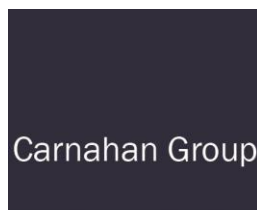


Southwest Medical Center

Community Health Needs Assessment

Fiscal Year 2013

September 18, 2013



Strategic Healthcare Consulting
10 Years of Excellence

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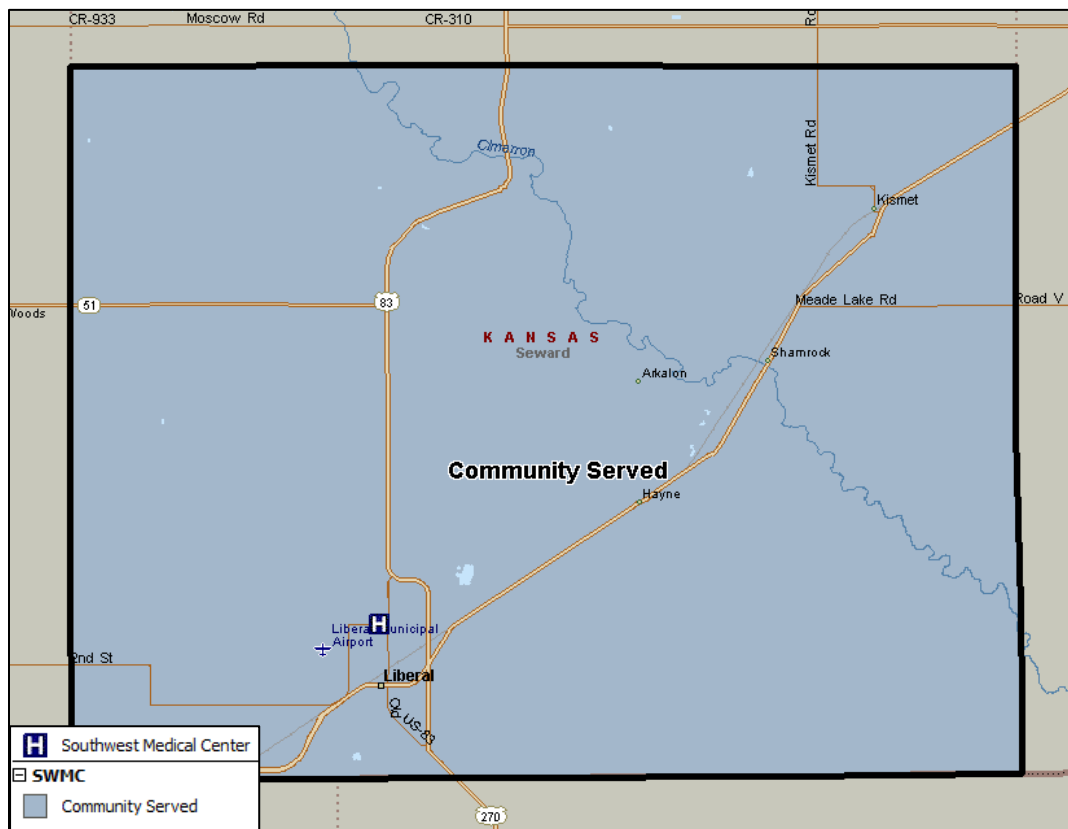
Introduction

Southwest Medical Center at a Glance

Southwest Medical Center (SWMC), located in Liberal, KS is a non-profit acute care hospital. SWMC first opened in 1964 and strives “to be the regional medical center of choice for Southwest Kansas and the surrounding region.” Over the years, SWMC has served patients from Oklahoma, Colorado, Texas and New Mexico.

Community Overview

For the purpose of this report, Southwest Medical Center defined its community as Seward County. The map below represents the community served by SWMC.



Source: SWMC; Microsoft MapPoint 2013

Purpose

Community Health Needs Assessment Background

On April 15, 2013, Southwest Medical Center contracted with Carnahan Group to conduct a Community Health Needs Assessment (CHNA) as required by the Patient Protection and Affordable Care Act (PPACA). Please refer to Appendix A: Carnahan Group Qualifications for more information about the Carnahan Group.

The PPACA, enacted on March 23, 2010, requires not-for-profit hospital organizations to conduct a CHNA once every three taxable years that meets the requirements the Internal Revenue Code 501(r) set forth by the PPACA. The PPACA defines a hospital organization as an organization that operates a facility required by a state to be licensed, registered, or similarly recognized as a hospital; or, a hospital organization is any other organization that the Treasury's Office of the Assistant Secretary ("Secretary") determines has the provision of hospital care as its principal function or purpose constituting the basis for its exemption under section 501(c)(3).

A CHNA is a report based on epidemiological, qualitative and comparative methods that assesses the health issues in a hospital organization's community and that community's access to services related to those issues. Based on the findings of the CHNA, an implementation strategy for Southwest Medical Center that addresses the community health needs will be developed and adopted by the end of fiscal year 2013.

Requirements

As required by the Treasury Department ("Treasury") and the Internal Revenue Service (IRS), this CHNA includes the following:

- A description of the community served;
- A description of the process and methods used to conduct the CHNA, including:
 - A description of the sources and dates of the data and the other information used in the assessment; and,
 - The analytical methods applied to identify community health needs.
- The identification of all organizations with which SWMC collaborated, if applicable, including their qualifications;
- A description of how SWMC took into account input from persons who represented the broad interests of the community served by SWMC, including those with special knowledge of or

expertise in public health and any individual providing input who was a leader or representative of the community served by SWMC; and,

- A prioritized description of all of the community health needs identified through the CHNA and a description of the process and criteria used in prioritizing those needs.

CHNA Strategy

This CHNA was conducted following the requirements outlined by the Treasury and the IRS, which included obtaining necessary information from the following sources:

- Input from persons who represented the broad interests of the community served by SWMC, which included those with special knowledge of or expertise in public health;
- Identifying federal, regional, state, or local health or other departments or agencies, with current data or other information relevant to the health needs of the community served by SWMC, leaders, representatives, or members of medically underserved, low-income, and minority populations with chronic disease needs in the community served by SWMC; and,
- Consultation or input from other persons located in and/or serving SWMC's community, such as:
 - Healthcare community advocates;
 - Nonprofit organizations;
 - Local government officials;
 - Community-based organizations, including organizations focused on one or more health issues;
 - Healthcare providers, including community health centers and other providers focusing on medically underserved populations, low-income persons, minority groups, or those with chronic disease needs.

The sources used for SWMC's CHNA are provided in the References and Appendix B: Community Leader Interviewees. Information was gathered by conducting interviews with physicians, leaders of community organizations, members of government organizations and public health experts, as well as focus groups with general population and Hispanic community members.

