SAINT LUKE'S COMMUNITY HEALTH NEEDS ASSESSMENT & IMPLEMENTATION PLAN 2016



> Kansas City Orthopaedic Institute

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Kansas City Orthopaedic Institute

Community Benefit Community Health Needs Assessment and Implementation Plan 2016

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Executive Summary

About Kansas City Orthopaedic Institute

The Kansas City Orthopaedic Institute (KCOI) is the first and only hospital in the Kansas City area dedicated solely to orthopedics. KCOI was created through a strategic alliance between leading orthopedic surgeons in Kansas City and Saint Luke's Health System. The hospital specializes in providing comprehensive inpatient and outpatient treatment of orthopedic disorders. KCOI services include:

- Inpatient and outpatient surgery for all orthopedic subspecialties
- Rehabilitation, including physical therapy and occupational therapy
- Magnetic resonance imaging (MRI)
- Interventional pain treatment provided by board-certified physiatrists

KCOI consistently achieves exceptional quality and patient satisfaction scores. The hospital is equipped with nine staffed beds, four operating rooms, a magnetic resonance imaging department, and a rehabilitation department providing physical and occupational therapy.

About Saint Luke's Health System

Kansas City Orthopaedic Institute is a joint-venture of the Saint Luke's Hospital of Kansas City. Saint Luke's Hospital of Kansas City is a hospital within the Saint Luke's Health System. The health system has 10 hospitals throughout the Kansas City region. The health system also includes home health, hospice, and behavioral health care, as well as multiple physician practices.

Saint Luke's Health Mission

Saint Luke's Health System is a faith-based, not-for-profit community hospital committed to the highest levels of excellence in providing health care and health-related services in a caring environment. As a member of Saint Luke's Health System, we are committed to enhancing the physical, mental, and spiritual health of the communities we serve.

Saint Luke's Health System Vision

The best place to get care. The best place to give care.

Community Health Needs Assessment Objectives

KCOI conducted its second Community Health Needs Assessment (CHNA) in order to better understand and serve the needs of the community. As part of the 2010 Affordable Care Act, all tax-exempt hospitals must complete a CHNA every three years. The CHNA addresses the health needs in the community and prioritizes the identified needs. The hospital is then responsible for completing an implementation strategy for the community health needs identified.

Community Health Needs Assessment Summary

An effort to understand and create a healthier community requires collaboration and input from many community stakeholders. Through data research and key conversations in the Johnson County community, this CHNA pulls together community findings and addresses top health priorities to help improve community health over the next three years.

Community Health Needs

A wide range of primary and secondary data was used to identify three health priorities in KCOI's community.

Priority 1: Access to Care

- Access to care is a national and local priority focused on the need to better support the uninsured, underinsured, and healthcare service shortages.
- In Johnson County, almost 100,000 individuals are at or below 200 percent of the Federal Poverty Level (FPL) leaving services out of reach because of the cost of care.
- Without the proper access to care, individuals are more likely to experience multiple chronic health problems, disabilities, and a shorter life expectancy.
- The two leading causes of death in Johnson County are cancer and heart disease. Both are chronic conditions and accounted for 41 percent of deaths in Johnson County in 2013.
- Other health indicators identified the need for better mental health and substance abuse support in the community.

Priority 2: Increased Access to Physical Activity and Nutrition

- Johnson County demonstrated a need for increased physical activity and better access to healthy foods.
- The numbers of both obese and overweight residents have continued to increase.
- Approximately 7 percent of the population in Johnson County has been diagnosed with diabetes. Nationally, diabetes accounts for about \$176 billion in annual medical expenses.
- Two areas of concern in Johnson County are food insecurity and access to healthy foods.
- According to the Centers for Disease Control and Prevention (CDC), 84 percent of all healthcare spending in 2006 can be attributed to 50 percent of the population who have one or more chronic conditions.
- Prevention and early detection are two of the best methods for avoiding chronic conditions. Prevention through risky behavior modification and early detection through available screenings are two examples of how chronic conditions can be avoided.

Priority 3: Management of Transitions of Care

- Transitions of care are a Hot Topic priority for The Joint Commission (TJC) and considered a major problem in health care by the Center for Medicare and Medicaid Services (CMS).
- Research shows that 80 percent of serious medical errors are the result of poor care transitions.
- The aging population is especially at risk as this population is more likely to face chronic conditions that require more complex and coordinated care.
- The Johnson County 65 and up age group is expected to increase more than any other age group over the next 5 years and will account for 15 percent of the Johnson County population making transitions of care a key area of focus in order to prevent avoidable patient readmissions.

Key Contributors

Hospital/System Leadership (Saint Luke's South Hospital) President and Chief Executive Officer – Bobby Olm-Shipman, MHSA

Chief Financial Officer – Shelby Frigon

Vice President and Chief Nursing Officer – Julia Woods, RN, MSN

KCOI Leadership

Chief Executive Officer and Board Chairman – Charles E Rhoades, M.D.

Senior Executive Officer – Paul Kerens

Director of Nursing - Jane Leggio, RN

Quality Nurse Specialist - Cindy Ewert, RN

Public Health Collaborations

Johnson County Department of Health and Environment

Community Partners

Health Partnership Clinic of Johnson County (HPCJC)

Metropolitan Organization to Counter Sexual Assault (MOCSA)

Medical Society of Johnson and Wyandotte Counties (Wy/Jo Care)

American Heart Association (AHA)

American Lung Association

Assessment Methodology

To prepare the CHNA, both primary sources and secondary data were compiled and analyzed. The CHNA team conducted multiple interviews with hospital leadership and community stakeholders to better understand the needs in the community. Secondary quantitative data was pulled and analyzed from multiple community and hospital sources to better understand the impact of each of the identified needs.

