Community Health Needs Assessment 2016

COMMUNITY MEMORIAL HEALTHCARE

Your Community Health Connection

BKD LLP

CPAs & Advisors

Contents

Introduction

Internal Revenue Code (IRC) Section 501(r) requires health care organizations to assess the health needs of their communities and adopt implementation strategies to address identified needs. Per IRC Section 501(r), a byproduct of the *Affordable Care Act*, to comply with federal tax-exemption requirements, a tax-exempt hospital facility must:

- ✓ Conduct a community health needs assessment (CHNA) every three years.
- ✓ Adopt an implementation strategy to meet the community health needs identified through the assessment.
- ✓ Report how it is addressing the needs identified in the CHNA as well as a description of needs that are not being addressed with the reasons why such needs are not being addressed.

The CHNA must take into account input from persons including those with special knowledge of or expertise in public health, those who serve or interact with vulnerable populations and those who represent the broad interest of the community served by the hospital facility. The hospital facility must make the CHNA widely available to the public.

This CHNA, which describes both a process and a document, is intended to document Community Memorial Healthcare's (Hospital or CMH) compliance with IRC Section 501(r)(3). Health needs of the community have been identified and prioritized so that the Hospital may adopt an implementation strategy to address specific needs of the community.

The *process* involved:

- ✓ An evaluation of the implementation strategy for fiscal years ended December 31, 2014 through December 31, 2016, which was adopted by the Hospital's board of directors in 2013.
- ✓ Collection and analysis of a large range of data, including demographic, socioeconomic and health statistics, health care resources and hospital data.
- ✓ Obtaining community input from key stakeholders through an electronic survey on health and quality of life issues impacting Marshall County.

This *document* is a summary of all the available evidence collected during the CHNA conducted in tax year 2016. It will serve as a compliance document, as well as a resource, until the next assessment cycle. Both the *process* and *document* serve as the basis for prioritizing the community's health needs and will aid in planning to meet those needs.

Summary of Community Health Needs Assessment

The purpose of the CHNA is to understand the unique health needs of the community served by the Hospital and to document compliance with new federal laws outlined above.

The Hospital engaged **BKD, LLP** to conduct a formal CHNA. **BKD, LLP** is one of the largest CPA and advisory firms in the United States, with approximately 2,000 partners and employees in 34 offices. BKD serves more than 900 hospitals and health care systems across the country. The CHNA was conducted from May 2016 to September 2016.

Based on current literature and other guidance from the treasury and the IRS, the following steps were conducted as part of the Hospital's CHNA:

- An evaluation of the impact of actions taken to address the significant health needs identified in the tax year 2013 CHNA was completed to understand the effectiveness of the Hospital's current strategies and programs.
- The "community" served by the Hospital was defined by utilizing inpatient & outpatient data regarding patient origin. This process is further described in *Community Served by the Hospital*.
- Population demographics and socioeconomic characteristics of the community were gathered and reported utilizing various third parties (see references in *Appendices*). The health status of the community was then reviewed. Information on the leading causes of death and morbidity information was analyzed in conjunction with health outcomes and factors reported for the community by the Center for Disease Control and Prevention (Community Health Status Indicators) as well as countyhealthrankings.org. Health factors with significant opportunity for improvement were noted.
- Community input was provided through a community health survey which was completed by 31 key stakeholders. Results and findings are described in the *Key Stakeholder Survey* section of this report.
- Information gathered in the above steps was analyzed and reviewed to identify health issues of uninsured persons, low-income persons and minority groups and the community as a whole. Health needs were ranked utilizing a weighting method that weighs 1) the size of the problem, 2) the seriousness of the problem, 3) the impact of the issues on vulnerable populations, 4) the prevalence of common themes and 5) how important the issue is to the community.
- An inventory of health care facilities and other community resources potentially available to address the significant health needs identified through the CHNA was prepared and collaborative efforts were identified.

Health needs were then prioritized taking into account the perceived degree of influence the Hospital has to impact the need and the health needs impact on overall health for the community. Information gaps identified during the prioritization process have been reported.

General Description of the Hospital

Community Memorial Healthcare serves the community with high quality health care, featuring the latest in technologies and treatments, delivered in an environment that promotes healing. Access to quality health care is critical and Community Memorial Healthcare provides health care services for those we work and live with, neighbors and friends.

CMH has expanded the scope of health care services to encompass the full continuum of care that emphasizes health promotion, disease prevention and treatment for all members of your family. That's why CMH offers a full range of services to treat you. Whether you are admitted as an impatient, visiting for outpatient services or attending one of CMH's community education programs, everyone at Community Memorial Healthcare considers it a privilege to serve you.

Mission

To excel at caring for you.

Vision

CMH will exceed expectations as a trusted and valued health provider.

Values

Treat: To provide appropriate and knowledgeable care to you, our patients.
Respect: We respect you through privacy, honesty, and sincerity.
Understand: Understanding your needs with compassion and small town values.
Stewardship: A responsible way to ensure that we are here for you today and in the future.
Teamwork: Secret of our success.

Clinics and Facilities

- Blue Rapids Medical Clinic
- Community Physician Clinic – Marysville
- Community Physician Clinic – Wymore
- CPC Surgeon
- Community Medical Equipment

Evaluation of Prior Implementation Strategy

The implementation strategy for fiscal years ended December 31, 2014 through December 31, 2016, focused on two priorities to address identified health needs. The areas of focus were 1.) increase physical activity; and 2.) decrease the prevalence of obesity. In addition, *Thrive Marshall County,* a community wellness coalition, evolved from the Marshall County Community Health Needs Assessment completed in 2013. Below is a summary of actions taken by CMH as well as *Thrive Marshall County.*

- During the 2014-15 school year, USD 364 (*Thrive* committee member) applied for and received a small grant for *Safe and Active School Transportation* to develop a 'Walking School Bus,' a program that encourages children to walk safely to and from school. Public meetings were held to promote the program and the committee was pleased with the participation. Following the goals and strategies outlined in the Implementation Plan "to replace and/or repair sidewalks near local schools in Marysville," the school district submitted a proposal in 2015 for a Phase I Kansas Department of Transportation (KDOT) *Safe Routes to Schools Grant,* a federal reimbursement program that provides funding for infrastructural projects and educational activities to assist cities, counties, and school districts to enable children to walk or bicycle to school more safely. The Phase I grant was received, so the school district is pursuing a Phase II Grant Proposal. *Thrive* also created and distributed activity flyers, as outlined in Implementation Plan strategies, for elementary-age students about summer activities in Marshall County.

- In October 2014, Hospital Administrator Curtis Hawkinson signed the Healthy Kansas Hospitals pledge for CMH, which affirmed the hospital's commitment to explore opportunities to provide greater access to healthy food and beverage options for hospital employees, patients and visitors. The pledge became effective on January 1, 2015. Changes made to overall nutritionduring the past year include: removal of high fat/calorie pastries, display of calorie/fat contents for lunch menu items, vending changes, offering infused water, removal of complimentary calorie-containing beverages, healthy entrée choice each day, adding healthier snack options, offering appropriate juice sizes, and removal of trans fats from kitchen production.

- In August of 2015, CMH created a new employee wellness program for all hospital employees and contract services to establish a work environment that promotes healthy lifestyles and enhances quality of life. Employees are encouraged (through incentive prizes) to exercise regularly, eat healthy, participate in 'Lunch & Learn' programs, and engage in health coaching. The employee wellness program was designed to increase activity of employees throughout the day as well as address mental and financial health as well as encourage overall well-being.

- In October 2015, CMH partnered in the newly expanded Cooking Classes sponsored by Pony Express Partnership for Children (PEPC), a non-profit organization located in Lincoln Center, PEPC provides resources and support for families in Marshall County, and the cooking classes are one way to promote healthy eating habits. The first session of classes started in late October and continued into November, 2015. The second session of cooking classes ran from May to June, 2016.

Summary of Findings – 2016 Tax Year CHNA

Health needs were identified based on information gathered and analyzed through the 2016 CHNA conducted by the Hospital. These identified community health needs are discussed in greater detail later in this report and the prioritized listing is available at *Exhibit 24*.

Based on the prioritization process, the following significant needs were identified:

- Lack of mental health providers/mental health conditions
- Lack of access to primary care providers
- Obesity
- Poverty/lack of financial resources
- Need for health services to respond to aging population
- Unhealthy eating/food insecurity
- Alcohol and drug abuse
- Lack of access to exercise opportunities

These needs have been prioritized based on information gathered through the CHNA and the prioritization process is discussed in greater detail later in this report.

Community Served by the Hospital

Community Memorial Healthcare, Inc. is located in Marysville, Kansas which is the county seat of Marshall County.

Defined Community

A community is defined as the geographic area from which a significant number of the patients utilizing Hospital services reside. While the CHNA considers other types of health care providers, the Hospital is the single largest provider of acute care services. For this reason, the utilization of Hospital services provides the clearest definition of the community.

Based on the patient origin of acute care inpatient discharges and outpatient visits from January 1, 2015, through December 31, 2015 management has identified Marshall County as the defined CHNA community. Marshall County represents almost 80% of the total as reflected in *Exhibit 1* below. The CHNA will utilize data and input from this county to analyze health needs for the community.