Health Profile

Secondary Data Collection and Analysis Methodology

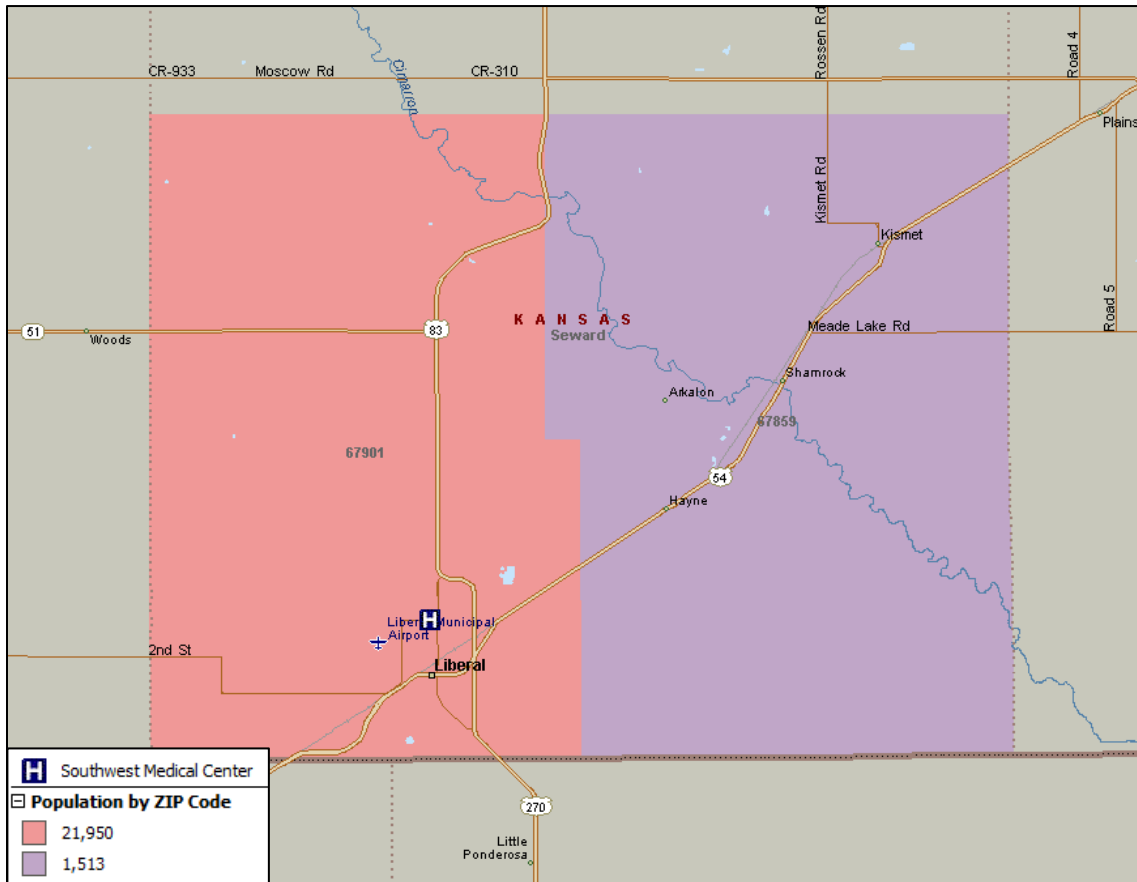
A variety of data sources were utilized to gather demographic and health indicators for the community served by SWMC. Commonly used data sources include Claritas, the Kansas Department of Health and Environment (KDHE), and the Centers for Disease Control and Prevention (CDC). SWMC serves Seward County (“Seward”), which is comprised of ZIP Codes 67901 and 67859.

ZIP Code level data were used where available and county level data are presented where ZIP Code level data were unavailable. For select indicators, county level data are compared to state and national benchmarks. When possible, multi-year rates are reported. Because Seward has a relatively low population, multi-year rates are considered more stable. Single-year rates must be interpreted with caution, as small changes in case numbers can dramatically change a rate.

Demographics

Population in SWMC's Community

Figure 1 - Population Density by ZIP Code, 2013



Sources: Claritas 2013; Microsoft MapPoint 2013

Population Change by ZIP Code

The overall projected population growth in SWMC's community is 5.0% over the next five years. Moderate population growth is expected for ZIP Code 67901 (5.2%), while slight growth is expected for ZIP Code 67859 (1.7%).

Table 1 – Population Change by ZIP Code, 2013–18

| ZIP Code | Community | Population 2013 | Population 2018 | Percent Change |
|--------------|-----------|-----------------|-----------------|----------------|
| 67901 | Liberal | 21,950 | 23,101 | 5.2% |
| 67859 | Kismet | 1,513 | 1,539 | 1.7% |
| Total | | 23,463 | 24,640 | 5.0% |

Source: Claritas 2013

Population Change by Age and Gender

The populations of individuals ages 0–17 and 25–44 are expected to grow slightly (see Table 2). A marginal population decline is expected for individuals ages 18–24 (-0.7%). Moderate growth is expected for individuals aged 45–64 (8.5%). The age group with the largest expected population growth is 65 and older (17.6%).

Table 2 – Population Change by Age and Gender, 2013–18

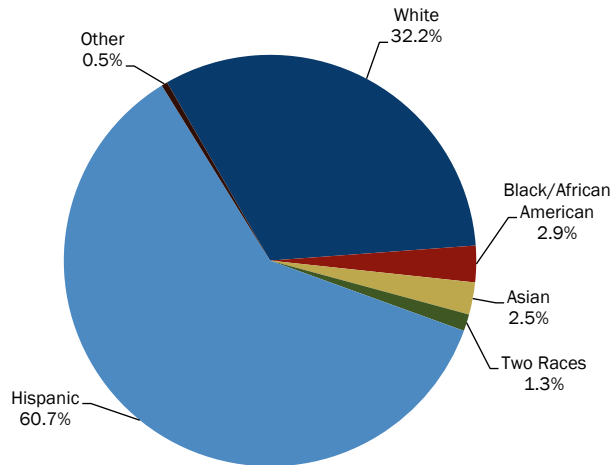
| Age Group | 2013 | | | 2018 | | | Percent Change | | |
|-------------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|-------------|-------------|
| | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Age 0 through 17 | 3,820 | 3,549 | 7,369 | 3,859 | 3,646 | 7,505 | 1.0% | 2.7% | 1.8% |
| Age 18 through 24 | 1,525 | 1,240 | 2,765 | 1,499 | 1,248 | 2,747 | -1.7% | 0.6% | -0.7% |
| Age 25 through 44 | 3,351 | 3,060 | 6,411 | 3,546 | 3,149 | 6,695 | 5.8% | 2.9% | 4.4% |
| Age 45 through 64 | 2,492 | 2,348 | 4,840 | 2,677 | 2,573 | 5,250 | 7.4% | 9.6% | 8.5% |
| Age 65 and older | 885 | 1,193 | 2,078 | 1,082 | 1,361 | 2,443 | 22.3% | 14.1% | 17.6% |
| Total | 12,073 | 11,390 | 23,463 | 12,663 | 11,977 | 24,640 | 4.9% | 5.2% | 5.0% |

Source: Claritas 2013

Population by Race and Ethnicity

The most common race/ethnicity in SWMC’s community is Hispanic (60.7%) followed by white (32.2%), black/African American (2.9%), Asian (2.5%), individuals of two races (1.3%) and other races (0.5%).

