

# *Community Health Needs Assessment 2019*



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## Consultants' Report

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Community Memorial Healthcare  
Marysville, Kansas

On behalf of Community Memorial Healthcare, we have assisted in conducting a Community Health Needs Assessment (CHNA) consistent with the scope of services outlined in our engagement letter dated March 12, 2019. The purpose of our engagement was to assist the Hospital in meeting the requirements of Internal Revenue Code §501(r)(3) and regulations thereunder. We also relied on certain information provided by the Hospital, specifically certain utilization data, geographic HPSA information and existing community health care resources.

Based upon the assessment procedures performed, it appears the Hospital is in compliance with the provisions of §501(r)(3). Please note that we were not engaged to, and did not, conduct an examination, the objective of which would be the expression of an opinion on compliance with the specified requirements. Accordingly, we do not express such an opinion.

We used and relied upon information furnished by the Hospital, its employees and representatives and on information available from generally recognized public sources. We are not responsible for the accuracy and completeness of the information and are not responsible to investigate or verify it.

These findings and recommendations are based on the facts as stated and existing laws and regulations as of the date of this report. Our assessment could change as a result of changes in the applicable laws and regulations. We are under no obligation to update this report if such changes occur. Regulatory authorities may interpret circumstances differently than we do. Our services do not include interpretation of legal matters.

*BKD, LLP*

December 26, 2019

## 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, 2017 through December 31, 2019, which was adopted by the Hospital's board of directors in 2016.
- ✓ 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 2019. 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 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 2,700 partners and employees in 40 offices. BKD serves more than 1,000 hospitals and health care systems across the country. The CHNA was conducted from May 2019 to November 2019.

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 2016 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](http://countyhealthrankings.org). Health factors with significant opportunity for improvement were noted.
- Community input was provided through a community health survey which was completed by 25 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) how important the issue is to the community and 5) how many sources identified the need.
- 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 inpatient, 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
- Community Memorial Healthcare Home Health Agency



### ***Evaluation of Prior Implementation Strategy***

The implementation strategy for fiscal years ending December 31, 2017 through December 31, 2019, focused on two priorities to address identified health needs. The areas of focus were 1) addressing obesity through nutrition and exercise; and 2) lack of access to mental health resources and providers. Below is a summary of actions taken by CMH:

- Obesity goals: To increase awareness of healthy eating and reduce food insecurity, and to increase exercise opportunities for the community.
  - In July 2018 CMH hosted a special event through the local Farmers' Market to promote healthy food education and awareness of fresh and natural ingredients to children and parents, involving making fruit and vegetable plantings, a scavenger hunt for children to identify fresh foods located at the different booths and a take-home game for children to play with their parents.
  - CMH also helps provide daily, low-cost prepared meals for our aging population and residents of local disability housing through a Meals-on-Wheels program.
  - A summer program was created to promote walking one mile each day around Marysville's City Park. Miles were recorded by participants as a way to win various health prizes.
  - A 10-week exercise course called BINGOCIZE was implemented for seniors to learn to build strength and reduce falls in a fun way, while playing Bingo with friends. Prizes were offered for those who repeated learned exercises outside of class each week.
  - Healthy recipes and tips for meal preparation were shared on social media.
- Mental Health goals: Increase awareness and utilization of mental health providers in the community, and to educate and empower medical providers regarding mental health conditions and available services in the community.
  - Open communication with local mental health providers to better address access and referral needs.
  - Partnered with regional provider to allow referral screenings via Zoom web-cam and referrals to their offices.
  - Applied for and received grant through Heartland Health Alliance and Bryan Health for the USDA Distance & Learning Telemedicine grant. Each rural hospital enrolled with Heartland Health Alliance is set to receive an equipment cart through the grant by early 2020. CMH physicians met with Bryan Health coordinator in August 2019 to get up to speed on where the process is, and to select which specialties they'd like to begin with for telemedicine. CMH physicians selected psychiatry/mental health, endocrinology and rheumatology to be offered as outpatient clinic services.



**Summary of Findings – 2019 Tax Year CHNA**

Health needs were identified based on information gathered and analyzed through the 2019 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 26*.

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 physicians
- Adult obesity
- Poverty
- Health needs associated with the aging population
- Substance abuse

These needs have been prioritized based on information gathered through the CHNA. 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, 2018 through December 31, 2018, management has identified Marshall County as the defined CHNA community. Marshall County represents over 80 percent 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.

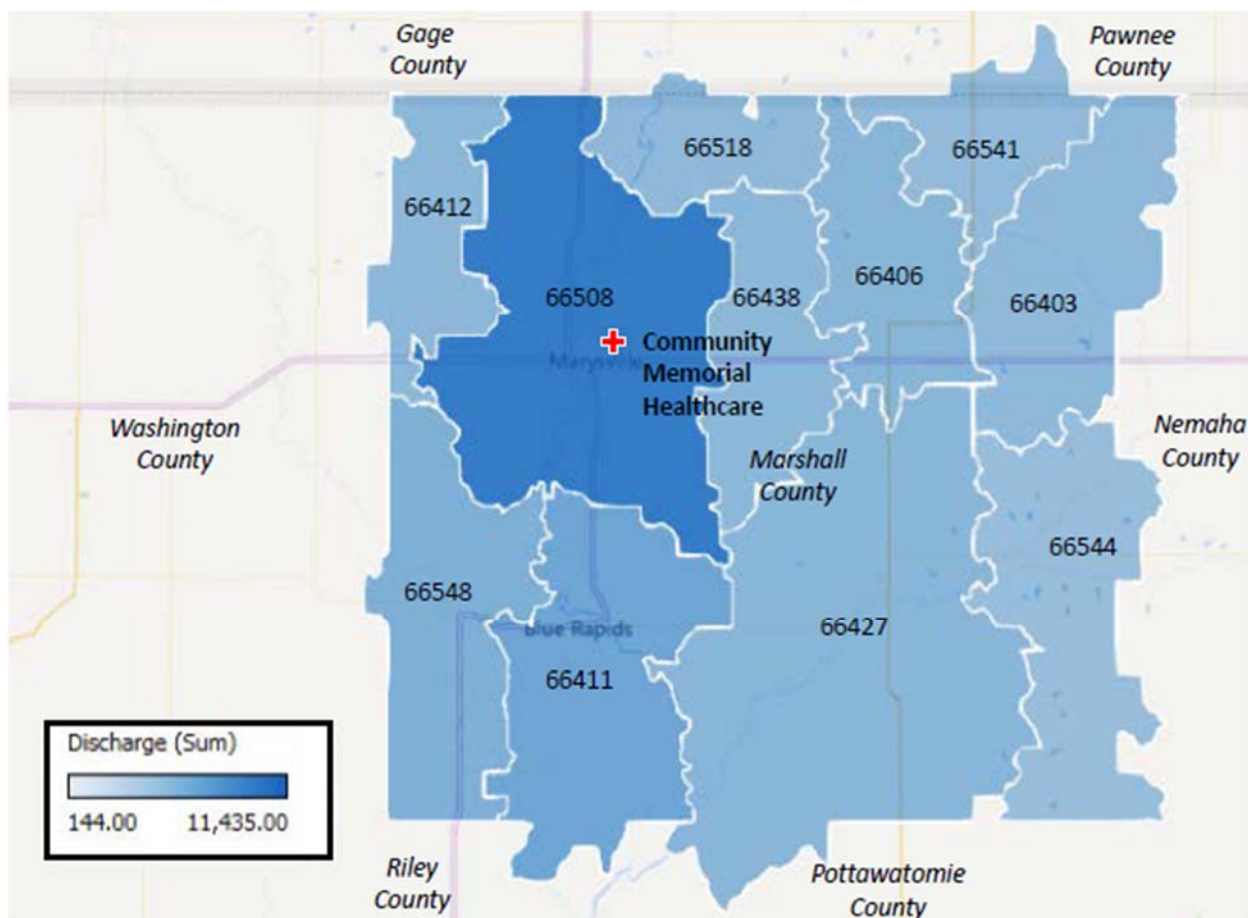
Exhibit 1 Summary of Discharges by Zip Code 1/1/2018 to 12/31/2018							
Zip Code	City	Inpatient	Outpatient	ER	Swing-Bed	Total	Percent of Total Discharges
<b>Marshall County:</b>							
66508	Marysville	249	9,527	1,545	114	11,435	43.9%
66411	Blue Rapids	65	3,044	347	16	3,472	13.3%
66548	Waterville	26	1,503	175	9	1,713	6.6%
66406	Beattie	23	829	89	4	945	3.6%
66427	Frankfort	19	720	87	3	829	3.2%
66438	Home	10	597	53	4	664	2.5%
66403	Axtell	10	413	63	5	491	1.9%
66518	Oketo	11	396	42	8	457	1.8%
66412	Bremen	8	494	41	6	549	2.1%
66541	Summerfield	9	274	28	1	312	1.2%
66544	Vermillion	6	121	16	1	144	0.6%
<b>Total Marshall County</b>		<b>436</b>	<b>17,918</b>	<b>2,486</b>	<b>171</b>	<b>21,011</b>	<b>80.7%</b>
<b>Washington County</b>		70	2,950	258	17	3,295	12.7%
<b>Gage County</b>		16	869	157	3	1,045	4.0%
<b>All Other Counties</b>		12	500	175	3	690	2.6%
<b>Total</b>		<b>534</b>	<b>22,237</b>	<b>3,076</b>	<b>194</b>	<b>26,041</b>	<b>100.0%</b>

