

Community Health Needs Assessment 2016



Contents

Introduction.....	1
Summary of Community Health Needs Assessment.....	2
General Description of the Medical Center	3
Evaluation of Prior Implementation Strategy.....	4
Summary of Findings – 2015 Tax Year CHNA	6
Community Served by the Medical Center	7
Defined Community	7
Community Details	9
Identification and Description of Geographical Community	9
Community Population and Demographics.....	10
Socioeconomic Characteristics of the Community	12
Income and Employment	12
Unemployment Rate.....	13
Poverty	13
Uninsured	14
Medicaid.....	15
Education	16
Physical Environment of the Community	17
Grocery Store Access	17
Food Access/Food Deserts	18
Recreation and Fitness Facility Access	19
Clinical Care of the Community.....	21
Access to Primary Care	21
Lack of a Consistent Source of Primary Care	22
Population Living in a Health Professional Shortage Area	23
Preventable Medical Center Events.....	24
Health Status of the Community	25
Leading Causes of Death and Health Outcomes.....	26
Health Outcomes and Factors	27
Diabetes (Adult)	32
High Blood Pressure (Adult)	32
Obesity.....	33
Poor Dental Health	33

Low Birth Weight.....	34
Community Input – Key Stakeholder Interviews.....	35
Methodology.....	35
Key Stakeholder Profiles.....	36
Key Stakeholder Interview Results.....	36
Key Findings.....	38
Community Input – Survey.....	40
Methodology.....	40
Key Stakeholder Profiles.....	40
Key Stakeholder Interview Results.....	41
Health Issues of Vulnerable Populations.....	47
Information Gaps.....	48
Prioritization of Identified Health Needs.....	49
Management’s Prioritization Process.....	52
Resources Available to Address Significant Health Needs.....	53
Health Care Resources.....	53
Hospitals.....	53
Other Health Care Facilities.....	54
Health Departments.....	54
Appendices	
Appendix A: Analysis of Data.....	55
Appendix B: Sources.....	57
Appendix C: Dignity Health CNI Report.....	58
Appendix D: Key Stakeholder Interview Protocol.....	59
Appendix E: Community Survey Protocol & Acknowledgements.....	62

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 Shannon Medical Center's (Shannon) compliance with IRC Section 501(r)(3). Health needs of the community have been identified and prioritized so that Shannon may adopt an implementation strategy to address specific needs of the community.

The *process* involved:

- ✓ A comprehensive evaluation of the implementation strategy for fiscal years ended September 30, 2014 through September 30, 2016, which was adopted by the Shannon board of directors in 2013.
- ✓ Collection and analysis of a large range of data, including demographic, socioeconomic and health statistics, health care resources and data from Shannon.
- ✓ Obtaining community input through:
 - Interviews with key stakeholders who represent a) persons with specialized knowledge in public health, b) populations of need or c) broad interests of the community.
 - A health survey which gathered a wide range of information which was widely distributed to members of the community.

This *document* is a summary of all the available evidence collected during the CHNA conducted in tax year 2015. 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 Shannon and to document compliance with new federal laws outlined above.

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

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

- An evaluation of the impact of actions taken to address the significant health needs identified in the tax year 2013 CHNA was completed to understand the effectiveness of Shannon's current strategies and programs.
- The "community" served by Shannon was defined by utilizing inpatient and outpatient data regarding patient origin. This process is further described in *Community Served by the Medical Center*.
- 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 CountyHealthrankings.org. Health factors with significant opportunity for improvement were noted.
- Community input was provided through key stakeholder interviews of five stakeholders and a community survey with 54 responses. Results and findings are described in the *Key Stakeholder Interview Results* section of this report.
- Information gathered in the above steps was analyzed and reviewed to identify health issues of uninsured persons, low-income persons and minority groups and the community as a whole. Health needs were ranked utilizing a weighting method that weighs 1) the size of the problem, 2) the seriousness of the problem, 3) the impact of the issues on vulnerable populations, 4) the prevalence of common themes and 5) how important the issue is to the community.
- An inventory of health care facilities and other community resources potentially available to address the significant health needs identified through the CHNA was prepared and collaborative efforts were identified.

Health needs were then prioritized taking into account the perceived degree of influence Shannon 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 Shannon

Shannon is a 400 bed medical center located in San Angelo, Texas whose goal is to provide patients with the most compassionate and efficient service while ensuring the highest quality care. Shannon has been caring for West Texans for more than 80 years and is proud to be the largest locally-based health care provider for the Concho Valley and surrounding region.

Shannon provides the communities of West Central Texas with a variety of medical services. Dedicated to the region's health and well-being, Shannon offers diverse clinical services, including a nationally-recognized cardiac care program, nationally-recognized ICU, the region's lead Level III Trauma Facility and AirMed 1 air ambulance serving a 200-mile radius of San Angelo, a dedicated Women's & Children's Hospital which is home to the Children's Miracle Network, and the most extensive Senior Health services in the Concho Valley. Shannon continues to collaborate and build relationships with a broad range of agencies, organizations and institutions to build community and organizational capacity. By effectively utilizing resources and working together, Shannon plans to implement strategies to improve the community it serves.

Mission and vision

Shannon strives to create an environment committed to the values of accountability, service, pride, integrity, respect and excellence.

Mission

Founded on a legacy of caring, Shannon is a locally owned health care system dedicated to providing exceptional health care for our family, friends and neighbors.

Vision

The trusted health care leader in West Texas.



Evaluation of Prior Implementation Strategy

The implementation strategy for fiscal years ended September 30, 2014 through September 30, 2016, focused on three strategies to address identified health needs. Action plans for each of the strategies are summarized below. Based on Shannon's evaluation for the fiscal year ending September 30, 2015, Shannon has either met their goals or is still in the process of meeting their goals for each strategy listed.

Priority 1: Healthy Living

- Shannon partners with San Angelo Independent School District to host an event to promote physical activity for children and families to address the growing concern of childhood obesity. The Kids' Marathon event provides an opportunity for students, ranging in ages from Kindergarten through sixth grade, to participate in a program that encourages healthy habit formation early in life. Students accumulate laps/miles during a three-month period leading up to the event, and participate in the final lap celebration.
- Each October Shannon organizes the Pink Ribbon Run for cancer awareness and education. This event features a 1 mile walk/run as well as a 5K and 10K race.
- Shannon partners with the local Restaurant Association and restaurants to promote Healthier Choice Restaurants throughout the community.
- Shannon works with employers in the community to offer Worksite Wellness Programs to their employees. Some activities include: providing flu shots, biometric screenings, educational lunch and learns, health fairs, health coaching, and resources.
- Shannon offers an Employee Wellness program for Shannon Associates and spouses. Some activities include: biometric screenings, health coaching, educational resources, challenges, and healthier options in the cafeteria.

Priority 2: Prevention and Disease Management

- Shannon is one of the collaborating organizations of the Tom Green County Partnership for Better Health. The partnership began in January 2012 as a result of an initiative by the Department of State Health Services to reduce potentially preventable hospitalizations. The coalition implements evidence-based strategies to prevent hospitalizations for the following three conditions: Congestive Heart Failure (CHF), Chronic Obstructive Pulmonary Disease (COPD) and Diabetes Complications.
- The Shannon Care Coordination program is designed to assist in the healthcare of chronically ill patients with multiple disease processes. This program provides a comprehensive team approach to managing high risk patients by utilizing patient navigators that report to an interdisciplinary team at Shannon. Ongoing care of the identified high risk patients includes weekly visits from the patient navigator and/or member of the Shannon team in order to address health care issues as they arise. The team coordinates the patients' healthcare with the primary care provider's guidance.
- Shannon provides indigent/charity care services for low-income children, adults and elderly.

- Partnership with Shannon Clinic:
 - The expansion to three Urgent Care Clinic locations. They are open seven days per week with extended hours.
 - Physician recruitment to increase access – including the addition of an Endocrinologist.
 - Opening the Access Clinic to provide follow-up appointments post-discharge for patients that do not have a primary care provider.
 - Partnership with MHMR Services of the Concho Valley to provide primary care services in the behavioral health setting.

Priority 3: Education

- Shannon provides a host of community education events related to topics such as cancer prevention and screenings, diabetes education, fitness and nutrition, and cardiovascular health. Through events like Go Red, health professionals relay current health information to the public.
- Shannon hosts a free online health library as well as the Words of Wellness health blog to access health-related information.
- Shannon hosts three HealthBeat Live Television segments each week on the news to relay current health information and educational tips.
- Shannon provides a monthly ‘House Call’ article in the local newspaper. Each of these articles are provided by Shannon Physicians to discuss education and detection of disease.
- Shannon provides health and wellness presentations to numerous non-profits, businesses and organizations. Some of the organizations include: San Angelo Independent School District, Education Services Center Region 15, Reece Albert, Devon Energy, and Angelo State University.
- Representatives from different departments provide support and participate in local health fairs and health-related community events.
- Shannon’s Trauma Service Department coordinates the annual Gus Eckhardt Trauma Symposium. This is a full day of trauma related education for all health care practitioners in the region.
- Nursing, Physical Therapy, Speech Therapy, Occupational Therapy, Social Work, and Psychology students participate in clinical rotations at Shannon as part of their school requirements.

Summary of Findings – 2015 Tax Year CHNA

Health needs were identified based on information gathered and analyzed through the 2016 CHNA conducted by Shannon. 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:

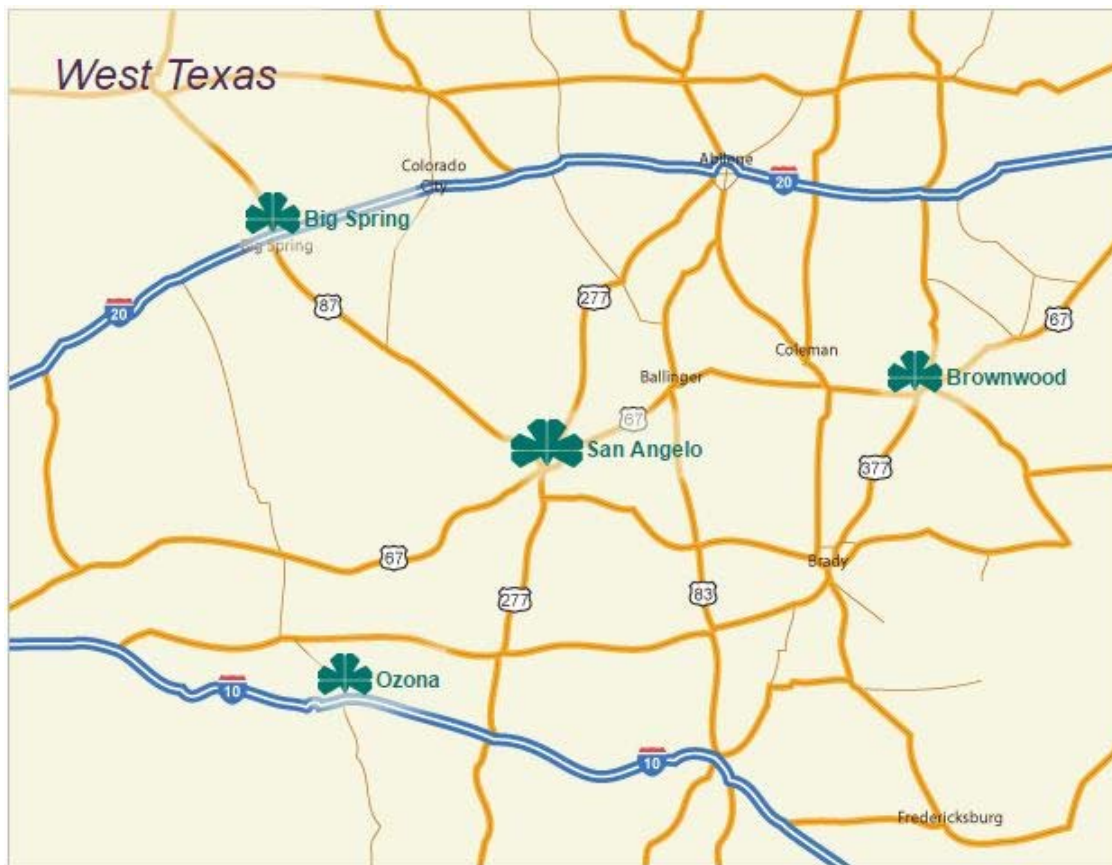
- Lack of health knowledge/education
- Healthy behaviors/lifestyle changes
- Adult obesity
- Poverty/financial resources/children in poverty
- Diabetes
- High cost of health care
- Uninsured
- Physical Inactivity
- Lack of primary care physicians
- Limited access to health foods/nutrition
- High blood pressure
- Language/cultural mindset
- Lack of mental health providers
- Transportation
- Heart health
- Older adult asthma
- Lack of agency collaboration
- Lack of convenient ambulatory care
- Lack of dental providers

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

Community Served by the Medical Center

Shannon is located in San Angelo, Texas, in Tom Green County, 2 hours away from Midland, Texas. Shannon is located near US Highways 67, 87 and 277. As a regional facility, Shannon serves residents in and around the San Angelo. To better serve the residents in the area, Shannon has three clinics located in West Texas in addition to the main downtown location:

- Shannon Clinic Brownwood
- Family Health Center of Ozona
- Shannon Clinic Big Spring



Defined Community

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

Based on the patient origin of acute care inpatient discharges from October 1, 2014, through September 30, 2015 management has identified Tom Green County as the defined CHNA community. Tom Green County represents 71% of the inpatient discharges and 79% of the outpatient visits as reflected in *Exhibits 1.1 and 1.2* below. The CHNA will utilize data and input from this county to analyze the health needs of the community. Data for the top four zip codes within Tom Green County will be assessed as well. As indicated by the asterisk (*) below, zip code 76902 is included within the discharge information for the community but represents a PO Box location. Therefore, no demographic or additional secondary data is available for this zip code and will not be included in the remainder of the report.