Exhibit 1
Summary of Inpatient Discharges & Outpatient Visits by Zip Code
1/1/2015 - 12/31/2015

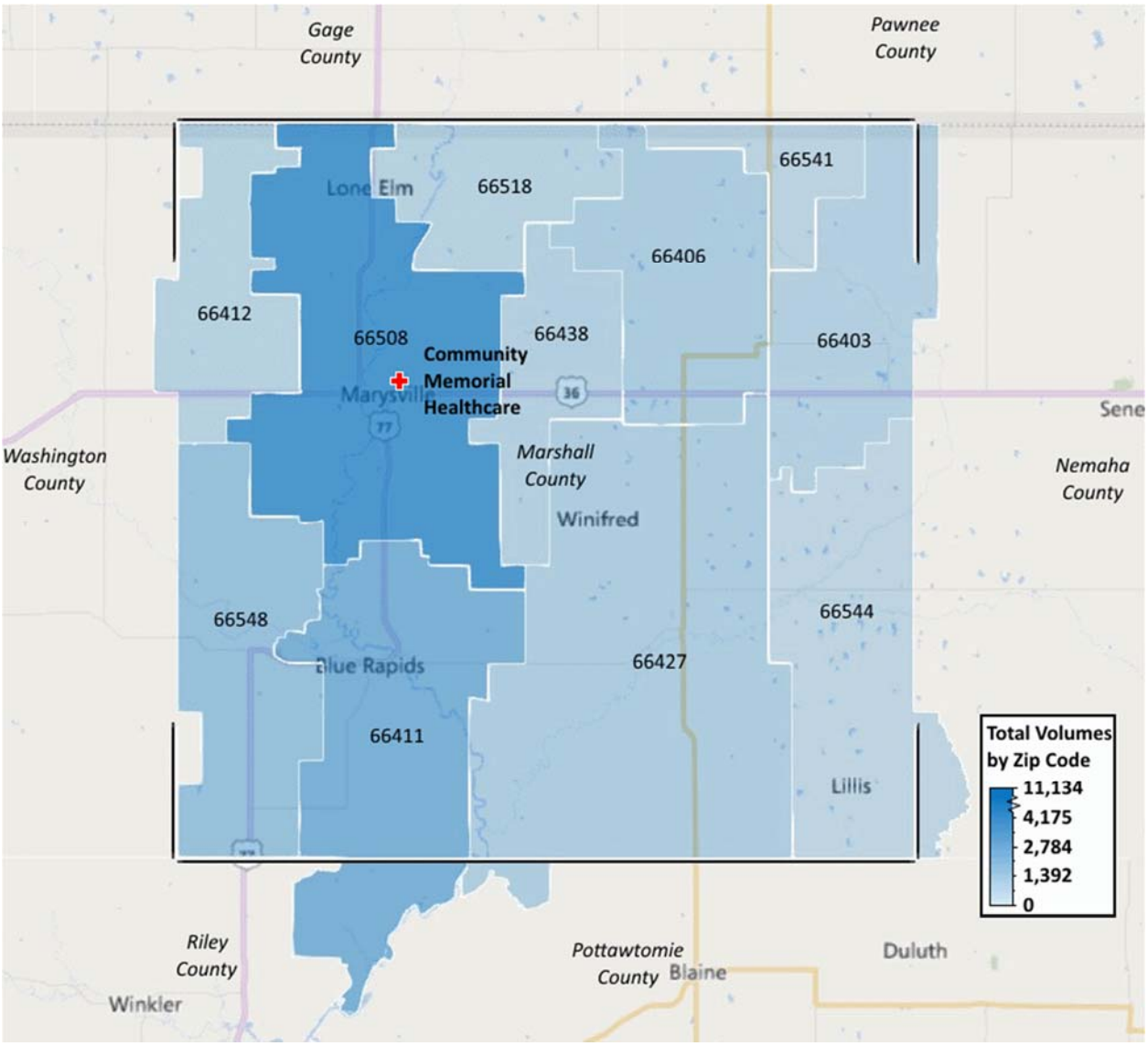
Zip Code	City	Inpatient	Outpatient	Total	Percent of Total
Marshall County:					
66508	Marysville	334	10,800	11,134	42.9%
66411	Blue Rapids	69	3,212	3,281	12.6%
66548	Waterville	42	1,877	1,919	7.4%
66406	Beattie	19	961	980	3.8%
66427	Frankfort	33	820	853	3.3%
66438	Home	9	620	629	2.4%
66403	Axtell	9	561	570	2.2%
66518	Oketo	10	479	489	1.9%
66412	Bremen	16	468	484	1.9%
66541	Summerfield	8	228	236	0.9%
66544	Vermillion	2	125	127	0.5%
Total Marshall County:		**551**	**20,151**	**20,702**	**79.8%**
Washington County:		118	3,504	3,622	14.0%
Gage County:		21	1,033	1,054	4.1%
All Other Counties		7	566	573	2.2%
	Total	**697**	**25,254**	**25,951**	**100.0%**

Source: Community Memorial Healthcare

Community Details

Identification and Description of Geographical Community

The following map geographically illustrates the Hospital's community by showing the community zip codes shaded by number of inpatient discharges. The map below displays the Hospital's geographic relationship to the community, as well as significant roads and highways.



Community Population and Demographics

The U.S. Bureau of Census has compiled population and demographic data. *Exhibit 2* below shows the total population of the CHNA community. It also provides the breakout of the CHNA community between the male and female population, age distribution, race/ethnicity and the Hispanic population.

Exhibit 2
Demographic Snapshot

DEMOGRAPHIC CHARACTERISTICS

	Total Population		Marshall County
Marshall County	10,042		
Kansas	2,882,946	**Total Male Population**	4,987
United States	314,107,083	**Total Female Population**	5,055

POPULATION DISTRIBUTION

Age Distribution Age Group	County	Total	Kansas	Percent of Total Kansas	United States	Percent of Total US
0 - 4	622	6.19%	202,749	7.03%	19,973,712	6.36%
5 - 17	1,698	16.91%	522,222	18.11%	53,803,944	17.13%
18 - 24	600	5.97%	296,081	10.27%	31,273,296	9.96%
25 - 34	1,149	11.44%	384,162	13.33%	42,310,184	13.47%
35 - 44	954	9.50%	345,769	11.99%	40,723,040	12.96%
45 - 54	1,458	14.52%	386,309	13.40%	44,248,184	14.09%
55 - 64	1,446	14.40%	350,595	12.16%	38,596,760	12.29%
65+	2,115	21.06%	395,059	13.70%	43,177,963	13.75%
Total	10,042	100.00%	2,882,946	100.00%	314,107,083	100.00%

RACE/ETHNICITY

Race/Ethnicity Distribution Race/Ethnicity	Marshall County	Percent of Total	Kansas	Percent Kansas	United States	Percent of Total US
White Non-Hispanic	9,590	95.50%	2,231,152	77.39%	197,159,492	62.77%
Hispanic	219	2.18%	316,171	10.97%	53,070,096	16.90%
Black Non-Hispanic	35	0.35%	162,948	5.65%	38,460,597	12.24%
Asian & Pacific Island Non-Hispanic	50	0.50%	73,689	2.56%	16,029,364	5.10%
All Others	148	1.47%	98,986	3.43%	9,387,534	2.99%
Total	10,042	100.00%	2,882,946	100.00%	314,107,083	100.00%

Source: Community Commons (ACS 2010-2014 data sets)

While the relative age of the community population can impact community health needs, so can the ethnicity and race of a population. The population of the CHNA community by race and illustrates different categories of race such as, white, black, Asian, other and multiple races. White non-Hispanics make up over 95% of the community while Hispanics make up approximately 2% of the CHNA community. The community is also comprised of a higher percentage of seniors compared to the state and national percentages.

Exhibit 3 reports the percentage of population living in urban and rural areas. Urban areas are identified using population density, count, and size thresholds. Urban areas also include territory with a high degree of impervious surface (development). Rural areas are all areas that are not urban. This table could help to understand why transportation may or may not be considered a need within the community, especially within the rural and outlying populations.

Exhibit 3

County	Percent Urban	Percent Rural
Marshall County, KS	29.03%	70.97%
KANSAS	74.20%	25.80%
UNITED STATES	80.89%	19.11%

Source: Community Commons (2010)

Socioeconomic Characteristics of the Community

The socioeconomic characteristics of a geographic area influence the way residents access health care services and perceive the need for health care services within society. The economic status of an area may be assessed by examining multiple variables within the CHNA community. The following exhibits are a compilation of data that includes household per capita income, unemployment rates, poverty, uninsured population and educational attainment for the CHNA community. These standard measures will be used to compare the socioeconomic status of the community to the state of Kansas and the United States.

Income and Employment

Exhibit 4 presents the per capita income for the CHNA community. This includes all reported income from wages and salaries, as well as income from self-employment, interest or dividends, public assistance, retirement and other sources. The per capita income in this exhibit is the average (mean) income computed for every man, woman and child in the specified area. Marshall County's per capita income is below the state of Kansas and the United States.

Exhibit 4

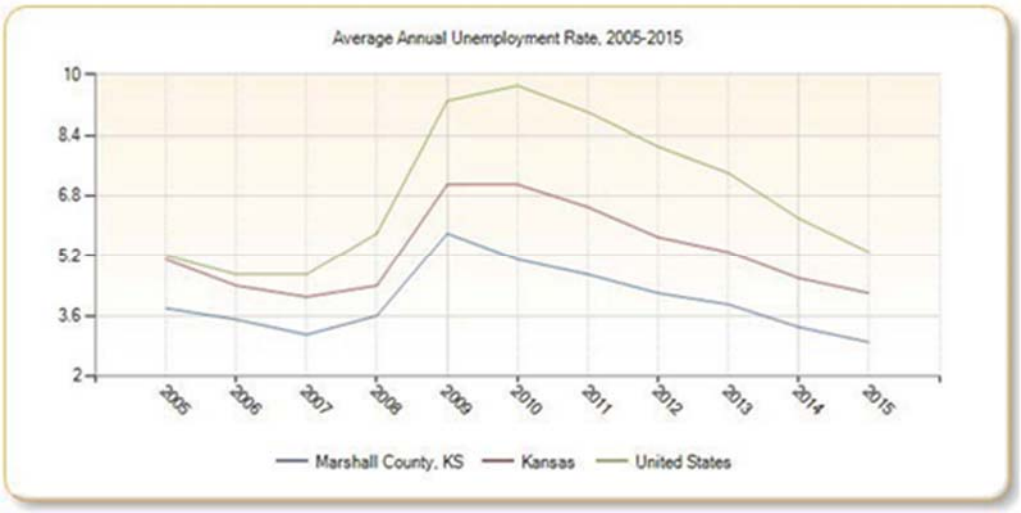
County	Total Population	Total Income ($)	Per Capita Income ($)
Marshall County, KS	10,042	$ 259,368,896	**$ 25,828**
KANSAS	2,882,946	$ 78,898,626,560	$ 27,367
UNITED STATES	314,107,072	$ 8,969,237,037,056	$ 28,554

Source: Community Commons (2010 – 2014)

Unemployment Rate

Exhibit 5 presents the average annual unemployment rate from 2005 through 2015 for the community defined as the community, as well as the trend for Kansas and the United States. On average, the unemployment rates for the community are lower than both the United States and the state of Kansas. A decrease in the unemployment rate has been the trend since reaching its highest point of 5.8 in 2009.

Exhibit 5



Data Source: US Department of Labor, Bureau of Labor Statistics. 2015 - May. Source geography: County

Poverty

Exhibit 6 presents the percentage of total population below 100% Federal Poverty Level (FPL). Poverty is a key driver of health status and is relevant because poverty creates barriers to access, including health services, healthy food choices and other factors that contribute to poor health. Marshall County's poverty rate is lower than the state and national poverty rate.

Exhibit 6

County	Total Population	Population in Poverty	Percent Population in Poverty
Marshall County, KS	9,840	1,266	**12.87%**
KANSAS	2,799,551	386,062	13.79%
UNITED STATES	306,226,400	47,755,608	15.59%

Data Source: US Census Bureau, American Community Survey. 2010-14. Source geography: Tract
Note: Total population for poverty status was determined at the household level.