Primary Data

Primary data was collected by connecting with community stakeholders to discuss the needs of the Johnson County population. Stakeholders were chosen to represent broad interests of the community, including underserved populations. Stakeholders provided information, which was used to help identify and prioritize community needs. No public comments were received from the previous CHNA; therefore, they could not be taken into consideration for this CHNA process.

Primary Data Sources

- Kansas City Othropaedic Board of Directors
- Saint Luke's South Senior Leadership
 - System hospital that serves the same population
- Johnson County Department of Health and Environment
- Health Partnership Clinic of Johnson County (HPCJC)
 - Safety net primary care provider
- Metropolitan Organization to Counter Sexual Assault (MOCSA)
- Medical Society of Johnson and Wyandotte Counties (Wy/Jo Care)
 - Provides care to the underserved in the area
- American Heart Association
- American Lung Association

Secondary Data

Secondary data was collected through multiple community resources. The most current data available was compiled and analyzed for key population health indicators.

Secondary Data Sources

- County Health Rankings
- KC Health Matters
- Kansas Department of Health and Environment
- National Institute of Mental Health
- Medicare's Hospital Compare
- Healthy People 2020
- Healthy Kansans 2020
- Centers for Disease Control and Prevention

- Hospital Industry Data Institute (HIDI)
- SG2 Nielsen Population and Demographic Data
- Johnson County Government Data
- City Data
- REACH Healthcare Foundation
- American Diabetes Association
- The Joint Commission
- Centers for Medicare and Medicaid Services
- Institute of Medicine
- National Transitions of Care Coalition
- Robert Wood Johnson Foundation

Summary of Findings

Community Health Needs

Based on the significant needs identified via interviews, input received from community representatives, and local and national data, during the data collection period, SLHS and KCOI leadership reviewed the health needs and considered how KCOI can address each of the identified issues and which of the issues KCOI and SLHS might pursue in a more strategic and targeted approach over the next three years. The following represent the three resulting prioritized needs.

Priority 1: Access to Care

Overview

Access to care is a national and local priority through the Healthy People 2020 and the Healthy Kansans 2020 initiatives. Insufficient access to health services can be caused by many different issues including: lack of insurance, underinsurance, primary care provider availability, provider quality, and costs of care ("Kansas Health Assessment," 2014 Nov). Access to primary care providers and/or a health center has a major impact on individual health. Adequate access to both primary and specialty care is of even more importance to individuals with chronic conditions such as cancer and heart disease. Individuals with access to care are more likely to receive preventive care that improves quality of life and helps detect and manage chronic conditions.

Access to health services for mental illness and substance abuse is also an area of concern for Johnson County. According to population statistics, citizens demonstrated higher than average risk in these two health areas. The need for improved mental health and substance abuse care is a national focus. According to information from our interview with the Health Partnership Clinic of Johnson County, access to behavioral health is an area of need. In 2013, the clinic

began offering behavioral health services in the primary care setting to better meet the patients' needs right on site. This includes the use of Tele-Psych to give patients access to needed medications and support with substance abuse programs. Alcohol and drug abuse problems were also highlighted in the data as a high-risk problem for citizens. The statistics are poor for Johnson County and the trends do not show major improvements in alcohol and substance-related incidents.

Prevalence

In Johnson County, 88 percent of adults have health insurance and 95.3 percent of children have health insurance ("KC Health Matters," 2013). Healthy People 2020 and Healthy Kansans 2020 both have a goal of 100 percent health insurance coverage for adults and children. About 26.6 percent of Kansans over the age of 18 lack a primary care provider ("KC Health Matters," 2012). According to the REACH Healthcare Foundation, in 2011, 48,679 individuals in Johnson County did not have health insurance. The largest number of uninsured was in the 25-34 age range followed by the 35-44 age range ("Health Profile," 2013).

Poverty rates in Johnson County are also an area of concern because of the financial costs of health care. Many individuals will forego medical care if they are unable to afford services. In 2011, 6.6 percent of the population or 36,071 persons in Johnson County were at or below the FPL. The number of individuals with income below 100 percent of the FPL increased from 6.6 percent of the population in 2011 to 6.8 percent of the population in 2012. A better indicator of overall numbers of individuals that are struggling financially is to look at the population at or below 200 percent the FPL ("Johnson County Poverty," 2013). In 2011, in Johnson County, 18.9 percent were at 200 percent of the FPL, or 103,068. This number did decline in 2012 to 97,230 persons.

Due to insufficient access to care and disease management, the health care system is currently more focused on addressing acute, episodic care needs versus more holistic patient needs over time. This leads to insufficient support for key chronic conditions such as cancer and heart disease. Patients are utilizing the emergency department for health problems associated with chronic diseases that could have been prevented through adequate access to care across the care continuum.

The number of hospital admissions related to mental health, number of mental health providers, and number of poor mental health days are each areas where Johnson County is performing better than the state median, but worse than the top national performers (see Figure 27). The lack of mental health providers suggests that residents of Johnson County have insufficient access to mental health care. Figure 36 below shows the prevalence of mental illness in the United States in 2012 and the range of mental health needs among different

groups of the population. The high prevalence rates demonstrate a growing need for care of patients suffering from mental illness.

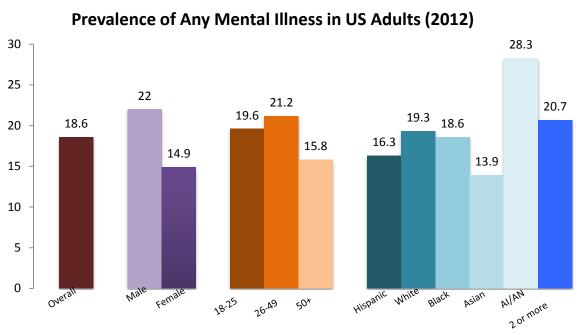


Figure 36: National Prevalence of Mental Illness in US Adults

*Source: National Institute of Mental Health, 2012

According to the REACH Healthcare Foundation, the number of reported poor mental health days has increased in Johnson County from 2010-2012 (from 2.34 to 2.4 days).

