who are most in need.

**NEEDS HAVE INTENSIFIED:** The types of needs have not changed but the degree of the need has intensified. Examples where this has occurred include substance abuse and smoking.

**CANCER:** There is a need for more services in the area of women's breast health where there is limited availability for those who need surgery. A rise in skin cancer cases has also been observed, especially for diagnoses of melanoma. These services are specifically limited for those who lack insurance coverage.

**STIGMA ASSOCIATED WITH LAW ENFORCEMENT:** How people look at law enforcement has changed over the last few years. Law enforcement is concerned with identifying drug dealers so that future deaths can be avoided by reducing the supply of drugs.

Some school districts have welcomed law enforcement and included them as an active part of the solution to address the issue of substance abuse. Others have refused the offer to include them in the process, seemingly because the school districts are afraid to be labeled as having a "drug problem."

The community needs to support the role that law enforcement is playing in this area with additional education and awareness in the community.

#### OTHER ORGANIZATIONS WITH WHOM TO CONSIDER PARTNERING:

There is a general need to identify and develop a process to allow more organizations to work together and collaborate on how to address these issues. Things are being done in a disjointed manner and resources are spent on an individual organization's overhead when they could be better spent on services offered in collaboration with each other. What's missing is an overall community planning process around health for our community. "How can we work together and engage everybody and bring everybody to the table, or at least create a structure where we're looking at the health of the community overall?"

A few organizations were identified as additional partners to consider in future collaborations and discussions:

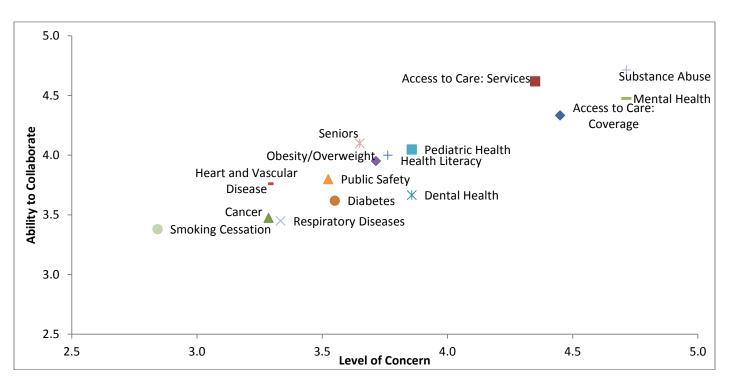
• The Community and Children's Resource Board of St. Charles County (CCRB) is an organization that is focused on the needs of children, especially those from birth to age five. It is the administrator of the Community Children's Services fund, created when St. Charles County passed a 1/8 cent sales tax in November 2004. Funds are contracted to non-profit agencies to provide mental health and substance abuse treatment services to St. Charles County children, youth and families.

- Preferred Family Healthcare is a comprehensive behavioral health non-profit that provides substance abuse treatment, prevention and mental health services to children and families.
- United Way Ready by 21 St. Louis "is a collaborative effort to ensure that all young people in the St. Louis region have the supports they need to be productive, connected, healthy and safe."

#### **RATING OF NEEDS**

Participants were given a list of the needs that were identified in the 2012/2013 assessment. They were asked 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 around them.

Substance abuse and mental health ranked highest in terms of level of concern as well as ability to collaborate. Access to Coverage and Services all ranked among the top needs.



Health Need	<u>Level of</u> <u>Concern</u>	Ability to Collaborate
Substance Abuse	4.7	4.7
Mental Health	4.7	4.5
Access to Care: Coverage	4.5	4.3
Access to Care: Services	4.4	4.6
Pediatric Health	3.9	4.0
Dental Health	3.9	3.7
Health Literacy	3.8	4.0
Obesity/Overweight	3.7	4.0
Seniors	3.7	4.1
Diabetes	3.6	3.6
Public Safety	3.5	3.8
Respiratory Diseases	3.3	3.5
Heart and Vascular		
Disease	3.3	3.8
Cancer	3.3	3.5
Smoking Cessation	2.8	3.4
Chronic Liver Disease	2.3	3.0

#### **NEXT STEPS**

Based on the input the hospitals received from community stakeholders, SSM St. Joseph Health Center, SSM St. Joseph West, Barnes-Jewish St. Peters and Progress West Hospitals will examine secondary data for St. Charles County to explore the size of the needs that have been identified.

Each hospital has established an internal stakeholder workgroup to assess this information and evaluate whether the priorities should change.

The needs assessment and associated implementation plan must be revised and updated for release by December 31, 2015 for the SSM hospitals, and 2016 for the BJC facilities.

The community stakeholder group will continue to be updated about the progress of the internal work groups as they work to meet these deadlines.

It was also noted that the St. Charles County Partners for Progress has a health coalition which is focusing on how to have an impact on the health of the community. They are exploring ways to partner with employers and businesses as well as religious organizations and not-for-profits to educate the community about healthy lifestyles.