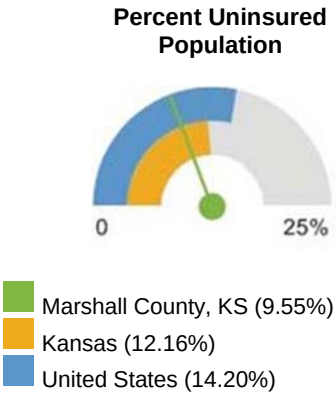
Uninsured

Exhibit 7 reports the percentage of the total civilian non-institutionalized population without health insurance coverage. This indicator is relevant because lack of insurance is a primary barrier to health care access, including regular primary care, specialty care and other health services that contribute to poor health status. *Exhibit 7* shows less than 1,000 persons are uninsured in the CHNA community based on 5-year estimates produced by the U.S. Census Bureau, 2010 through 2014 American Community Survey. However, the 2015 uninsured rate is estimated to be 10% for Marshall County, per www.enrollamerica.org, which indicates the uninsured population has remained roughly the same since 2014.

Exhibit 7

County	Total Population (For Whom Insurance Status is Determined)	Total Uninsured Population	Percent Uninsured Population
Marshall County, KS	9,819	938	**9.55%**
KANSAS	2,824,176	343,475	12.16%
UNITED STATES	309,082,272	43,878,140	14.20%

Data Source: US Census Bureau, American Community Survey. 2010-14. Source geography: Tract



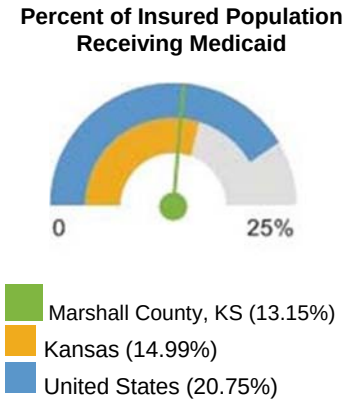
Medicaid

The Medicaid indicator reports the percentage of the population with insurance enrolled in Medicaid (or other means-tested public health insurance). This is relevant because it assesses vulnerable populations, which are more likely to have multiple health access, health status and social support needs; when combined with poverty data, providers can use this measure to identify gaps in eligibility and enrollment. *Exhibit 8* shows Marshall County ranks favorably when compared to the state of Kansas and the United States.

Exhibit 8

County	Total Population (For Whom Insurance Status is Determined)	Population with Any Health Insurance	Population Receiving Medicaid	Percent of Insured Population Receiving Medicaid
Marshall County, KS	9,819	8,881	1,168	**13.15%**
KANSAS	2,824,176	2,480,701	371,857	14.99%
UNITED STATES	309,082,272	265,204,128	55,035,660	20.75%

Data Source: US Census Bureau, American Community Survey. 2010-14. Source geography: Tract



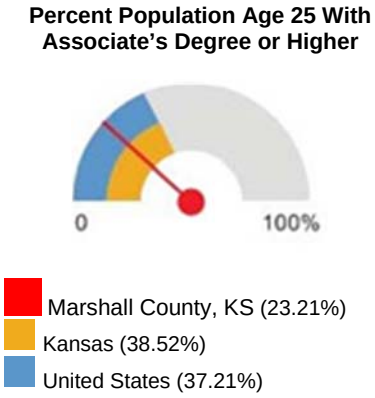
Education

Exhibit 9 presents the population with an Associate's degree or higher in Marshall County versus Kansas and the United States.

Exhibit 9

County	Total Population Age 25	Population Age 25 with Associate's Degree or Higher	Percent Population Age 25 with Associate's Degree or Higher
Marshall County, KS	7,122	1,653	**23.21%**
KANSAS	1,861,894	717,130	38.52%
UNITED STATES	209,056,128	77,786,232	37.21%

Data Source: US Census Bureau, American Community Survey. 2010-14. Source geography: Tract



Education levels obtained by community residents may impact the local economy. Higher levels of education generally lead to higher wages, less unemployment and job stability. These factors may indirectly influence community health. As noted in *Exhibit 9*, the percent of residents within the CHNA community of Marshall County obtaining an associate's degree or higher is well below the state and national percentages.

Physical Environment of the Community

A community's health is also affected by the physical environment. A safe, clean environment that provides access to healthy food and recreational opportunities is important to maintaining and improving community health. This section will touch on a few of the elements that relate to some needs mentioned throughout the report.

Grocery Store Access

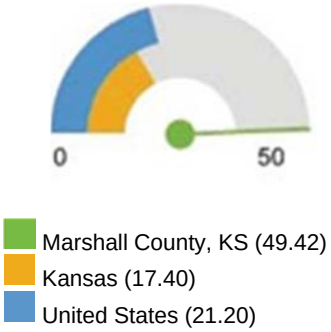
Exhibit 10 reports the number of grocery stores per 100,000-population. Grocery stores are defined as supermarkets and smaller grocery stores primarily engaged in retailing a general line of food, such as canned and frozen foods, fresh fruits and vegetables and fresh and prepared meats, fish and poultry. Included are delicatessen-type establishments. Convenience stores and large general merchandise stores that also retail food, such as supercenters and warehouse club stores, are excluded. This indicator is relevant because it provides a measure of healthy food access and environmental influences on dietary behaviors.

Exhibit 10

County	Total Population	Number of Establishments	Establishments, Rate per 100,000 Population
Marshall County, KS	10,117	5	49.42
KANSAS	2,853,118	496	17.40
UNITED STATES	312,732,537	66,286	21.20

Data Source: U.S. Census Bureau, County Business Patterns. Additional data analysis by CARES. 2013. Source geography: County

Grocery Stores, Rate (Per 100,000 Population)



Food Access/Food Deserts

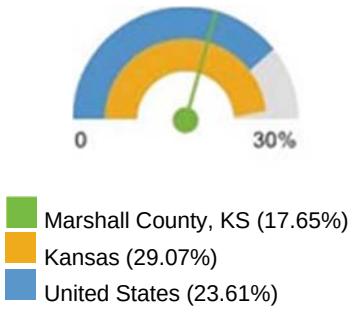
This indicator reports the percentage of the population living in census tracts designated as food deserts. A food desert is defined as a low-income census tract where a substantial number or share of residents has low access to a supermarket or large grocery stores. The information in *Exhibit 11* below is relevant because it highlights populations and geographies facing food insecurity. Marshall County does not have a population with low food access when compared to Kansas and the United States.

Exhibit 11

County	Total Population	Population With Low Food Access	Percent Population With Low Food Access
Marshall County, KS	10,117	1,786	17.65%
KANSAS	2,853,118	829,328	29.07%
UNITED STATES	308,745,538	72,905,540	23.61%

Data Source: US Department of Agriculture, Economic Research Service, USDA - Food Access Research Atlas. 2010. Source geography: Tract

Percent Population With Low Food Access



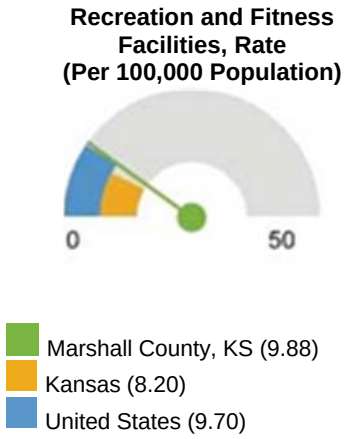
Recreation and Fitness Facility Access

This indicator reports the number per 100,000-population of recreation and fitness facilities as defined by North American Industry Classification System (NAICS) Code 713940. It is relevant because access to recreation and fitness facilities encourages physical activity and other healthy behaviors. *Exhibit 12* shows that Marshall County has more fitness establishments available to the residents of the community (per 100,000 population) than Kansas as a whole.

Exhibit 12

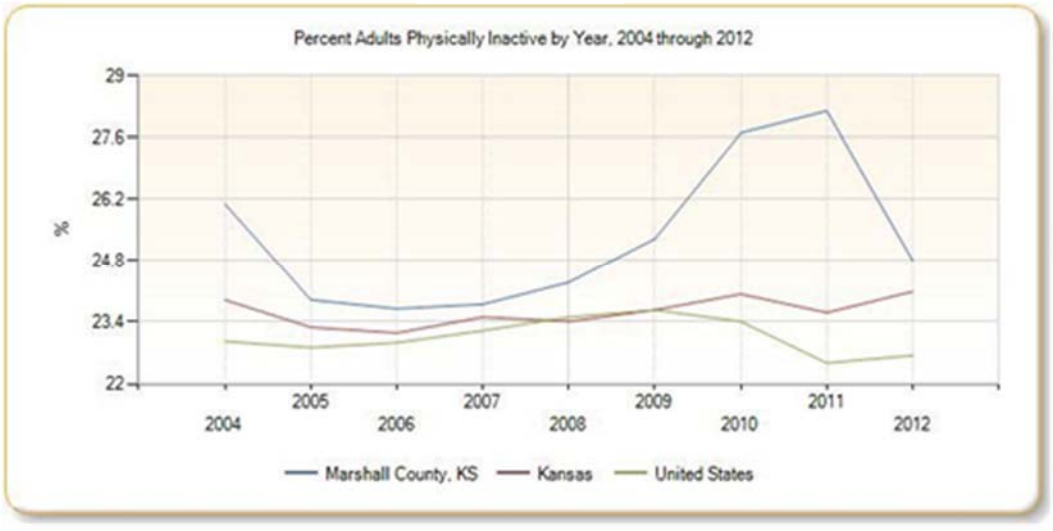
County	Total Population	Number of Establishments	Establishments, Rate per 100,000 Population
Marshall County, KS	10,117	1	**9.88**
KANSAS	2,853,118	234	8.20
UNITED STATES	312,732,537	30,393	9.70

Data Source: US Census Bureau, County Business Patterns. Additional data analysis by CARES. 2013. Source geography: County



The trend graph below (*Exhibit 13)* shows the percentage of adults who are physically inactive by year for the community and compared to Kansas and the United States. From 2006 through 2011, the CHNA community percentage of adults who are physically inactive was on the rise from its trough of 23.7%. The community then saw a quick turnaround in 2012, going from 28.2% to 24.8%. Although the percentage has started to decline, it is still higher than the state of Kansas and the United States.

Exhibit 13



Data Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. 2012. Source geography: County

Clinical Care of the Community

A lack of access to care presents barriers to good health. The supply and accessibility of facilities and physicians, the rate of uninsured, financial hardship, transportation barriers, cultural competency and coverage limitations affect access.