Impact

According to an interview with the Johnson County safety net clinic, Health Partnership Clinic, there are around 110,000 patients that could use care from one of their two clinics. The Health Partnership Clinic noted the lack of access to care as a major concern for the population given the large number of individuals living in financial stress. The clinic's main priorities currently include access to women's health and obstetric (OB) services, cancer screening, and pediatric care.

The Health Partnership Clinic also addressed the lack of specialty care services for the vulnerable population. The clinic currently works with Wy/Jo Care, a partner for Johnson County and Wyandotte County safety net clinics, to access specialty care services for patients. According to an interview conducted with Wy/Jo Care, the program currently has over 650 physicians that donate specialty services to patients in need. While patients with insurance can access primary care services at the Health Partnership Clinic, in order to qualify for specialty

care, patients must be uninsured and ineligible for government health assistance, such as Medicare, Medicaid, or KanCare.

The Health Partnership Clinic also mentioned a lack of access to mental health services. Mental health and substance abuse have lasting impacts on the community. Abuse of alcohol and other substances can lead to larger issues in society, which include drunk driving and use of other more dangerous illegal drugs. Johnson County has shown an increase in the number of adults who drink excessively and teenage access to illegal drugs. The county also has a very high rate of alcohol-impaired driving deaths, which demonstrate a profound need for further education and prevention in mental health and substance abuse. Hospital admissions for alcohol and substance-related mental health problems are above the state median rate.

Available Resources

The following represent resources (such as programs, organizations and facilities in the community) available to address the significant health needs identified in this report. This list is not exhaustive, but rather outlines those resources identified (through the focus groups) in the course of conducting Community Health Needs Assessment.

- Johnson County Department of Health and Environment
- Health Partnership Clinic (Safety Net)
- Wy/Jo Care (Safety Net)
- Mercy and Truth Clinic (Safety Net)
- Johnson County Mental Health
- Overland Park Valley Hope
- Marillac (Mental Health)
- Avenues to Recovery
- Clinical Associates P.A. Overland Park
- The Family Conservancy
- Mirror, Inc.
- American Cancer Society
- Cancer Action KC
- American Lung Association
- R.A. Bloch Cancer Foundation
- American Heart Association

Priority 2: Increased Access to Physical Activity and Nutrition

Overview

Johnson County demonstrated a need for increased physical activity and nutrition for the community as a whole. Physical activity and nutrition play a vital role in the overall health of members of a community, and Johnson County demonstrated a need to improve on a few areas in order to help improve the health of the population in the future. The county as a whole has failed to improve on measures such as obesity, physical inactivity, and diabetes.

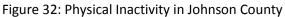
Prevalence

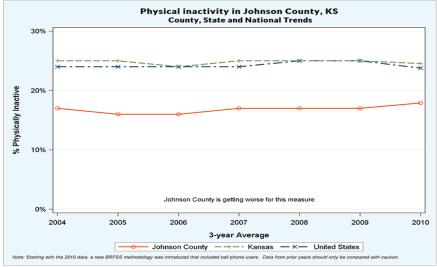
Physical Activity/Nutrition – The chart below shows the physical activity indicators as well as the nutrition factors for Johnson County in comparison to the state median value. These values demonstrate some needs for Johnson County in terms of availability of health food options for the members of the community. Even though the physical inactivity percentage is below the state median, it has been increasing yearly for Johnson County.

Indicator	Johnson County	State Median
Physical Inactivity	18%	25%
Access to Exercise Opportunities (population who live close to park/rec facility)	94%	71%
Food Insecurity (percent of population)	11.7%	15.9%
Limited Access to Health Foods	3%	8%
Food Environment Index	8.5	7.5
Fast Food Restaurant Density (restaurant/1,000 population)	.75	.56
Grocery Store Density (store/1,000 population)	.12	.20
Farmer's Market Density (market/1,000 population)	.01	.03

Figure 31: Physical Activity and Nutrition Factors

*Source: County Health Rankings, 2013





*Source: Graph from County Health Rankings, 2013

Diabetes – In Johnson County 7 percent of adults over the age of 18 have been diagnosed with diabetes ("County Health Rankings," 2014). While this is less than the Kansas average, the risk of getting diabetes can increase as physical inactivity and nutrition statistics become worse. The rate of diagnosis has also been increasing each year between 2007 and 2010. Diabetes is impacted by many other factors including diet and physical activity, which is why this is a health need for Johnson County even with the lower than average prevalence rate in the community.

Obesity/Overweight – In Johnson County the percent of adults who are obese (BMI > 30) and adults who are overweight have both been increasing over time. The obesity percentage is below the state average, but the percentage of overweight adults is above the state average and an area of concern for the county as a whole.

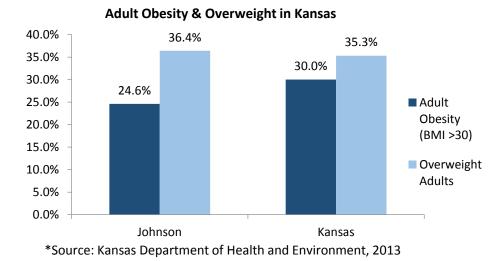


Figure 33: Adult Obesity and Overweight Graph

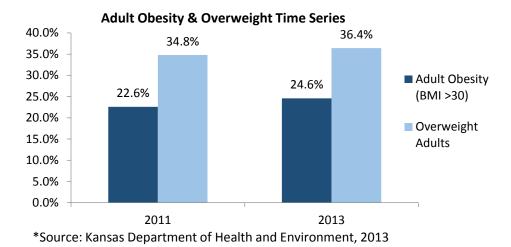
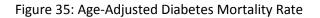