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.



## 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 (as of 2017)						
Total Population			Population by Gender			
County	Population		County	Male	Female	
Marshall County	9,859		Marshall County	4,937	4,922	
Kansas	2,903,820		Kansas	1,445,980	1,457,840	
United States	321,004,407		United States	158,018,753	162,985,654	
Age Distribution						
Age Group	Marshall County	% of Total	Kansas	% of Total	United States	% of Total
0 - 4	616	6.3%	196,826	6.8%	19,853,515	6.2%
5 - 19	1,707	17.3%	521,448	18.0%	53,747,764	16.7%
20 - 24	615	6.2%	298,805	10.3%	31,131,484	9.7%
25 - 34	1,072	10.9%	383,984	13.2%	44,044,173	13.7%
35 - 44	989	10.0%	348,347	12.0%	40,656,419	12.7%
45 - 54	1,236	12.5%	360,925	12.4%	43,091,143	13.4%
55 - 64	1,563	15.9%	367,212	12.6%	40,747,520	12.7%
65+	2,061	20.9%	426,273	14.6%	47,732,389	14.9%
<b>Total</b>	<b>9,859</b>	<b>100.0%</b>	<b>2,903,820</b>	<b>100.0%</b>	<b>321,004,407</b>	<b>100.0%</b>
Race/Ethnicity						
County	White	Black	Hispanic	American Indian & Alaska	Asian	Other
Marshall County	9,365	28	232	31	31	172
Percentage	94.99%	0.28%	2.35%	0.31%	0.31%	1.74%
Kansas	2,220,256	163,490	334,860	19,241	80,142	85,831
Percentage	76.46%	5.63%	11.53%	0.66%	2.76%	2.96%
United States	197,277,789	39,445,495	56,510,571	2,098,763	16,989,540	8,682,249
% of Community	61.46%	12.29%	17.60%	0.65%	5.29%	2.70%

Data Source: US Census Bureau, American Community Survey. 2013-17.

\* May not total due to rounding

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 approximately 95 percent of the community. The community is also comprised of a higher percentage of seniors compared to the state and national percentages.

Note that the age category that utilizes health care services the most, 65 years and over, is an estimated 20.9 percent of the population in Marshall County. The number of persons age 65 or older is relevant because this population has unique health needs, which should be considered separately from other age groups.

*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.

<b>Exhibit 3</b>		
<b>Urban/Rural Population</b>		
<b>County</b>	<b>Percent Urban</b>	<b>Percent Rural</b>
<b>Marshall County</b>	29.0%	71.0%
<b>Kansas</b>	74.2%	25.8%
<b>United States</b>	80.9%	19.1%
<i>Data Source: US Census Bureau, Decennial Census. 2010.</i>		

## **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 median household 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***

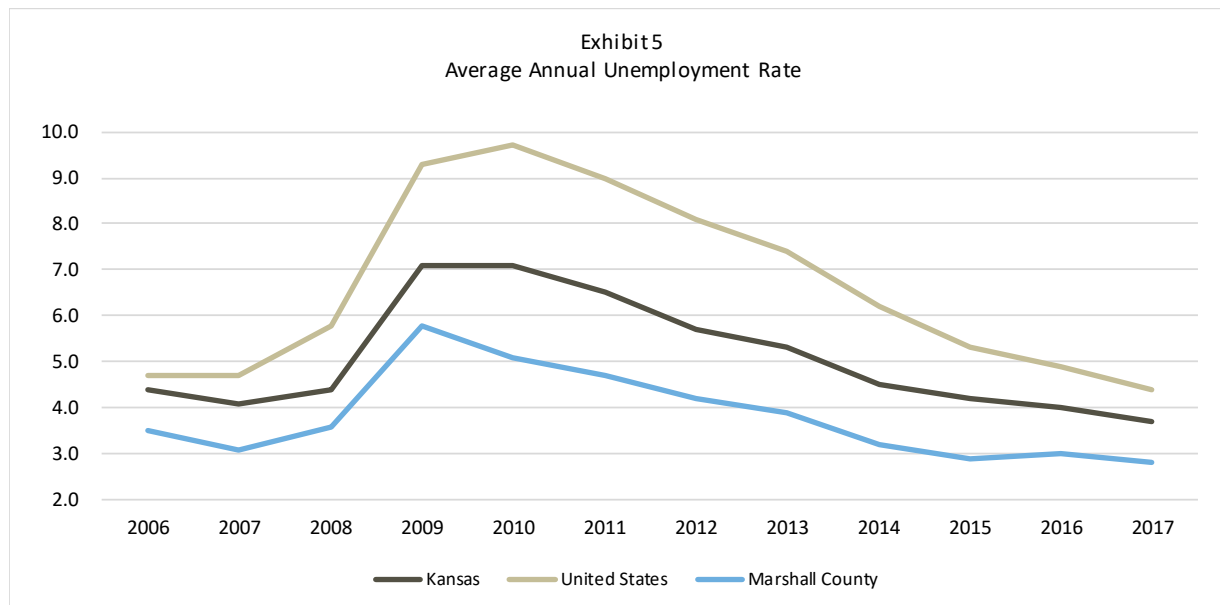
*Exhibit 4* presents the median household income for the CHNA community. This includes the income of the householder and all other individuals 15 years old and over in the household, whether they are related to the householder or not. Because many households consist of only one person, average household income is usually less than average family income. Marshall County's median household income is below the state of Kansas and the United States.

