

2016  
COMMUNITY  
HEALTH NEEDS  
ASSESSMENT



Our name says good. Our care is great.

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## **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 and 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 who represent the broad interest of the community served by the hospital facility, including those with special knowledge of or expertise in public health. 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 Good Shepherd's compliance with IRC Section 501(r). Health needs of the community have been identified and prioritized so that Good Shepherd Medical Center 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 ending June 30, 2014, through June 30, 2016, which was adopted by Good Shepherd Medical Center board of directors in 2013.
- ✓ Collection and analysis of a large range of data, including demographic, socioeconomic and health statistics, health care resources and hospital data.
- ✓ Obtaining community input through:
  - Surveys with key stakeholders who represent a) broad interests of the community, b) populations of need or c) persons with specialized knowledge in public health.

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

### ***Summary of Community Health Needs Assessment***

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

Good Shepherd 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 during the fiscal year ending September 30, 2016.

Based on current literature and other guidance from the Treasury and the IRS, the following steps were conducted as part of Good Shepherd'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 and an implementation strategy scorecard was prepared to understand the effectiveness of Good Shepherd's current strategies and programs.
- The "community" served by Good Shepherd was defined by utilizing inpatient data regarding patient origin. This process is further described in *Community Served by the Hospital*.
- Population demographics and socioeconomic characteristics of the community were gathered and reported utilizing various third parties (see references in *Appendices*). The health status of the community was then reviewed. Information on the leading causes of death and morbidity information was analyzed in conjunction with health outcomes and factors reported for the community by CountyHealthrankings.org. Health factors with significant opportunity for improvement were noted.
- Community input was provided through key stakeholder surveys. Results and findings are described in the *Key Stakeholder Survey 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 Good Shepherd 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.

### *Executive Summary*

Good Shepherd Medical Center – Marshall (Good Shepherd) conducted a comprehensive, multifactor health and wellness assessment of Good Shepherd’s neighborhood and surrounding communities. The assessment provides a guide for the development and implementation of Good Shepherd’s strategic plans while promoting opportunities to work collaboratively to address the health needs of service area residents.

To conduct this Community Health Needs Assessment (CHNA) Good Shepherd collected and analyzed the most current health, social, economic, housing and other data, as well as qualitative input directly from community leaders, representatives and agencies through surveys of key stakeholders. This approach allowed Good Shepherd to analyze both quantitative data and qualitative input on our community’s health status. The steering committee reviewed all data available and collectively, through discussion, prioritized the health needs of our community that varied substantially from benchmark data and often times were also aligned with national and state-level health priorities.

This CHNA helps Good Shepherd to ensure our resources are appropriately directed towards opportunities with the greatest impact on the community. Good Shepherd will focus on providing resources that address each of the following health needs through direct patient care, health education and promotion and developing and supporting community partnerships aligned with the identified health needs in our community.

Since we last completed a CHNA, we have seen improvements in our community as well as areas that continue to represent challenges to individuals in the community. The community has experienced a decline in preventable hospital stays which may indicate the population has begun to better manage conditions that might not require hospitalization and are possibly more successfully supervised by primary care providers in outpatient settings. Managing health conditions in outpatient settings may reduce the likelihood of medical conditions which require emergency treatment as well as easier to manage medical expenses by the individual.

While a decrease in preventable hospital stays is a positive sign the community has taken proactive steps to better manage and protect their health, the community continues to struggle in areas already identified in the community research. Some areas for improvement in the community’s health include the lack of mental health providers and resources in the community and affordable primary and preventative care options for residents. The community also struggled with health issues such as obesity, heart disease and other chronic diseases.

***General Description of Good Shepherd Health System***

Good Shepherd Health System includes two medical centers, more than 30 provider office locations, emergency services, immediate care centers, a full range of outpatient services and our health and wellness facility, the Institute for Healthy Living. Our multi-specialty network of providers is focused on patient-centered care that improves the lives of patients as well as the overall wellness of the communities we serve. A cornerstone to the rich heritage of Good Shepherd Health System, we are committed to providing excellence in health care.

**Good Shepherd Medical Center – Marshall**

Good Shepherd Medical Center – Marshall is a not-for-profit facility. Located in northeast Texas, it is approximately 150 miles east of Dallas and 35 miles west of Shreveport, Louisiana. Although the majority of the center's patients come from the city of Marshall, it also serves communities and residents in Harrison, Marion, Cass and Panola counties in Texas.



**Mission Statement**

It is the mission of Good Shepherd Medical Center – Marshall to improve the health of the communities we serve.

**Vision Statement**

To be the provider of choice for the communities we serve.