Exhibit 1.1
Summary of Inpatient Discharges by Zip Code
 10/1/2014 - 9/30/2015

Zip Code	City	Discharges	Percent Discharges
Tom Green County:			
76903	San Angelo	3,636	26.4%
76901	San Angelo	2,620	19.0%
76904	San Angelo	2,128	15.5%
76905	San Angelo	886	6.4%
76902	San Angelo*	141	1.0%
Other Tom Green		376	2.7%
Total Tom Green County		9,787	71.1%
All Other		3,984	28.9%
Total		13,771	100.0%

Source: Shannon Medical Center

* Represents PO Box zip code

Exhibit 1.2
Summary of Outpatient Visits by Zip Code
 10/1/2014 - 9/30/2015

Zip Code	City	Discharges	Percent Discharges
Tom Green County:			
76903	San Angelo	27,423	28.5%
76901	San Angelo	19,565	20.4%
76904	San Angelo	16,055	16.7%
76905	San Angelo	7,197	7.5%
76902	San Angelo*	1,272	1.3%
Other Tom Green		4,359	4.5%
Total Tom Green County		75,871	79.0%
All Other		20,193	21.0%
Total		96,064	100.0%

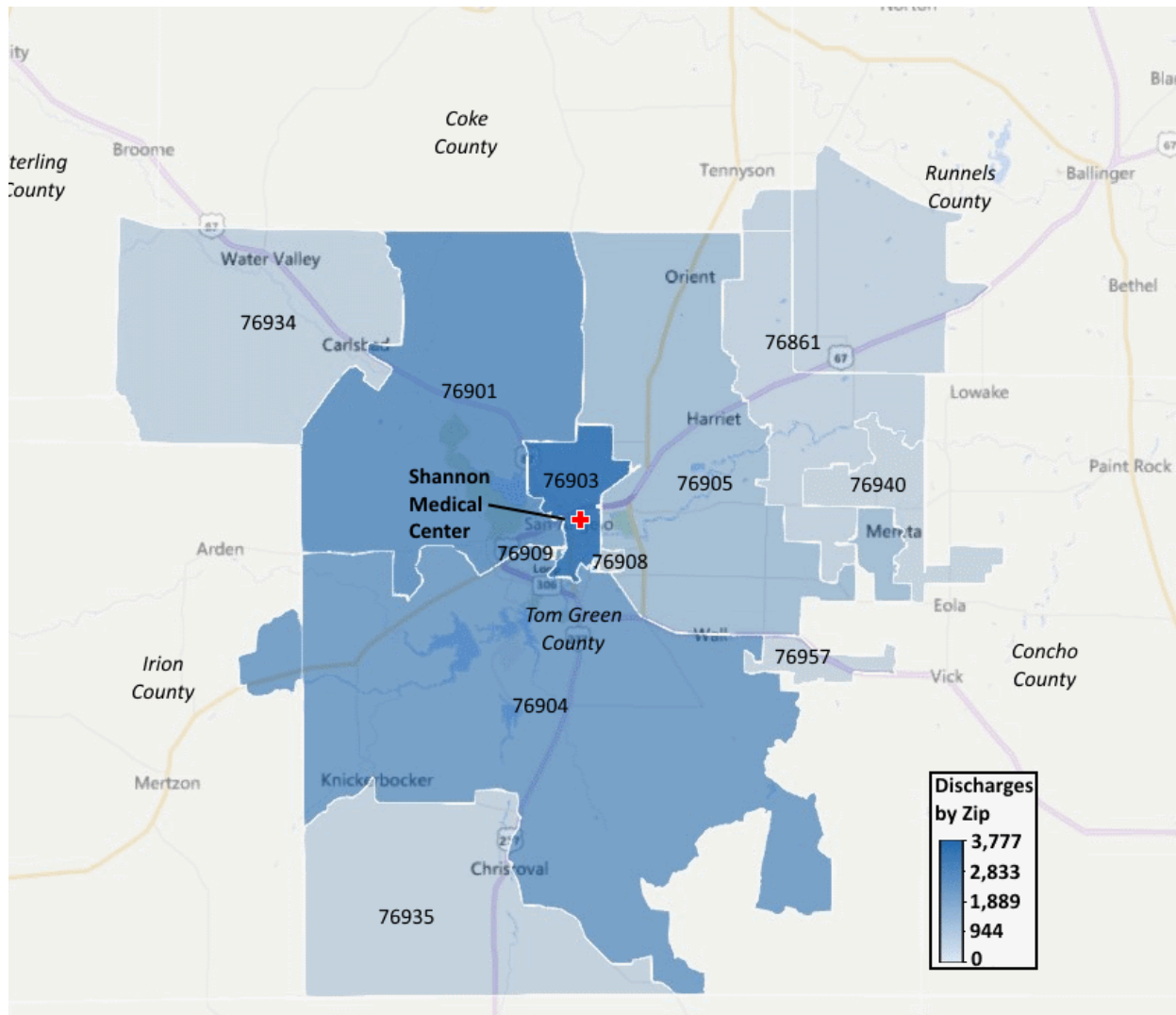
Source: Shannon Medical Center

* Represents PO Box zip code

Community Details

Identification and Description of Geographical Community

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



Community Population and Demographics

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

Exhibit 2
Demographic Snapshot

DEMOGRAPHIC CHARACTERISTICS						
	Total Population				Total Male Population	Tom Green County
Tom Green County	113,516				55,965	
Texas	26,092,032					
United States	314,107,083				57,551	

POPULATION DISTRIBUTION						
Age Group	Age Distribution					
	Tom Green County	Percent of Total	Texas	Percent of Total Texas	United States	Percent of Total US
	0 - 4	7,809	6.88%	1,940,753	7.44%	19,973,712
5 - 17	18,730	16.50%	5,049,335	19.35%	53,803,944	17.13%
18 - 24	15,277	13.46%	2,675,215	10.25%	31,273,296	9.96%
25 - 34	16,438	14.48%	3,766,749	14.44%	42,310,184	13.47%
35 - 44	11,995	10.57%	3,556,741	13.63%	40,723,040	12.96%
45 - 54	13,961	12.30%	3,451,540	13.23%	44,248,184	14.09%
55 - 64	13,344	11.76%	2,801,943	10.74%	38,596,760	12.29%
65+	15,962	14.06%	2,849,757	10.92%	43,177,963	13.75%
Total	113,516	100.00%	26,092,033	100%	314,107,083	100%

RACE/ETHNICITY						
Race/Ethnicity	Race/Ethnicity Distribution					
	Tom Green County	Percent of Total	Texas	Percent of Total Texas	United States	Percent of Total US
	White Non-Hispanic	64,093	56.46%	11,562,452	44.31%	197,159,492
Hispanic	41,811	36.83%	9,962,643	38.18%	53,070,095	16.90%
Black Non-Hispanic	4,533	3.99%	3,015,767	11.56%	38,460,597	12.24%
Asian & Pacific Island Non-Hispanic	1,340	1.18%	1,072,204	4.11%	16,029,364	5.10%
All Others	1,739	1.53%	478,966	1.84%	9,387,535	2.99%
Total	113,516	100.00%	26,092,032	100.00%	314,107,083	100.00%

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

While the relative age of the community population can impact community health needs, so can the ethnicity and race of a population. The population of the CHNA community by race and ethnicity illustrates different categories of race such as, white, black, Asian, other and multiple races. White non-Hispanics make up almost 57% of the community while Hispanics make up about 37% of the CHNA community. The community is comprised of a higher percentage of seniors at 14.06% as compared to the state (10.92%) and national (13.75%) percentages. The 18 – 24 year old age group also has a higher rate in Tom Green County as compared to the Texas and US rates.

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

Exhibit 3

Zip Code	Percent Urban	Percent Rural
76903 - San Angelo	95.32%	4.68%
76901 - San Angelo	79.40%	20.60%
76904 - San Angelo	91.36%	8.64%
76905 - San Angelo	70.17%	29.83%
Tom Green County, TX	84.36%	15.64%
TEXAS	84.70%	15.30%
UNITED STATES	80.89%	19.11%

Source: Community Commons (2010)

Socioeconomic Characteristics of the Community

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

Income and Employment

Exhibit 4 presents the per capita income for the CHNA community. This includes all reported income from wages and salaries, as well as income from self-employment, interest or dividends, public assistance, retirement and other sources. The per capita income in this exhibit is the average (mean) income computed for every man, woman and child in the specified area. Tom Green County's per capita income is below the state of Texas and the United States. There is a large disparity between zip codes 76903 and 76904 within the CHNA community; with 76903 having per capita income well below Texas and the United States.

Exhibit 4

Zip Code	Total Population	Total Income (\$)	Per Capita Income (\$)
76903 - San Angelo	32,848	\$642,208,704	\$19,550
76901 - San Angelo	27,319	\$679,587,712	\$24,876
76904 - San Angelo	33,064	\$1,008,225,024	\$30,493
76905 - San Angelo	13,563	\$291,428,512	\$21,487
Tom Green County, TX	113,516	\$2,774,707,200	\$24,443
TEXAS	26,092,032	\$691,771,801,600	\$26,512
UNITED STATES	314,107,072	\$8,969,237,037,056	\$28,554

Source: Community Commons (2010 – 2014)

Unemployment Rate

Exhibit 5 presents the average annual unemployment rate from 2011 through 2015 for the community defined as the community, as well as the trend for Texas and the United States. On average, the unemployment rates for the community are lower than both the United States and the state of Texas. A decrease in the unemployment rate has been the trend since 2011 for Tom Green County.

Exhibit 5

County	2011	2012	2013	2014	2015
Tom Green County, TX	6.2	5.3	5.1	4.0	4.0
TEXAS	7.8	6.7	6.2	5.1	4.5
UNITED STATES	9.0	8.1	7.4	6.2	5.3

Source: Community Commons

Poverty

Exhibit 6 presents the percentage of total population below 100% Federal Poverty Level (FPL). Poverty is a key driver of health status and is relevant because poverty creates barriers to access, including health services, healthy food choices and other factors that contribute to poor health. Tom Green County's poverty rate is less than the state poverty rate, but greater than the national rate. Zip code 76903 has a high poverty rate when compared to Texas and the United States.

Exhibit 6

Zip Code	Total Population	Population in Poverty	Percent Population in Poverty
76903 - San Angelo	31,576	8,228	26.06%
76901 - San Angelo	27,182	3,436	12.64%
76904 - San Angelo	31,016	2,779	8.96%
76905 - San Angelo	13,533	2,358	17.42%
Tom Green County, TX	107,380	17,264	16.08%
TEXAS	25,478,976	4,500,034	17.66%
UNITED STATES	306,226,400	47,755,608	15.59%

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

Uninsured

Exhibit 7 reports the percentage of the total civilian non-institutionalized population without health insurance coverage in 2015 and compares this with the percentage from 2013. 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 almost 22,000 persons are uninsured in the CHNA community based on 5-year estimates produced by the U.S. Census Bureau, 2010-2014 American Community Survey. However, the 2015 uninsured rate is estimated to be 17% for Tom Green County, per www.enrollamerica.org, which indicates the uninsured population has decreased by an additional 600 persons, since 2014, in in the CHNA Community. One reason for this decrease is due to the Affordable Care Act. The table below shows of the main zip codes, zip code 76903 has the highest percentage of uninsured and is the only zip code higher than Texas and the United States rate.

Exhibit 7

Zip Code	Total Population (For Whom Insurance Status is Determined)	Total Uninsured Population	Percent Uninsured Population
76903 - San Angelo	31,605	8,821	27.91%
76901 - San Angelo	27,073	5,343	19.74%
76904 - San Angelo	32,498	4,221	12.99%
76905 - San Angelo	13,199	2,636	19.97%
Tom Green County, TX	108,445	21,768	20.07%
Texas	25,613,334	5,610,908	21.91%
United States	309,082,272	43,878,140	14.20%

Percent Uninsured Population



- Tom Green County, TX (20.07%)
- Texas (21.91%)
- United States (14.20%)

Data Source: US Census Bureau, American Community Survey, 2009-13. Source geography: Tract

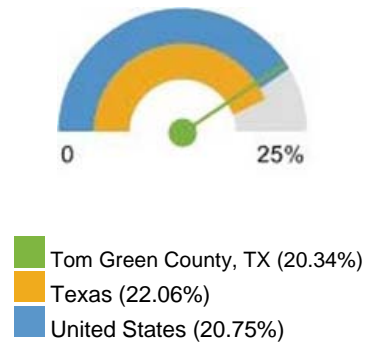
Medicaid

The Medicaid indicator reports the percentage of the population with insurance enrolled in Medicaid (or other means-tested public health insurance). This is relevant because it assesses vulnerable populations, which are more likely to have multiple health access, health status and social support needs; when combined with poverty data, providers can use this measure to identify gaps in eligibility and enrollment. *Exhibit 8* shows Tom Green County ranks favorably compared to the state of Texas and to the United States while zip codes 76903 and 76905 rank unfavorably.