<b>Exhibit 4</b>				
<b>Median Household Income</b>				
<b>County</b>	<b>Total Households</b>	<b>Average Household Income</b>	<b>Median Household Income</b>	
<b>Marshall County</b>	4,209	\$	65,232	\$ 50,420
<b>Kansas</b>	1,121,943	\$	74,633	\$ 55,477
<b>United States</b>	118,825,921	\$	81,283	\$ 57,652

*Data Source: US Census Bureau, American Community Survey. 2013-17.*

## Unemployment Rate

*Exhibit 5* presents the average annual unemployment rate from 2006 through 2017 for Marshall County, as well as the trend for Kansas and the United States. On average, the unemployment rates for Marshall County 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.



## Poverty

*Exhibit 6* presents the percentage of total population below 100 percent 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			
Population Below 100% FPL			
County	Population (for Whom Poverty Status is Determined)	Population in Poverty	Percent in Poverty
Marshall County	9,648	860	8.9%
Kansas	2,820,265	361,285	12.8%
United States	313,048,563	45,650,345	14.6%
Data Source: US Census Bureau, American Community Survey. 2013-17.			



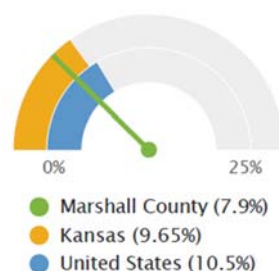
## Uninsured

*Exhibit 7* reports the percentage of the total civilian noninstitutionalized 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, 2013 through 2017 American Community Survey.

Exhibit 7 Uninsured Status			
County	Population (Civilian Noninstitutionalized)	Total Uninsured	Percent Uninsured
Marshall County	9,699	766	7.9%
Kansas	2,843,739	274,403	9.6%
United States	316,027,641	33,177,146	10.5%

*Data Source: US Census Bureau, American Community Survey. 2013-17.*

Percent Uninsured Population



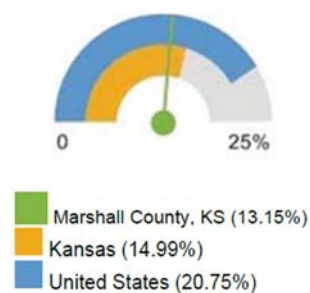
## Medicaid

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 Health Insurance Coverage Status				
County	Total Population	Population with Any Health Insurance	Population Receiving Medicaid	Percent Receiving Medicaid
Marshall County	9,819	8,881	1,168	13.15%
Kansas	2,824,176	2,480,701	371,857	14.99%
United States	309,082	275,204,128	55,035,660	20.75%

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

Percent of Insured Population  
Receiving Medicaid



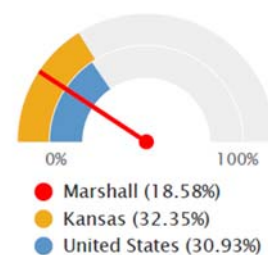
## Education

*Exhibit 9* presents the population with a Bachelor's degree or higher in Marshall County versus the state of Kansas and the United States.

<b>Exhibit 9</b>			
<b>Educational Attainment of Population Age 25 and Older</b>			
<b>County</b>	<b>Total Population Age 25 and Older</b>	<b>Population with Bachelor's Degree or Higher</b>	<b>Percent with Bachelor's Degree or Higher</b>
<b>Marshall County</b>	6,921	1,286	18.6%
<b>Kansas</b>	1,886,741	610,346	32.4%
<b>United States</b>	216,271,644	66,887,603	30.9%

*Data Source: US Census Bureau, American Community Survey. 2013-17.*

Percent Population Age 25+ with Bachelor's Degree or Higher



Education levels obtained by community residents may impact the local economy. Higher levels of education generally lead to higher wages, less unemployment and greater 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 a Bachelor's degree or higher is well below the state and national percentages.

## Physical Environment of the Community

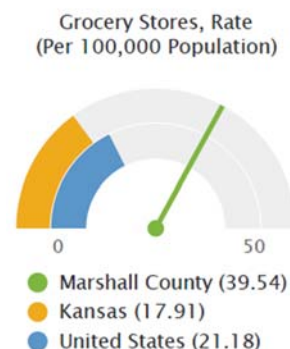
A community's health is also affected by the physical environment. A safe, clean environment that provides access to healthy food and recreational opportunities is important to maintaining and improving community health. This section will touch on a few of the elements that relate to needs mentioned 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 Grocery Store Access			
County	Total Population	Number of Establishments	Establishments Rate per 100,000
Marshall County	10,117	4	39.5
Kansas	2,853,118	511	17.9
United States	308,745,538	65,399	21.2

*Data Source: US Census Bureau, County Business Patterns*  
*Additional data analysis by CARES. 2016.*

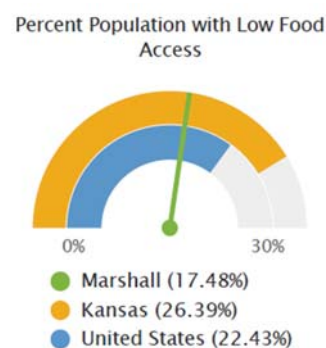


### Food Access/Food Deserts

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 Population with Low Food Access			
County	Total Population	Population with Low Food Access	Percent with Low Food Access
Marshall County	10,117	1,768	17.5%
Kansas	2,853,118	752,888	26.4%
United States	308,745,538	69,266,771	22.4%

*Data Source: US Department of Agriculture, Economic Research Service, USDA - Food Access Research Atlas. 2015.*



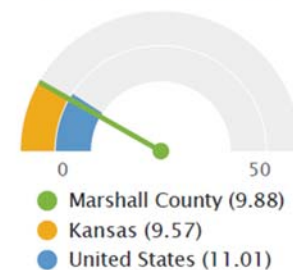
## Recreation and Fitness Facility Access

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.