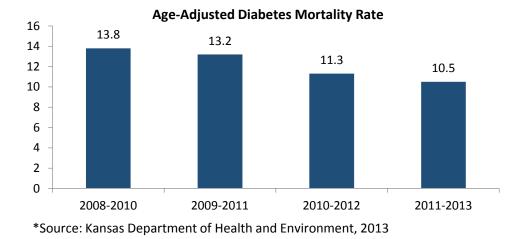
Figure 34: Adult Obesity & Overweight Time Series

Impact

Physical Activity/Nutrition – Decreased physical activity has been related to several disease conditions such as Type 2 diabetes, hypertension, cardiovascular disease, cancer, stroke, and premature mortality. Lack of physical activity can be attributed to 11 percent of premature deaths in the United States ("County Health Rankings," 2013). Nutrition is imperative to maintaining a healthy community as well. Food insecurity and low access to healthy food will leave the community at an increased risk for adopting unhealthy lifestyle choices and lacking proper nutrition on a daily basis. People who live further away from grocery stores are more likely to choose to eat at fast food restaurants, which can lead to higher incidences of obesity and obesity-related health problems. Physical exercise and proper nutrition are both imperative in order to help improve the health of the community as a whole.

Diabetes – Poor nutrition and a lack of physical activity can lead to diabetes. Diabetes is a top ten leading cause of death in the United States. Diabetes can lead to many other medical complications including blindness, end-stage renal disease, and possible amputation. According to the American Diabetes Association, diabetes accounts for roughly \$176 billion in direct medical expenditures. Included below is an age-adjusted mortality graph showing the number of deaths per 100,000 population attributed to diabetes. Figure 35 demonstrates the importance of managing diabetes at the appropriate time and in order to save as many lives as possible. The trend is improving, but Johnson County is still near the 50th percentile in the state of Kansas for this factor.





Obesity/Overweight - Adult obesity is important because obesity increases the risk of many other health conditions. These conditions include Type 2 diabetes, cancer, hypertension, heart disease, and stroke. Monitoring and decreasing obesity rates can have substantial positive impact on the health of a particular community. The Healthy People 2020 initiative has a goal of decreasing the percentage of adults over 20 who are obese (BMI > 30) to 30.6 percent.

Available Resources

The following represent resources (such as programs, organizations and facilities in the community) available to address the significant health needs identified in this report. This list is not exhaustive, but rather outlines those resources identified (through the focus groups) in the course of conducting Community Health Needs Assessment.

- Healthy People 2020
- Healthy Kansans 2020
- Johnson County Department of Health and Environment
- Centers for Disease Control
- American Diabetes Association

Priority 3: Management of Transitions of Care

Overview

The Joint Commission (TJC) considers transitions of care a current hot topic in health care and the Centers for Medicare and Medicaid Services (CMS) identified care transitions as a leading problem in health care today. According to The Joint Commission, around 80 percent of serious medical errors are caused by poor transitions of care ("Joint Commission," 2012). TJC defines Transitions of Care as "the movement of patients between health care practitioners, settings, and home as their condition and care needs change" ("Hot Topics in Health Care: Transitions,"

2012). Other issues can result from poor patient care transitions such as delayed treatment, incorrect treatment, and increased stays in the hospital.

Prevalence

According to the report *Crossing the Quality Chasm* from the Institute of Medicine, the aging population creates new needs in health care services in order to meet the demands of consumers. As individuals live longer, they are more likely to face more chronic conditions that require better coordination of care services. According to the National Transitions of Care Coalition (NTOCC), individuals with chronic conditions are likely to see up to 16 physicians in one year. In one care episode in the hospital, a patient could see an average of 10 or more physicians during their stay (2012, p.2).

In Johnson County, in 2014, the 65 and up age group accounted for 12 percent of the population, but is expected to grow to account for 15 percent of the population by 2019. The health care system is currently more focused on addressing acute, episodic care needs versus more holistic patient needs over time. The Federal government reports that one in five elderly patients is back in the hospital within 30 days ("The Revolving Door," 2013). According to Hospital Compare data for KCOI, the 30-Day unplanned readmission rates are comparable to U.S. national rates.

Impact

According to the Robert Wood Johnson Foundation, the Federal Government has estimated that the cost for readmissions for Medicare patients is around \$26 billion annually. More than \$17 billion of that amount was the result of unnecessary readmissions (Lavizzo-Mourey, 2013, p. 3). Part of the health reform policy will penalize hospitals with high readmission rates.

TJC found three areas that cause problems in the care transition process: communication breakdowns, patient education breakdowns, and accountability breakdowns ("Hot Topics in Health Care: Transition," 2012). Communication could be between providers, patient and provider, or the provider and the patient caregiver. Patient education could be unclear or confusing, leaving the patient and/or the patient caregiver uncertain about follow-up instructions. Finally, breakdowns in accountability between providers and care facilities can create confusion for the patient and the receiver or next caregiver of the patient, allowing that patient to fall through the cracks. The Robert Wood Johnson Foundation noted that 50 percent of Medicare patients that receive care in the hospital do not see a primary care physician or specialist within 2 weeks of discharge ("The Revolving Door," 2013, p. 4).

Available Resources

The following represent resources (such as programs, organizations and facilities in the community) available to address the significant health needs identified in this report. This list is

not exhaustive, but rather outlines those resources identified (through the focus groups) in the course of conducting Community Health Needs Assessment.