Figure 2 – Race Composition, 2013



Source: Claritas 2013

Population Change by Race and Ethnicity

Substantial population growth is expected for Hispanics (14.9%). The population of individuals of two races and other races are expected to grow slightly (see Table 3). Population declines are expected for whites (-12.3%), black/African Americans (-4.3%) and Asians (-1.2%).

Table 3 – Population Change by Race and Ethnicity, 2013–18

| Race & Ethnicity | 2013 | 2018 | Percent Change |
|------------------------|--------|--------|----------------|
| White | 7,547 | 6,618 | -12.3% |
| Black/African American | 672 | 643 | -4.3% |
| Asian | 593 | 586 | -1.2% |
| Two Races | 310 | 321 | 3.5% |
| Hispanic | 14,232 | 16,359 | 14.9% |
| Other | 109 | 113 | 3.7% |

Source: Claritas 2013

Hispanic Population Change

By 2018, the Hispanic population is expected to grow by 14.9%. The Hispanic population in ZIP Code 67901 is expected to grow substantially (15.3%), while moderate growth is expected in ZIP Code 67859 (7.7%).

Table 4 – Hispanic Population Change by ZIP Code, 2013–18

| ZIP Code | Community | Population 2013 | Population 2018 | Percent Change |
|--------------|-----------|--------------------|--------------------|-------------------|
| 67901 | Liberal | 13,541 | 15,615 | 15.3% |
| 67859 | Kismet | 691 | 744 | 7.7% |
| Total | | 14,232 | 16,359 | 14.9% |

Source: Claritas 2013

Children Ages 0–17 Population Change

Overall, the population of children ages 0–17 is expected to grow 1.8% over the next five years. Population growth is expected for ZIP Code 67901 (2.1%), while a decline is expected in ZIP Code 67859 (-2.2%).

Table 5 – Children Ages 0–17 Population Change by ZIP Code, 2013–18

| ZIP Code | Community | Population 2013 | Population 2018 | Percent Change |
|--------------|-----------|--------------------|--------------------|-------------------|
| 67901 | Liberal | 6,865 | 7,012 | 2.1% |
| 67859 | Kismet | 504 | 493 | -2.2% |
| Total | | 7,369 | 7,505 | 1.8% |

Source: Claritas 2013

Women at Childbearing Age Population Change

Overall, the population of women at childbearing age (15–44) is expected to grow slightly (1.8%). Slight growth is expected for ZIP Code 67901 (1.9%), while marginal growth is expected for ZIP Code 67859 (0.4%).

Table 6 – Women at Childbearing Age Population Change by ZIP Code, 2013–18

| ZIP Code | Community | Population 2013 | Population 2018 | Percent Change |
|--------------|-----------|--------------------|--------------------|-------------------|
| 67901 | Liberal | 4,539 | 4,626 | 1.9% |
| 67859 | Kismet | 268 | 269 | 0.4% |
| Total | | 4,807 | 4,895 | 1.8% |

Source: Claritas 2013

Individuals Ages 65 and Older Population Change

The overall projected population growth of individuals ages 65 and older is 17.6% by 2018. Substantial population growth is expected in both ZIP Codes (see Table 7).

Table 7 – Individuals Ages 65 and Older Population Change, 2013–18

| ZIP Code | Community | Population 2013 | Population 2018 | Percent Change |
|--------------|-----------|--------------------|--------------------|-------------------|
| 67901 | Liberal | 1,918 | 2,250 | 17.3% |
| 67859 | Kismet | 160 | 193 | 20.6% |
| Total | | 2,078 | 2,443 | 17.6% |

Source: Claritas 2013

Socioeconomic Characteristics

According to the U.S. Bureau of Labor Statistics, the 2011 annual unemployment average for Seward (4.6%) was lower than Kansas (6.7%).

The U.S. Census American Community Survey (ACS) publishes median household income and poverty estimates. According to 2009–2011 estimates, the median household income in Seward (\$48,743) is slightly lower than Kansas (\$49,929).

Poverty thresholds are determined by family size, number of children and age of the head of the household. A family's income before taxes is compared to the annual poverty thresholds. If the income is below the threshold, the family and each individual in it are considered to be in poverty. In 2011, the poverty threshold for a family of four was \$23,021. The ACS estimates indicate that Seward residents are more likely to live in poverty (17.3%) compared to Kansas residents (13.6%). Similarly, children in Seward are more likely to be living in poverty (23.3%) compared to all children in Kansas (18.4%).

Table 8 – Socioeconomic Characteristics

| | Seward County | Kansas |
|---|------------------|----------|
| Unemployment rate, 2011 annual average ¹ | 4.0% | 5.7% |
| Median household income ² | \$48,743 | \$49,929 |
| Individuals below poverty level ² | 17.3% | 13.6% |
| Children below poverty level ² | 23.3% | 18.4% |

¹Source: U.S. Bureau of Labor Statistics

²Source: U.S. Census - ACS 2009–11 estimates

Education

The U.S. Census ACS publishes estimates of the highest level of education completed for residents aged 25 years and older. The ACS 2009–2011 estimates indicate that more Seward residents have not earned a high school degree or equivalent (37.2%) compared to Kansas (10.4%). Adults aged 25 years and older in Seward are less likely to have a high school degree or equivalent (50.0%) compared to Kansas residents (59.8%). Seward residents are substantially less likely to have a bachelor’s degree (12.8%).

Table 9 – Highest Level of Education Completed by Persons 25 Years and Older, 2009–11

| | Seward County | Kansas |
|----------------------------------|------------------|--------|
| Less than a high school degree | 37.2% | 10.4% |
| High school degree or equivalent | 50.0% | 59.8% |
| Bachelor's degree | 12.8% | 29.8% |

Source: U.S. Census - ACS 2009–11 estimates

Crime Rates

The Kansas Bureau of Investigation reports annual crime data. The rates were calculated by dividing the crime totals by the estimated populations for each geographic area and multiplying by 100,000. Thus, the rates presented are per 100,000 population.

The aggravated assault/battery rate in Seward (274.3 per 100,000 population) is higher than in Kansas (259.0 per 100,000 population).

Robberies are substantially less likely to occur in Seward (25.7 per 100,000 population) compared to Kansas (50.9 per 100,000 population).

The rape and homicide rates in Seward are similar to Kansas (see Table 10).

Table 10 – Violent Crime Rates, 2011

| | Seward County | Kansas |
|----------------------------|------------------|--------|
| Aggravated assault/battery | 274.3 | 259.0 |
| Robbery | 25.7 | 50.9 |
| Rape | 38.6 | 37.5 |
| Homicide | 4.3 | 4.0 |

Source: Kansas Bureau of Investigation, 2011 Crime Index

Rates are per 100,000 population

Built Environment

A community's built environment refers to structures influenced and created by humans. This includes infrastructure, buildings, parks, restaurants, grocery stores, recreational facilities and other structures that affect how people interact and the health status of the community. Business and shopping amenities such as farmer's markets and fast food restaurant density are factors that contribute to the community's health.

The USDA Food Environment Atlas displays various built environment indicators. There are 4.3 recreational facilities per 100,000 population in Seward. There are substantially more fast food restaurants than farmer's markets and grocery stores in Seward (see Table 11).