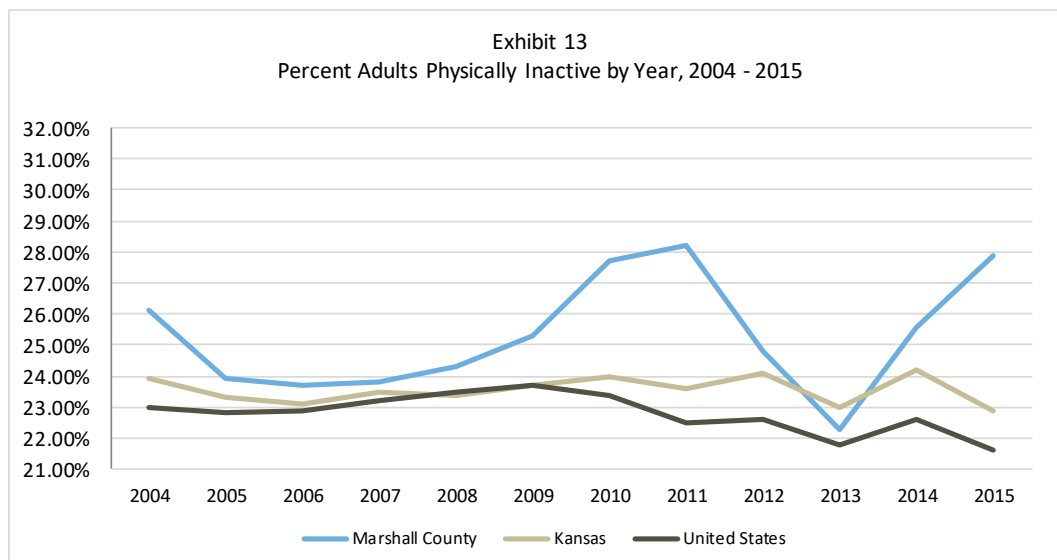
Exhibit 12 Recreation and Fitness Facility Access			
County	Total Population	Number of Establishments	Establishments Rate per 100,000
Marshall County	10,117	1	9.9
Kansas	2,853,118	273	9.6
United States	308,745,538	33,980	11.0

*Data Source: US Census Bureau, County Business Patterns*  
*Additional data analysis by CARES. 2016.*

Recreation and Fitness Facilities,  
Rate  
(Per 100,000 Population)



The trend graph below (*Exhibit 13*) shows the percentage of adults who are physically inactive by year for Marshall County compared to Kansas and the United States. From 2013 to 2015, the CHNA community percentage of adults who are physically inactive has been on the rise, going from 22.3 percent to 27.9 percent. This percentage is much higher than the state of Kansas and the United States.



## 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 Access to Primary Care			
County	Total Population 2014	Primary Care Physicians 2014	Primary Care Physicians Rate per 100,000
Marshall County	10,006	5	49.5
Kansas	2,904,021	2,457	84.6
United States	318,857,056	279,871	87.8
Data Source: US Department of Health & Human Services, Health Resources and Services Administration, Area Health Resource File. 2014.			

### Access to Dentists

*Exhibit 15* shows the number of dentists per 100,000 population. This indicator includes all dentists - qualified as having a doctorate in dental surgery (D.D.S.) or dental medicine (D.M.D.), who are licensed by the state to practice dentistry and who are practicing within the scope of that license.

Exhibit 15 Access to Dentist			
County	Total Population 2015	Primary Care Physicians 2015	Dentists Rate per 100,000
Marshall County	9,936	6	60.4
Kansas	2,911,641	1,614	55.4
United States	321,418,820	210,832	65.6
Data Source: US Department of Health & Human Services, Health Resources and Services Administration, Area Health Resource File. 2015.			

## **Access to Mental Health Providers**

*Exhibit 16* shows the estimated population to the number of mental health providers including psychiatrists, psychologists, clinical social workers and counselors that specialize in mental health care.

<b>Exhibit 16</b>			
<b>Access to Mental Health Providers</b>			
<b>County</b>	<b>Estimated Population</b>	<b>Number of Mental Health Providers</b>	<b>Mental Health Care Providers Rate per 100,000</b>
<b>Marshall County</b>	9,745	6	61.6
<b>Kansas</b>	2,837,874	5,473	192.9
<b>United States</b>	317,105,555	643,219	202.8
<i>Data Source: US Department of Health &amp; Human Services, Health Resources and Services Administration, Area Health Resource File. 2017.</i>			

## **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 17* below shows, all of Marshall County is considered a health professional shortage area.

<b>Exhibit 17</b>			
<b>Population Living in a Health Professional Shortage Area</b>			
<b>County</b>	<b>Total Population</b>	<b>Population Living in HPSA</b>	<b>Percent Living in HPSA</b>
<b>Marshall County</b>	10,117	10,117	100.0%
<b>Kansas</b>	2,853,118	1,418,050	49.7%
<b>United States</b>	308,745,538	102,289,607	33.1%
<i>Data Source: US Department of Health &amp; Human Services, Health Resources and Services Administration, Health Resources and Services Administration. April 2016</i>			

### **Preventable Hospital Events**

*Exhibit 18* 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.

<b>Exhibit 18</b>			
<b>Preventable Hospital Events</b>			
<b>County</b>	<b>Total Medicare Part A Enrollees</b>	<b>Ambulatory Care Sensitive Condition Hospital Discharges</b>	<b>Ambulatory Care Sensitive Condition Discharge Rate</b>
<b>Marshall County</b>	1,551	84	54.6
<b>Kansas</b>	261,763	13,441	51.3
<b>United States</b>	22,488,201	1,112,019	49.4
<small>Data Source: Dartmouth College Institute for Health Policy &amp; Clinical Practice, Dartmouth Atlas of Health Care. 2015.</small>			



## 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 percent 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	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 Cardiovascular disease Alcohol/drug abuse

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

<b>Exhibit 19</b>			
<b>Age-Adjusted Rates</b>			
<b>Selected Causes of Resident Deaths</b>	<b>Age-Adjusted Death Rate per 100,000 Population</b>		
	<b>Marshall County</b>	<b>Kansas</b>	<b>United States</b>
<b>Cancer</b>	144.3	162.0	158.1
<b>Coronary Heart Disease</b>	93.2	88.8	97.1
<b>Lung Disease</b>	47.7	49.8	41.1
<b>Stroke</b>	55.6	38.4	37.1
<b>Unintentional Injury</b>	54.8	46.9	44.0
<i>Data Source: Centers for Disease Control and Prevention, National Vital Statistics System. Accessed via CDC WONDER. 2013-17.</i>			

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 leading causes of death above that are greater than both the state of Kansas and national rates are stroke and unintentional injury.

## 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 2015:

Marshall County Indicators	*	**
	2015	2018
Health Outcomes	30	28
Mortality	13	12
Morbidity	62	61
Health Factors	13	20
Health Behaviors	45	26
Clinical Care	27	24
Social and Economic Factors	13	17
Physical Environment	21	71
*Out of 101 Kansas counties		
**Out of 103 Kansas counties		
Source: Countyhealthrankings.org		

The following tables in *Exhibits 20.1* and *20.2* include the 2015 and 2018 indicators reported by County Health Rankings for Marshall County.