Exhibit 8

Zip Code	Total Population (For Whom Insurance is Determined)	Population with Any Health Insurance	Population Receiving Medicaid	Percent of Insured Population Receiving Medicaid
76903 - San Angelo	31,605	22,784	7,233	31.75%
76901 - San Angelo	27,073	21,730	4,319	19.88%
76904 - San Angelo	32,498	28,277	2,805	9.92%
76905 - San Angelo	13,199	10,563	2,733	25.87%
Tom Green County, TX	108,445	86,677	17,634	20.34%
TEXAS	25,613,334	20,002,428	4,412,903	22.06%
UNITED STATES	309,082,272	265,204,128	55,035,660	20.75%

Percent of Insured Population Receiving Medicaid



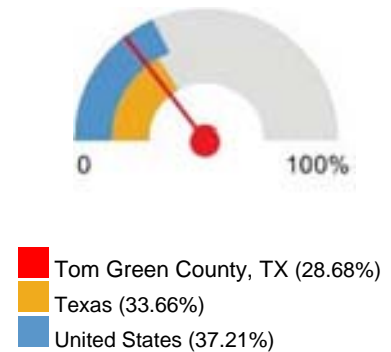
Data Source: US Census Bureau, American Community Survey, 2010-14. Source geography: Tract

Education

Exhibit 9 presents the population with an Associate's level degree or higher in Tom Green County versus Texas and the United States.

Exhibit 9	Total Population Age 25	Population Age 25 with Associate's Degree or Higher	Percent Population Age 25 with Associate's Degree or Higher
76903 - San Angelo	21,010	3,238	15.41%
76901 - San Angelo	18,319	4,916	26.84%
76904 - San Angelo	20,838	9,362	44.93%
76905 - San Angelo	8,121	2,076	25.56%
Tom Green County, TX	71,700	20,562	28.68%
TEXAS	16,426,730	5,529,495	33.66%
UNITED STATES	209,056,128	77,786,232	37.21%

Percent Population Age 25 With Associate's Degree or Higher



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

Education levels obtained by community residents may impact the local economy. Higher levels of education generally lead to higher wages, less unemployment and job stability. These factors may indirectly influence community health. As noted in *Exhibit 9*, the percent of residents within the CHNA community of Tom Green County obtaining an associate's degree or higher is below the state and national percentages. Only zip code, 76904, has a greater percentage of the population with an associate's degree or higher.

Physical Environment of the Community

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

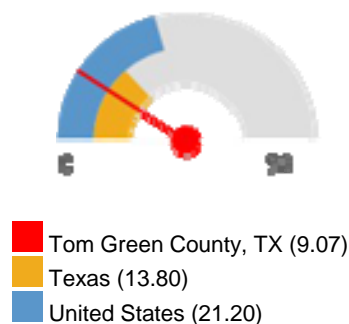
Grocery Store Access

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

Exhibit 10

Zip Code	Total Population	Number of Establishments	Establishments, Rate per 100,000 Population
76903 - San Angelo	31,905	2	6.27
76901 - San Angelo	27,969	2	7.15
76904 - San Angelo	32,718	3	9.17
76905 - San Angelo	11,335	1	8.82
Tom Green County, TX	110,224	10	9.07
TEXAS	25,145,561	3,473	13.80
UNITED STATES	312,732,537	66,286	21.20

Grocery Stores, Rate (Per 100,000 Population)



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

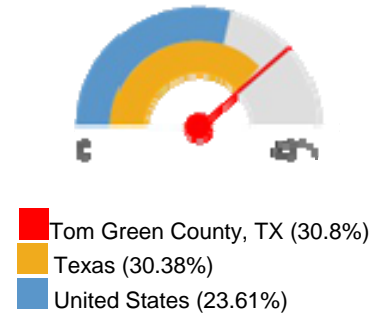
Food Access/Food Deserts

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. Tom Green County as a whole, along with zip codes 76903 and 76905, has a population with low food access.

Exhibit 11

Zip Code	Total Population	Population With Low Food Access	Percent Population With Low Food Access
76903 - San Angelo	31,905	11,052	34.64%
76901 - San Angelo	27,969	6,685	23.90%
76904 - San Angelo	32,718	7,540	23.05%
76905 - San Angelo	11,335	7,132	62.93%
Tom Green County, TX	110,224	33,950	30.80%
TEXAS	25,145,561	7,639,114	30.38%
UNITED STATES	308,745,538	72,905,540	23.61%

Percent Population With Low Food Access



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

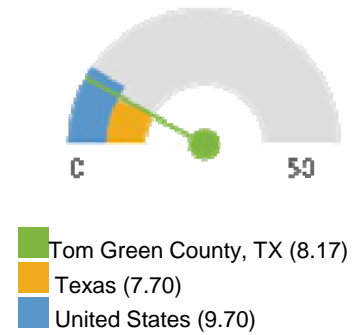
Recreation and Fitness Facility Access

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 Tom Green County has more fitness establishments available to the residents of the community than Texas, while the four zip codes presented have fewer establishments available to the residents.

Exhibit 12

Zip Code	Total Population	Number of Establishments	Establishments, Rate per 100,000 Population
76903 - San Angelo	31,905	2	6.27
76901 - San Angelo	27,969	2	7.15
76904 - San Angelo	32,718	2	6.11
76905- San Angelo	11,335	0	0.00
Tom Green County, TX	110,224	9	8.17
TEXAS	25,145,561	1,932	7.70
UNITED STATES	312,732,537	30,393	9.70

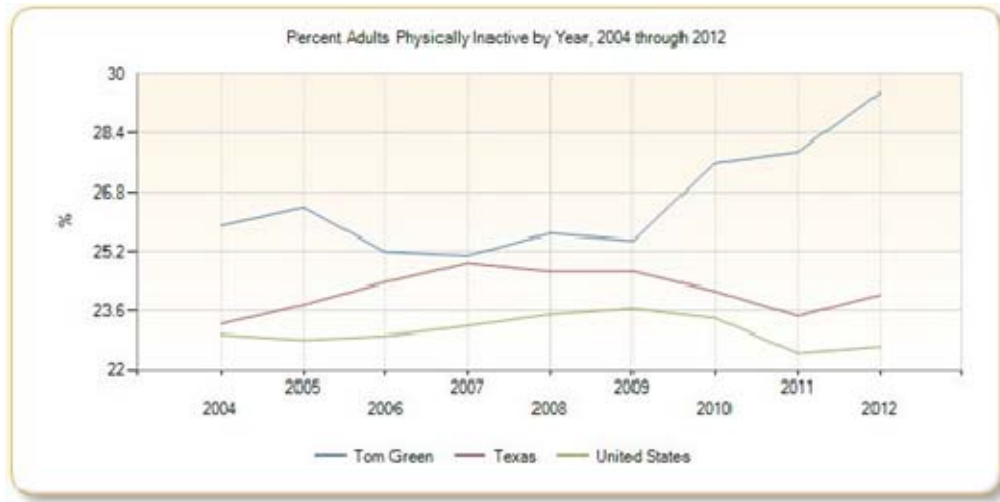
Recreation and Fitness Facilities, Rate (Per 100,000 Population)



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

The trend graph below (*Exhibit 13*) shows the percentage of adults who are physically inactive by year for the community and compared to Texas and the United States. Since 2004, the CHNA community has had a higher percentage of adults who are physically inactive compared to both the state of Texas and the United States. The trend has been increasing from 2009 through 2012 and the percentage of adults physically inactive within the community is significantly higher than both the state of Texas and the United States.

Exhibit 13



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

Clinical Care of the Community

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

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

Access to Primary Care

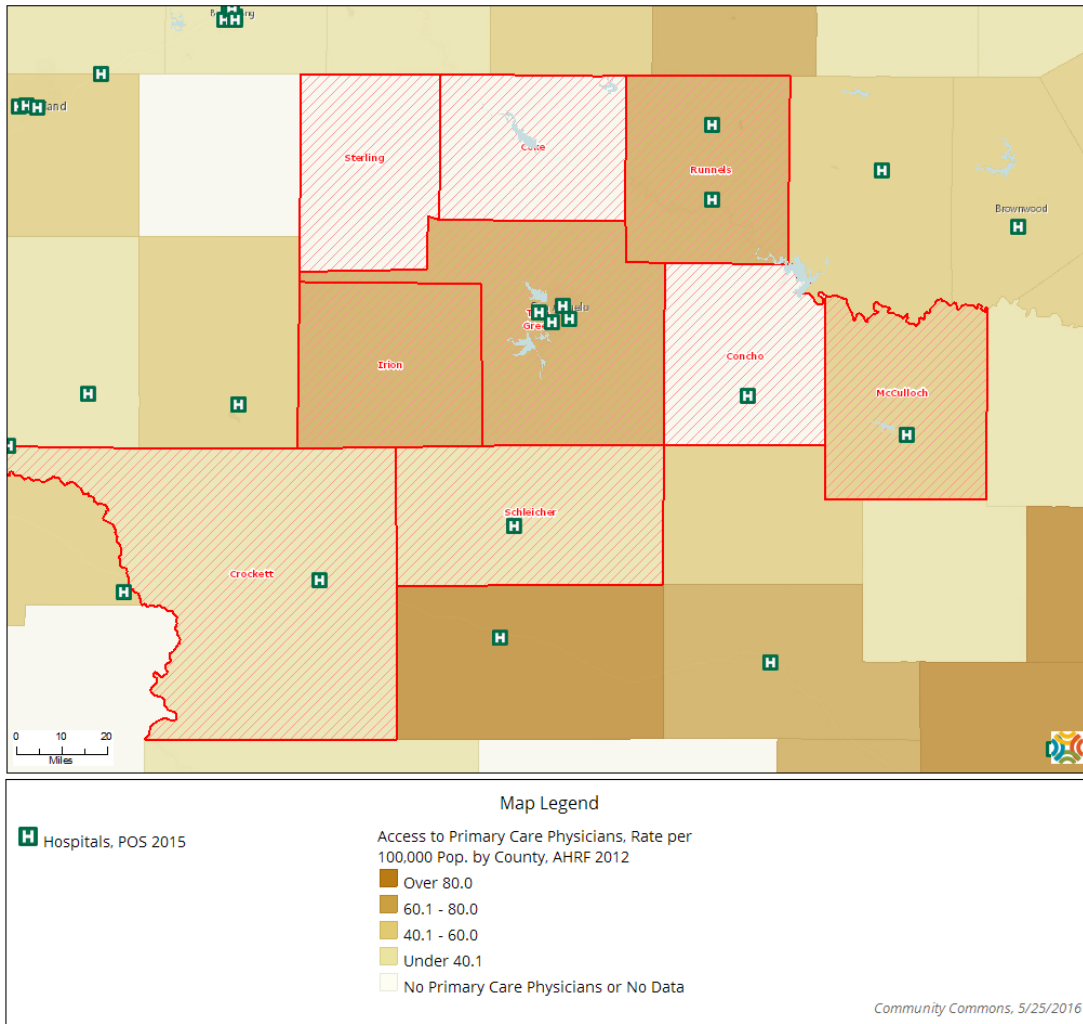
Exhibit 14 shows the number of primary care physicians per 100,000-population. Doctors classified as “primary care physicians” by the American Medical Association include general family medicine MDs and DOs, general practice MDs and DOs, general internal medicine MDs and general pediatrics MDs. Physicians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

Exhibit 14

Zip Code	Total Population, 2012	Primary Care Physicians, 2012	Primary Care Physicians, Rate per 100,000 Pop.
76903 - San Angelo	32,789	23	70.15
76901 - San Angelo	28,743	20	69.58
76904 - San Angelo	33,622	23	68.41
76905 - San Angelo	11,649	8	68.68
Tom Green County, TX	113,281	80	70.62
TEXAS	26,059,203	15,254	58.54
UNITED STATES	313,914,040	233,862	74.50

Data Source: US Department of Health Human Services, Health Resources and Services Administration, Area Health Resource File. 2012. Source geography: County

Although the above Exhibit shows Tom Green County as having a greater rate of primary care physicians than the state, the map below shows many of the surrounding counties are lacking sufficient access to primary care. Many of the hospitals located in these counties are short-term and critical access hospitals, while some counties do not even have a hospital located within them (for example, Coke and Sterling Counties). Residents in the surrounding counties rely on medical providers located in Tom Green County. The rate of primary care physicians per 100,000 population for the counties outlined in red on the map below is at 63.1 which is above the state rate and below the national rate.