- The Joint Commission
- Center of Medicare and Medicaid Services
- National Transitions of Care Coalition
- Institute for Healthcare Improvement

I. Implementation Strategy

The Kansas City Orthopaedic Institute (KCOI) is the first and only hospital in the Kansas City area dedicated solely to orthopedics. KCOI was created through a strategic alliance between leading orthopedic surgeons in Kansas City and Saint Luke's Hospital of Kansas City. The hospital specializes in providing comprehensive inpatient and outpatient treatment of orthopedic disorders. KCOI services include:

- Inpatient and outpatient surgery for all orthopedic subspecialties
- Rehabilitation, including physical therapy and occupational therapy
- Magnetic resonance imaging (MRI)
- Interventional pain treatment provided by board-certified physiatrists
- Urgent Care After Hours Clinic

KCOI consistently achieves exceptional quality and patient satisfaction scores. The hospital is equipped with nine staffed beds, five operating rooms, a magnetic resonance imaging department, and a rehabilitation department providing physical and occupational therapy.

II. Purpose of Implementation Plan

This Implementation Plan addresses the community health needs identified in the 2016 Community Health Needs Assessment (CHNA) prepared for KCOI. This Plan serves as Kansas City Orthopaedic Institute's implementation strategy for meeting those needs. The Plan also meets the requirements for community benefit planning as set forth in federal law, including but not limited to: The Patient Protection and Affordable Care Act of 2010.

III. How the Implementation Plan Was Developed

This Implementation Plan was developed based on the findings established in the Community Health Needs Assessment (CHNA) prepared for KCOI, as well as through a review of existing community benefit activities.

IV. Community Health Needs Assessment Summary

KCOI undertook a structured approach to determine health needs including analysis of public health data and interviews with health care professionals. The Community Health Needs Assessment identified three major health needs:

- Access to Care
- Nutrition and Physical Activity
- Management of Transitions of Care

V. How Priorities Were Determined

Priority needs were identified based on input and analysis from several groups including hospital representatives and outside agencies providing services in the community. The process recognized all

three health needs identified in the CHNA as priority needs which KCOI will address through community benefit activities.

VI. What KCOI Will Do to Address Priority Needs

KCOI is proud to continue its tradition of providing top-quality health care through experienced and dedicated doctors, nurses, therapists, and support staff. Along with the specific programs detailed below, KCOI will continue to meet the unique needs of orthopedic patients in the community by providing a range of comprehensive health services. It should also be noted, as with any hospital, KCOI does not have the resources to address all the priority needs of their community. Due to the specialty and narrowed scope of KCOI, certain priorities are being left to the care of Saint Luke's Health System and the collaborating community partners. The following section outlines how KCOI plans to address priority needs.

1. Access to Care for Low Income Individuals

Access to care for low income individuals was identified in the CHNA as a priority need for the community served by KCOI. Access to care was also identified by the Johnson County Health Coalition as a top priority for community health improvement. According to the CHNA, there were 95,000 low income individuals residing in Johnson County in 2013. A considerable number of these low income individuals residing in Johnson County have significant health needs and lack access to appropriate care. Providing better access to care for low-income individuals would help improve the general health of the entire community.

Implementation Strategies–Access to Care for Low Income Individuals

KCOI will work to expand access to comprehensive, quality health care services for low income individuals. KCOI will implement the following strategies in addressing access to care for low income individuals as a priority need:

- KCOI has in place Charity Care and Financial Assistance protocols and will make those processes readily available for those who qualify in order to increase access.
- As a member of Saint Luke's Health System, KCOI will continue to advocate on key health policy issues at the state and national level, including Medicaid reform, access to care, and health care financing for the low-income population.
- Continue to support number of Wy/Jo Care cases per year that KCOI supports through provision
 of care and services. Wy/Jo Care is a community partnership to improve access to specialty
 health care for low income, uninsured residents of Wyandotte and Johnson Counties. KCOI
 donates specialty care in a coordinated referral program led by the Medical Society to enhance
 the work of existing safety net clinics and other community agencies.
- Continue to offer increased access to care with a newly opened urgent care clinic with extended appointment hours.

2. Nutrition and Physical Activity

Obesity is considered a local, state, and national priority, and it is also a major contributing factor to a number of other service area concerns including heart disease and diabetes. As a provider of orthopedic

surgical services, KCOI is particularly concerned with the high rates of obesity in the population. This, coupled with an aging population, has lead to an increase in the prevalence of osteoarthritis within the community. Osteoarthritis affects 14 percent of adults age 25 and older and approximately one-third of those 65 and older*.

Implementation Strategies–Nutrition and Physical Activity

KCOI will work to promote health and reduce the prevalence of overweight and obese individuals through the consumption of healthy diets and increased physical activity, resulting in achievement and maintenance of healthy body weight. KCOI will implement the following strategies in addressing nutrition and physical activity as a priority need:

- Continue to provide resources and education for the primary service area regarding physical activity. This includes continuation of the Sports Injury Prevention Clinics. These clinics are free to the public to help prevent injuries sustained while engaging in physical activity; running in particular.
- Continue strategies for optimizing patients for surgery such as incorporating nutrition and physical activity themes in preoperative education to patients.

3. Management of Transitions of Care

Care transitions has been identified by both the Joint Commission and the Centers for Medicare and Medicaid Services (CMS) as a leading problem in health care today. Many issues can results from poor patient care transitions such as delayed treatment, incorrect treatment, and increased stays in the hospital

Implementation Strategies– Management of Transitions of Care KCOI will implement the following strategies in addressing management of transitions of care as a priority need:

With the introduction of Bundled Payments, communication and patient transitions have become more of a focus for orthopedic institutes and collaborating facilities. KCOI has created a committee to implement and monitor the patient care for lower extremity total joint replacement for a 90 day post discharge episode of care. Following the new guidelines of this CMS initiative will help promote successful and well-coordinated transitions of care for all those who pass through our doors.

VII. Approval

The Kansas City Orthopaedic Institute Board of Directors approved this Community Benefit Implementation Plan on December 6, 2016. This Implementation Plan specifies community health needs that Kansas City Orthopaedic Institute has determined to meet in whole or in part and that are consistent with its mission. The Kansas City Orthopaedic Institute Board of Directors reviews the Community Benefit Implementation Plan on an annual basis, and reserves the right to amend it as circumstances warrant.