<b>Exhibit 20.1</b>					
<b>County Health Rankings - Health Outcomes</b>					
	Marshall County 2015	Marshall County 2018		Kansas 2018	Top US Performers 2018
<b>Mortality</b>	*	13	12	↓	
<b>Premature death</b> - Years of potential life lost before age 75 per 100,000 population (age-adjusted)	5,800	6,100	↑	6,800	5,300
<b>Morbidity</b>	*	62	61	↓	
<b>Poor or fair health</b> - Percent of adults reporting fair or poor health (age-adjusted)	14%	13%	↓	15%	12%
<b>Poor physical health days</b> - Average number of physically unhealthy days reported in past 30 days (age-adjusted)	3.1	3.1	—	3.1	3.0
<b>Poor mental health days</b> - Average number of mentally unhealthy days reported in past 30 days (age-adjusted)	3.0	3.3	↑	3.3	3.1
<b>Low birth weight</b> - Percent of live births with low birth weight (<2500 grams)	8.0%	8.0%	—	7.0%	6.0%
*2015 rank out of 101 Kansas counties					
*2018 rank out of 103 Kansas counties					
Source: <a href="http://Countyhealthrankings.org">Countyhealthrankings.org</a>					

Exhibit 20.2 County Health Rankings - Health Factors					
	Marshall County 2015	Marshall County 2018		Kansas 2018	Top US Performers 2018
<b>Health Behaviors</b>	<b>*</b>	<b>45</b>	<b>26</b>		
<b>Adult smoking</b> - Percent of adults that report smoking at least 100 cigarettes and that they currently smoke	17.0%	15.0%	↓	17.0%	14.0%
<b>Adult obesity</b> - Percent of adults that report a BMI >= 30	34.0%	33.0%	↓	32.0%	26.0%
<b>Food environment index</b> - Index of factors that contribute to healthy food environment, 0 (worst) to 10	7.8	8.1	↑	7.0	8.6
<b>Physical inactivity</b> - Percent of adults aged 20 and over reporting no leisure time physical activity	26.0%	27.0%	↑	25.0%	20.0%
<b>Access to exercise opportunities</b> - Percentage of population with adequate access to locations for physical	40.0%	53.0%	↑	81.0%	91.0%
<b>Excessive drinking</b> - Percent of adults that report excessive drinking in the past 30 days	15.0%	15.0%	—	17.0%	13.0%
<b>Alcohol-impaired driving deaths</b> - Percent of motor vehicle crash deaths with alcohol involvement	36.0%	45.0%	↑	25.0%	13.0%
<b>Sexually transmitted infections</b> - Chlamydia rate per 100K population	119.7	119.9	↑	394.8	145.1
<b>Teen births</b> - Female population, ages 15-19	28.0	28.0	—	30.0	15.0
<b>Clinical Care</b>	<b>*</b>	<b>27</b>	<b>24</b>		
<b>Uninsured adults</b> - Percent of population under age 65 without health insurance	12.0%	9.0%	↓	10.0%	6.0%
<b>Primary care physicians</b> - Number of population for every one primary care physician	2,000	1,660	↓	1,320	1,030
<b>Dentists</b> - Number of population for every one dentist	1,670	1,640	↓	1,760	1,280
<b>Mental health providers</b> - Number of population for every one mental health provider	5,000	2,460	↓	560	330
<b>Preventable hospital stays</b> - Hospitalization rate for ambulatory-care sensitive conditions per 1,000 Medicare enrollees	71.0	55.0	↓	51.0	35.0
<b>Diabetic screening<sup>^</sup></b> - Percent of diabetic Medicare enrollees that receive HbA1c screening	86.0%	86.0%	—	86.0%	91.0%
<b>Mammography screening<sup>^</sup></b> - Percent of female Medicare enrollees that receive mammography screening	63.0%	61.0%	↓	63.0%	71.0%

Exhibit 20.2 County Health Rankings - Health Factors					
	Marshall County 2015	Marshall County 2018		Kansas 2018	Top US Performers 2018
<b>Social &amp; Economic Factors</b>	<b>*</b>	<b>13</b>	<b>17</b>		
<b>High school graduation<sup>^</sup></b> - Percent of ninth grade cohort that graduates in 4 years	95.0%	90.0%	↓	86.0%	95.0%
<b>Some college<sup>^</sup></b> - Percent of adults aged 25-44 years with some post-secondary education	62.0%	67.0%	↑	69.0%	72.0%
<b>Unemployment</b> - Percent of population age 16+ unemployed but seeking work	3.2%	3.2%	—	4.2%	3.2%
<b>Children in poverty</b> - Percent of children under age 18 in poverty	14.0%	14.0%	—	14.0%	12.0%
<b>Income inequality</b> - Ratio of household income at the 80th percentile to income at the 20th percentile	4.4	4.2	↓	4.4	3.7
<b>Children in single-parent households</b> - Percent of children that live in household headed by single parent	23.0%	21.0%	↓	29.0%	20.0%
<b>Social associations<sup>^</sup></b> - Number of membership associations per 10,000 population	27.0	28.2	↑	13.7	22.1
<b>Violent Crime Rate</b> - Violent crime rate per 100,000 population (age-adjusted)	118.0	130.0	↑	348.0	62.0
<b>Injury deaths</b> - Number of deaths due to injury per 100,000 population	62.0	84.0	↑	70.0	55.0
<b>Physical Environment</b>	<b>*</b>	<b>21</b>	<b>71</b>		
<b>Air pollution-particulate matter days</b> - Average daily measure of fine particulate matter in micrograms per cubic meter	9.3	9.1	↓	8.5	6.7
<b>Severe housing problems</b> - Percentage of household with at least 1 of 4 housing problems: overcrowding, high housing costs or lack of kitchen or plumbing facilities	12.0%	11.0%	↓	14.0%	9.0%
<b>Driving alone to work</b> - Percentage of the workforce that drives alone to work	80.0%	80.0%	—	82.0%	72.0%
<b>Long commute, driving alone</b> - Among workers who commute in their car alone, the percentage that commute more than 30 minutes	11.0%	14.0%	↑	20.0%	15.0%
<p>* 2015 rank out of 101 Kansas counties</p> <p>* 2018 rank out of 103 Kansas counties</p> <p><sup>^</sup> Opposite Indicator signifying that an increase is a positive outcome and a decrease is a negative.</p> <p>Note: N/A indicates unreliable or missing data</p> <p>Source: <a href="http://Countyhealthrankings.org">Countyhealthrankings.org</a></p>					

### **Improvements and Challenges**

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. The following summary shows some of the major improvements from the prior Community Health Needs Assessment to current year and challenges faced by Marshall County. The improvements/challenges shown below in *Exhibit 21* were determined using a process of comparing the rankings of the Hospital's health outcomes in the current year to the rankings in the prior Community Health Needs Assessment. If the current year rankings showed an improvement or decline of four percent or four points, or was deemed to be significant, they were included in the charts below.

<b>Exhibit 21</b>	
<b>Marshall County Improvements and Challenges</b>	
<b>Improvements</b>	<b>Challenges</b>
Adult Smoking - percent decreased from 17% to 15%	Premature Death - number increased from 5,800 to 6,100
Preventable Hospital Stays - number decreased from 71 to 55 (per 1,000 Medicare enrollees)	Violent Crime Rate - rate increased from 118.0 to 130.0 (per 100,000 population)
Uninsured Adults - percent decreased from 12% to 9%	Injury Deaths - number of deaths increased from 62 to 84 (per 100,000 population)
Some College - percent of adults aged 25-44 years with some post-secondary education - percent increased from 62% to 67%	Alcohol-Impaired Driving Deaths - percent of motor vehicle crash deaths with alcohol involved increased from 36% to 45%

As can be seen from the summarized table above, there are numerous areas that have room for improvement when compared to the statistics from the prior Community Health Needs Assessment. However, there are also significant improvements that have been made within Marshall County over the past three years.



## Community Health Status Indicators

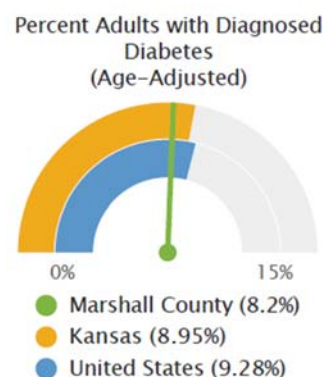
The following exhibits show a more detailed view of certain health outcomes and factors for the community, the state of Kansas and the United States.