Lack of a Consistent Source of Primary Care

Exhibit 15 reports the percentage of adults aged 18 and older who self-report that they do not have at least one person who they think of as their personal doctor or health care provider. This indicator is relevant because access to regular primary care is important to preventing major health issues and emergency department visits.

Exhibit 15

Zip Code	Survey Population (Adults Age 18)	Total Adults Without Any Regular Doctor	Percent Adults Without Any Regular Doctor
Tom Green County, TX	83,030	21,404	25.78%
TEXAS	18,375,873	5,946,509	32.36%
UNITED STATES	236,884,668	52,290,932	22.07%

Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Additional data analysis by CARES. 2011-12. Source geography: County Note: Information reported above is unavailable at the zip code level.

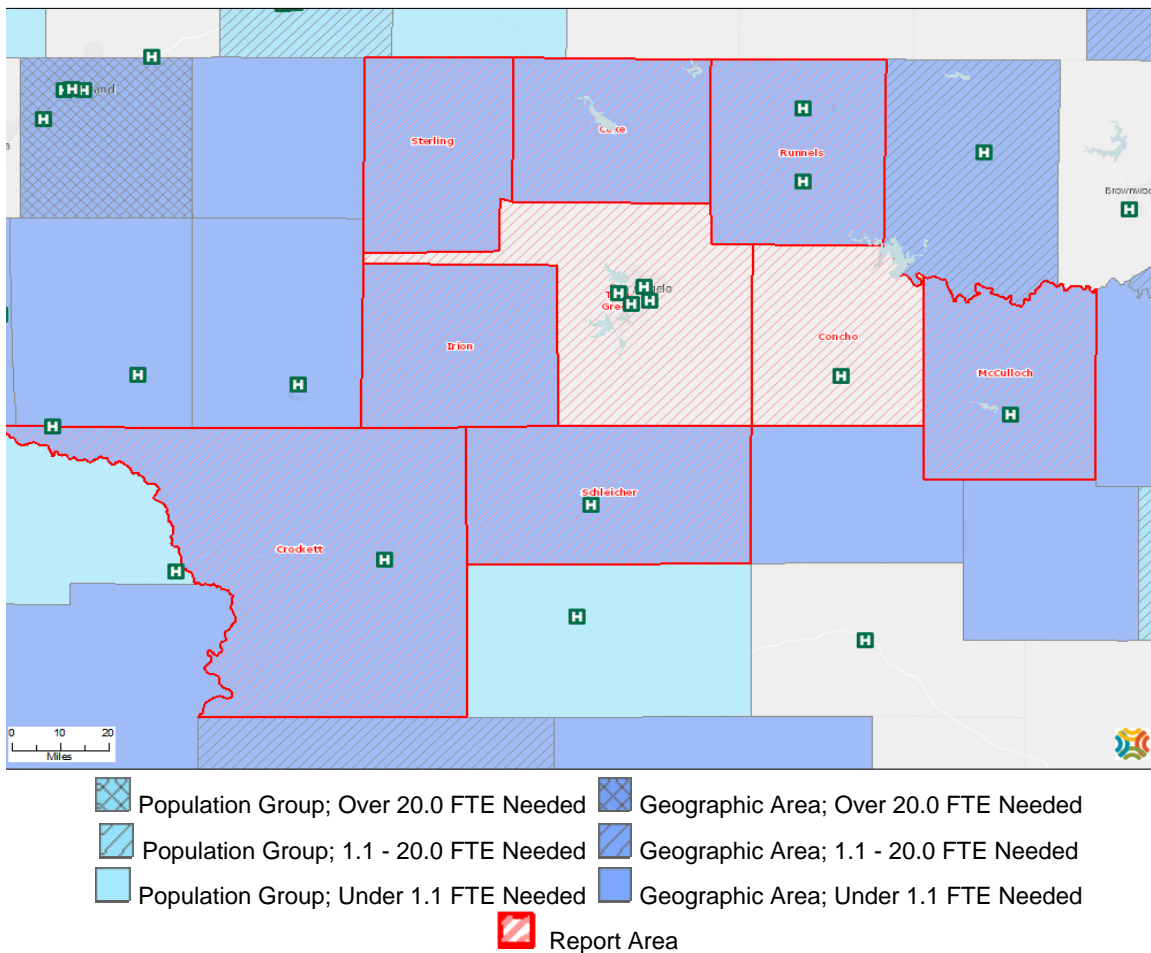
Population Living in a Health Professional Shortage Area

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 16* below shows, Tom Green County is not considered a health professional shortage area. The map below show residents within all the surrounding counties are living in a health professional shortage area, with the exception of Concho County.

Exhibit 16

Zip Code	Total Area Population	Population Living in a HPSA	Percentage of Population Living in a HPSA
Tom Green County, TX	110,224	0	0.00%
TEXAS	25,145,561	6,121,607	24.34%
UNITED STATES	308,745,538	105,203,742	34.07%

Data Source: U.S. Department of Health Human Services, Health Resources and Services Administration, Health Professional Shortage Areas. March 2015. Source geography: HPSA
 Note: Information reported above is unavailable at the zip code level.



Preventable Hospital Events

Exhibit 17 reports the discharge rate (per 1,000 Medicare enrollees) for conditions that are ambulatory care sensitive (ACS). ACS conditions include pneumonia, dehydration, asthma, diabetes and other conditions which could have been prevented if adequate primary care resources were available and accessed by those patients. This indicator is relevant because analysis of ACS discharges allows demonstrating a possible “return on investment” from interventions that reduce admissions (for example, for uninsured or Medicaid patients) through better access to primary care resources.

Exhibit 17

County	Total Medicare Part A Enrollees	Ambulatory Care Sensitive Condition Medical Center Discharges	Ambulatory Care Sensitive Condition Discharge Rate
Tom Green County, TX	13,731	781	56.90
TEXAS	2,030,887	127,787	62.90
UNITED STATES	58,209,898	3,448,111	59.24

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

Health Status of the Community

This section of the assessment reviews the health status of the CHNA community and its residents. As in the previous section, comparisons are provided with the state of Texas 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 Shannon to identify priority health issues related to the health status of its residents.

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

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

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

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

Lifestyle/Behavior	Primary Disease Factor
Smoking	Lung cancer Cardiovascular disease Emphysema Chronic bronchitis
Alcohol/drug abuse	Cirrhosis of liver Motor vehicle crashes Unintentional injuries Malnutrition Suicide Homicide Mental illness
Poor nutrition	Obesity Digestive disease Depression
Unsafe Driving (distracted, reckless, etc.)	Trauma Motor vehicle crashes
Lack of exercise	Cardiovascular disease Depression
Overstressed	Mental illness Alcohol/drug abuse Cardiovascular disease

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

Leading Causes of Death and Health Outcomes

Exhibit 18 reflects the leading causes of death for the community and compares the age-adjusted rates to the state of Texas and the United States.

Exhibit 18

Selected Causes of Resident Deaths	Age-Adjusted Death Rate per 100,000 Population		
	Tom Green County	Texas	United States
Cancer	159.9	161.8	168.9
Heart Disease	130.1	175.7	175.0
Lung Disease	51.8	42.6	42.2
Stroke	34.0	42.6	37.9
Unintentional injury	39.0	38.4	38.6

Source: Community Commons 2009-2013

The table above shows leading causes of death within Tom Green County as compared to the state of Texas and also to the United States. The crude rate is shown per 100,000 residents. The rates highlighted in red represent Tom Green County and corresponding leading cause of death that is greater than the state rates. As the table indicates, lung disease and unintentional injury are greater than the Texas and national rates.

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, all rankings within each area have improved from 2012 with the exception of morbidity.

Tom Green County Indicators	2012	2015
Health Outcomes	78	67
Mortality	113	80
Morbidity	50	85
Health Factors	96	48
Health Behaviors	197	118
Clinical Care	21	18
Social and Economic Factors	106	83
Physical Environment	150	49

**Out of 241 counties in 2015

Source: Countyhealthrankings.org

The following *Exhibits 19.1* and *19.2* include the 2012 and 2015 indicators reported by County Health Rankings for Tom Green County. The health indicators that are unfavorable when compared to the Texas rates are shaded in gray.

**Exhibit 19.1
County Health Rankings – Health Outcomes**

	Tom Green County 2012**	Tom Green County 2015**	Texas 2015	Top U.S. Performers 2015***
<i>Mortality</i>	*	113		
Premature death – Years of potential life lost before age 75 per 100,000 population (age-adjusted)	8,003	7,400	6,600	5,200
<i>Morbidity</i>	*	50		
Poor or fair health – Percent of adults reporting fair or poor health (age-adjusted)	17%	19%	20%	12%
Poor physical health days – Average number of physically unhealthy days reported in past 30 days (age-adjusted)	3.7	3.5	3.5	2.9
Poor mental health days – Average number of mentally unhealthy days reported in past 30 days (age-adjusted)	2.7	3.2	3.0	2.8
Low birth weight – Percent of live births with low birth weight (<2500 grams)	7.8%	8.0%	8.0%	6.0%

* Rank out of 232 Texas counties in 2012 and 241 counties in 2015

** Data for 2012 and 2015 released in 2013 and

*** 90th Percentile or better (only 10% better)

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

Source: Countyhealthrankings.org

Exhibit 19.2
County Health Rankings – Health Factors

	Tom Green County 2012***	Tom Green County 2015***	Texas 2015	Top Performers 2015**
<i>Health Behaviors</i>	*	197		
Adult smoking – Percent of adults that report smoking at least 100 cigarettes and that they currently smoke	25.0%	16.0%	15.0%	14.0%
Adult obesity – Percent of adults that report a BMI >= 30	29.0%	26.0%	28.0%	25.0%
Food environment index – Index of factors that contribute to a healthy food environment, 0 (worst) to 10 (best)	N/A	6.4	6.4	8.3
Physical inactivity – Percent of adults age 20 and over reporting no leisure time physical activity	26.0%	30.0%	24.0%	20.0%
Access to exercise opportunities – Percentage of population with adequate access to locations for physical activity	N/A	72.0%	84.0%	91.0%
Excessive drinking – Percent of adults that report excessive drinking in the past 30 days	18.0%	18.0%	17.0%	12.0%
Alcohol-impaired driving deaths – Percentage of driving deaths with alcohol involvement	N/A	38.0%	32.0%	14.0%
Sexually transmitted infections – Chlamydia rate per 100K population	558.0	579.1	498.3	134.1
Teen birth rate – Per 1,000 female population, ages 15-19	58.0	52.0	52.0	19.0
<i>Clinical Care</i>	*	21		
Uninsured adults – Percent of population under age 65 without health insurance	24.0%	23.0%	25.0%	11.0%
Primary care physicians – Ratio of population to primary care physicians	1,559:1	1,400:1	1,680:1	1,040:1
Dentists – Ratio of population to dentists	1,908:1	1,880:1	1,880:1	1,340:1
Mental health providers – Ratio of population to mental health providers	N/A	800:1	990:1	370:1
Preventable hospital stays – Hospitalization rate for ambulatory-care sensitive conditions per 1,000 Medicare enrollees	68.0	50.0	58.0	38.0
Diabetic screening – Percent of diabetic Medicare enrollees that receive HbA1c screening	86.0%	87.0%	84.0%	90.0%
Mammography screening – Percent of female Medicare enrollees that receive mammography screening	64.7%	60.0%	58.0%	71.0%

Exhibit 19.2 cont
County Health Rankings – Health Factors

	Tom Green County 2012***	Tom Green County 2015***	Texas 2015	Top Performers 2015**
<i>Social and Economic Factors</i>	*	106	83	
High school graduation – Percent of ninth grade cohort that graduates in 4 years	85.0%	89.0%	88.0%	93.0%
Some college – Percent of adults aged 25-44 years with some post-secondary education	53.7%	59.0%	59.0%	72.0%
Unemployment – Percent of population age 16+ unemployed but seeking work	6.3%	4.0%	5.1%	3.5%
Children in poverty – Percent of children under age 18 in poverty	25.0%	21.0%	25.0%	13.0%
Income inequality – Ratio of household income at the 80th percentile to income at the 20th percentile	N/A	4.7	4.9	3.7
Children in single-parent households – Percent of children that live in household headed by single parent	36.0%	36.0%	33.0%	21.0%
Social associations – Number of membership associations per 10,000 population	N/A	12.1	7.8	22.1
Violent crime rate – Violent crime rate per 100,000 population (age-adjusted)	338.0	270.0	422.0	59.0
Injury deaths – Number of deaths due to injury per 100,000 population	N/A	60.0	54.0	51.0
<i>Physical Environment</i>	*	105	49	
Air pollution-particulate matter days – Average daily measure of fine particulate matter in micrograms per cubic meter	10.7	10.0	9.6	9.5
Severe housing problems – Percentage of household with at least one of four housing problems: overcrowding, high housing costs or lack of kitchen or plumbing facilities	N/A	14.0%	18.0%	9.0%
Driving alone to work – Percentage of the workforce that drives alone to work	N/A	79.0%	80.0%	71.0%
Long commute, driving alone – Among workers who commute in their car alone, the percentage that commute more than 30 minutes	N/A	10.0%	36.0%	15.0%

* Rank out of 232 Texas counties in 2012 and 241 counties in 2015

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

*** 2012 and 2015 data released in 2013 and 2016

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

Note: N/A indicates unreliable or missing data

Source: Countyhealthrankings.org

Community Health Status Indicators

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

Tom Green County has multiple designated “peer” counties throughout the US, including Taylor and Victoria Counties in Texas, Comanche County in Oklahoma and Lafayette Parish in Louisiana. *Exhibit 20* provides a summary comparison of how Tom Green County compares with peer counties on the full set of primary indicators. Peer county values for each indicator were ranked and then divided into quartiles.