Table 11 – Access to Food Stores and Recreational Facilities

| | Seward County |
|--------------------------|------------------|
| Recreational facilities* | 4.3 |
| Fast food restaurants* | 60.8 |
| Grocery stores* | 8.7 |
| Farmer's markets^ | 5.0 |

Source: USDA Food Environment Atlas

*2009

^2012

Health Outcomes and Risk Factors

Cancer

Prostate cancer incidence is higher in Seward (200.5 per 100,000 males) than in Kansas (156.1 per 100,000 males).

The breast, lung and bronchus, and colorectal cancer incidence rates are lower in Seward than in Kansas (see Table 12).

Table 12 – Select Cancer Incidence Rates, 2003–08

| | Seward County | Kansas |
|--------------------------------|------------------|--------------|
| Prostate ¹ | 200.5 | 156.1 |
| Breast ² | 97.5 | 123.1 |
| Lung and bronchus ³ | 56.2 | 63.6 |
| Colorectal ³ | 43.6 | 49.1 |

Source: Kansas Department of Health and Environment –
Cancer Statistics Query

¹Rate is per 100,000 males

²Rate is per 100,000 females

³Rate is per 100,000 population

Sexually Transmitted Infections

The KDHE published data on reported sexually transmitted infections (STIs). Rates should be interpreted with caution, as small changes in case numbers from year to year can dramatically alter rates in areas with low populations. Reported chlamydia incidence in 2011 was higher in Seward (461.8 per 100,000 population) than in Kansas (369.2 per 100,000 population).

Reported HIV/AIDS prevalence among adults was higher in Seward (98.6 per 100,000 population) compared to Kansas (80.6 per 100,000 population) in 2011.

In 2011, reported gonorrhea was higher in Seward (113.3 per 100,000 population) compared to Kansas (77.0 per 100,000 population).

There were no reported cases of early syphilis in Seward in 2011.

Table 13 – Reported Sexually Transmitted Infection Rates, 2011

| | Seward County | Kansas |
|----------------------------------|------------------|--------|
| Chlamydia ¹ | 461.8 | 369.2 |
| HIV/AIDS prevalence ² | 98.6 | 80.6 |
| Gonorrhea ¹ | 113.3 | 77.0 |
| Early syphilis ¹ | 0.0 | 0.8 |

¹Source: Kansas Department of Health and Environment – Kansas STD Report January – December 2011

²Source: Kansas Department of Health and Environment – HIV/AIDS in Kansas, Annual Report, December 2011

Rates are per 100,000 population

Diabetes

Data on health status, risk factors and behaviors are available from the Behavioral Risk Factor Surveillance System (BRFSS), a state-based system of health surveys established by the Centers for Disease Control and Prevention (CDC). The data are presented in Table 14, Table 15 and Table 16.

Adults in Seward are more than twice as likely to have been diagnosed with diabetes (17.6%) compared to Kansas adults (8.5%) and U.S. adults (8.4%).

Table 14 – Adults with Diagnosed Diabetes, 2008

| | Seward County | Kansas | United States |
|--------------------|------------------|--------|------------------|
| Diagnosed diabetes | 17.6% | 8.5% | 8.4% |

Source: Kansas BRFSS –Local Data, 2009

Health Status and Conditions

High cholesterol refers to the percentages of adults who were told by a doctor that they have high blood cholesterol. Seward adults are slightly more likely to have high blood cholesterol (39.7%) than Kansas adults (38.6%) and U.S. adults (37.5%).

Seward adults are more likely to have ever had a heart attack (4.9%) compared to all Kansas (3.7%) and U.S. adults (4.0%).

Adults in Seward are less likely to report hypertension, arthritis and asthma diagnoses compared to all Kansas and U.S. adults (see Table 15).

Obesity refers to adults who reported a body mass index (BMI) greater than or equal to 30. Adults in the Seward are more likely to report being obese (33.1%) than all adults in Kansas (28.8%) and all adults in the U.S. (26.9%).

Health status refers to adults who reported general health status as fair or poor. According to BRFSS data, adults in Seward are substantially more likely to report fair or poor health status (23.8%) compared to all adults in Kansas (12.3%) and the United States (14.5%).

Poor mental health refers to the percentage of adults who reported their mental health was not good on 14 or more days in the past 30 days. Seward adults are equally likely to report poor mental health as all Kansas adults (8.6%).

Activity limitations reflect the percentages of adults who reported being limited in any activities because of physical, mental or emotional problems. Seward adults are substantially more likely to report activity limitations (27.3%) compared to all Kansas (18.9%) and U.S. adults (18.9%).

Table 15 – Reported Health Conditions in Adults, 2009

| | Seward County ¹ | Kansas ¹ | United States ² |
|----------------------|-------------------------------|---------------------|-------------------------------|
| High cholesterol | 39.7% | 38.6% | 37.5% |
| Heart attack | 4.9% | 3.7% | 4.0% |
| Hypertension | 21.1% | 28.7% | 28.7% |
| Obesity | 33.1% | 28.8% | 26.9% |
| Arthritis | 10.6% | 24.1% | 26.0% |
| Asthma | 6.5% | 8.5% | 8.8% |
| Health status | 23.8% | 12.3% | 14.5% |
| Poor mental health | 8.6% | 8.6% | * |
| Activity limitations | 27.3% | 18.9% | 18.9% |

¹Source: Kansas BRFSS – Local Data, 2009

²Source: Centers for Disease Control and Prevention, BRFSS – Prevalence and Trends Data

*Data unavailable

Health Risk Factors and Behaviors

Current smokers are those who reported smoking cigarettes every day or some days. Adults in Seward are substantially less likely to report smoking (5.1%) compared to Kansas (17.8%) and U.S. adults (17.9%).

Fruit and vegetable consumption is defined as consuming fruits and vegetables at least five times per day. Seward adults are substantially less like to consume fruits and vegetables (12.2%) compared to Kansas (18.6%) and U.S. adults (23.4%).

No healthcare provider reflects adults who reported having no personal doctor or healthcare provider. Seward adults are more than twice as likely to report not having a healthcare provider (39.4%) compared to Kansas adults (14.6%).

Unable to see doctor refers to adults who reported not being able to see a doctor in the past 12 months due to cost. Adults in Seward are nearly three times as likely to report being unable to see a doctor due to cost (31.6%) compared to Kansas adults (11.2%).

Flu shot reflects adults aged 18 and older who reported receiving a flu shot in the past 12 months. Seward adults are about half as likely to have received a flu shot (20.6%) compared to Kansas adults (41.1%).

Physical inactivity is defined as no leisure time exercise or physical activity in the past 30 days. Adults in Seward are more likely to report physical inactivity (48.3%) compared to all Kansas adults (23.2%) and U.S. adults (24.2%). Recommended physical activity reflects adults who reported participating in at least 30 minutes of moderate physical activity five times per week or at least 20 minutes of vigorous activity three times per week. Seward adults are less likely to report participating in the recommended level of physical activity (37.0%) compared to Kansas adults (48.5%) and U.S. adults (49.0%).