Rates of morbidity, mortality and emergency hospitalizations can be reduced if community residents access services such as health screenings, routine tests and vaccinations. Prevention indicators can call attention to a lack of access or knowledge regarding one or more health issues and can inform program interventions.

Access to Primary Care

Exhibit 14 shows the number of primary care physicians per 100,000 population. Doctors classified as "primary care physicians" by the American Medical Association include general family medicine MDs and DOs, general practice MDs and DOs, general internal medicine MDs and general pediatrics MDs. Physicians age 75 and over and physicians practicing sub-specialties within the listed specialties are excluded. This indicator is relevant because a shortage of health professionals contributes to access and health status issues.

Exhibit 14

County	Total Population, 2013	Primary Care Physicians, 2013	Primary Care Physicians, Rate per 100,000 Population
Marshall County, KS	10,002	5	**50.00**
KANSAS	2,893,957	2,180	75.30
UNITED STATES	316,128,839	239,500	75.80

Data Source: US Department of Health Human Services, Health Resources and Services Administration, Area Health Resource File. 2013. Source geography: County

Population Living in a Health Professional Shortage Area

This indicator reports the percentage of the population that is living in a geographic area designated as a Health Professional Shortage Area (HPSA), defined as having a shortage of primary medical care, dental or mental health professionals. This indicator is relevant because a shortage of health professionals contributes to access and health status issues. As *Exhibit 15* below shows, all of Marshall County is considered a health professional shortage area.

Exhibit 15

County	Total Area Population	Population Living in a HPSA	Percentage of Population Living in a HPSA
Marshall County, KS	10,117	10,117	**100.00%**
KANSAS	2,853,118	1,418,050	49.70%
UNITED STATES	308,745,538	102,289,607	33.13%

Data Source: U.S. Department of Health Human Services, Health Resources and Services Administration, Health Professional Shortage Areas. April 2016. Source geography: HPSA

Preventable Hospital Events

Exhibit 16 reports the discharge rate (per 1,000 Medicare enrollees) for conditions that are ambulatory care sensitive (ACS). ACS conditions include pneumonia, dehydration, asthma, diabetes and other conditions which could have been prevented if adequate primary care resources were available and accessed by those patients. This indicator is relevant because analysis of ACS discharges allows demonstrating a possible "return on investment" from interventions that reduce admissions (for example, for uninsured or Medicaid patients) through better access to primary care resources.

Exhibit 16

County	Total Medicare Part A Enrollees	Ambulatory Care Sensitive Condition Hospital Discharges	Ambulatory Care Sensitive Condition Discharge Rate
Marshall County, KS	2,069	144	**69.90**
KANSAS	328,509	19,671	59.90
UNITED STATES	58,209,898	3,448,111	59.20

Data Source: Dartmouth College Institute for Health Policy Clinical Practice, Dartmouth Atlas of Health Care. 2012. Source geography: County

Health Status of the Community

This section of the assessment reviews the health status of the CHNA community and its residents. As in the previous section, comparisons are provided with the state of Kansas and the United States. This in-depth assessment of the mortality and morbidity data, health outcomes, health factors and mental health indicators of the county residents that make up the CHNA community will enable the Hospital to identify priority health issues related to the health status of its residents.

Good health can be defined as a state of physical, mental and social well-being, rather than the absence of disease or infirmity. According to *Healthy People 2020*, the national health objectives released by the U.S. Department of Health and Human Services, individual health is closely linked to community health. Community health, which includes both the physical and social environment in which individuals live, work and play, is profoundly affected by the collective behaviors, attitudes and beliefs of everyone who lives in the community. Healthy people are among a community's most essential resources.

Numerous factors have a significant impact on an individual's health status: lifestyle and behavior, human biology, environmental and socioeconomic conditions, as well as access to adequate and appropriate health care and medical services.

Studies by the American Society of Internal Medicine conclude that up to 70% of an individual's health status is directly attributable to personal lifestyle decisions and attitudes. Persons who do not smoke, drink in moderation (if at all), use automobile seat belts (car seats for infants and small children), maintain a nutritious low-fat, high-fiber diet, reduce excess stress in daily living and exercise regularly have a significantly greater potential of avoiding debilitating diseases, infirmities and premature death.

The interrelationship among lifestyle/behavior, personal health attitude and poor health status is gaining recognition and acceptance by both the general public and health care providers. Some examples of lifestyle/behavior and related health care problems include the following:

Lifestyle/ Behavior	Primary Disease Factor	
Smoking	Lung cancer Cardiovascular disease	Emphysema Chronic bronchitis
Alcohol/drug abuse	Cirrhosis of liver Motor vehicle crashes Unintentional injuries Malnutrition	Suicide Homicide Mental illness
Poor nutrition	Obesity Digestive disease Depression	
Driving at excessive speeds	Trauma Motor vehicle crashes	
Lack of exercise	Cardiovascular disease Depression	
Overstressed	Mental illness Alcohol/drug abuse Cardiovascular disease	

Health problems should be examined in terms of morbidity as well as mortality. Morbidity is defined as the incidence of illness or injury, and mortality is defined as the incidence of death. Such information provides useful indicators of health status trends and permits an assessment of the impact of changes in health services on a resident population during an established period of time. Community attention and health care resources may then be directed to those areas of greatest impact and concern.

Leading Causes of Death and Health Outcomes

Exhibit 17 reflects the leading causes of death for the community and compares the age-adjusted rates to the state of Kansas and the United States.

Exhibit 17

Age-Adjusted Rates

Selected Causes of Resident Deaths	Age-Adjusted Death Rate per 100,000 Population		
	Marshall County	Kansas	United States
Cancer	151.8	168.8	168.9
Heart Disease	182.0	160.0	175.0
Lung Disease	42.0	50.8	42.2
Stroke	37.9	40.3	37.9
Unintentional Injury	40.5	43.7	38.6

Source: Community Commons 2009-2013

The table above shows leading causes of death within Marshall County as compared to the state of Kansas and also to the United States. The age-adjusted rate is shown per 100,000 residents. The rates in red represent Marshall County and corresponding leading causes of death that are greater than the state rates. As the table indicates, the only leading cause of death above that is greater than the Kansas and national rates is heart disease.

Health Outcomes and Factors

An analysis of various health outcomes and factors for a particular community can, if improved, help make the community a healthier place to live, learn, work and play. A better understanding of the factors that affect the health of the community will assist with how to improve the community's habits, culture and environment. This portion of the community health needs assessment utilizes information from County Health Rankings, a key component of the Mobilizing Action Toward Community Health (MATCH) project, a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute.

The County Health Rankings model is grounded in the belief that programs and policies implemented at the local, state and federal levels have an impact on the variety of factors that, in turn, determine the health outcomes for communities across the nation. The model provides a ranking method that ranks all 50 states and the counties within each state, based on the measurement of two types of health outcomes for each county: how long people live (mortality) and how healthy people feel (morbidity). These outcomes are the result of a collection of health factors and are influenced by programs and policies at the local, state and federal levels.

Counties in each of the 50 states are ranked according to summaries of a variety of health measures. Those having high ranks, *e.g.* 1 or 2, are considered to be the "healthiest". Counties are ranked relative to the health of other counties in the same state based on health outcomes and factors, clinical care, economic status and the physical environment.

A number of different health factors shape a community's health outcomes. The County Health Rankings model includes four types of health factors: health behaviors, clinical care, social and economic and the physical environment. As can be seen from the chart below, many rankings within each area have improved from 2012:

Marshall County Indicators	2012	2015
Health Outcomes	35	30
Mortality	26	13
Morbidity	43	62
Health Factors	35	13
Health Behaviors	84	45
Clinical Care	22	27
Social and Economic Factors	33	13
Physical Environment	6	21

Out of 101 counties in Kansas

Source: Counthhealthrankings.org

The following tables in *Exhibits 18.1* and *18.2* include the 2012 and 2015 indicators reported by County Health Rankings for Marshall County. The health indicators that are unfavorable when compared to the Kansas rates are shaded in gray.

Exhibit 18.1

County Health Rankings – Health Outcomes

		Marshall County 2012***	Marshall County 2015***	Kansas 2015	Top U.S. Performers 2015**
Mortality	*	26	13		
Premature death – Years of potential life lost before age 75 per 100,000 population (age-		6,523	5,800	6,800	5,200
Morbidity	*	43	62		
Poor or fair health – Percent of adults reporting fair or poor health (age-adjusted)		15%	14%	15%	12%
Poor physical health days – Average number of physically unhealthy days reported in past 30 days (age-adjusted)		3.1	3.1	3.2	2.9
Poor mental health days – Average number of mentally unhealthy days reported in past 30 days (age-adjusted)		2.1	3.0	3.0	2.8
Low birth weight – Percent of live births with low birth weight (<2500 grams)		6.7%	8.0%	7.0%	6.0%

* Rank out of 101 Kansas counties

** 90th percentile, i.e., only 10% are better

*** Data for 2012 and 2015 w as released in 2013 and 2016, respectively

^ Data should not be compared betw een years due to changes in definition and/or methods

Source: Countyhealthrankings.org

Exhibit 18.2
County Health Rankings – Health Factors

		Marshall County 2012***	Marshall County 2015***	Kansas 2015	Top U.S. Performers 2015**
Health Behaviors	*	84	45		
Adult smoking – Percent of adults that report smoking at least 100 cigarettes and that they currently smoke		20.0%	17.0%	18.0%	14.0%
Adult obesity – Percent of adults that report a BMI >= 30		34.0%	34.0%	30.0%	25.0%
Food environment index – Index of factors that contribute to a healthy food environment, 0 (worst) to 10		N/A	7.8	7.2	8.3
Physical inactivity – Percent of adults age 20 and over reporting no leisure time physical activity		28.0%	26.0%	25.0%	20.0%
Access to exercise opportunities – Percentage of population with adequate access to locations for physical		N/A	40.0%	76.0%	91.0%
Excessive drinking – Percent of adults that report excessive drinking in the past 30 days		21.0%	15.0%	17.0%	12.0%
Alcohol-impaired driving deaths – Percentage of driving deaths with alcohol involvement		N/A	36.0%	33.0%	14.0%
Sexually transmitted infections – Chlamydia rate per 100K population		188.0	119.7	381.6	134.1
Teen birth rate – Per 1,000 female population, ages 15-19		26.0	28.0	38.0	19.0
Clinical Care	*	22	27		
Uninsured adults – Percent of population under age 65 without health insurance		15.0%	12.0%	14.0%	11.0%
Primary care physicians – Ratio of population to primary care physicians		2,021:1	2,000:1	1,330:1	1,040:1
Dentists – Ratio of population to dentists		2,021:1	1,670:1	1,840:1	1,340:1
Mental health providers – Ratio of population to mental health providers		N/A	5000:1	550:1	370:1
Preventable hospital stays – Hospitalization rate for ambulatory-care sensitive conditions per 1,000 Medicare enrollees		75.0	71.0	55.0	38.0
Diabetic screening – Percent of diabetic Medicare enrollees that receive HbA1c screening		92.0%	86.0%	86.0%	90.0%
Mammography screening – Percent of female Medicare enrollees that receive mammography screening		66.2%	63.0%	63.0%	71.0%

Exhibit 18.2 cont.
County Health Rankings – Health Factors (cont.)