Exhibit 20
Tom Green County, Texas

	Most Favorable Quartile	Middle Two Quartiles	Least Favorable Quartile
Mortality	<ul style="list-style-type: none"> Alzheimer's disease deaths Cancer deaths Chronic Kidney Disease Deaths Coronary Heart Disease Deaths Male Life Expectancy Motor Vehicle Deaths Stroke Deaths Unintentional Injury (including motor vehicle) 	<ul style="list-style-type: none"> Chronic Lower Respiratory Disease (CLRD) deaths Diabetes deaths Female Life Expectancy 	
Morbidity	<ul style="list-style-type: none"> Adult Diabetes Adult Obesity HIV Older Adult Depression Preterm births 	<ul style="list-style-type: none"> Adult Overall Health Status Alzheimer's Disease/Dementia Cancer Gonorrhea Syphilis 	<ul style="list-style-type: none"> Older Adult Asthma
Health Care Access and Quality	<ul style="list-style-type: none"> Older adult preventable hospitalizations 	<ul style="list-style-type: none"> Cost barrier to care Primary Care Provider Access 	<ul style="list-style-type: none"> Uninsured
Health Behaviors		<ul style="list-style-type: none"> Adult physical inactivity Adult smoking Teen births 	<ul style="list-style-type: none"> Adult binge drinking Adult female routine pap tests
Social Factors	<ul style="list-style-type: none"> High Housing Costs Poverty Unemployment Violent Crime 	<ul style="list-style-type: none"> Children in Single-Parent households Inadequate social support On Time High School Graduation 	
Physical Environment	<ul style="list-style-type: none"> Annual Average PM2.5 Concentration 	<ul style="list-style-type: none"> Access to parks Housing stress 	<ul style="list-style-type: none"> Limited access to healthy food Living near highways

Source: Community Health Status Indicators (2015)

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

Diabetes (Adult)

Exhibit 21 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 21

County	Total Population Age 20	Population With Diagnosed Diabetes	Population With Diagnosed Diabetes, Crude Rate	Population With Diagnosed Diabetes, Age-Adjusted Rate
Tom Green County, TX	83,083	7,976	9.6	9.00%
Texas	18,357,669	1,698,171	9.25	9.24%
United States	234,058,710	23,059,940	9.85	

Data Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. 2012. Source geography: County
 Note: Information reported above is unavailable at the zip code level.

Percent Adults With Diagnosed Diabetes (Age-Adjusted)



- Tom Green County, TX (9.00%)
- Texas (9.24%)
- United States (9.11%)

High Blood Pressure (Adult)

Per Exhibit 22 below, 26,415 or 31.7% of adults aged 18 and older have ever been told by a doctor that they have high blood pressure or hypertension. The community percentage of high blood pressure among adults is greater than the percentage of Texas and the United States.

Exhibit 22

County	Total Population (Age 18)	Total Adults With High Blood Pressure	Percent Adults With High Blood Pressure
Tom Green County, TX	83,328	26,415	31.70%
Texas	17,999,726	5,399,918	30.00%
United States	232,556,016	65,476,522	28.16%

Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Additional data analysis by CARES. 2006-12. Source geography: County
 Note: Information reported above is unavailable at the zip code level.

Percent Adults With High Blood Pressure



- Tom Green County, TX (31.70%)
- Texas (30.00%)
- United States (28.16%)

Obesity

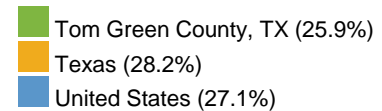
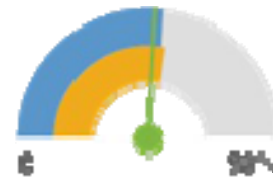
Of adults aged 20 and older, 25.9% self-report that they have a Body Mass Index (BMI) greater than 30.0 (obese) in the Community per *Exhibit 23*. Excess weight may indicate an unhealthy lifestyle and puts individuals at risk for further health issues. The CHNA community has a BMI percentage which is favorable to the state and national rates.

Exhibit 23

County	Total Population Age 20	Adults With BMI > 30.0 (Obese)	Percent Adults With BMI > 30.0 (Obese)
Tom Green County, TX	82,792	21,443	25.9%
Texas	18,326,228	5,204,739	28.2%
United States	231,417,834	63,336,403	27.1%

Data Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion 2012. Source geography: County
 Note: Information reported above is unavailable at the zip code level.

Percent Adults With BMI > 30.0 (Obese)



Poor Dental Health

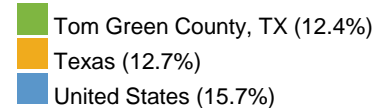
This indicator is relevant because it indicates lack of access to dental care and/or social barriers to utilization of dental services. *Exhibit 24* shows the total CHNA Community has a smaller percentage of adults with poor dental health than that of Texas and the United States.

Exhibit 24

County	Total Population (Age 18)	Total Adults With Poor Dental Health	Percent Adults With Poor Dental Health
Tom Green County, TX	82,288	10,214	12.4%
Texas	17,999,726	2,279,845	12.7%
United States	235,375,690	36,842,620	15.7%

Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System. Additional data analysis by CARES 2006-10. Source geography: County
 Note: Information reported above is unavailable at the zip code level.

Percent Adults With Poor Dental Health



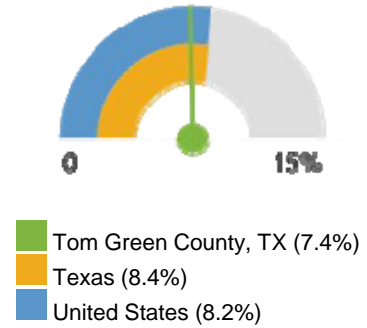
Low Birth Weight

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

County	Total Live Births	Low Weight Births (Under 2500g)	Low Weight Births, Percent of Total
Tom Green County, TX	11,375	842	7.4%
Texas	2,759,442	231,793	8.4%
United States	29,300,495	2,402,641	8.2%
HP 2020 Target			<= 7.8%

Percent Low Birth Weight Births



Data Source: U.S. Department of Health Human Services, Health Indicators Warehouse. Centers for Disease Control and Prevention, National Vital Statistics System. Accessed via CDC WONDER 2006-12. Source geography: County
 Note: Information reported above is unavailable at the zip code level.

Community Input – Key Stakeholder Interviews

Interviewing 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. These interviews are 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

Interviews with key stakeholders were conducted throughout April 2016. Interviewees were determined based on their a) specialized knowledge or expertise in public health, b) their affiliation with local government, schools and industry or c) their involvement with underserved and minority populations.

Two representatives from Shannon Medical Center contacted the individuals selected for interviewing. Shannon's service area includes: Brown, Coke, Coleman, Concho, Crockett, Howard, Irion, Kimble, McCulloch, Menard, Mitchell, Nolan, Reagan, Runnels, Schleicher, Sterling, Sutton, and Tom Green counties. Many of the interviewee's organizations represent similar populations. If the respective key stakeholder agreed to an interview, an interview time and place was scheduled. Most of the interviews were conducted at the interviewees' workplace.

All interviews were conducted using a standard questionnaire. A copy of the interview instrument is included in *Appendix D*. A summary of stakeholder opinions is reported without judging the truthfulness or accuracy of their remarks. Community leaders provided comments on the following issues:

- ✓ Health and quality of life for residents of the primary community
- ✓ 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
- ✓ Delineation of the most important health care issues or services discussed and actions necessary for addressing those issues

Interview data was initially recorded in narrative form in Microsoft Word. Themes in the data were identified and representative quotes have been drawn from the data to illustrate the themes. Interviewees were assured that personal identifiers such as name or organizational affiliations would not be connected in any way to the information presented in this report. Therefore, quotes included in the report may have been altered slightly to preserve confidentiality.

This technique does not provide a quantitative analysis of the leaders' opinions, but reveals some of the factors affecting the views and sentiments about overall health and quality of life within the community.

Key Stakeholder Profiles

Key stakeholders from the community worked for the following types of organizations and agencies:

- ✓ Faith community
- ✓ Industry
- ✓ Local city and county government
- ✓ Local school systems, universities and community colleges
- ✓ Medical providers
- ✓ Public health agencies
- ✓ Social service agencies

These health care and non-health care professionals provided insight into the health status of Shannon's service area through a 13-question interview (refer to *Appendix D*).

Key Stakeholder Interview Results

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

1. General Opinions Regarding Health and Quality of Life in the Community

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

Eighty percent of the key stakeholders rated the health and quality of life in Tom Green County as 'good' or a '6 to 8 on a scale of 1 to 10'. While most of the key stakeholders consistently reported that the health and quality of life in their respective communities was good, other key stakeholders rated the health and quality of life lower based on the economic impacts to sub-populations.

When asked whether the health and quality of life had improved, declined or stayed the same, all key stakeholders stated that the health and quality of life has improved or stayed the same over the past three years. The main contributors to the improvements include: more awareness about health, more opportunities to make healthier choices and be active, more collaborations between organizations, the 1115 Transformation Waiver program, new services and new providers/specialists available in the community. On the other hand, one informant mentioned that some of the same issues still persist because of health disparities.

The lack of access was seen as a common issue for certain populations such as elderly, uninsured, low income and low health literacy. Also, lack of education/awareness and unhealthy behaviors were generally seen as the contributors to poor health and quality of life.

“People are seeking San Angelo because of the oil field boom over the past few years; therefore we have seen a growth in businesses and organizations.”

“The 1115 Waiver Program has positively impacted the population of Tom Green County and surrounding counties.”

“There has been a focus to add more walking trails and safe areas throughout the community to encourage healthy activities, including the beautification of the Red Arroyo Trails.”

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. We also asked the key stakeholders to provide their opinions as to why they thought these populations were underserved or in need. We asked each key stakeholder to consider the specific populations they serve or those with which they usually work. Responses to this question varied.

Some populations that were mentioned include: underinsured, uninsured, homeless, the working poor, and the uneducated.

Respondents felt the health and quality of life was impacted based on socioeconomic status. Populations with fewer financial resources are considered to have limited access to care and resources in the community. In addition, patients with comorbidities tend to have an increasing risk of other health issues and comorbidity needs to be addressed.

“The ‘working poor’ are sometimes the ones that fall through the cracks because they do not qualify for assistance but cannot afford premiums and deductibles.”

“There are limited resources for patients with diabetes and high blood pressure that speak Spanish. There are not many bilingual education classes offered throughout the community [for the Hispanic population].”

3. Barriers

The key stakeholders were asked what barriers or problems keep community residents from obtaining necessary health services in their community.

Responses from key stakeholders include undereducated, lack of health education, economic factors, increase in the costs of medications, cost of insurance premiums and deductibles, and lack of patient compliance.

Fear is considered to be a significant barrier. There is fear of the system because of its complexities and there is fear of the unknown if they find something out that they do not want to hear. In addition, there is a stigma or fear associated with mental health.

“The health care system is complex and has multiple entry points that can be difficult to navigate.”

“Health is a low priority for underinsured and uninsured populations, and they are unable to make it a priority due to work and other life factors.”

4. Most important health and quality of life issues

Key stakeholders were asked to provide their opinion as to the most critical health and quality of life issues facing the county. The issues identified most frequently were:

- The need for more prevention and education
- Access to care
- Diabetes

Other issues that were reported were mental health services, (particularly psychiatry), and heart health. In addition, there were discussions about expanding programs that address social needs and transitional care management. Interviewees stated there is a need for tobacco cessation and education in the community.

“Organizations need to work together to do more community-wide.”

“It is imperative to continue and sustain 1115 Transformation Waiver projects in the community.”

“Be more active in the community to reduce improper Emergency Department use. This leads to lower costs for healthcare, prevention and education for the patients, while providing right care in the right setting.”

Key Findings

A summary of themes and key findings provided by the key stakeholders follows:

- Many organizations are working to develop strategies and collaborations to positively address health and quality of life.
- Strategies need to be put in place to address social needs outside the four walls of the hospital to provide in-home care and fine tune all aspects of a care plan.
- Specific populations lack health knowledge regarding resources and services provided, as well as how to access those resources and services provided.
- Shannon does well at providing opportunities for members of the community but opportunities are not always taken.
- The underinsured and uninsured populations experience multiple barriers that tend to increase over time because this population is just trying to get by with what is a necessity at any given moment.
- Insurance coverage is complex and hard to understand for all levels of health literacy.
- There are many opportunities for outreach and education throughout the community; however, one respondent stated that there needs to be more meaningful interactions that take place in these settings.
- There is a wide range between high income levels and low income levels, and the gap creates variance in the needs to address these populations.
- Tom Green County, particularly in San Angelo, there has been an emphasis on collaboration to address needs in the community over the past few years.