Appendix

Community Analysis

Demographic Profile

This section outlines the demographic profile for the Kansas City Orthopaedic Institute defined community.

Geography

Due to a high percentage of patients originating from a limited amount of zip codes, KCOI's community is defined as Johnson County, Kansas (see Figure 1). Johnson County includes 32 zip codes.

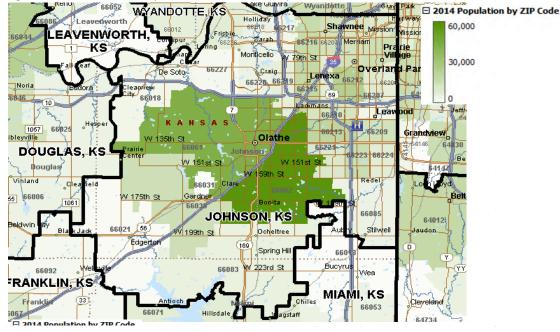


Figure 1: KCOI's Defined Community, Johnson County, Kansas

Johnson County

Johnson County is located on the eastern state line of Kansas in the southwest quadrant of the Kansas City metro area. The total land area is 473 square miles, which is about 0.6 percent of the total land area in Kansas. Johnson County is the most populous county in Kansas with a population density of 1,150 persons per square mile. About 59 percent of Johnson County is urban land while the remaining 41 percent is unincorporated/rural areas ("Fast Facts," 2014). About 96 percent of the population lives in an urban area and 4 percent live in a rural area ("Johnson County," 2012).

Figure 2: Johnson County Geography							
Geography	Johnson County	Kansas					
Land area in square miles, 2010	473	81,759					
Persons per square mile, 2010	1,150	35					
FIPS Code (Federal Information Processing Standard)	91	20					
Metropolitan or Mircopolitan Statistical Area	Kansas City, MO - KS						
	Metro Area						

*Source: US Census Bureau, 2010

Population Characteristics

As of 2014, the Johnson County population was 573,915. The age group 18 to 44 makes up the largest portion of the population at 35 percent or 202,608 people followed by the age group 45 to 64 at 27 percent or 154,767 people. The smallest age group is 65 and up at only 12 percent of the population or 70,426 people.

Figure 3 : Johnson County Age Profile, 2014

	20:	L4
Age Group	Population	% of Total
00-17	146,114	25%
18-44	202,608	35%
45-64	154,767	27%
65-UP	70,426	12%
Total	573,915	100%

*Source: Sg2 Population and Demographic Data

Population Growth

The Johnson County population is expected to grow by 5.0 percent or 28,773 people in the next 5 years. In 2019, the 65 and up age is expected to have the highest growth with an increase of 24 percent or 17,158 people. The 65 and up age group is expected to account for 15 percent of the population in 2019. The age group 45 to 64 is expected to grow by 4 percent or 5,636 people. The other age groups are each expected to grow by 2 percent. The 18 to 44 age group will drop from 35 percent of the population to 34 percent. The other age groups total percent of the population will remain relatively consistent from 2014 to 2019.

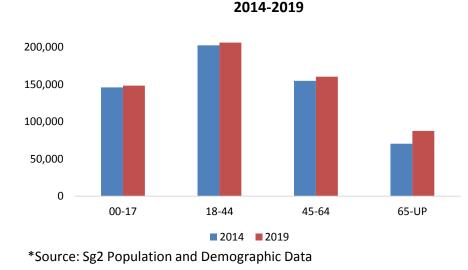


Figure 4: Projected Population Growth by Age Group, 2014-2019

Projected Population Growth by Age Group

Gender Characteristics

Johnson County has a slightly higher percentage of females to males at 51.1 percent (or 293,254 individuals) to 48.9 percent (or 280,661 individuals). According to the 2010 Johnson County Census, the median age for females was 37.6 years and the median age for males was 35.2 years. Based on population estimates, both genders are expected to grow by about 5 percent through 2019 (Sg2 Population and Demographic Data).

Marital Status

Based on the American Community Survey, 2009-2013 estimates show that the majority of the population 15 years and older is married (57.5 percent). The next largest group is those that have never been married, which account for 26.0 percent of the population. The divorced population makes up 10.7 percent of the population followed by widowed and separated at 4.6 and 1.2 percent of the population respectively.

Ethnicity

The majority of the population in Johnson County is White (84.7 percent in 2014). The White population is expected to have the lowest growth rate from 2014 to 2019 at 2.8 percent (or 13,773 individuals) and will account for 83.0 percent of the population in 2019. The Black/African-American population is the next largest at 4.9 percent of the population in 2014 with an expected growth of 22.6 percent (or 6,399 individuals) from 2014 to 2019. The Asian population is expected to grow from 4.3 percent of the population to 4.5 percent of the population during this time frame. The Multiple Races and Other ethnicity groups are both expected to grow by about 17.0 percent to make up a little over 6.0 percent of the population

in 2019. The American Indian/Alaskan Native ethnicity group and Native Hawaiian and Pacific Island ethnicity group together account for less than 1.0 percent of the population. Both ethnicities are expected to grow by over 20.0 percent from 2014 to 2019.