		Marshall County 2012***	Marshall County 2015***	Kansas 2015	Top U.S. Performers 2015**
Social and Economic Factors	*	33	13		
High school graduation – Percent of ninth grade cohort that graduates in 4 years		96.0%	95.0%	85.0%	93.0%
Some college – Percent of adults aged 25-44 years with some post-secondary education		54.0%	62.0%	69.0%	72.0%
Unemployment – Percent of population age 16+ unemployed but seeking work		4.6%	3.2%	4.5%	3.5%
Children in poverty – Percent of children under age 18 in poverty		17.0%	14.0%	18.0%	13.0%
Income inequality – Ratio of household income at the 80th percentile to income at the 20th percentile		N/A	4.4	4.4	3.7
Children in single-parent households – Percent of children that live in household headed by single parent		19.0%	23.0%	29.0%	21.0%
Social associations – Number of membership associations per 10,000 population		N/A	27.0	13.9	22.1
Violent crime rate – Violent crime rate per 100,000 population (age-adjusted)		96.0	118.0	360.0	59.0
Injury deaths – Number of deaths due to injury per 100,000 population		N/A	62.0	67.0	51.0
Physical Environment	*	6	21		
Air pollution-particulate matter days – Average daily measure of fine particulate matter in micrograms per cubic		8.8	9.3	10.9	9.5
Severe housing problems – Percentage of household with at least one of four housing problems: overcrowding, high housing costs or lack of kitchen or plumbing facilities		N/A	12.0%	13.0%	9.0%
Driving alone to work – Percentage of the workforce that drives alone to work		N/A	80.0%	82.0%	71.0%
Long commute, driving alone – Among workers who commute in their car alone, the percentage that commute more than 30 minutes		N/A	11.0%	20.0%	15.0%

* Rank out of 101 Kansas counties

** 90th percentile, i.e., only 10% are better

*** Data for 2012 and 2015 was pulled in 2013 and 2016, respecitvely

Note: N/A indicates unreliable or missing data

^ Data should not be compared between years due to changes in definition and/or methods

Source: Countyhealthrankings.org

Community Health Status Indicators

The Community Health Status Indicators (CHSI) Project of the U.S. Department of Health and Human Services compares many health status and access indicators to both the median rates in the United States and to rates in "peer counties" across the United States. Counties are considered "peers" if they share common characteristics such as population size, poverty rate, average age, and population density.

Marshall County has multiple designated "peer" counties throughout the US, including Marion and Pawnee in Kansas. *Exhibit 19* provides a summary comparison of how Marshall County compares with peer counties on the full set of primary indicators. Peer county values for each indicator were ranked and then divided into quartiles.

Exhibit 19
Marshall County, Kansas

	Most Favorable Quartile	Middle Two Quartiles	Least Favorable Quartile
Mortality	• Unintentional injury (including motor vehicle)	• Alzheimer's disease deaths • Coronary heart disease • Female life expectancy • Male life expectancy • Chronic lower respiratory disease (CLDR) deaths • Cancer Deaths • Stroke Deaths	
Morbidity	• Adult Diabetes • Syphilis	• Adult Obesity • Alzheimer's disease/dementia • Gonorrhea • Older adult asthma • Older adult depression	• Adult overall health status • Preterm births
Health Care Access and Quality		• Cost barrier to care • Uninsured • Older adult preventable hospitalization • Primary Care Provider Access	
Health Behaviors		• Adult binge drinking • Adult physical inactivity • Adult smoking • Teen births	• Adult female routine pap tests
Social Factors	• Unemployment	• Children in single-parent households • Inadequate social support • High Housing Costs • On time high school graduation • Poverty • Violent Crime	
Physical Environment	• Access to parks • Limited access to healthy food	• Housing stress • Annual average PM2.5 concentration	• Living near highways

Source: Community Health Status Indicators, 2015

The following exhibits show a more detailed view of certain health outcomes and factors. The percentages for Marshall County are compared to the state of Kansas and the United States.

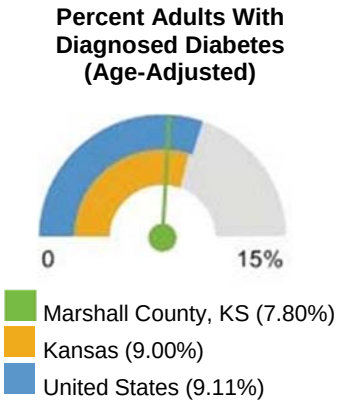
Diabetes (Adult)

Exhibit 20 reports the percentage of adults aged 20 and older who have ever been told by a doctor that they have diabetes. This indicator is relevant because diabetes is a prevalent problem in the U.S.; it may indicate an unhealthy lifestyle and puts individuals at risk for further health issues.

Exhibit 20

County	Total Population Age 20	Population With Diagnosed Diabetes	Population With Diagnosed Diabetes, Crude Rate	Population With Diagnosed Diabetes, Age-Adjusted Rate
Marshall County, KS	7,584	766	10.10	**7.80%**
Kansas	2,077,219	201,403	9.70	9.00%
United States	234,058,710	23,059,940	9.85	9.11%

Data Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. 2012. Source geography: County



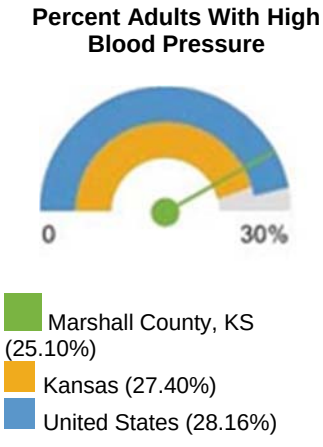
High Blood Pressure (Adult)

Per *Exhibit 21* below, 1,954 or 25.1% of adults aged 18 and older have ever been told by a doctor that they have high blood pressure or hypertension. The community percentage of high blood pressure among adults is less than the percentage of Kansas and the United States.

Exhibit 21

County	Total Population (Age 18)	Total Adults With High Blood Pressure	Percent Adults With High Blood Pressure
Marshall County, KS	7,785	1,954	**25.10%**
Kansas	2,112,400	578,798	27.40%
United States	232,556,016	65,476,522	28.16%

Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Additional data analysis by CARES. 2006-12. Source geography: County



Obesity

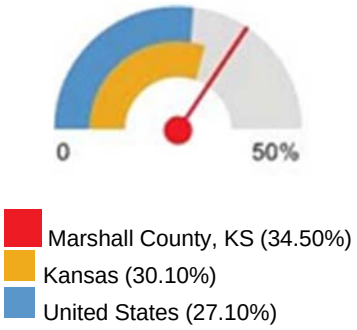
Of adults aged 20 and older, 34.5% self-report that they have a Body Mass Index (BMI) greater than 30.0 (obese) in the Community per *Exhibit 22*. Excess weight may indicate an unhealthy lifestyle and puts individuals at risk for further health issues. The CHNA community has a BMI percentage higher than the state and national rates.

Exhibit 22

County	Total Population Age 20	Adults With BMI > 30.0 (Obese)	Percent Adults With BMI > 30.0 (Obese)
Marshall County, KS	7,557	2,592	**34.50%**
Kansas	2,075,836	627,084	30.10%
United States	231,417,834	63,336,403	27.10%

Data Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion 2012. Source geography: County

Percent Adults With BMI > 30.0 (Obese)



Rates for youth obesity for the State of Kansas are 12.6% compared to the national rate of 15.7% as reported by America's Health Rankings for 2015.

Low Birth Weight

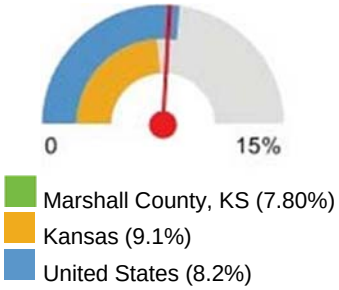
Exhibit 23 reports the percentage of total births that are low birth weight (Under 2500g). This indicator is relevant because low birth weight infants are at high risk for health problems. This indicator can also highlight the existence of health disparities.

Exhibit 23

County12.6	Total Live Births	Low Weight Births (Under 2500g)	Low Weight Births, Percent of Total
Marshall County, KS	854	67	**7.80%**
Kansas	285,236	20,537	7.20%
United States	29,300,495	2,402,641	8.20%
HP 2020 Target			<= 7.80%

Data Source: U.S. Department of Health Human Services, Health Indicators Warehouse. Centers for Disease Control and Prevention, National Vital Statistics System. Accessed via CDC WONDER 2006-12. Source geography: County

Percent Low Birth Weight Births



Community Input – Key Stakeholder Survey

Obtaining input from key stakeholders (persons with knowledge of or expertise in public health, community members who represent the broad interest of the community or persons representing vulnerable populations) is a technique employed to assess public perceptions of the county's health status and unmet needs. This input is intended to ascertain opinions among individuals likely to be knowledgeable about the community and influential over the opinions of others about health concerns in the community.

Methodology

Electronic surveys were distributed to stakeholders representing Marshall County. Stakeholders were determined based on a) their specialized knowledge or expertise in public health, b) their involvement with underserved and minority populations or c) their affiliation with local government, schools and industry.

Thirty one stakeholders provided input through an online community health survey on the following issues:

- ✓ Health and quality of life for residents of the primary community
- ✓ Underserved populations and communities of need
- ✓ Barriers to improving health and quality of life for residents of the community
- ✓ Opinions regarding the important health issues that affect community residents and the types of services that are important for addressing these issues

The survey consisted of a series of twelve questions.

Key Stakeholder Profiles

Key stakeholders who were asked to participate in the online survey worked for the following types of organizations and agencies:

- ✓ Hospitals and healthcare facilities
- ✓ Social service agencies
- ✓ Local school systems and educational organizations
- ✓ Public health agencies
- ✓ Other medical providers
- ✓ Local elected officials and governmental agencies
- ✓ Local businesses

Key Stakeholder Survey Results

The questions on the survey were grouped into four major categories. A summary of the stakeholders' responses by each of the categories follows. Paraphrased quotes are included to reflect some commonly held opinions and direct quotes are employed to emphasize strong feelings associated with the statements. This section of the report summarizes what the key stakeholders said without assessing the credibility of their comments.