- There are new services, including providers and specialists, in the community.
- There are agencies and organizations working to eliminate barriers and address the needs of the community, but education and clear access points must be defined to better serve the population.

Community Input – Survey

In addition to key stakeholder interviews, a survey was conducted to obtain 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). 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 80 stakeholders representing Shannon Medical Center's service area. 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.

Fifty-four 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 nine questions. Please refer to *Appendix E* for a copy of the survey instrument.

Key Stakeholder Profiles

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

- ✓ Shannon Medical Center
- ✓ Social service agencies
- ✓ Local school systems and universities
- ✓ Public health agencies
- ✓ Other medical providers
- ✓ Local elected officials and governmental agencies
- ✓ Local businesses

Key Stakeholder Survey Results

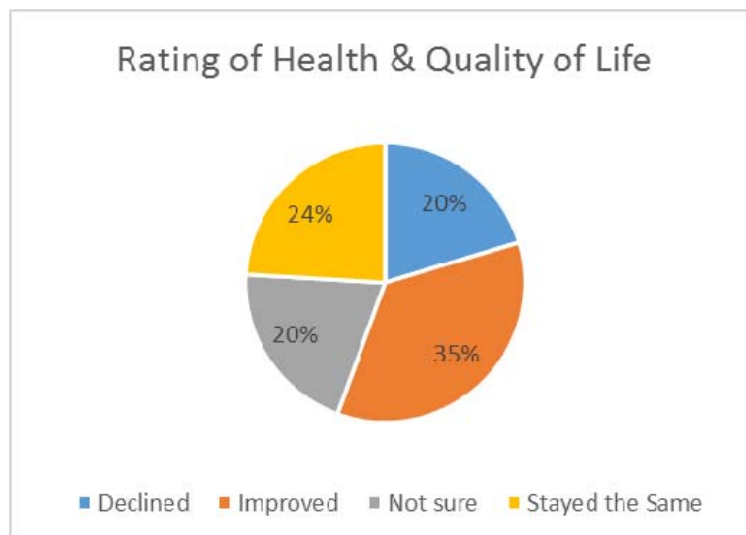
The questions on the survey were grouped into four major categories. A summary of the stakeholders' responses by each of the categories follows. Paraphrased quotes are included to reflect some commonly held opinions and direct quotes are employed to emphasize strong feelings associated with the statements.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

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

The key stakeholders were asked to rate the health and quality of life in Tom Green 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.

Twenty-seven percent (18 out of 66) rated the health and quality of life as “very good”. Sixty-two percent (41 out of 66) of the key stakeholders rated the health and quality of life in Tom Green County as “average”. The remaining stakeholders rated the health and quality of life as “below average”/“poor”.

When asked whether the health and quality of life had improved, declined or stayed the same, 35% of those that responded to this question felt the health and quality of life had improved over the last few years. Twenty-four percent expressed they thought the health and quality of life had stayed the same over the last three years and 20% 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 improved hospital facilities and expanded services provided by Shannon were contributing to improved health. The addition of new medical providers, especially specialists, was seen positively impacting access to services, although some stakeholders noted mental health services are still lacking. The increased health offerings and providers is allowing people to receive healthcare close to home.



Another positive factor related to the general increase in awareness and education is the importance of wellness that is occurring within the community. The availability of community exercise opportunities are more abundant and more individuals are taking advantage of using such opportunities.

“San Angelo in particular has increased the number of walking trails and programs available for a healthier lifestyle “

“Although health and quality of life for youth and middle aged adults has stayed the same, health and quality of life for those over age 55 has declined.”

“The Shannon concept of coordinated provider care has helped a great deal in improving the overall health care of our community.”

2. Underserved populations and communities of need

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

The majority of the key stakeholders identified persons living with low-incomes (working poor) or in poverty, including homeless persons, as most likely to be underserved due to lack of access to services. Lack of financial resources prevents persons with low-income from seeking medical care and receiving the resources they need. In addition many providers do not accept certain forms of insurance, which limits access to primary care for persons living with low-income. As a result, people skip routine screenings that could identify problems early.

The elderly were also identified as a population that is faced with challenges accessing care due to limited transportation and fixed incomes. Elderly people tend to live in isolation, having no family support system. Elderly living in outlying rural areas become even more isolated and may not address health needs due to barriers with getting to medical appointments.

Stakeholders also noted that persons with language or cultural barriers (Hispanics and African-Americans) have difficult time accessing health services. There is a lack of education and healthy living which leads to a lower quality of health. Key stakeholders also noted these populations tend to not seek out preventative medical care and when seeing a medical provider is necessary, they do not have the financial resources to do so.

Persons with mental health needs were another group identified as a population whose health needs are not being met in the community. 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. Mental health patients are complicated to serve and often chronic health conditions accompany mental health issues. For these patients, there is a need for more coordinated care.

Key stakeholders were then asked to provide opinions regarding actions that should be taken to respond to the identified needs above. Many of the stakeholders suggested that free health screenings and education classes should be continued, especially within low income or culturally segregated neighborhoods. They also suggested that utilizing recognized leaders from certain communities to help promote the activities to gain more interest. Having health professionals/representatives

available in certain areas of town (i.e.: high schools, college campuses, rural areas of the community, etc.) would give certain populations the ability to more easily seek out information and health resources.

Stakeholders also noted the need for more services in communities where people live so persons with limited transportation can access basic healthcare. Additionally, mental health providers are needed throughout the county.

Lack of healthy food options and/or affordable nutrition were noted as issues which impact all groups above. Stakeholders noted there are persons living on low-incomes and fixed incomes often can't afford healthy food and often eat at fast food restaurants due to their convenience. Stakeholders noted that by addressing unhealthy eating and lack of fresh food now will help to improve health outcomes in the future.

“The education needs to come from multi-lingual educators to address needs across the spectrum.”

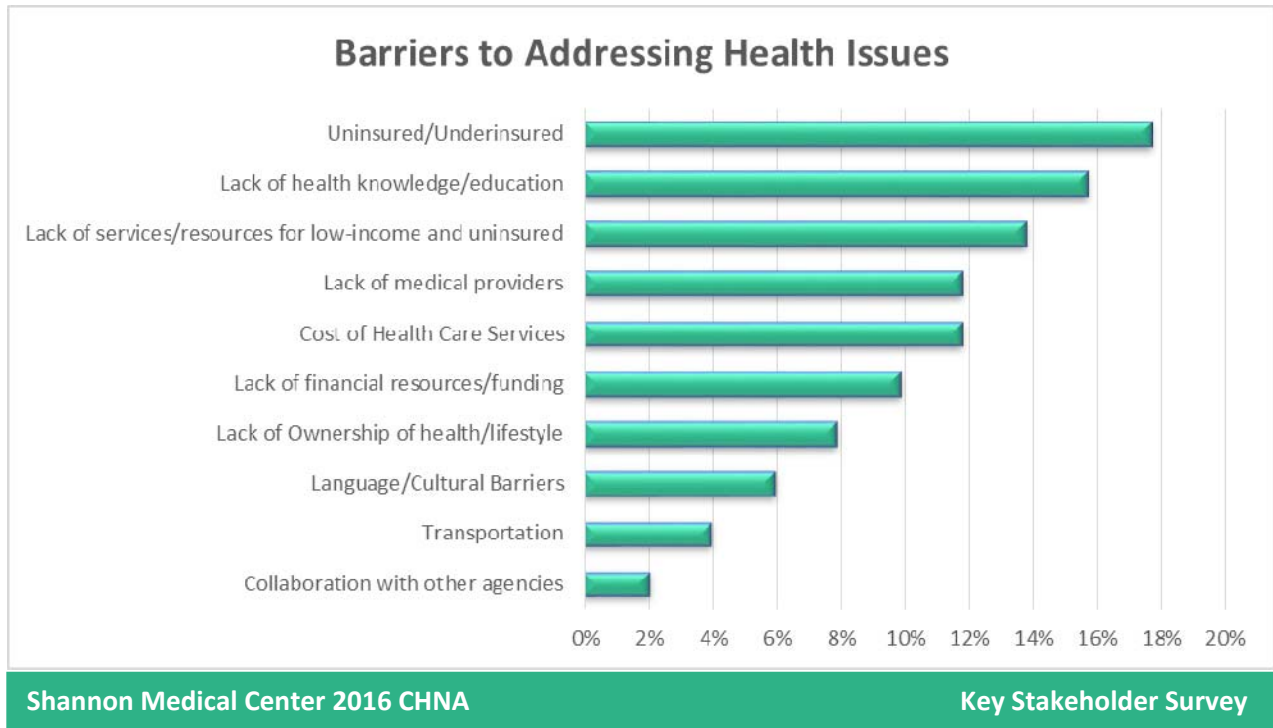
“Healthy food is expensive. [People's] priorities include paying the bills.”

“Uneducated individuals do not know the resources available or are uninterested in learning to make behavioral changes.”

“Some are unsure how to access care or are afraid it will cost too much, so they wait to seek care at an emergent level. This costs more in resources than seeking care from a primary provider at the onset.”

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 being uninsured/underinsured (18%), lack of health knowledge/education (16%) and lack of services/resources for low-income and uninsured (14 %) are big barriers to health care. Other barriers include lack of medical providers and the cost of health care services.

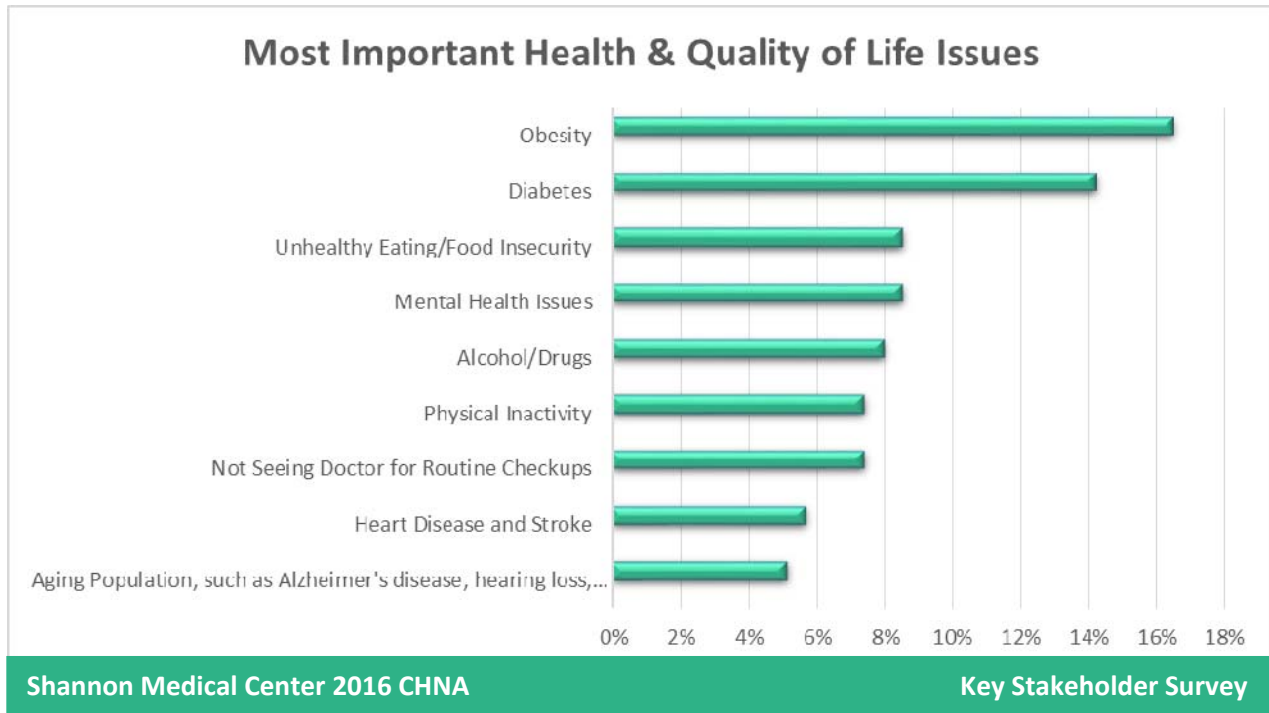


Key stakeholders identified the following as the main reasons why people are not able to access health services:

1. Inability to afford co-pays and/or deductibles
2. Lack of health insurance
3. Fear
4. Too long to wait for medical appointments
5. People don't know how to find a doctor

4. Most important health and quality of life issues

The survey solicited input from participants regarding health problems of the community. Obesity, diabetes, unhealthy eating/food insecurity and mental health issues were identified as the biggest health and quality of life issues in the in the community.



“Access to mental health providers remains a constant issue within our community. It is hard to find a provider who is willing/able to take on new patients, especially those who need to have their medications monitored.”

“Changes in life style and education must be core for diabetes and obesity.”