Table 16 – Reported Health Risk Factors and Behaviors in Adults, 2009

| | Seward County ¹ | Kansas ¹ | United States ² |
|----------------------------------|-------------------------------|---------------------|-------------------------------|
| Current smoking | 5.1% | 17.8% | 17.9% |
| Fruits and vegetable consumption | 12.2% | 18.6% | 23.4% |
| No healthcare provider | 39.4% | 14.6% | * |
| Unable to see doctor | 31.6% | 11.2% | * |
| Flu shot | 20.6% | 41.1% | * |
| Physical inactivity | 48.3% | 23.2% | 23.8% |
| Recommended physical activity | 37.0% | 48.5% | 49.0% |

¹Source: Kansas BRFSS – Local Data, 2009

²Source: Centers for Disease Control and Prevention, BRFSS – Prevalence and Trends Data

*Data unavailable

Mortality Indicators

The Institute for Health Metrics and Evaluation publishes life expectancies by county and gender. The life expectancy for males in Seward (73.2 years) is lower than Kansas (76.0 years). The life expectancy for females is slightly lower in Seward (79.2 years) compared to Kansas (80.7 years).

According to the KDHE, the all-cause mortality rate in Seward (731.4 per 100,000 population) is lower than in Kansas (769.6 per 100,000 population).

Table 17 – Mortality Indicators

| | Seward County | Kansas |
|--|------------------|--------|
| Male life expectancy at birth, 2009 ¹ | 73.2 | 76.0 |
| Female life expectancy at birth, 2009 ¹ | 79.2 | 80.7 |
| All-cause mortality rate ² | 731.4 | 769.6 |

¹Source: Institute for Health Metrics and Evaluation

²Source: Kansas Department of Health and Environment –Death Statistics Query, 2007–2011
Rates are per 100,000 population

Leading Causes of Death

The KDHE reports leading causes of death by county in Kansas. Due to its low population, low mortality counts produce unstable rates for Seward. Thus, death rates for select causes are not displayed.

Heart disease, cancer and chronic lower respiratory disease (CLRD) are the top three leading causes of death in Seward. Cancer is the leading cause of death in Kansas, followed by heart disease and CLRD. Diabetes ranks fourth in Seward, but seventh in Kansas. The diabetes mortality rate in Seward (40.1 per 100,000 population) is nearly twice the Kansas rate (21.6 per 100,000 population). Stroke is the fifth leading cause of death in Seward and fourth in Kansas. Accidents rank sixth in Seward and fifth in Kansas.

Table 18 – Leading Causes of Death, 2011

| | Seward County | Kansas | United States |
|---|------------------|--------|------------------|
| Cancer | 159.3 | 173.1 | 168.6 |
| Heart Disease | 163.1 | 167.1 | 173.7 |
| CLRD | 62.4 | 50.7 | 42.7 |
| Diabetes | 40.1 | 21.6 | 21.5 |
| Stroke | 29.6 | 43.2 | 37.9 |
| Accidents (not including motor vehicle) | 25.4 | 27.4 | 38.0 |
| Influenza and pneumonia | 22.4 | 18.9 | 15.7 |
| Alzheimer's disease | * | 24.7 | 24.6 |
| Kidney disease | * | 17.9 | 13.4 |
| Suicide | * | 13.4 | 12.0 |
| Septicemia | * | 10.6 | 10.5 |
| Chronic liver disease and cirrhosis | * | 7.9 | 9.7 |

Sources: Kansas Department of Health and Environment –Death Statistics Query

Rates are per 100,000 population

*Numerator too small for stable rate calculation

Maternal and Child Health

Birth and infant mortality data are reported by the KDHE. Birth rate is defined as number of live births per 1,000 persons in a given year. The birth rate in Seward (19.3 per 1,000 population) is substantially higher than the Kansas rate (13.8 per 1,000 population).

Teen birth rate is defined as the number of live births to women under 18 per 1,000 women under 18. The teen birth rate in Seward (20.7 per 1,000 women under 18) is more than three times the state rate (6.1 per 1,000 women under 18).

Infant mortality is substantially lower in Seward (3.9 per 1,000 births) than in Kansas (6.9 per 1,000 births).

Table 19 – Births and Infant Deaths, 2011

| | Seward County | Kansas |
|---|------------------|-------------|
| Birth rate (per 1,000 population) ¹ | 19.3 | 13.8 |
| Teen birth rate (per 1,000 women under 18) ² | 20.7 | 6.1 |
| Infant mortality rate (per 1,000 births) ¹ | 3.9 | 6.9 |

¹Source: Kansas Department of Health and Environment – 2011 Annual Summary of Vital Statistics

²Source: Kansas Department of Health and Environment – Pregnancy Statistics Query

Adequate and inadequate prenatal care are reported for pregnancies where sufficient information is available to calculate the Kotelchuk index. The Kotelchuk index consists of the following classifications: adequate plus, adequate, intermediate, inadequate and unknown. In the table below, women receiving adequate care includes both adequate plus and adequate care. Women receiving less than adequate care includes intermediate and inadequate care. Those with unknown status are not included.

In Seward, women are substantially less likely to receive adequate prenatal care (63.3%) compared to all Kansas women (81.8%).

Women in Seward are about twice as likely to receive less than adequate prenatal care (36.7%) compared to all Kansas women (18.2%).

Infants born weighing less than 2,500 grams are classified as having low birth weight. Low birthweight is calculated by dividing the number of low weight births by the number of births with known status. Low birthweight and very low birthweight are less common in Seward than in Kansas (see Table 20).

Table 20 – Select Maternal and Child Health Indicators, 2011

| | Seward County | Kansas |
|---|------------------|--------------|
| Women receiving adequate prenatal care* | 63.3% | 81.8% |
| Women receiving less than adequate prenatal care* | 36.7% | 18.2% |
| Low birthweight* | 4.9% | 7.2% |
| Very low birthweight* | 0.4% | 1.3% |

Source: Kansas Department of Health and Environment – 2011 Annual Summary of Vital Statistics

*Percent of all births with known status

Access to Care

According to the ACS 2009–2011 estimates, Seward residents are less likely to have health insurance coverage (74.5%) compared to Kansas residents (86.8%).

Private insurance coverage is less common among Seward residents (58.2%) compared to all Kansas residents (73.3%).

Public insurance coverage is slightly less common in Seward (23.2%) compared Kansas (25.4%).

Seward residents are more likely to be uninsured (25.5%) compared to Kansas residents (13.2%). Children in Seward are more than twice as likely to be uninsured (17.0%) compared to all children in Kansas (7.7%).

Table 21 – Health Insurance Coverage, 2009–11

| | Seward County | Kansas |
|---|------------------|--------------|
| Health insurance coverage | 74.5% | 86.8% |
| Private insurance | 58.2% | 73.3% |
| Public coverage | 23.2% | 25.4% |
| No health insurance coverage | 25.5% | 13.2% |
| No health insurance coverage (children) | 17.0% | 7.7% |

Source: U.S. Census - ACS 2009–11 estimates

Hospital Discharges and Visits

The following hospital discharge and visit data is from fiscal year 2012 (FY2012). The time period for FY2012 was October 1, 2011 through September 30, 2012.