#### Appendix D **BJSP and PWH CHNA Internal Team Members** Title **Last Name** First name Department Williams Kristin Director Foundation Daly Theresa Sr. Coordinator Community Education & Events Kathleen Manager Case Management Dougherty Gross Cindy Director Finance Nagy Christine Manager Surgical Services Dabrowski Jack Director Marketing and communication Manager ICU Anatra Joe Smith Linda Manager Patient Access Walter Mika Manager **Emergency Dept** Katie Social Worker Case Management Biermann Ridenhour Rebecca Supervisor Pharmacy Supervisor Cardiac Cathether Haney Kenya Rosenthal Robyn Educator TQM/CQI Fogelsong Diane Manager Medical Oncology King Karley Manager Corporate Communication & Marketing

## Implementation Plan

#### A. Community Health Needs to be Addressed

#### I. Lung Cancer

**Rationale:** According to the American Lung Association, more people die from lung cancer annually than any other type of cancer, exceeding the total deaths caused by breast cancer, colorectal cancer, and prostate cancer combined. The greatest risk factor for lung cancer is duration and quantity of smoking. While the mortality rate due to lung cancer among men has reached a plateau, the mortality rate due to lung cancer among women continues to increase. African Americans have the highest risk of developing lung cancer.

**Program Goal**: Reduce the number of new lung cancer cases, as well as the illness, disability and death caused by lung cancer.

#### **Program Objectives:**

- a) Educate 300 individuals living in St. Charles County at community and corporate health fairs about their current lung capacity, the consequences of smoking and resources available for behavior modification in 2017, increasing that number by 10 percent annually.
- b) Improve overall knowledge of healthy behavior including understanding of the effects of smoking by the participant by 10 percent from pre- to post-test assessment.
- At least two percent of individuals who required a follow-ups call will maintain a healthy behavior after three months.

#### **Action Plan:**

- Identify 10 corporations to host health fairs and provide spirometer testing, educational resources and recommendations for behavior modifications to employees. A pre and post evaluation will be given to participants that asks questions about the understanding of the effects of smoking and the likelihood that they will seek behavior modification support. Volunteers will follow-up three months after testing to see if behavior modification was sought.
- Identify five community health fairs and provide spirometer testing, educational resources and recommendations for behavior modifications to participants. A pre and post evaluation will be given that asks questions about the understanding of the effects of smoking and the likelihood that they will seek behavior modification support. Volunteers will follow-up three months after testing to see if behavior modification was sought.

**Intended outcomes:** Participants will understand the impact smoking has on their lung capacity and overall long-term health and seek support for behavior modification.

**Outcomes Measurement:** This program is evaluated by using assessment tools that demonstrate an increased understanding of the risks associated with lung cancer. Pre

and poste questionnaires will be utilized to determine knowledge has changed and behavior modification is likely.

#### II. Breast Cancer

Rationale: Breast cancer is a leading cause of cancer death among women in the United States. According to the American Cancer Society, about 1 in 8 women will develop breast cancer and about 1 in 36 women will die from breast cancer. On average, every 2 minutes a woman is diagnosed with breast cancer and 1 woman will die of breast cancer every 13 minutes. Over 2.8 million breast cancer survivors are alive in the United States today. Breast cancer is associated with increased age, hereditary factors, obesity, and alcohol use. Since 1990, breast cancer death rates have declined progressively due to advancements in treatment and detection.

**Program Goal**: Reduce the number of new cancer cases, as well as the illness, disability and death caused by cancer.

#### **Program Objective:**

- a) Increase the number of screening mammograms by 10 percent over the course of three years.
- b) Obtain a follow-up appointment for those who screened abnormal for mammograms at the end of each screening and are in need of primary physicians.

#### **Action Plan:**

- Mammography van will be present at five community or corporate health events offering access to convenient screenings.
- Marketing efforts will include specific messaging focused on the importance of early detection and screening mammography for women according to current guidelines, emphasizing no one is too old.
- Host annual Pretty In Pink event that educates women on the importance of early detection and screening mammography. Oncologists will be on hand to answer questions during event.
- Promote Show Me Healthy Women program that supports the uninsured population of St. Charles County to receive free screening mammograms.

**Expected Outcomes:** More women in St. Charles County will be made aware of the importance of regular screenings and early detection.

**Outcomes Measurement:** With an established baseline # of screenings established at the end of 2016 offered at BJSPH, we will track the increase of screenings over the next three years with the goal of 10% increase by the end of 2019.

#### III. Obesity

**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.

**Program 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.

#### **Program Objectives**

- **I.** Provide intensive group educational sessions that focus on nutrition, physical activity and emotional health to 30 children per year.
- II. Increase knowledge of nutrition, physical activity and emotional health among participants by a five percent increase in average knowledge score among participants at post-test compared to pre-test.

#### **Action Plan:**

- 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.
- 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.

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

**Outcome Measurements:** 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.

#### 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, we are collaborating with SSM to set up a county wide registry. We will continue to refer and partner with mental health providers in the region.

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

#### **DENTAL HEALTH**

Barnes-Jewish St. Peters Hospital does not provide preventive dental services. We do 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**

We 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 we partner 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 our community, but we don't have capacity to start anything new.

#### **HEALTH LITERACY**

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

#### **CANCER: COLORECTAL**

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