“Education needs to be provided to make people aware of the effects of poor choices and simple attainable steps to improve their health and the health of their families.”

Additional survey results:

When asked what needs to be done to address the critical issues, participants indicated the following:

- More health fairs, especially those geared towards lower income population. Taking the fairs out to the different communities to encourage more individuals to participate.
- Access to routine health care and dental care for those who are uninsured/underinsured.
- Education on healthy living and eating, particularly within schools and geared towards youth.
- More collaboration between agencies to respond to health needs.
- Increase access to mental health services and providers.
- Better access to nutritious foods to help with chronic health conditions such as obesity.

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

- Access to dental and mental health services and providers.
- Recruitment and retention of primary care physicians and specialists to the community.
- Increased community education and outreach; particularly within diverse neighborhoods.
- Continue to educate on healthy behaviors, preventative measures and chronic diseases such as diabetes and obesity.
- Continue the coordination of care program and provide streamline processes to better serve patients.
- Increase the reach of the mobile clinic to areas where vulnerable populations congregate.
- Improve cooperation, collaboration and communication with other providers, health care employees and social organizations.

Health Issues of Vulnerable Populations

According to Dignity Health's Community Need Index (see Appendices), Shannon'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 Tom Green County is 3.6. The zip codes with the highest CNI scores within the community are 76903 (San Angelo), 76943 (Ozona), 76905 (San Angelo), 76901 (San Angelo), 76821 (Ballinger) and 79567 (Winters).

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

- Uninsured/Working Poor Population
 - Economic factors
 - Increase cost in medications
 - High cost of health care
 - Lack of healthy lifestyle and health nutrition education
- Homeless
 - Financial barriers
 - Limited access to health resources
 - Cost of health care
- Elderly
 - Transportation
 - Financial Barriers
 - Isolation/Lack of family support
- Hispanic/African-American Populations
 - Language/Cultural barriers
 - Lack of healthy lifestyle and health nutrition education

Information Gaps

This assessment was designed to provide a comprehensive and broad picture of the health in the overall community served by Shannon; 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, Shannon completed an analysis of these inputs (see *Appendices*) to identify community health needs. The following data was analyzed to identify health needs for the community:

Leading Causes of Death

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

Health Outcomes and Factors

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

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

Primary Data

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

Health Needs of Vulnerable Populations

Health needs of vulnerable populations were included for ranking purposes.

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

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

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

Exhibit 26
Prioritization of Health Needs

	How Many People Are Affected by the Issue?	What Are the Consequences of Not Addressing This Problem?	What is the Impact on Vulnerable Populations?	How Important is it to the Community?	How Many Sources Identified the Need?	Total Score *
Lack of Health Knowledge/Education	5	4	5	5	3	22
Healthy Behaviors/Lifestyle Changes	4	4	5	5	3	21
Adult Obesity	5	5	3	5	2	20
Poverty/Financial Resources/Children in Poverty	4	4	4	4	3	19
Diabetes	4	5	2	4	4	19
High Cost of Health Care	3	3	5	4	3	18
Uninsured	4	3	4	4	3	18
Physical Inactivity	5	5	2	3	3	18
Lack of Primary Care Physicians	4	4	3	4	2	17
Limited Access to Healthy Foods/Nutrition	3	3	4	4	3	17
High Blood Pressure	5	5	4	2	1	17
Language/Cultural Mindset	3	2	5	4	2	16
Lack of Mental Health Providers	3	3	4	4	2	16
Transportation	3	3	5	3	1	15
Heart Health	2	5	2	4	1	14
Older Adult Asthma	3	4	4	2	1	14
Lack of Agency Collaboration	3	2	4	3	1	13
Lack of Convenient Ambulatory Care	2	2	4	4	1	13
Lack of Dental Providers	3	3	3	2	2	13
Children in Single-Parent Households	3	3	2	1	1	10
Lung Disease	2	5	2	0	1	10
Alcohol Impaired Driving Deaths/Excessive Drinking/Adult Binge Drinking	2	3	1	0	2	8
Preventable Hospital Stays	2	2	2	0	1	7
Routine Pap Test	1	2	2	0	1	6
Sexually Transmitted Infections	1	2	1	0	1	5
Teen Birth Rate	1	2	1	0	1	5
Violent Crime Rate	1	2	1	0	1	5

*Highest potential score = 25

Management's Prioritization Process

For the health needs prioritization process, Shannon engaged the leadership team to review the most significant health needs reported in the prior CHNA, as well as in *Exhibit 26*, using the following criteria:

- ✓ Current area of Shannon's focus
- ✓ Established relationships with community partners to address the health need
- ✓ Organizational capacity and existing infrastructure to address the health need

This data was reviewed to identify health issues of uninsured persons, low-income persons and minority groups, and the community as a whole. As a result of the analysis described above, the following health needs were identified as the most significant health needs for the community:

- Lack of health knowledge/education
- Healthy behaviors/lifestyle changes
- Adult obesity
- Poverty/financial resources/children in poverty
- Diabetes
- High cost of health care
- Uninsured
- Physical Inactivity
- Lack of primary care physicians
- Limited access to health foods/nutrition
- High blood pressure
- Language/cultural mindset
- Lack of mental health providers
- Transportation
- Heart health
- Older adult asthma
- Lack of agency collaboration
- Lack of convenient ambulatory care
- Lack of dental providers

Shannon's next steps include 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

Shannon has 400 acute beds. 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. Shannon also has a system of outpatient clinics within San Angelo and throughout the neighboring counties that are available to the residents of the community. *Exhibit 27* summarizes hospitals available to the residents of CHNA Community.

Exhibit 27

Hospital	Address	County
San Angelo Community Medical Center	3501 Knickerbocker Road, San Angelo, TX 76904	Tom Green
Shannon Medical Center	2018 Pulliam, San Angelo, TX 76905	Tom Green
River Crest Hospital	1636 Hunters Glen Road, San Angelo, TX 76901	Tom Green
Ballinger Memorial Hospital	608 Avenue B, Ballinger, TX 76821	Runnels
North Runnels Hospital	7821 East Highway 153, Winters, TX 79567	Runnels
Concho County Hospital	614 Baker Street, Eden, TX 76837	Concho
Heart of Texas Memorial Hospital	2008 Nine Road, Brady, TX 76825	McCulloch

Source: US Hospital Finder

Other Health Care Facilities

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

Exhibit 28

Health Care Facility	Facility Type	Address	County
Family Health Center of Ozona	Rural Health Clinic	104 North Avenue H, Ozona, TX 76943	Crockett
Brady Medical Clinic	Rural Health Clinic	2010 Nine Road, Brady, TX 76825	McCulloch
Ballinger Medical Clinic	Rural Health Clinic	2001 Hutchins Ave, Suite C, Ballinger, TX 76821	Runnels
NRH Clinic	Rural Health Clinic	7571 State Hwy 153/PO BOX 185, Winters, TX 79567	Runnels
Frontera Healthcare Network- Brady Clinic	Federally Qualified Health Center	2205 S Bridge St, Brady, TX 76825	McCulloch
La Esperanza Clinic	Federally Qualified Health Center	1610 S Chadbourne St, San Angelo, TX 76903	Tom Green
La Esperanza Clinic	Federally Qualified Health Center	2033 W Beauregard Ave, San Angelo, TX 76901	Tom Green
La Esperanza Health & Dental Center	Federally Qualified Health Center	35 E. 31 st Street, San Angelo, TX 76901	Tom Green
Goodfellow AFB Clinic	Health Clinic	271 Ft. Richardson Ave., Goodfellow Air Force Base, TX 76908	Tom Green
Shannon Clinic Big Spring	Rural Health Clinic	2503 Gregg Street, Unit C, Big Spring, TX 79720	Howard
Shannon Clinic Sweetwater	Rural Health Clinic	201 E Arizona Ave, Sweetwater, TX 79556	Nolan
Shannon Clinic Brownwood	Rural Health Clinic	3655 U.S. Hwy 377, Brownwood, TX 76801	Brown

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

Health Departments

Shannon's CHNA community has one county health department located within it: City of San Angelo - Tom Green County Health Department.

The Health Services Department is responsible for public health issues ranging from restaurant inspections to immunizations to the public smoking ban. Additionally, the department is responsible for project management and grants administration. The department is comprised of the following two divisions: Environmental Health and Nursing.

Environmental health deals with food service, pools and public health nuisances. The nursing division provides a range of services designed to promote healthy living through prevention protection and intervention. They provide immunizations for children and adults such as influenza, polio, measles, mumps, chickenpox and Hepatitis A and B among others. Tuberculosis testing as well as case management clinics and sexually transmitted disease clinics are also available to residents.

APPENDICES

APPENDIX A
ANALYSIS OF DATA

Shannon Medical Center
Analysis of CHNA Data
Analysis of Health Status-Leading Causes of Death

	U.S. Crude Rates	(A) 10% of U.S. Crude Rate	County Rate	(B) County Rate Less U.S. Adjusted Crude Rate	If (B)>(A), then "Health Need"
--	------------------------	--	----------------	---	---

Tom Green County:

Cancer	168.9	16.9	159.9	-9.0	
Heart Disease	175.0	17.5	130.1	-44.9	
Lung Disease	42.2	4.2	51.8	9.6	Health Need
Stroke	37.9	3.8	34.0	-3.9	
Unintentional Injury	38.6	3.9	39.0	0.4	

***The crude rate is shown per 100,000 residents. Please refer to Exhibit 18 for more information.

Analysis of Health Outcomes and Factors - County Health Rankings

	National Benchmark	(A) 30% of National Benchmark	County Rate	(B) County Rate Less National Benchmark	If (B)>(A), then "Health Need"
--	-----------------------	--	----------------	--	--------------------------------------

Tom Green County:

Adult Smoking	14.0%	4.2%	16.0%	2.0%	
Adult Obesity	25.0%	7.5%	26.0%	1.0%	
Food Environment Index	8.3	2	6.4	2	
Physical Inactivity	20.0%	6.0%	30.0%	10.0%	Health Need
Access to Exercise Opportunities	91.0%	27.3%	72.0%	19.0%	
Excessive Drinking	12.0%	3.6%	18.0%	6.0%	Health Need
Alcohol-Impaired Driving Deaths	14.0%	4.2%	38.0%	24%	Health Need
Sexually Transmitted Infections	134	40	579	445	Health Need
Teen Birth Rate	19	6	52	33	Health Need
Uninsured	11.0%	3.3%	23.0%	12.0%	Health Need
Primary Care Physicians	1040	312	1400	360	Health Need
Dentists	1340	402	1880	540	Health Need
Mental Health Providers	370	111	800	430	Health Need
Preventable Hospital Stays	38	11	50	12	Health Need
Diabetic Screen Rate	90.0%	27.0%	87.0%	3.0%	
Mammography Screening	71.0%	21.3%	60.0%	11.0%	
Violent Crime Rate	59	18	270	211	Health Need
Children in Poverty	13.0%	3.9%	21.0%	8.0%	Health Need
Children in Single-Parent Households	21.0%	6.3%	36.0%	15.0%	Health Need

Analysis of Health Outcomes and Factors - Community Health Status Indicator

Older Adult Asthma
Uninsured
Adult Binge Drinking
Adult Female Routine Pap Tests
Limited Access to Healthy Food
Living Near Highways

* From Community Health Status Indicators

Analysis of Primary Data

Key Stakeholder Interviews

Poverty
Lack of Convenient Ambulatory Care
Lack of Health Knowledge/Education
Healthy Behaviors/Lifestyle Choices
Lack of Mental Health Services
Diabetes
Heart Health
Uninsured

Community Survey

Obesity
Diabetes
Lack of Health Knowledge/Education
Healthy Behaviors/Lifestyle Choices
Lack of Mental Health Services
Collaboration between entities
Lack of access to healthy foods