Southwest Medical Center Inpatient Discharges

The most common reasons for inpatient discharges at Southwest Medical Center during FY2012 are displayed in Table 22. Excluding normal newborn, which accounted for 558 discharges, the most common were vaginal delivery without complicating diagnosis (447), Cesarean section without complications and comorbidities (CC) or major complications and comorbidities (MCC) (152), neonate with other significant problems (60), bronchitis and asthma without CC/MCC (59) and vaginal delivery with sterilization and/or dilation and curettage (48).

Table 22 – Top Inpatient Discharge Reasons, FY2012

| Description | Count |
|---|-------|
| Vaginal delivery w/o complicating diagnoses | 447 |
| Cesarean section w/o CC/MCC | 152 |
| Neonate w/ other significant problems | 60 |
| Bronchitis & asthma w/o CC/MCC | 59 |
| Vaginal delivery w/ sterilization and/or D&C | 46 |
| Bilateral or multiple major joint procedures of lower extremity w/o MCC | 45 |
| Simple pneumonia & pleurisy w/CC | 43 |
| Kidney & urinary tract infections w/o MCC | 41 |
| Cesarean section w/ CC/MCC | 37 |
| Simple pneumonia & pleurisy w/o CC/MCC | 36 |
| Misc. disorders of nutrition, metabolism, fluids/electrolytes w/o MCC | 35 |
| Esophagitis, gastroenteritis & misc. digestive disorders w/o MCC | 30 |
| Cellulitis w/o MCC | 24 |
| Prematurity w/o major problems | 22 |
| Vaginal delivery w/complicating diagnoses | 19 |
| Chronic obstructive pulmonary disease w/o CC/MCC | 18 |
| Full term neonate w/ major problems | 14 |
| Chronic obstructive pulmonary disease w/ MCC | 13 |
| Chronic obstructive pulmonary disease w/ CC | 13 |

Source: Kansas Hospital Association

CC=complications and comorbidities

MCC=major complications and comorbidities

Southwest Medical Center Outpatient Visits

The five most common reasons for outpatient visits at Southwest Medical Center in FY2012 were other screening mammogram (804), abdominal pain, unspecified site (645), screening mammogram for high-risk patient (505), chest pain, unspecified (488) and diabetes mellitus without mention of complication, type 2 or unspecified site, not stated as controlled (485). Other common outpatient visit reasons can be found in Table 23.

Table 23 – Top Outpatient Visit Reasons, FY2012

| Description | Count |
|--|-------|
| Other screening mammogram | 804 |
| Abdominal pain, unspecified site | 645 |
| Screening mammogram for high-risk patient | 505 |
| Chest pain, unspecified | 488 |
| DM w/o mention of complication, type 2 or unspecified type, not stated as uncontrolled | 485 |
| Urinary tract infection, site not specified | 439 |
| Headache | 415 |
| Lumbago | 414 |
| Acute upper respiratory infections of unspecified site | 350 |
| Unspecified essential hypertension | 306 |
| Other specified pre-operative examination | 299 |
| Joint pain, lower leg | 291 |
| Routine medical exam | 271 |
| Allergic rhinitis, cause unspecified | 271 |
| Other malaise and fatigue | 259 |
| Pain in limb | 258 |
| Unspecified acquired hypothyroidism | 254 |
| Unspecified cataract | 248 |
| Care involving other physical therapy | 239 |
| Abdominal pain, right upper quadrant | 230 |

Source: Kansas Hospital Association

DM=diabetes mellitus

Community Input

The interview and focus group data is qualitative in nature and should be interpreted as reflecting the values and perceptions of those interviewed. This portion of the CHNA process is meant to gather input from persons who represent the broad interest of the community serviced by the hospital facility, as well as individuals providing input who have special knowledge or expertise in public health. It is meant to provide depth and richness to the quantitative data collected.

Community Leader Interviews

Interview Methodology

Twelve interviews were conducted in-person from June 11–12, 2013. Three interviews were conducted via phone. Interviews required approximately 30 minutes to complete. Interviewers followed the same process for each interview, which included documenting the interviewee's expertise and experience related to the community. Additionally, the following community-focused questions were used as the basis for discussion:

- Interviewee's name
- Interviewee's title
- Interviewee's organization
- Overview information about the interviewee's organization
- What are the top three strengths of the community?
- What are the top three health concerns of the community?
- What are the health assets and resources available in the community?
- What are the health assets or resources that the community lacks?
- What assets or resources in the community are not being used to their full capacity?
- What are the barriers to obtaining health services in the community?
- What is the single most important thing that could be done to improve the health in the community?
- What changes or trends in the community do you expect over the next five years?
- What other information can be provided about the community that has not already been discussed?

Community Leader Interview Summary

There were a variety of topics discussed in the community leader interviews. The most common topics included retention and recruitment of physicians, the lack of providers accepting Medicaid patients, the shortage of specialty care, teen pregnancy, diabetes and obesity.

The most frequently mentioned issue affecting the community was the retention and recruitment of physicians. Many interviewees acknowledged this as a top community health concern. The discussion centered on the struggle to keep doctors practicing in Liberal for long periods of time. Interviewees described the physician population as mostly “transient” and discussed the fear community members have of losing their doctor. Furthermore, interviewees feel that replacing retiring and transient physicians is becoming increasingly difficult. They feel there needs to be an enhanced effort to attract doctors to the community.

Another frequently mentioned concern expressed by community leaders was the lack of providers in the community who currently accept Medicaid patients. Interviewees believe that physicians feel they do not need to accept these patients because of the shortage of doctors in the area. They cited the high percentage of low-income families in the area who rely on Medicaid for healthcare. As a result, this portion of the population was the main group identified as medically underserved. One interviewee discussed this issue further in the context of the children growing up in these households. The interviewee stated that these children often experience more adverse health conditions, but encounter major hurdles when seeking specialty care. There were a few different resources identified by interviewees that provide various forms of assistance to low-income, disadvantaged and medically underserved populations are United Methodist Mexican-American Ministries (UMMAM), Liberal Area Coalition for Families (LACF), Women, Infants and Children (WIC) and the United Way. The UMMAM provides services and programs such as medical and dental clinics, education, screening, a food bank, clothing, emergency assistance and much more for all residents of Southwest Kansas. Interviewees mentioned UMMAM frequently as a valuable community resource, but cited the organization’s difficulty in providing healthcare because there is only one nurse practitioner on staff. The LACF strives to better the Liberal community through the advancement of community safety, health and services through the networking of government, civic, service and business organizations. They have been successful in garnering funding for community service programs such as tobacco cessation and prevention of underage drinking. The WIC program aims to improve the health of women, infants and children through provision of supplemental food and nutrition. The United Way of Seward County serves primary as a fundraiser and works with 26 local agencies.

There were a few different topics related to specialty care. Interviewees mentioned the difficulty in getting appointments with specialists due to a shortage. This shortage of specialists causes patients to seek care in surrounding cities such as Garden City, Hugoton, Dodge City and Guymon. Interviewees also discussed a need for urologists, orthopedic surgeons and OB/GYN.