1. General opinions regarding health and quality of life in the community

The key stakeholders were asked to rate the health and quality of life in Marshall County. They were also asked to provide their opinion on whether the health and quality of life had improved, declined or stayed the same over the past few years. Lastly, key stakeholders were asked to provide support for their answers.

Thirty-one percent (9 out of 29) rated the health of the community as "excellent" or "very good". The remaining sixty-nine percent (20 out of 29) of the key stakeholders rated the health in Marshall County as "average". The quality of life ratings provided by stakeholders were much higher with 72% of the stakeholders rating the quality of life in Marshall County as "excellent" or "very good." None of the stakeholder rated the health or quality of life in the county "below average."

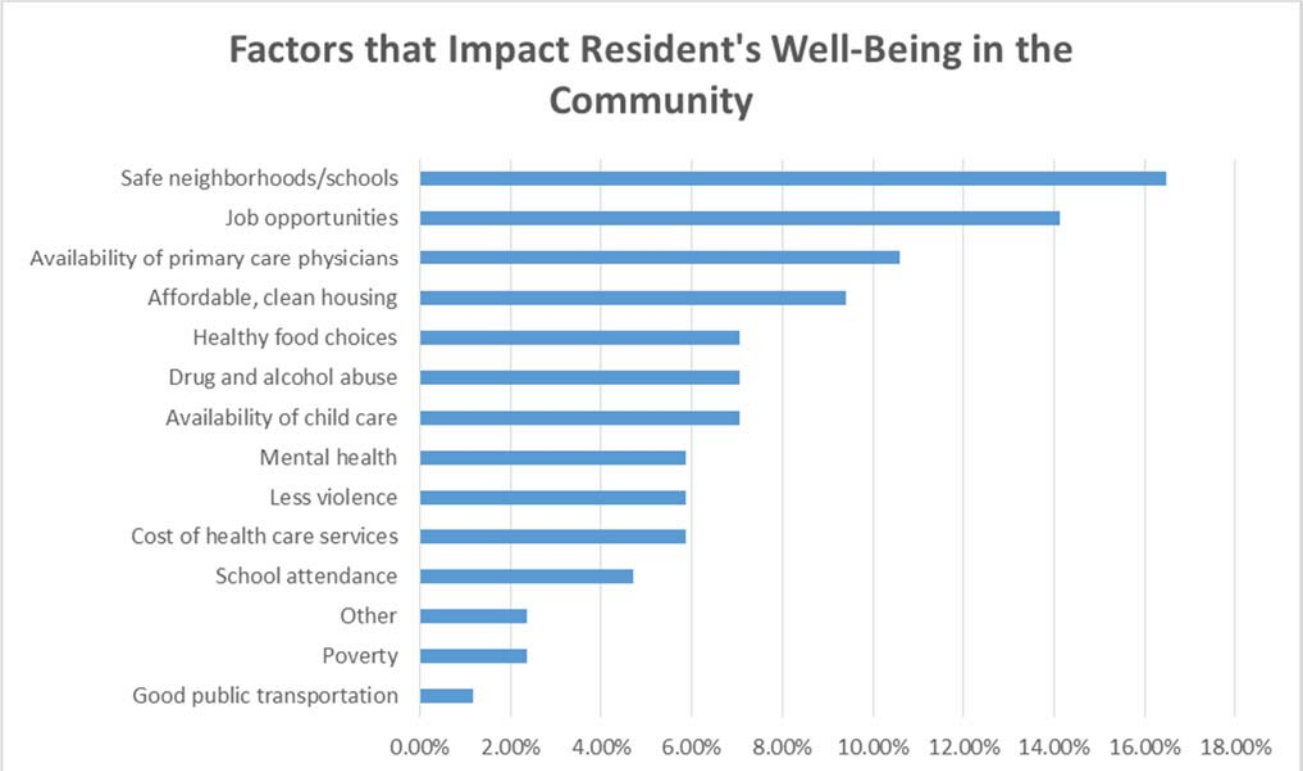
When asked whether the health and quality of life had improved, declined or stayed the same, 60% of those that responded to this question felt the health and quality of life had improved over the last few years. Twenty-seven percent expressed they thought the health and quality of life had stayed the same over the last three years and 13% responded the health and quality of life in the community had declined. When asked why they thought the health and quality of life had improved, key stakeholders noted the availability of recreational and fitness facilities including Blue River Rail Trail, lap swim at the Marysville Aquatic Center (city pool), tennis courts and city parks. They also indicated the community has good physicians. Another positive factor noted related to the "walking school bus" which was implemented by the elementary school last year allowing students to walk to school. Additionally, leaders in the community have come together, through Thrive Marshall County, to inform the public of what is available to them and to help make informed decisions concerning community health. .

"Rural living offers some unique quality of life benefits such as lower crime and knowing your neighbors."

"I believe Marysville provides residents with great recreational opportunities as well as things for fitness."

"Our local groups are definitely doing a great job of banding together to help inform the public of what's available to them and helping make informed decisions concerning their health and that of their children."

Stakeholders identified safe neighborhoods and schools, job opportunities and availability of primary care physicians as the most important factors that impact the overall well-being of the community.



Community Memorial Health - 2016 CHNA **Key Stakeholder Survey**

2. Underserved populations and communities of need

Key stakeholders were asked to provide their opinions regarding specific populations or groups of people whose health or quality of life may not be as good as others. They were also asked to provide their opinions as to why they thought these populations were underserved or in need. Each key stakeholder was asked to consider the specific populations they serve or those with which they usually work.

The majority of the key stakeholders identified persons living with low-incomes or in poverty as most likely to be underserved due to lack of access to services. Lack of financial resources prevents persons with low-income from seeking medical care and receiving the resources they need. It also leads to people being uninsured and underinsured. In addition, many providers do not accept certain forms of insurance, including plans issued under the *Affordable Care Act* which limits access to primary care for persons living with low-income. As a result, people skip routine screenings, particularly men, that could identify problems early. Often, persons living with low-income also have less access to safe and affordable housing, reliable transportation and healthy nutrition.

Persons with mental health needs, including drug and alcohol addiction, were another group identified as a population whose health needs may be unmet in the community due to lack of understanding regarding mental health conditions and available resources. Stakeholders expressed a lack of mental

health providers resulting in long waits for appointments. Additionally, the stigma surrounding mental illness prevents people from getting help.

Key stakeholders were then asked to provide opinions regarding actions that should be taken to respond to the identified needs above. Many stakeholders noted that families are struggling with managing household budgets and that more assistance needs to be provided on topics such as parenting, nutrition, healthy lifestyles and household budgeting. Stakeholders also suggested increased community outreach from CMH to the various organizations that provide support to families with lower incomes including Marshall County Health, Lincoln Center, food pantries and other service organizations. Lastly, stakeholders suggested CMH work to develop relationships with community families starting when children are very young to provide health education, screenings and information on preventive health.

"Families with lower incomes often have different priorities and they need to be educated and approached differently just like students in poverty at school."

"The high deductible insurance plans hinder the lower income family from even using health and dental care."

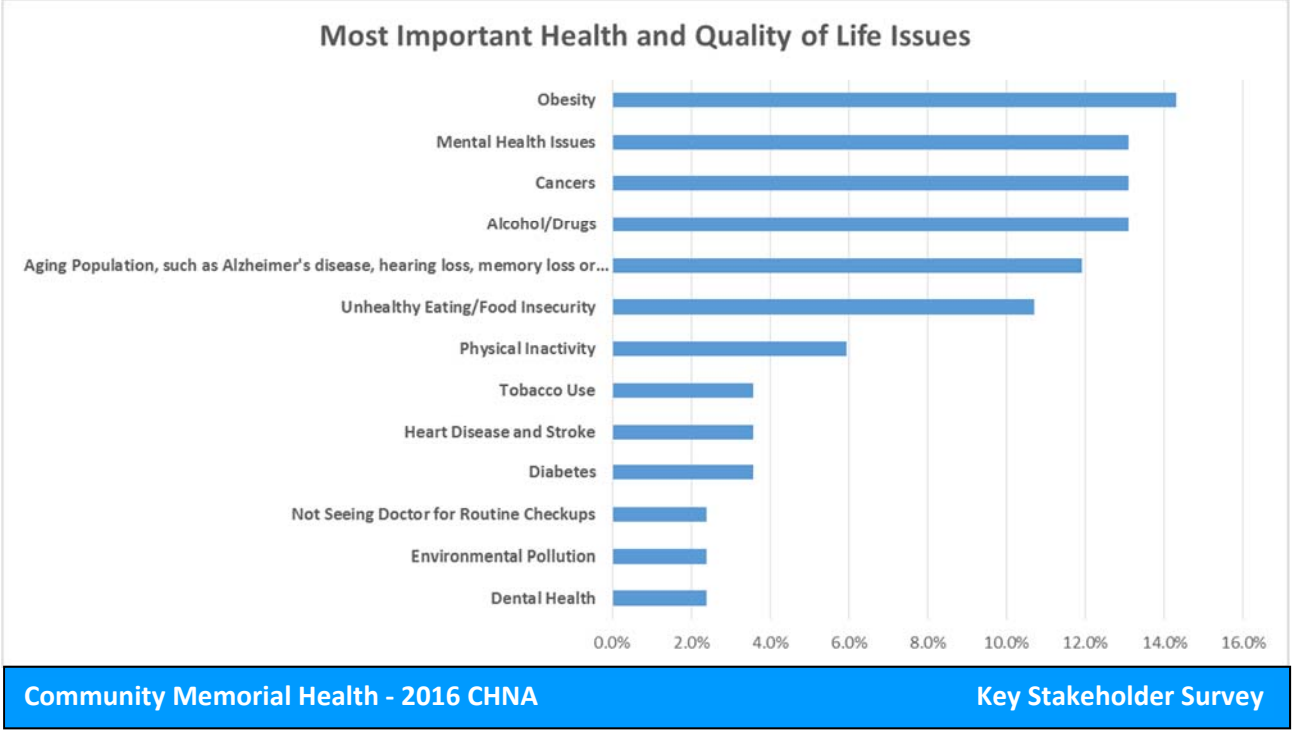
"A lot of younger families with children in our communities are struggling to make ends meet. Their wages aren't enough to make ends meet. This has a trickle-down effect as they are not able to feed their children properly and provide the nutrition needed. We need more programs to provide assistance, especially to the children so that they make healthy food choices and they have those healthy foods available."

3. Barriers

The survey included an assessment of community perceptions of major barriers to addressing health issues. The overwhelming majority of respondents strongly agreed or agreed that lack of medical providers (34%), transportation (32%) and physicians limiting access for certain insurance plans, including Medicare (13 %) are big barriers to health care. Other barriers included lack of behavioral health services and lack of services for low-income patients.