Single Race	2014		2019		Population Change	
Single Nace	Population	% of Total	Population	% of Total	Fopulatio	II Change
White	486,344	84.7%	500,117	83.0%	13,773	2.8%
Black / African American	28,374	4.9%	34,773	5.8%	6,399	22.6%
Asian	24,747	4.3%	27,253	4.5%	2,506	10.1%
Multiple Races	15,845	2.8%	18,663	3.1%	2,818	17.8%

Figure 5: Projected Population	Growth by 9	Single Race	2014-2019
inguite 5. i rojecteu i opulation	Growth by .	Julgie Mace	2014 2015

*Source: Sg2 Population and Demographic Data

Language

In 2014, 88.4 percent of the population speaks only English in Johnson County. Almost 96 percent of the population speaks English very well and another 2.1 percent of the population speaks English well. As of 2014, only about 0.3 percent of the population does not speak English at all. The language mix is expected to stay consistent through 2019. The Spanish language accounts for the second largest percentage of the population at 5.3 percent, which is expected to account for only 5.2 percent in 2019.

Figure 6: Projected Population Growth by Language 2014-2019

Language	2014	4 Рор	2019	Рор	Population Change	
	Population	% of Total	Population	% of Total	Populatio	on Change
Only English	472,396	88.4%	497,837	88.5%	25,441	5.4%
Spanish	28,197	5.3%	29,483	5.2%	1,286	4.6%
Indo-European	14,804	2.8%	15,380	2.7%	576	3.9%
Asian-Pacific	12,006	2.2%	12,442	2.2%	436	3.6%
Other Lang	7,085	1.3%	7,323	1.3%	238	3.4%
Total	534,488	100.0%	562,465	100.0%	27,977	5.2%

*Source: Sg2 Population and Demographic Data

Figure 7: Projected Population Growth by Ability to Speak English 2014-2019

Ability to Speak	2014 Pop		2019 Pop		Dopulation Change	
English	Population	% of Total	Population	% of Total	Population Change	
English Very Well	512,664	95.9%	539,665	95.9%	27,001	5.3%
English Well	11,288	2.1%	11,803	2.1%	515	4.6%
English Not Well	9,080	1.7%	9,469	1.7%	389	4.3%
English Not at All	1,456	0.3%	1,528	0.3%	72	4.9%
Total	534,488	100.0%	562,465	100.0%	27,977	5.2%

*Source: Sg2 Population and Demographic Data

Education

In Johnson County, almost 96 percent of the population over 25 years of age has a high school diploma or higher. Of that group, an additional 21.4 percent have at least a little college education and 43.8 percent have a professional, associates, or bachelor's degree. Only about 4.3 percent of the population has not attained a high school diploma. In the state of Kansas, 89.8 percent of the population over 25 years is at least a high school graduate (Sg2 Population and Demographic Data).

Employment

About 70 percent of the population above 16 years of age is employed in Johnson County. About 4.3 percent of the population is unemployed. The cities that have the highest unemployment rates are Edgerton, Mission, Gardner, and Lenexa (Sg2 Population and Demographic Data).

Housing Profile

Figure 8. Johnson County Housing Prome				
Housing Profile	2010 Census Data			
Housing Units	226,571			
Occupied Housing Units	94.0%			
Renter Occupied Housing Units	29.2%			
Persons Per Household	2.53			
Single-Parent Households	18.0%			

Figure 8: Johnson County Housing Profile

*Source: U.S. Census Bureau, 2010

Homelessness

Based on a Point in Time measure of homelessness, there were 213 persons without a home on January 22, 2013 in Johnson County. Of those individuals, over 50 percent are under the age of 18 years. The homeless rate for children has increased from 2009-2012. The homeless rate increased 56 percent from the 2009-2010 school year to the 2011-2012 school year. The Olathe school district had the 4th highest number of homeless students in the Kansas City Metro during the 2011-2012 school year with 509 students.

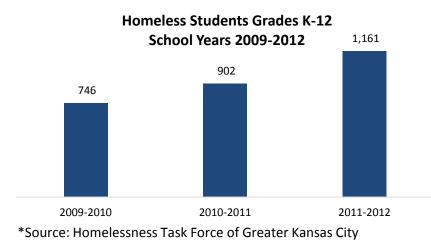
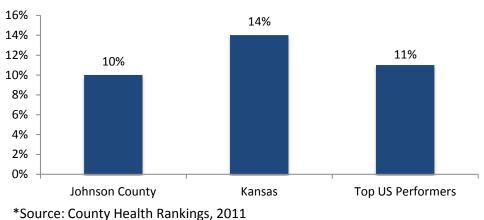


Figure 9: Homeless Students Grades K-12 in KC Metro, 2009-2012

Uninsured Population

In Johnson County, 88% of adults have health insurance and 95.3% of children have health insurance. According to the REACH foundation, in 2011, 48,679 individuals in Johnson County did not have health insurance. The largest number of uninsured was in the 25-34 age range followed by the 35-44 age range.

Figure 10: Percent of Uninsured Adults under 65



Percent of Uninsured Adults under 65

Health Status of the Population

The following section focuses on measures related to the health status of the population that is served by Kansas City Orthopaedic Institute. The measures are specific to Johnson County, Kansas. The measures are compared against national and state averages or Healthy People 2020 goals in order to assess the specific health needs of the population of Johnson County.

Mortality

Mortality is a measure used to assess the overall health status of the population. Typically, the mortality rate is age-adjusted, which adequately describes the death rate in a population, but it fails to take into account the population health implications of premature deaths. Figure 11 below shows the premature death rate or years of potential life lost (YPLL) before age 75 per 100,000 population. The advantage of this specific type of mortality measure is that it focuses on the reasons for premature mortality in a population (Dranger & Remington, 2004). The premature death measure avoids focusing on causes of death related to age. Johnson County has a premature death rate well below the U.S. 90th percentile of 5,317, while also doing better than the state with an YPLL 2,285 lower than Kansas. This measure indicates that the health status of the population in Johnson County is relatively good when compared to the state of Kansas and the United States.