Six interviewees mentioned the high rate of teen pregnancy. Most of the interviewees who discussed teen pregnancy indicated that Seward County has one of the highest rates in the state. One issue commonly mentioned by these interviewees was whether or not there is a sufficient sexual health program in schools. Some interviewees feel that this problem is being improperly acknowledged or ignored by stakeholders because rates have been high for many years. Interviewees expressed concern for the lack of acknowledgment because they feel there is no improvement in sight.

Diabetes and obesity were the most commonly mentioned health conditions. Five interviewees identified diabetes as a top health concern in the city of Liberal. A few interviewees discussed diabetes as resulting from poor nutrition and lack of knowledge of proper dietary habits. General health education, diabetes-specific classes and nutrition seminars were suggested as a method of lowering the prevalence of diabetes. Currently, there is a local program offered to Liberal residents. Dining with Diabetes is a collaboration of K-State Research and Extension, SWMC, UMMAM, Great Western Dining Services, United Way and the Seward County Health Department. This program for diabetes and prediabetics is designed to provide instruction on how to prepare healthy and tasty meals that are conducive to disease management and prevention. Obesity was discussed by five interviewees as a top community health issue for reasons similar to those mentioned for diabetes. Some interviewees feel that the community is active and provides opportunity for exercise and physical activity, while others stated that sedentary lifestyles are common.

Focus Groups

Two focus groups were conducted at Southwest Medical Center on June 11–12. The purpose of the focus groups was to gather information about health concerns from particular interest groups in Seward County to add to the richness of the quantitative data collected. Participants provided information about their experiences in the community and ways in which they think the services and resources provided to the community can be improved.

Focus Group Methodology

Focus groups consisted of adult community members. Target populations that represent a cross section of Seward County were recruited through promotion in the media and outreach to

organizations to glean potential leads on participants. The two focus groups were: Hispanic and general adult community members.

Focus group participants were notified prior to divulging information that it would be used solely to benefit the public good, and all information would be presented in an anonymous nature. All participants were encouraged to share their ideas, opinions and experiences, including any positive or negative feedback. Participants completed a demographic questionnaire and a consent form agreeing to participate in the focus group.

The general population focus group session required approximately two hours to complete and followed this agenda:

- Session Opening – 15 Minutes
 - Introductions
 - Explanation of the purpose of the focus group
 - Overview of the rules governing the session
- Nominal Group Technique was utilized to identify priority health needs in the community. The Nominal Group Technique process is as follows:
 - Participants are instructed to separately write on a piece of paper their top three perceived health concerns within the community
 - Each participant calls out in order the health concerns round robin style until all options for every person have been exhausted
 - Participants instruct the facilitator on which like items, if any, they would like to combine
 - Participants are instructed to separately rank the items most important (3) to least important (1)
 - Each member calls out round robin style their 3's, then 2's and so on until all ranked items have been exhausted and recorded
 - The facilitator adds up the rankings for each item, ranking the highest to lowest in importance based on the added result, taking the item that has the largest number as highest importance and so on
- After this process has been completed, a discussion is facilitated about the results of the process. Examples of these questions include:
 - Was there anything that surprised you?
 - Why do you feel these are the top health concerns?

- How do you feel these needs could be addressed in the community?
- Session Conclusion – 15 minutes
 - Summary of findings
 - Closing discussion
 - Distribution of incentives for participation

The Hispanic focus group was conducted by asking open-ended questions about health concerns, resources, barriers to accessing care and opportunities for improvement. This focus group was also conducted over two hours, and participants received incentives for attending.

Data Analysis

The collected qualitative data was analyzed using Dedoose software utilizing a thematic approach. These themes and the resulting analysis, combined with quantitative data, served as the foundation of the CHNA, including identifying areas where the needs of the community were properly addressed and where service offerings could be improved.

Hispanic Focus Group Summary

The health concerns most discussed by participants were cardiovascular disease, diabetes and dental health. Among cardiovascular concerns, hypertension was the most frequently mentioned, particularly in relation to health education and prevention. Participants discussed the need for more community outreach because physicians do not have the time during appointments to provide comprehensive health education. They cited a physician shortage as the cause for abbreviated appointments.

One outreach suggestion was to incorporate health and wellness education and screening into required meetings with large local employers like National Beef. For those not working in these organizations, incentives for health fair participation could be a way to increase screening rates among community members for hypertension, diabetes and contributing risk factors like body mass index measurement. Health fairs would also afford Hispanic community members the opportunity to access information about healthy eating habits that can be developed while still eating foods that are consistent with their culture. Another community outreach outlet mentioned specifically for the Hispanic community was the church; individuals discussed a level of cultural respect among Hispanic individuals for information coming from a faith-based source. This respect was discussed as a potentially important component with regard to effectively disseminating health information to the

congregation. Participants also mentioned there are limited dental resources for adults and children with Medicaid coverage in Liberal. The pediatric dentist discussed by focus group participants does not have the capacity to see all of the children needing services, and the office wait time is often nearly two hours for an appointment.

Physician shortage was a priority among participants, especially for those with Medicaid and Medicare insurance. There are currently two pediatricians taking Medicaid insurance, but both are overwhelmed, causing long in-office wait times and difficulties in making an appointment. One resource mentioned for adults was UMMAM, which provides comprehensive healthcare and dental services for underinsured and uninsured community members. Focus group members mentioned that the organization is struggling to meet the demand. One focus group participant stated it can take as long as two to three weeks to get an appointment. Overuse of the emergency department was discussed as a result of not being able to receive services from primary care providers in the community. Individuals discussed a lack of alternate options in the community if they are unable make an office appointment, and that the next closest physicians are over an hour away.

Cultural competency was also discussed among focus group participants. While there are translators and translation services available at physician offices and the hospital, individuals expressed that the information conveyed to patients is not always medically accurate, as the meaning gets lost in the translation. One individual mentioned that a physician gave her medication instructions printed from a translation website with completely inaccurate information. A participant mentioned that some patients have children translate to avoid using an interpreter. This can lead to traumatic experiences for children and misinformation due to a lack of understanding on the child's part. A suggestion to combat the language barrier issue is to encourage translators to go through a translation certification course; the community college is in the beginning stages of offering translation courses.

General Population Focus Group Summary

Discussion in the general population focus group centered on the healthcare system, community engagement and coordination of care. The shortage of physicians was a major issue for participants, who felt that there are not enough physicians to meet the demand in the community. One individual suggested that an urgent care center would help address the lack of availability among physicians by taking patients with critical needs. They felt this would also decrease the burden on the emergency department by offering services in a less acute setting. Additionally, many physicians in the community have office hours that do not meet the needs of their patients; many close in early in the

afternoon and do not have weekend hours. Expanding hours for those services that could be handled by nurse practitioners or nurses could help alleviate this issue.

Another concern was the frequency of referring patients to physicians and medical facilities outside of the community. A few participants discussed situations in which physicians sent them to other towns to receive services because they did not have the capacity or felt they would be better served elsewhere. This puts a strain on time and resources for many individuals and the cost to travel out of town can be exorbitant. Increasing continuing education opportunities for healthcare professionals in the community was a suggestion to decrease referrals outside of the community.