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

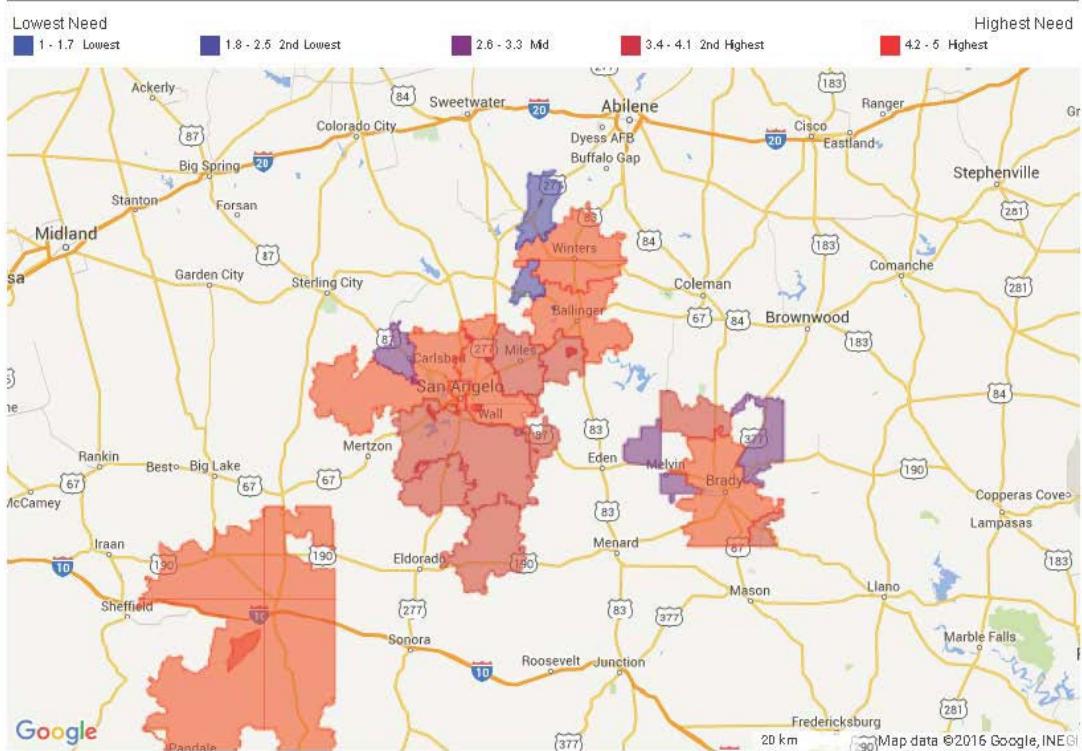
Population	Issues
Uninsured/Working Poor Population	Economic factors Increase cost in medications Cost of health care Lack of healthy lifestyle and health nutrition education
Homeless	Financial barriers Limited access to health services Cost of health care
Elderly	Transportation Financial barriers Isolation/lack of family support
Hispanic/African-American Populations	Language/Cultural barriers Lack of healthy lifestyle and health nutrition education

APPENDIX B

SOURCES

DATA TYPE	SOURCE	YEAR(S)
Discharges by Zip Code	Hospital	FY 2015
Population Estimates	Community Commons via American Community Survey http://www.communitycommons.org/	2015
Demographics - Race/Ethnicity	Community Commons via American Community Survey http://www.communitycommons.org/	2015
Demographics - Income	Community Commons via American Community Survey http://www.communitycommons.org/	2009 - 2013
Unemployment	Community Commons via US Department of Labor http://www.communitycommons.org/	2015
Poverty	Community Commons via US Census Bureau, Small Areas Estimates Branch http://www.census.gov	2009 - 2013
Uninsured Status	https://www.enrollamerica.org/research-maps/maps/changes-in-uninsured-rates-by-county/	2015
Medicaid	Community Commons via American Community Survey http://www.communitycommons.org/	2009 - 2013
Education	Community Commons via American Community Survey http://www.communitycommons.org/	2009 - 2013
Physical Environment - Grocery Store Access	Community Commons via US Census Bureau, County Business Patterns http://www.communitycommons.org/	2013
Physical Environment - Food Access/Food Deserts	Community Commons via US Department of Agriculture http://www.communitycommons.org/	2010
Physical Environment - Recreation and Fitness Facilities	Community Commons via US Census Bureau, County Business Patterns http://www.communitycommons.org/	2013
Physical Environment - Physically Inactive	Community Commons via US Centers for Disease Control and Prevention http://www.communitycommons.org/	2012
Clinical Care - Access to Primary Care	Community Commons via US Department of Health & Human Services http://www.communitycommons.org/	2012
Clinical Care - Lack of a Consistent Source of Primary Care	Community Commons via US Department of Health & Human Services http://www.communitycommons.org/	2011 - 2012
Clinical Care - Population Living in a Health Professional Shortage Area	Community Commons via US Department of Health & Human Services http://www.communitycommons.org/	2015
Clinical Care - Preventable Hospital Events	Community Commons via Dartmouth College Institute for Health Policy & Clinical Practice http://www.communitycommons.org/	2012
Leading Causes of Death	Community Commons via CDC national Behavioral Risk Factor Surveillance System http://www.communitycommons.org/	2007 - 2011
Health Outcomes and Factors	County Health Rankings http://www.countyhealthrankings.org/ & Community Commons http://www.communitycommons.org/	2015 & 2006 - 2012
Health Care Resources	Community Commons, CMS.gov, HRSA	
Health Care Resources	https://www.shannonhealth.com/contact-us/locations.aspx	

APPENDIX C
DIGNITY HEALTH COMMUNITY NEED INDEX
(CNI) REPORT



Mean(zipcode): 3.6 / Mean(person): 4.3

CNI Score Median: 3.6

CNI Score Mode: 3.6

Zip Code	CNI Score	Population	City	County	State
76935	3.4	1075	Christoval	Tom Green	Texas
76887	3.6	108	McCulloch County	Mcculloch	Texas
76858	3	330	Concho County	Mcculloch	Texas
76955	3.4	131	Vancourt	Tom Green	Texas
76825	4.2	7131	McCulloch County	Mcculloch	Texas
76957	2.6	84	Wall	Tom Green	Texas
76905	4.4	11764	San Angelo	Tom Green	Texas
76908	4	1927	Goodfellow Afb	Tom Green	Texas
76909	2.6	1131	San Angelo	Tom Green	Texas
76872	2.8	807	McCulloch County	Mcculloch	Texas
76940	3.6	180	Mereta	Tom Green	Texas
76901	4.4	29427	San Angelo	Tom Green	Texas
76852	3.4	269	McCulloch County	Mcculloch	Texas
76903	5	33001	San Angelo	Tom Green	Texas
76904	3.6	33827	San Angelo	Tom Green	Texas
76821	4.4	4911	Ballinger	Runnels	Texas
76875	3.6	625	Rowena	Runnels	Texas
76861	3.6	1988	Miles	Runnels	Texas
76934	3	1648	Carlsbad	Tom Green	Texas
76865	2.4	218	Norton	Runnels	Texas
79567	4.4	3288	Winters	Runnels	Texas
79566	2.2	335	Wingate	Runnels	Texas
76943	4.6	3898	Ozona	Crockett	Texas

APPENDIX D
KEY STAKEHOLDER INTERVIEW PROTOCOL

KEY STAKEHOLDER INTERVIEW

Community Health Needs Assessment for: Shannon Medical Center

Interviewer's Initials: _____

Date: _____ Start Time: _____ End Time: _

Name: _____ Title:

Agency/Organization:

of years living in Tom Green County: _ Current position: _____

E-mail address: _____

Introduction: Good morning/afternoon. My name is **[interviewer's name]**. Thank you for taking time out of your busy day to speak with me. I'll try to keep our time to approximately 40 minutes, but we may find that we run over – up to 50 minutes total - once we get into the interview. **(Check to see if this is okay).**

[Name of Organization] is gathering local data as part of developing a plan to improve health and quality of life in Tom Green County. Community input is essential to this process. A combination of surveys and key informant interviews are being used to engage community members. You have been selected for a key informant interview because of your knowledge, insight, and familiarity with the community. The themes that emerge from these interviews will be summarized and made available to the public; however, individual interviews will be kept strictly confidential.

To get us started, can you tell me briefly about the work that you and your organization do in the community?

Thank you. Next I'll be asking you a series of questions about health and quality of life in Tom Green County. As you consider these questions, keep in mind the broad definition of health adopted by the World Health Organization: 'Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity,' while sharing the local perspectives you have from your current position and from experiences in this community.

Questions:

1. In general, how would you rate health and quality of life in Tom Green County?

2. In your opinion, has health and quality of life in Tom Green County improved/declined /stayed the same over the past few years?
3. Why do you think it has (based on answer from previous question: Improved/declined/stayed the same)?
4. What other factors have contributed to the health and quality of life (based on answer to question 2: Improvement/decline/staying the same)?
5. What barriers, if any, exist to improving health and quality of life in Tom Green County?
6. In your opinion, what are the most critical health and quality of life issues in Tom Green County?
7. What needs to be done to address these issues?
8. Do you think access to Health Services has improved over the last 3 years? Why or why not?
9. In your opinion, what is the reason why people are not able to access health services (medical, dental, mental health)?
 - Lack of Health Insurance
 - Inability to afford co-pays and/or deductibles
 - Transportation
 - Physicians refuse to take insurance or Medicaid
 - People don't know how to find a doctor.
 - Fear
 - Too long to wait for an appointment
 - Inconvenient hours/locations
 - Other
10. Please provide your thoughts on how well the community participates and takes ownership in preventive care?
11. Please describe your familiarity and/or perceptions regarding educational programs provided by Shannon Medical Center.
13. Are there any specialists (physicians) which are needed in the community? If so, what specialties are needed?

14. Are there people or groups of people in Tom Green County whose health or quality of life may not be as good as others? Who are these persons or groups? Describe the causes? What should be done to address the needs of these persons?

15. What is the most important issue that the hospital should address in the next 3-5 years?

Close: Thanks so much for sharing your concerns and perspectives on these issues. The information you have provided will contribute to develop a better understanding about factors impacting health and quality of life in Tom Green County. Before we conclude the interview,

Is there anything you would like to add?

As a reminder, summary results will be made available by the **Shannon Medical Center** and used to develop a community-wide health improvement plan.

APPENDIX E
COMMUNITY SURVEY PROTOCOL
& ACKNOWLEDGEMENTS

Shannon Medical Center is gathering information as part of developing a plan to improve health and quality of life in the communities it serves. Community input is essential to this process. This survey is being used to engage community members. You have been selected to complete the survey below because of your knowledge, insight, and familiarity with the community and the services provided by Shannon Medical Center. The survey consists of 12 questions. Some of the following survey questions are open-ended. In these instances, we are trying to gather your thoughts and opinions. There are no right or wrong answers. The themes that emerge from these questions will be summarized and made available to the public; however, your identity will be kept strictly confidential.

In general, how would you rate the health and quality of life in your community?

1. Very Good
2. Average
3. Below Average
4. Poor

In your opinion has the health and quality of life in your county improved, declined, or stayed the same over the past few years? Please provide what factors influence your answer and describe why you feel it has improved, declined or stayed the same?

What are the most significant barriers to addressing health issues in Tom Green County?

Are there populations of people in the community whose health or quality of life may not be as good as others. If yes, in your opinion, who are these persons or groups?

Please explain why the populations identified in the previous question have lower health and quality of life? Also, provide input as to what assistance is needed to assist these individuals.

In your opinion, what are the three most important health and quality of life issues in your county? Please mark three.

1. Aging Population, such as Alzheimer's disease, hearing loss, memory loss or arthritis
2. Alcohol/Drugs
3. Allergies
4. Cancers
5. Child Abuse/Neglect
6. Dental Health
7. Dropping Out of High School
8. Diabetes
9. Environmental Pollution
10. Heart Disease and Stroke
11. High Blood Pressure
12. Infant Mortality
13. Mental Health Issues
14. Not Seeing Doctor for Routine Checkups
15. Obesity
16. Physical Inactivity
17. Respiratory/Lung Disease
18. Sexually Transmitted Diseases
19. Suicide
20. Teenage Pregnancy
21. Tobacco Use
22. Unhealthy Eating/Food Insecurity
23. Other

What needs to be done to address the critical health and quality of life issues identified in the previous question?

In your opinion, what is the primary reason why people are not able to access health services (medical, dental, mental health)?

1. Lack of Health Insurance
2. Inability to afford co-pays and/or deductibles
3. Transportation
4. Physicians refuse to take insurance or Medicaid
5. People don't know how to find a doctor.
6. Fear
7. Too long to wait for an appointment
8. Inconvenient hours/locations
9. Other

What is the most important issue that Shannon Medical Center should address in the next 3-5 years to help improve the health of the community? Also, please describe what Shannon Medical Center can do to better serve the health and wellness needs of the community, including improving access to health services.

How familiar are you with educational programs offered by Shannon Medical Center?

1. Very familiar and I know people who attend them or I attend myself
2. Very familiar but I don't know anyone who attends them
3. Somewhat familiar
4. I am unfamiliar with educational programs offered by the hospital
5. Other

Please describe your familiarity and/or perceptions regarding educational programs, health fairs and screenings provided by Shannon Medical Center?

Please mark the best description of your role in the community.

1. Community Physician
2. Work with providing mental health services
3. Work with providing services to elderly
4. Represent public schools, colleges and universities
5. Local government
6. Employed by Public Health Department
7. Work with social service organization serving the community
8. Other

Acknowledgements

The project Steering Committee was the convening body for this project. Many other individuals including community residents, key stakeholders and community-based organizations contributed to this community health needs assessment.

Project Steering Committee

Special thanks to all of the following committee members for their time and commitment to this project:

Gloria Robledo, Accountant, Shannon Medical Center
Holly Foreman, Regional Health Manager, Shannon Medical Center
Lyndy Stone, Marketing Director, Shannon Medical Center
Staci Wetz, Chief Financial Officer, Shannon Medical Center
Starr Long, Special Projects Coordinator, Shannon Medical Center
Theresa Daniels, Controller, Shannon Medical Center

Key Stakeholders and Community Health Needs Survey

Thank you to the key stakeholders that participated in the key stakeholder interviews.

Thank you to the individuals who assisted with distributing and completing the Community Health Needs Assessment Survey to stakeholders throughout the community.