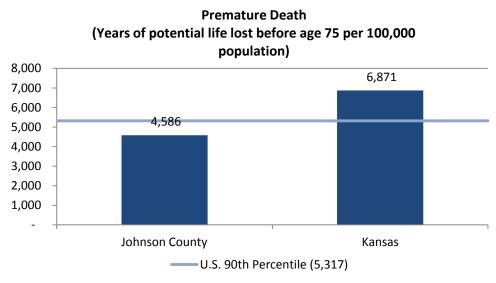


Figure 11: Premature Death Rate

*Source: County Health Rankings, 2010 - 2012

Leading Causes of Death

It is important to identify the leading causes of death in a population in order to assess the health outcomes in the specific population. Identifying the leading causes of death also allows a community to develop programs or treatment options that address the needs of the population. The table below shows the top ten leading causes of death in Johnson County for years 2011 to 2013. The rankings have remained relatively stable over the three-year period with cancer and heart disease being the top two leading causes of death in Johnson County.

Cause of Death	2011		2012		2013	
Cause of Death	Percentage	Rate	Percentage	Rate	Percentage	Rate
Cancer*	22%	141	23%	145.2	23%	143.6
Heart disease*	19%	118.1	17%	106.3	18%	108.4
Atherosclerosis*	6%	37.9	9%	55.9	9%	52.2
Chronic lower respiratory						
diseases*	5%	35.8	5%	33.9	5%	33.6
Cerebrovascular disease (Stroke)*	5%	32.8	5%	33.6	5%	30.5
Alzheimer's disease*	3%	18.7	3%	18.8	3%	19.2
Kidney disease (nephritis/nephrotic						
syndrome/nephrosis)*	2%	13.2	2%	13.4	2%	15.4
Suicide*	2%	11.6	3%	16	2%	14.3
Pneumonia and influenza*	2%	11.5	2%	12.1	2%	11.8
Diabetes*	2%	12	2%	10.2	1%	9.6

*Source: Kansas Department of Health and Environment

Morbidity

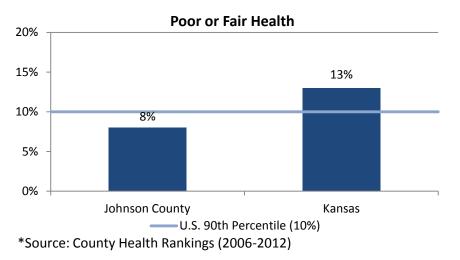
Morbidity measures are purported to measure the quality of life of individuals within a population. The goal of the measures is to focus on the impact that health status has on quality of life. The poor or fair health indicator is a self-reported measure of an individual's perception of their overall health. The poor physical and mental health days indicators are self-reported measures of days of work lost for health-related reasons and are shown as an average number of days lost per month in the table below. The last indicator is low birth weight. According to County Health Rankings, low birth weight is an important morbidity measure because it is indicative of maternal exposure to health risks, the current and future morbidity of the infant, and risk of premature mortality. While Johnson County's morbidity measures look good compared to the state of Kansas and the United States 90th percentile, Johnson County ranks 14th out of the 98 counties assessed in Kansas.

Indicator	Johnson County	Kansas	90th Percentile				
Poor Or Fair Health	8%	13%	10%				
Poor Physical Health Days	2.4	3	2.5				
Poor Mental Health Days	2.4	2.8	2.4				
Low Birth Weight	6.3%	7.2%	6.0%				

Figure 14: Morbidity Measures

*Source: County Health Rankings (2006-2012)

Figure 15: Poor or Fair Health Measure



National Priorities

Healthy People 2020

The Healthy People 2020 initiative identifies 10-year national objectives to improve the health of the United States population. According to the United States Department of Health and Human Services, the mission of Healthy People 2020 is to strive to:

- Identify nationwide health improvement priorities.
- Increase public awareness and understanding of the determinants of health, disease, and disability and the opportunities for progress.
- Provide measurable objectives and goals that are applicable at the national, state, and local levels.
- Engage multiple sectors to take actions to strengthen policies and improve practices that are driven by the best available evidence and knowledge.
- Identify critical research, evaluation, and data collection needs.

This mission is achieved through the development of Leading Health Indicators (LHIs). The United States Department of Health and Human Services developed an LHI framework that analyzes both determinants of health and health disparities and health across the life stages. The Healthy People 2020 LHIs include the following:

- Access to health services
- Clinical preventive services
- Environmental quality
- Injury and violence
- Maternal, infant, and child health
- Mental health

- Nutrition, physical activity, and obesity
- Oral health
- Reproductive and sexual health
- Social determinants
- Substance abuse
- Tobacco

Local Priorities

Healthy Kansans 2020

Health Kansans 2020 is an initiative inside the state of Kansas, which is focused on identifying and adopting health priorities for the people of Kansas to improve the overall health in the state. These priorities focus on ways the state can improve the well-being of all residents of the state. This initiative builds off the Healthy People 2020 initiative going on for the entire country. The priorities identified for Healthy Kansans 2020 are the following:

- Access to Health Services
- Chronic Disease
- Disability and Health
- Environmental Health
- Immunization and Infectious Disease
- Injury Prevention
- Lifestyle Behaviors
- Maternal, Infant, and Child Health
- Mental Health
- Oral Health
- Social Determinants of Health
- Violence Prevention

2013 CHNA/Implementation Evaluation

This year's Implementation plan places more efforts to come from the system in addressing the needs of the community, but activities are still being conducted at KCOI that were started after the 2013 CHNA process. The three health priorities outlined in the 2013 CHNA process were 1.) Nutrition and Physical Activity, 2.) Access to Care and 3.) Mental Health. Assessment around the previous and some current activities are as follows:

- 1. Nutrition and Physical Activity: Efforts have stayed the same from the previous process to the current CHNA and Implementation Plan.
- 2. Access to Care: We have Implemented the Financial Assistance Policy and are continuing other activities outlined in the previous CHNA and Implementation Plan.
- 3. Mental Health: We are also continuing our efforts in this area, especially our work with Safehome, in order to address the mental health needs of our community.