4. Most important health and quality of life issues

The survey solicited input from participants regarding health problems of the community. Obesity, mental health, cancers and alcohol and drug use were identified as the biggest health and quality of life issues impacting the in the community.



"Obesity is a serious issue along with a wide range of other health issues."

"Mental health and drug use remain challenges to our community- we talk about it, but affirmative action needs to make an impact on treatment."

"There is not enough taught about nutrition anywhere at this time. It hasn't been a priority for many years. What is cheapest and most affordable for lower income families has no nutritional value so their health slips. Higher income families may eat higher quality food but not necessarily more nutritious."

Additional survey results:

- When asked what needs to be done to address the critical issues, participants indicated the following:
  - Education on health risk including impact of diet and exercise as well as family history
  - Educating individuals of the importance of preventative health, budgeting households to afford wellness expenses, convincing the population to be motivated, disciplined and ambitious.
  - Continued education about nutrition, chronic disease, physical activity, health insurance and other issues that affect health and quality of life.
  - Continue to build healthy environment supporting hiking/biking in town and to school.
  - Support local, healthy food alternatives at school, farmer's market, food service locations.
  - CMH needs to be out in community at public events offering simple tests, free pencils, and health information.

- We need quality health care to stay in our county as well as more education and sources for those in poverty to eat healthy.

- Access to mental health services needs to be addressed by the community as a whole.

➢ When asked to provide input regarding what the hospital should focus on over the next 3-5 years, participants provided the following input:

- CMH should provide more services for the aging in their homes.
- CMH should continue to develop coalitions with lots of community organizations and focus on aggressive community outreach including: 1.) educating the community on what it means to lead a healthy lifestyle; 2.) provide the community with the knowledge of the services that can be performed here; and 3.) make appointment with specialist easy to obtain to prevent community members from traveling to other hospitals
- Access to mental health services including recruitment of more mental health providers.
- Expand hours of availability of medical appointments. Consider expanded hours on Saturdays or evenings. Coordinate with the Health Department on Wednesdays.

- Offering urgent care is the best thing Community Memorial Healthcare can do to help better serve the people of Marshall County and improve the quality of healthcare for its citizens.

- Continue to work with local government for continued support of projects that will add more recreation or raise the standard of living

- Increased community education and outreach; particularly out in the community.

"Our community has a sturdy base of medical providers and healthcare system. Mental Health is the domino that, if strongly addressed, will favorably impact other health issues, i.e., obesity, drug usage, depression."

"The addition to urgent care or Saturday clinic would be something we should strongly consider and figure out how we can accomplish. It will make our healthcare services stronger and provide a benefit to the community."

"Prevention is going to need to be the focus for the hospital. Stop the problems before they start."

Health Issues of Vulnerable Populations

According to Dignity Health's Community Need Index (see Appendices), the Hospital's community has a moderate level of need. The CNI score is an average of five different barrier scores that measure socioeconomic indicators of each community (income, cultural, education, insurance and housing). The median CNI score for Marshall County is 2.6. The zip code with the highest level of need was 66411 (Blue Rapids) with a score of 3.2.

Certain key stakeholders were selected due to their positions working with low-income and uninsured populations. Several key stakeholders were selected due to their work with minority populations. Based on information obtained through key stakeholder interviews and the community health survey, the following populations are considered to be vulnerable or underserved in the community and the identified needs are listed:

- Persons with Low Incomes/Uninsured/Working Poor Population
  - Access to primary care physicians
  - High cost of health care prevents needs from being met
  - Lack of healthy nutrition and affordable housing
  - Transportation

- Person with Mental Health Needs
  - Lack of mental health providers

Information Gaps

This assessment was designed to provide a comprehensive and broad picture of the health in the overall community served by the Hospital; however, there may be a number of medical conditions that are not specifically addressed in this report due to various factors, including but not limited to, publically available information or limited community input.

In addition, certain population groups might not be identifiable or might not be represented in numbers sufficient for independent analysis. Examples include homeless, institutionalized persons, undocumented residents and members of certain ethnic groups who do not speak English or Spanish. Efforts were made to obtain input from these specific populations through key stakeholder interviews.

Prioritization of Identified Health Needs

Priority setting is a required step in the community benefit planning process. The IRS regulations indicate that the CHNA must provide a prioritized description of the community health needs identified through the CHNA and include a description of the process and criteria used in prioritizing the health needs.

Using findings obtained through the collection of primary and secondary data, the Hospital completed an analysis of these inputs (see *Appendices*) to identify community health needs. The following data was analyzed to identify health needs for the community:

Leading Causes of Death

Leading causes of death for the community and the death rates for the leading causes of death for each county within the Hospital's CHNA community were compared to U.S. adjusted death rates. Causes of death in which the county rate compared unfavorably to the U.S. adjusted death rate resulted in a health need for the Hospital CHNA community.

Health Outcomes and Factors

An analysis of the County Health Rankings health outcomes and factors data was prepared for Community Memorial Healthcare's CHNA community. County rates and measurements for health behaviors, clinical care, social and economic factors and the physical environment were compared to state benchmarks. County rankings in which the county rate compared unfavorably (by greater than 30% of the national benchmark) resulted in an identified health need.

The indicators falling within the least favorable quartile from the Community Health Status Indicators (CHSI) resulted in an identified health need.

Primary Data

Health needs identified through the key stakeholder survey were included as health needs. Needs for vulnerable populations were separately reported on the analysis in order to facilitate the prioritization process.

Health Needs of Vulnerable Populations

Health needs of vulnerable populations were included for ranking purposes.

To facilitate prioritization of identified health needs, a ranking process was used. Health needs were ranked based on the following five factors. Each factor received a score between 0 and 5.

1) **How many people are affected by the issue or size of the issue?** For this factor, ratings were based on the percentage of the community who are impacted by the identified need. The following scale was utilized: >25% of the community= 5; >15% and <25%=4; >10% and <15%=3; >5% and <10%=2 and <5%=1.
2) **What are the consequences of not addressing this problem?** Identified health needs which have a high death rate or have a high impact on chronic diseases received a higher rating.
3) **The impact of the problem on vulnerable populations.** Needs identified which pertained to vulnerable populations were rated for this factor.
4) **How important the problem is to the community.** Needs identified through community interviews and/or focus groups were rated for this factor.
5) **Prevalence of common themes.** The rating for this factor was determined by how many sources of data (leading causes of death, health outcomes and factors and primary data) identified the need.

Each need was ranked based on the five prioritization metrics. As a result, the following summary list of needs was identified:

Exhibit 24

Prioritization of Health Needs

	How Many People Are Affected by the Issue?	What Are the Consequences of Not Addressing This Problem?	What is the Impact on Vulnerable Populations?	How Important is it to the Community?	How Many Sources Identified the Need?	Total Score *
Lack of Mental Health Providers/Mental Health Conditions	5	5	5	5	3	**23**
Lack of Access to Primary Care Providers	5	5	5	3	3	**21**
Obesity (Adult and Child)	5	4	3	5	3	**20**
Poverty/Lack of Financial Resources	3	4	5	3	2	**17**
Need for Health Services to Respond to Aging Population	4	3	4	4	1	**16**
Unhealthy Eating/Food Insecurity	4	3	5	3	1	**16**
Alcohol and Drug Abuse	3	3	3	4	2	**15**
Lack of Access to Exercise Opportunities	5	3	3	2	1	**14**
Cancers	2	3	3	4	1	**13**
Alcohol Impaired Driving Deaths	5	4	2	1	1	**13**
Physicians not Accepting Medicare	4	3	4	1	1	**13**
Preventable Hospital Stays	2	4	4	1	1	**12**
Transportation	2	2	4	1	2	**11**
Preterm Births/Low Birthweight	2	3	3	1	2	**11**
Violent Crime	1	4	3	1	1	**10**
Adult Female Routine Pap Tests	2	3	3	1	1	**10**
Teen Birth Rate	1	2	2	1	3	**9**

*Highest potential score = 25

As a result of the analysis described, Hospital management identified the following health needs as the most significant health needs for the community:

- Lack of mental health providers/mental health conditions
- Lack of access to primary care providers
- Obesity
- Poverty/lack of financial resources
- Need for health services to respond to aging population
- Unhealthy eating/food insecurity
- Alcohol and drug abuse
- Lack of access to exercise opportunities

The Hospital's next steps include determining priority areas and developing an implementation strategy to address these priority areas.

Resources Available to Address Significant Health Needs

Health Care Resources

The availability of health care resources is a critical component to the health of a county's residents and a measure of the soundness of the area's health care delivery system. An adequate number of health care facilities and health care providers are vital for sustaining a community's health status. Fewer health care facilities and health care providers can impact the timely delivery of services. A limited supply of health resources, especially providers, results in the limited capacity of the health care delivery system to absorb charity and indigent care as there are fewer providers upon which to distribute the burden of indigent care.

Hospitals

Community Memorial Healthcare is a critical access hospital with 23 beds, and is the only hospital located in the community. Residents of the community can also take advantage of services provided by hospitals in neighboring counties, as well as services offered by other facilities and providers. *Exhibit 25* summarizes hospitals available to the residents of CHNA Community. Those hospitals marked with an asterisk (*) are within 30 miles of the Hospital.

Source: US Hospital Finder

Exhibit 25

Hospital	Address	County
*Community Health Care Systems Inc.	120 West Eighth Street, Onaga, KS 66521-0120	Pottawatomie
*Nemaha Valley Community Hospital	1600 Community Drive, Seneca, KS 66538-9739	Nemaha
*Hanover Hospital	205 South Hoover, Hanover, KS 66945-0038	Washington
*Washington County Hospital	304 East Third Street, Washington, KS 66968-2033	Washington

Other Health Care Facilities

Short-term acute care hospital services are not the only health services available to members of the Hospital's community. E*xhibit 26* provides a listing of community health centers and rural health clinics in the Hospital's community.

Exhibit 26

Facility	Facility Type	Address	County
Blue Rapids Medical Clinic	Rural Health Clinic	607 Lincoln Street, Blue Rapids, KS 66411	Marshall
Community Physicians Clinic	Rural Health Clinic	1902 May Street, Marysville, KS 66508	Marshall
Downtown Medical Clinic	Rural Health Clinic	112 E 2nd Street, Frankfort, KS 66427	Marshall
Marysville Clinic	Rural Health Clinic	808 N 19th Street, Marysville, KS 66508	Marshall

Source: CMS.gov, Health Resources & Services Administration (HRSA)

Health Departments

The Marshall County Health Department has provided services in Marshall County since 1975 and offers many programs to the residents of the community. These services and programs include:

- Maternal and Infant
- Healthy Start Home Visitor
- WIC (Women, Infant and Children)
- STD/HIV Counseling
- Car Seat Fitting Station
- Emergency Preparedness
- Medical Reserve Corps
- Certified Breastfeeding Educator
- Quest Diagnostic/Lab One Collection Site
- LabCorp Collection Site
- Disease Investigation
- Prescription Discount Card
- Women's Clinic

More information on the Marshall County Health Department's services may be obtained by visiting www.marshallcohealth.org.