### Diabetes (Adult)

*Exhibit 22* 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 22 Population with Diagnosed Diabetes			
County	Total Population Age 20 and Older	Population with Diagnosed Diabetes	Percent* with Diagnosed Diabetes
Marshall County	7,429	795	8.2%
Kansas	2,107,012	207,387	8.95%
United States	241,492,750	24,722,757	9.28%

\* Age-adjusted Rate  
Data Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. 2015.

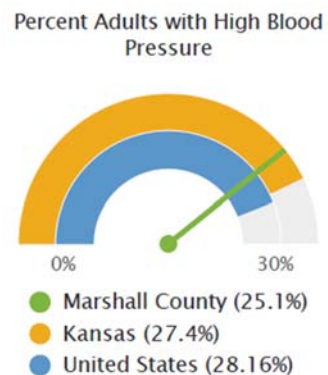


### High Blood Pressure (Adult)

Per *Exhibit 23* below, 1,954 or 25.1 percent of adults aged 18 and older who 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 23 Population with High Blood Pressure			
County	Total Population Age 18 and Older	Population with High Blood Pressure	Percent with High Blood Pressure
Marshall County	7,785	1,954	25.1%
Kansas	2,112,400	578,798	27.4%
United States	232,556,016	65,476,522	28.2%

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



## Obesity (Adult)

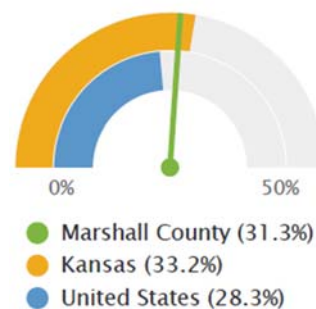
Of adults aged 20 and older, 31.3 percent self-report that they have a Body Mass Index (BMI) greater than 30.0 (obese) in the Community per *Exhibit 24*. Excess weight may indicate an unhealthy lifestyle and puts individuals at risk for further health issues. Rates for youth obesity for the state of Kansas are 33.2 percent compared to the national rate of 28.3 percent.

Exhibit 24			
Population with Obesity			
County	Total Population Age 20 and Older	Population with BMI > 30.0 (Obese)	Percent* with BMI > 30.0 (Obese)
Marshall County	7,397	2,308	31.3%
Kansas	2,106,148	699,363	33.2%
United States	238,842,519	67,983,276	28.3%

\* Age-adjusted Rate

Data Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. 2015.

Percentage of Adults Obese



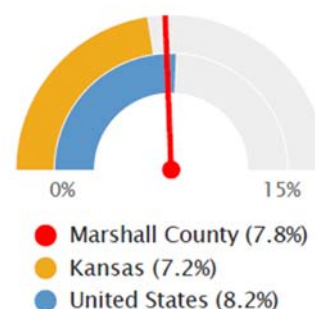
## Low Birth Weight

*Exhibit 25* 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 25			
Births with Low Birth Weight			
County	Total Live Births	Low Weight Births (Under 2500g)	Percent Low Weight Births
Marshall County	854	67	7.8%
Kansas	285,236	20,537	7.2%
United States	29,300,495	2,402,641	8.2%

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

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.

Twenty-five 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 on a scale of 1 to 10, with 10 being perfect health, 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.

The 25 key stakeholders that participated in the survey provided answers that varied across the board with the lowest rating being a 5 and the highest being a 10. The average rating was a 7. Key stakeholders repeatedly noted the great quality of health care provided in the community, recreational offerings and access to specialists.

When asked whether the health and quality of life had improved, declined or stayed the same, 36 percent of those that responded to this question felt the health and quality of life had improved over the last few years. Sixty percent expressed they thought the health and quality of life had stayed the same over the last three years and 4 percent 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 quality healthcare, access to specialists and a clean town.

*“We have a lot of activities and places to go to help with the overall health of the area.”*

*“Great places to raise a family. Lots of quality life amenities. Great schools and hospital. Safe, great place to live, stay and retire.”*

*“Good healthcare providers including specialist who visit and see patients at the local hospital.”*

## **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 with mental health needs and individuals with low-incomes or in poverty as most likely to be underserved due to lack of access to services. Cut back in mental health services have led to many community members not having access to care. Lack of financial resources prevents individuals from seeking medical care and receiving the resources they need. It also leads to people being uninsured and underinsured. As a result, people skip routine screenings, particularly men, that could identify problems early. Persons living in poverty may have less access to safe and affordable housing, less reliable transportation and inadequate access to nutritious foods.

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 better access to mental health facilities.

*“Working poor will forgo needed care to make bottom line each month. Elderly also will forgo care due to lack of finances.”*

*“Increasing mental health needs in the community with no mental health facilities for patients to go to.”*

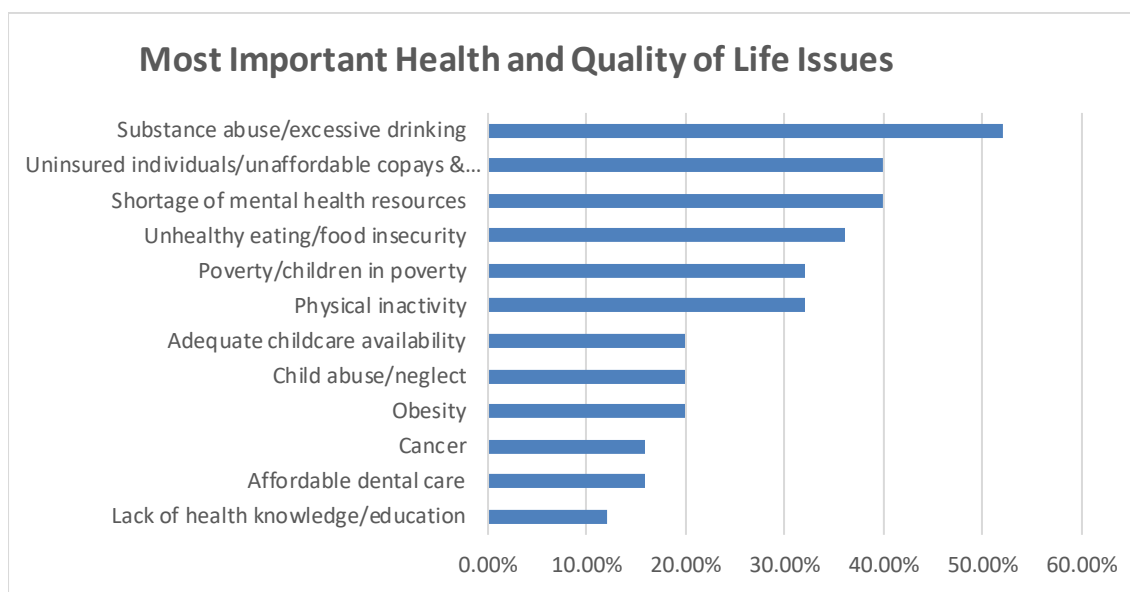
*“Those who are low income and living in poverty are less likely to have health insurance, and in some cases, lack the knowledge and skills to live a healthy life style.”*

### 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 mental health providers (71 percent), lack of insurance (60 percent) and high cost of copays and deductibles (56 percent) are significant barriers to health care. Other barriers included transportation and lack of health education and awareness.