Coordination of care was another main concern among participants. One issue discussed was a lack of collaboration between pediatricians and the health department with regard to vaccinations. One individual discussed the capacity of the health department to provide necessary vaccinations to children, as they are required to have all first-year child vaccinations on hand. However, pediatricians are reluctant to refer their patients to the health department, which leads to the potential for children to go without the necessary vaccinations for longer than the suggested time period. Some community members perceive this reluctance to be a product of a lack of interest in cost sharing among physicians. Additionally, the wait times at pediatric offices are long, which can expose children to illnesses in the waiting room that they may not have been exposed to at the health department. For those who are underinsured or uninsured, this can cause concern for parents who do not have the resources to afford treatment for avoidable illnesses. Focus group participants suggested collaboration between WIC and primary healthcare providers to avoid repetitive child exams. Enhancing relationships among physicians in the area was also a suggestion given to help address the lack of collaboration and the difficulty experienced by community members in getting adequate and timely services.

Communication and community engagement was another priority among focus group participants. Individuals discussed feeling a lack of community engagement from the hospital about bringing new physicians into the area. Some people felt that it might encourage physicians to get involved in the community if there was a welcoming event when they arrived. Communication from the hospital about general information is something the community would like to see as well; some participants mentioned enhancing the existing newsletter and expanding the availability of it throughout the community.

Health Needs Prioritization

Community Health Priorities

The overarching goal in conducting this Community Health Needs Assessment is to identify significant health needs of the community, prioritize those health needs, and identify potential measures and resources available to address the needs. For the purpose of identifying health needs for SWMC, a health priority is defined as a medical condition or factor that is central to the state of health of the residents in the community. With this in mind, a modified version of Fowler and Dannenberg's Revised Decision Matrix was developed to capture priorities from the primary and secondary data. This matrix tool is used in health program planning intervention strategies, and uses a ranking system of "high," "medium" and "low" to distinguish the strongest options based on effectiveness, efficiency and sustainability. Health needs identified as either "high" or "medium" within by this process were considered significant health needs and are included in this report.

An exhaustive list of health needs was compiled based on the health profile, interviews and focus group data. Concerns that did not fall within the definition of an identified health priority, such as social determinants of health, are discussed in conjunction with the health priorities where applicable. The five health priorities identified as high or medium priorities through the CHNA are: cardiovascular disease, diabetes, healthcare access and availability, maternal and child health, and overweight/obesity. For the sake of continuity, the priorities are presented alphabetically.

Cardiovascular Disease (Medium)

Cardiovascular disease includes heart disease, hypertension and cholesterol status.

- Heart disease is the leading cause of death in Seward.
- Stroke is the fifth leading cause of death in Seward.
- Seward adults are slightly more likely to have high cholesterol compared to all Kansas adults.
- Education and screening for hypertension was one of the most frequently mentioned topics among focus group participants.

Diabetes (High)

- Seward adults are approximately twice as likely to be told by a doctor they have diabetes compared to all Kansas adults.
- The diabetes mortality rate in Seward is nearly double the state rate.
- Diabetes was one of the top health concerns discussed by community leaders.

- Diabetes and unspecified related complications are within the top five reasons for outpatient visits.
- A need for an increase in community health education and screening for diabetes was discussed among focus group participants.

Healthcare Access and Availability (High)

- Seward adults are more than twice as likely to report not having a healthcare provider compared to all Kansas adults.
- Seward adults are more than twice as likely to report being unable to see a doctor in the past 12 months due to cost compared to all Kansas adults.
- Seward residents are substantially more likely to be uninsured compared to all Kansas residents.
- Retention and recruitment of physicians was the most frequently mentioned health concern among interviewees.
- Community leaders also expressed concern for the lack of providers accepting Medicaid.
- Focus group participants discussed a shortage of both primary care and specialty physicians, particularly for those on Medicaid and Medicare.
- A need for more comprehensive cultural competence, particularly regarding language assistance services in healthcare facilities, was discussed among Hispanic focus group participants.
- Long wait times at physician offices and a lack of physician appointment availability were concerns among the general population focus group participants.

Maternal and Child Health (Medium)

- The teen birth rate in Seward is more than three times the state rate.
- Women in Seward are substantially more likely to receive less than adequate prenatal care compared to all Kansas women.
- Teen pregnancy was discussed a serious health concern in community leader interviews.
- A shortage of pediatricians was one of the most frequently discussed topics among focus group participants, particularly as it relates to timely vaccination accessibility.

Overweight/Obesity (Medium)

According to the World Health Organization, obesity (BMI \geq 30) and overweight (BMI=25–29.9) refer to abnormal or excessive fat accumulation.

- Seward adults are more likely to report a BMI of 30 or higher compared to all Kansas adults.
- Adults in Seward are more than twice as likely to report physical inactivity compared to all Kansas adults. Additionally, Seward adults are less likely to report participating in the recommended level of physical activity.
- Obesity was a top health concern discussed by community leaders.
- Hispanic focus group members discussed obesity as a risk factor to cardiovascular and diabetic concerns; food culture, especially the consumption of high fat foods, was discussed under this topic.

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Appendix A: Carnahan Group Qualifications

Carnahan Group is an independent and objective healthcare consulting firm that focuses on the convergence of regulations and planning. For nearly 10 years, Carnahan Group has been trusted by healthcare organizations throughout the nation as an industry leader in providing Fair Market Valuations, Medical Staff Demand Analyses, Community Health Needs Assessments and Strategic Planning. Carnahan Group serves a variety of healthcare organizations, such as, but not limited to, hospitals and health systems, large and small medical practices, imaging centers and ambulatory surgery centers. Carnahan Group offers services through highly trained and experienced employees, and Carnahan Group's dedication to healthcare organizations ensures relevant and specific insight into the needs of our clients.

Our staff members offer diverse capabilities and backgrounds, including:

- CPAs, JDs, Ph.Ds., and others with medical and clinical backgrounds;
- Degrees that include Masters of Business Administration, Masters of Science, Masters of Public Health, Masters of Accounting and Masters of Health Administration;
- Serving as members of the American Institute of CPAs (AICPA), Medical Group Management Association (MGMA) and the National Association of Certified Valuation Analysts (NACVA); and,
- Certifications include Certified Health Education Specialist (CHES) and Certified in Public Health (CPH).

Appendix B: Organizations Represented in Community Leader Interviews

| Organization | Area Represented |
|-------------------------------------|---|
| Seward County Administration | Government Official |
| Southwest Medical Center | Hospital Administration |
| First Southern Baptist Church | Faith-Based Organization |
| United Way | Low Income Population |
| Women's Specialists of Liberal | Medical Community |
| Liberal School District | School Health |
| Southwest Guidance Center | Community Health Organization |
| Liberal Area Coalition for Families | Medically Underserved Population |
| Seward County Health Department | Public Health Expert, Medically Underserved Population |
| Area Agency on Aging | Sixty and Older Population |
| WIC | Maternal Child Health, Low Income Population |
| Ministerial Alliance | Faith-Based Organization |