APPENDICES

APPENDIX A

ANALYSIS OF DATA

Community Memorial Healthcare
Analysis of CHNA Data

Analysis of Health Status-Leading Causes of Death

	U.S. Age-Adjusted Rate	(A) 10% of U.S. Age-Adjusted Rate	County Rate	(B) County Rate Less U.S. Age-Adjusted Rate	If (B)>(A), then "Health Need"
Marshall County:					
Cancer	168.9	16.9	151.8	-17.1	
Heart Disease	175.0	17.5	182.0	7.0	
Lung Disease	42.2	4.2	42.0	-0.2	
Stroke	37.9	3.8	37.9	0.0	
Unintentional Injury	38.6	3.9	40.5	1.9	

***The age-adjusted rate is shown per 100,000 residents. Please refer to Exhibit 17 for more information.

Analysis of Health Outcomes and Factors - County Health Rankings

	National Benchmark	(A) 30% of National Benchmark	County Rate	(B) County Rate Less National Benchmark	If (B)>(A), then "Health Need"
Marshall County, KS					
Adult Smoking	14.0%	4.2%	17.0%	3.0%	
Adult Obesity	25.0%	7.5%	34.0%	9.0%	Health Need
Food Environment Index	8.3	2	7.8	1	
Physical Inactivity	20.0%	6.0%	26.0%	6.0%	
Access to Exercise Opportunities	91.0%	27.3%	40.0%	51.0%	Health Need
Excessive Drinking	12.0%	3.6%	15.0%	-3.0%	
Alcohol-Impaired Driving Deaths	14.0%	4.2%	36.0%	22%	Health Need
Sexually Transmitted Infections	134	40	120	-14	
Teen Birth Rate	19	6	28	9	Health Need
Uninsured	11.0%	3.3%	12.0%	1.0%	
Primary Care Physicians	1,040	312	2,000	960	Health Need
Dentists	1,340	402	1,670	330	
Mental Health Providers	370	111	5,000	4630	Health Need
Preventable Hospital Stays	38	11	71	33	Health Need
Diabetic Screen Rate	90.0%	27.0%	86.0%	4.0%	
Mammography Screening	71.0%	21.3%	63.0%	8.0%	
Violent Crime Rate	59	18	118	59	Health Need
Children in Poverty	13.0%	3.9%	14.0%	1.0%	
Children in Single-Parent Households	21.0%	6.3%	23.0%	2.0%	

* From County Health Rankings

Analysis of Health Outcomes and Factors - Community Health Status Indicators

Least Favorable

Adult overal health status	*Obesity
Preterm births	*Low Birthweight
Adult female routine pap tests	
Living near highways	

* From Community Commons Data

Analysis of Primary Data – Key Informant Surveys

Obesity
Mental Health Conditions/lackof Mental Health Providers
Cancers
Alcohol and Drug Abuse
Need for Health Services to Respond to Aging Population
Unhealthy Eating/Food Insecurity
Lack of Medical Providers
Transportation
Physicians not accepting Medicare

Issues of Uninsured Persons, Low-Income Persons and Minority/Vulnerable Populations

Population	Issues
Uninsured/Working Poor Population	
	Access to primary care physicians
	High cost of health care prevents needs from being met
	Lack of healthy nutrition, affordable housing and transporation
Persons with Mental Health Needs	
	Lack of mental health providers

APPENDIX B

SOURCES

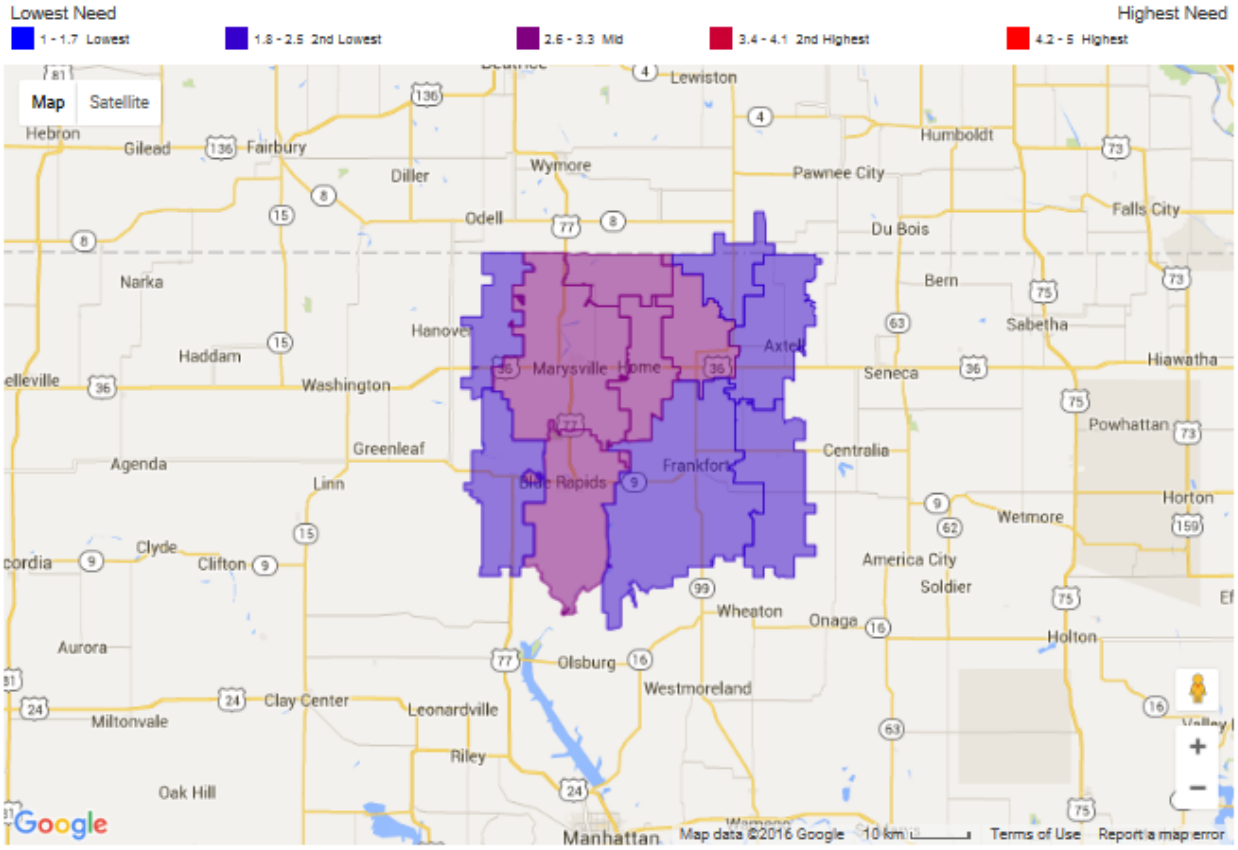
DATA TYPE	SOURCE	YEAR(S)
Discharges by Zip Code	Hospital	FY 2015
Population Estimates	Community Commons via American Community Survey http://www.communitycommons.org/	2015
Demographics - Race/Ethnicity	Community Commons via American Community Survey http://www.communitycommons.org/	2015
Demographics - Income	Community Commons via American Community Survey http://www.communitycommons.org/	2010 - 2014
Unemployment	Community Commons via US Department of Labor http://www.communitycommons.org/	2015
Poverty	Community Commons via US Census Bureau, Small Areas Estimates Branch http://www.census.gov	2010 - 2014
Uninsured Status	Community Commons via US Census Bureau, Small area Helath Insurance Estimates http://www.communitycommons.org/	2010 - 2014
Medicaid	Community Commons via American Community Survey http://www.communitycommons.org/	2010 - 2014
Education	Community Commons via American Community Survey http://www.communitycommons.org/	2010 - 2014
Physical Environment - Grocery Store Access	Community Commons via US Cenus Bureau, County Business Patterns http://www.communitycommons.org/	2013
Physical Environment - Food Access/Food Deserts	Community Commons via US Department of Agriculture http://www.communitycommons.org/	2010
Physical Environment - Recreation and Fitness Facilities	Community Commons via US Cenus Bureau, County Business Patterns http://www.communitycommons.org/	2013
Physical Environment - Physically Inactive	Community Commons via US Centers for Disease control and Prevention http://www.communitycommons.org/	2012
Clinical Care - Access to Primary Care	Community Commons via US Department of Health & Human Services http://www.communitycommons.org/	2012
Clinical Care - Lack of a Consistent Source of Primary Care	Community Commons via US Department of Health & Human Services http://www.communitycommons.org/	2011 - 2012
Clinical Care - Population Living in a Health Professional Shortage Area	Community Commons via US Department of Health & Human Services http://www.communitycommons.org/	2015
Clinical Care - Preventable Hospital Events	Community Commons via Dartmouth College Institute for Health Policy & Clinical Practice http://www.communitycommons.org/	2012
Leading Causes of Death	Community Commons via CDC national Bital Statistics System http://www.communitycommons.org/	2009 - 2013
Health Outcomes and Factors	County Health Rankings http://www.countyhealthrankings.org/ Community Commons http://www.communitycommons.org/ & Community Health Status Indicators http://wwwn.cdc.gov/communityhealth	2015 & 2009-2013
Health Care Resources	Community Commons, CMS.gov, HRSA	

APPENDIX C

DIGNITY HEALTH COMMUNITY NEED INDEX

(CNI) REPORT

Marshall County



Mean(zipcode): 2.4 / Mean(person): 2.7 | CNI Score Median: 2.6 | CNI Score Mode: 2,2.2,2.6

Zip Code	CNI Score	Population	City	County	State
66403	2.2	656	Axtell	Marshall	Kansas
66406	2.6	459	Beattie	Marshall	Kansas
66411	3.2	1297	Blue Rapids	Marshall	Kansas
66412	2.4	328	Bremen	Marshall	Kansas
66427	2	1238	Frankfort	Marshall	Kansas
66438	2.8	280	Home	Marshall	Kansas
66508	3	4046	Marysville	Marshall	Kansas
66518	2.6	202	Oketo	Marshall	Kansas
66541	2	207	Summerfield	Marshall	Kansas
66544	1.8	410	Vermillion	Marshall	Kansas
66548	2.2	961	Waterville	Marshall	Kansas