### 4. Most important health and quality of life issues

The survey solicited input from participants regarding health problems of the community. Substance abuse, health insurance and mental health resource shortage were identified as the biggest health and quality of life issues impacting the in the community.



*“More education on healthy lifestyle choices.”*

*“There limited public transit for the poor to get to health care facilities, particularly if they live in the country or a remote town.”*

Additional survey results:

- When asked what needs to be done to address the critical issues, participants indicated the following:
  - Health care needs to be more accessible financially to low income and elderly.
  - Partnerships with mental health providers.
  - More resources locally for mental health assistance, access to immediate mental health care when a need is presented.
  - Continued education about nutrition, chronic disease, physical activity, health insurance and other issues that affect health and quality of life.
  - Continue to build a healthy environment supporting hiking/biking in town and to school.
  - Support local, healthy food alternatives at school, farmer’s market and food service locations.
  - Access to mental health services needs to be addressed by the community as a whole.
- When asked to provide input regarding what health services they would like to see offered in Marshall County that are not currently offered, stakeholders provided the following input:
  - 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, or a 24/7 clinic.
  - More resources for victims of domestic violence and child abuse.
  - Increased community education and outreach; particularly out in the community.

*“I think we have made great strides in rural areas about providing adequate health care. However, I don’t think adequate should be the goal.”*

## **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.

## **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 Marshall County 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 an identified health need.

### ***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 percent 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) **How many sources identified the need?** 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:

<b>Exhibit 26</b>						
<b>Ranking of Community Health Needs</b>						
<b>Health Problem</b>	<b>How many people are affected by the issue?</b>	<b>What are the consequences of not addressing this problem?</b>	<b>What is the Impact on Vulnerable Population?</b>	<b>How Important is it to the Community?</b>	<b>How Many Sources Identified the Need?</b>	<b>Total Score</b>
Lack of Mental Health Providers/Mental Health Conditions	5	5	5	5	5	25
Lack of Access to Primary Care Physicians	5	5	4	4	5	23
Adult Obesity	5	4	3	4	5	21
Poverty	3	4	5	3	3	18
Needs Associated with the Aging Population	4	3	4	4	3	18
Substance Abuse	3	3	4	3	5	18
Lack of Access to Exercise Opportunities	5	3	3	3	1	15
Adult Smoking	3	1	4	3	3	14
Lack of Health Knowledge/Education	3	3	4	3	1	14
Violent Crime Rate	1	3	3	1	5	13
Unhealthy Eating/Food Insecurity	2	3	2	2	3	12
Transportation	2	2	3	2	3	12
Children in Poverty	3	2	3	2	1	11
Excessive Drinking	2	3	3	2	1	11
Alcohol-Impaired Driving Deaths	3	2	3	2	1	11
Cancer	2	3	2	2	1	10
Children in Single-Parent Households	2	2	2	1	3	10
Teen Birth Rate	1	3	2	1	3	10
Preventable Hospital Stays	2	2	3	1	1	9

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 physicians
- Adult obesity
- Poverty
- Health needs associated with the aging population
- Substance abuse

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 27* summarizes hospitals available to the residents of the CHNA community. Those hospitals marked with an asterisk (\*) are within 30 miles of the Hospital.

Exhibit 27 Summary of Acute Care Hospitals		
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
Source: Ushospitalfinder.com		

### Other Health Care Facilities

Short-term acute care hospital services are not the only health services available to members of the Hospital's community. *Exhibit 28* provides a listing of community health centers and rural health clinics in the Hospital's community.

Exhibit 28 Summary of Other Health Care Facilities			
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 19 <sup>th</sup> 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](http://www.marshallcohealth.org).

## **APPENDICES**

**APPENDIX A**  
**ANALYSIS OF DATA**



Analysis of CHNA Data Analysis of Health Status-Leading Causes of Death					
			(A)	(B)	
	U.S. Crude Rates	Kansas Crude Rates	County Rate	10% Increase of Kansas Crude Rate	If (A)>(B), then "Health Need"
<b>Marshall County:</b>					
Cancer	158.1	162.0	144.3	178.2	
Coronary Heart Disease	97.1	88.8	93.2	97.7	
Lung Disease	41.1	49.8	47.7	54.8	
Stroke	37.4	38.4	55.6	42.2	Health Need
Unintentional Injury	44.0	46.9	54.8	51.6	Health Need
<i>The crude rate is shown per 100,000 residents. Please refer to Exhibit 19 for more information</i>					

Analysis of Health Outcomes and Factors					
			(A)	(B)	
	National Benchmark	30% of National Benchmark	County Rate	County Rate Less National Benchmark	If (B)>(A), then "Health Need"
<b>Marshall County:</b>					
Adult Smoking	14.0%	4.2%	15.0%	1.0%	
Adult Obesity	26.0%	7.8%	33.0%	7.0%	
Food Environment Index	8.6	3	8.1	1	
Physical Inactivity	20.0%	6.0%	27.0%	7.0%	Health Need
Access to Exercise Opportunities	91.0%	27.3%	53.0%	38.0%	Health Need
Excessive Drinking	13.0%	3.9%	15.0%	2.0%	
Alcohol-Impaired Driving Deaths	13.0%	3.9%	45.0%	32%	Health Need
Sexually Transmitted Infections	145	44	120	-25	
Teen Birth Rate	15	5	28	13	Health Need
Uninsured	6.0%	1.8%	10.0%	4.0%	Health Need
Primary Care Physicians	1030	309	1660	630	Health Need
Dentists	1280	384	1640	360	
Mental Health Providers	330	99	2460	2130	Health Need
Preventable Hospital Stays	35	11	55	20	Health Need
Mammography Screening	71.0%	21.3%	61.0%	10.0%	
Violent Crime Rate	62	19	130	68	Health Need
Children in Poverty	12.0%	3.6%	14.0%	2.0%	
Children in Single-Parent Households	20.0%	6.0%	21.0%	1.0%	
<i>*From County Health Rankings</i>					

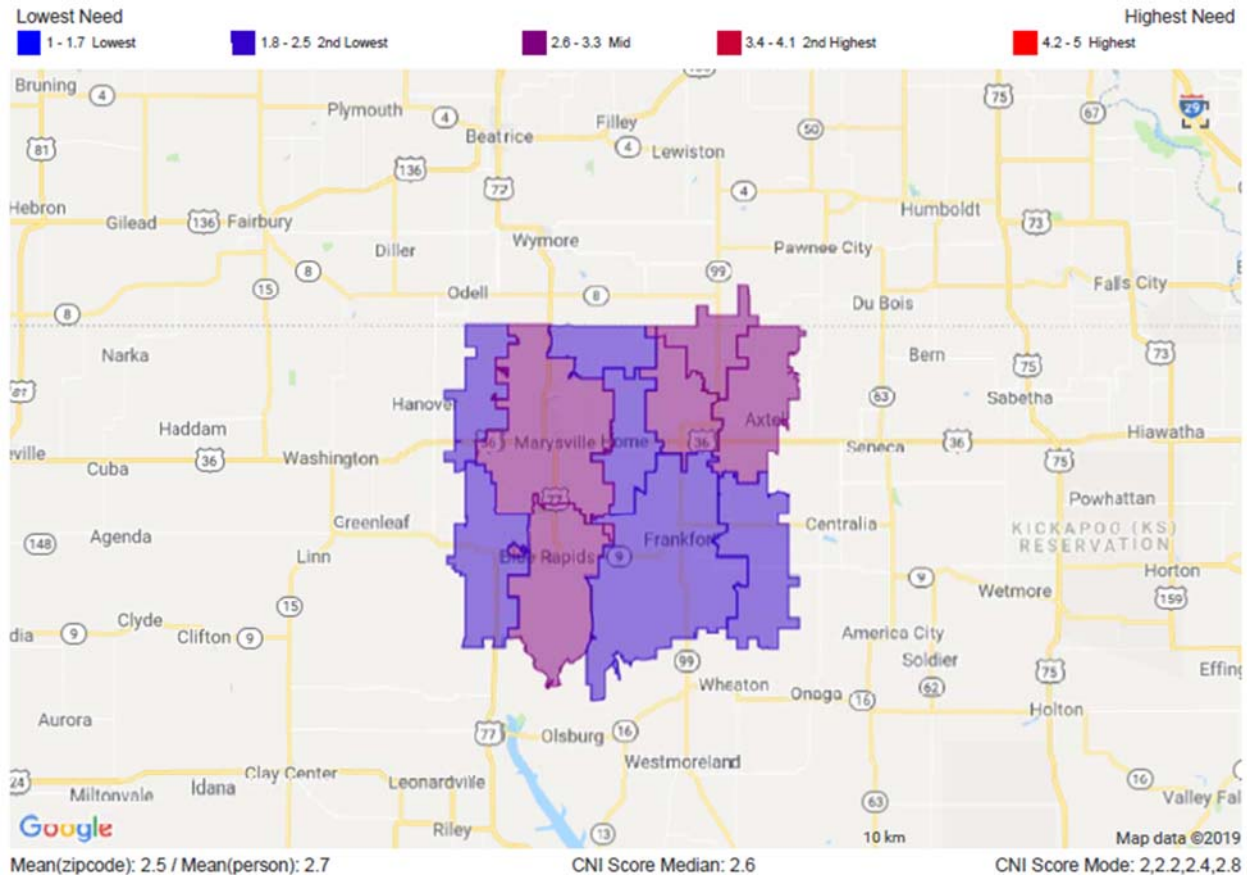
## **APPENDIX B**

### **SOURCES**

DATA TYPE	SOURCE	YEAR(S)
Discharges by Zip Code	Community Memorial Healthcare	FY 2018
Community Details: Population & Demographics	Community Commons via American Community Survey <a href="https://factfinder.census.gov/">https://factfinder.census.gov/</a>	2013-2017
Community Details: Urban/Rural Population	Community Commons via US Census Bureau <a href="https://factfinder.census.gov/">https://factfinder.census.gov/</a>	2010
Socioeconomic Characteristics: Income	Community Commons via American Community Survey <a href="https://factfinder.census.gov/">https://factfinder.census.gov/</a>	2013-2017
Socioeconomic Characteristics: Employment by Major Industry	US Department of Labor , Bureau of Labor Statistics <a href="http://www.bls.gov/cew/datatoc.htm">http://www.bls.gov/cew/datatoc.htm</a>	2017
Socioeconomic Characteristics: Unemployment	Community Commons via US Department of Labor <a href="http://www.communitycommons.org/">http://www.communitycommons.org/</a>	2018
Socioeconomic Characteristics: Poverty	Community Commons via American Community Survey <a href="http://www.communitycommons.org/">http://www.communitycommons.org/</a>	2013-2017
Socioeconomic Characteristics: Uninsured	Community Commons via American Community Survey <a href="https://factfinder.census.gov/">https://factfinder.census.gov/</a>	2013-2017
Socioeconomic Characteristics: Medicaid	Community Commons via American Community Survey <a href="https://factfinder.census.gov/">https://factfinder.census.gov/</a>	2010-2014
Socioeconomic Characteristics: Education	Community Commons via US Census Bureau <a href="http://www.communitycommons.org/">http://www.communitycommons.org/</a>	2013-2017
Physical Environment: Grocery Store Access	Community Commons via US Department of Agriculture <a href="http://www.communitycommons.org/">http://www.communitycommons.org/</a>	2016
Physical Environment: Food Access/Food Deserts	Community Commons via US Census Bureau <a href="http://www.communitycommons.org/">http://www.communitycommons.org/</a>	2015
Physical Environment: Recreation/Fitness Access	Community Commons via US Department of Health & Human Services <a href="http://www.communitycommons.org/">http://www.communitycommons.org/</a>	2016
Clinical Care: Access to Primary Care	Community Commons via Centers for Disease Control & Prevention <a href="http://www.communitycommons.org/">http://www.communitycommons.org/</a>	2014
Clinical Care: Access to Dentists	Community Commons via US Department of Health & Human Services <a href="http://www.communitycommons.org/">http://www.communitycommons.org/</a>	2015
Clinical Care: Access to Mental Health Providers	Community Commons via US Department of Health & Human Services <a href="http://www.communitycommons.org/">http://www.communitycommons.org/</a>	2017
Clinical Care: Professional Shortage Area	Community Commons via Centers for Disease Control & Prevention <a href="http://www.communitycommons.org/">http://www.communitycommons.org/</a>	2016
Critical Care: Preventable Hospital Events	Community Commons via Dartmouth College Institute for Health Policy <a href="http://www.communitycommons.org/">http://www.communitycommons.org/</a>	2015
Leading Causes of Death	Community Commons via Centers for Disease Control and Prevention <a href="http://www.communitycommons.org/">http://www.communitycommons.org/</a>	2013-2017
Health Outcomes and Factors	County Health Rankings <a href="http://www.countyhealthrankings.org/">http://www.countyhealthrankings.org/</a>	2015 & 2018
Health Outcome Details	Community Commons <a href="http://www.communitycommons.org/">http://www.communitycommons.org/</a>	2011-2016
Health Care Resources: Hospitals	US Hospital Finder <a href="http://www.ushospitalfinder.com/">http://www.ushospitalfinder.com/</a>	2018
Health Care Resources: Community Health Centers	Community Commons, CMS.gov, HRSA	
Zip Codes with Highest CNI	Dignity Health Community Needs Index <a href="http://cni.chw-interactive.org/">http://cni.chw-interactive.org/</a>	2018

**APPENDIX C**  
**DIGNITY HEALTH COMMUNITY NEED INDEX**  
**(CNI) REPORT**

## Marshall County



Zip Code	CNI Score	Population	City	County	State
66403	2.8	642	Axtell	Marshall	Kansas
66406	2.8	463	Beattie	Marshall	Kansas
66411	3.2	1286	Blue Rapids	Marshall	Kansas
66412	2	274	Bremen	Marshall	Kansas
66427	2.2	1212	Frankfort	Marshall	Kansas
66438	2	283	Home	Marshall	Kansas
66508	3	4008	Marysville	Marshall	Kansas
66518	2.4	195	Oketo	Marshall	Kansas
66541	2.6	219	Summerfield	Marshall	Kansas
66544	2.2	358	Vermillion	Marshall	Kansas
66548	2.4	982	Waterville	Marshall	Kansas