**Good Shepherd Health System's Values**

CHOICE: Compassion, High Quality, Outstanding Services, Innovation, Community, Education



### ***Significant Community Benefit Programs***

#### **Marshall LifeCenter**

The Marshall LifeCenter (owned and managed by the hospital) is in its 16th year of service to the community and continues to focus on the promotion of fitness, wellness and healthy life-styles. With current memberships about 2,550, the 24,000 square foot, state of the art fitness facility is open to the community through physician referral or personal and group memberships. The Marshall LifeCenter offers indoor aquatic therapy, an aerobic studio and fitness classes including yoga, Zumba, HIIT Kickboxing and Insanity, an indoor walking track, massage therapy, state of the art fitness equipment as well as Silver Sneakers, a program specifically designed for senior citizens. Clinically educated degreed trainers are available to assist with exercise prescriptions designed to inspire, motivate and help achieve personal goals. Easy to use Technogym smart-key technology helps to encourage accountability and stat tracking.

The Hospital has managed and maintained the facility and its equipment at top performance standards for over 11 years. In the summer of 2008, the facility underwent a renovation project which included updating locker rooms and shower areas as well as the addition of all new cardio and strength equipment. In 2010, the LifeCenter's therapy and lap pools were transformed to salt water pools. In December 2011, the Marshall Hospital Foundation donated \$250,000 worth of new equipment to the LifeCenter.

#### **A Fair of the Heart**

Heart disease is the leading cause of death in the United States. Many of the risk factors leading to heart disease are controllable through good health habits. Each February, Good Shepherd – Marshall hosts a community-wide health fair, A Fair of the Heart. The fair's purpose is to educate area residents on the risk factors leading to heart disease, including high blood pressure, excess weight, elevated cholesterol, inactivity and tobacco usage. Offerings included free cholesterol and glucose screenings, blood pressure checks and a multitude of health information and health-related activities. At 2015 event, 102 individuals received the screenings. The screening results were either mailed to the individual, or to a physician, at the individual's request. Physician referral services were also offered for those without primary care physicians.

#### **Red Thursday Seminars and Red Dress Luncheon**

In an effort to celebrate women's heart health and raise awareness about heart disease, the Marshall Hospital Foundation hosts annual Red Thursday Seminars and a Red Dress Luncheon during the month of February, National Heart Month.

Red Thursday Seminars focus on heart health and are free of charge to the community. Seminars are hosted by women's health experts who discuss a variety of women's health topics.

The annual Red Dress Luncheon is intended to bring women together in the battle against heart disease. The annual luncheon includes a healthy lunch, keynote speaker and door prizes.

Good Shepherd Medical Center – Marshall provides many additional community benefit programs which are details in the FY 2015 Marshall Community Benefit Report.



***Identified Community Health Needs***

The following health needs were identified based on the information gathered and analyzed through the 2016 CHNA conducted by Good Shepherd

These needs have been prioritized based on information gathered through the CHNA.

**Identified Community Health Needs**

1. Lack of Mental Health Providers/Services
2. Obesity, Diabetes, Heart Disease and other Chronic Health Disorders
3. Affordable Primary and Preventative Care Options
4. Unemployment and Decrease in Income in the Community Due to Economic Downturn
5. Healthy Behaviors/Lifestyle Choices
6. Substance Abuse
7. Lack of Health Knowledge/Education
8. Lack of Community Resources to Promote Health (facilities, outdoor spaces)
9. Poor Nutrition/Limited Access to Healthy Food Options
10. Uninsured/Limited Insurance due to Lack of Medicaid Expansion or High Deductible Plans
11. Adult Smoking/Tobacco Use
12. Crime and Violence

***These identified community health needs are discussed in greater detail later in this report***

***Community Served by Good Shepherd***

Good Shepherd – Marshall is located in Longview, TX. Longview is approximately a two (2) hour and fifteen minute drive from Dallas, TX.

***Defined Community***

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

Based on the patient origin of acute care inpatient and outpatient discharges from July 1, 2014, through June 30, 2015, management has identified the CHNA community to include Harrison, Marion, Panola and Cass counties for Good Shepherd Medical Center – Marshall as each county represents greater than 1% of the total discharges and in aggregate the four counties represent greater than 80% of the total discharges. These counties are listed in *Exhibit 1* (Community) with corresponding demographic information in the following exhibits.

Secondary data for certain counties included in the secondary service area has not been included in the CHNA report as discharges for each individual county is less than 1% of total discharges. The socioeconomic characteristics, physical environment, clinical care, health status and health outcomes for these counties are similar to those indicated in the data for the three counties identified as the CHNA community. Primary data was obtained for these counties through key stakeholder surveys.

***County Health Rankings – Improvements and Opportunity Areas from 2013 to Present***

The counties in the CHNA Defined Community were measured on several factors then their statistics were ranked in relation to the 237 counties in the state of Texas. The four (4) County Health Factor groups include categories that span the continuum of health care; the groups are identified as Health Behaviors, Clinical Care, Social and Economic Factors, and Physical Environment. The Health Behaviors category includes statistics on physical habits (exercise, substance consumption, etc.) that affect an individual's physical condition. Clinical Care includes statistics on individual's access to medical professionals and preventative medicine procedures. The Social and Economic Factors statistics relate to the education level, income measures, and other conditions which affect a child's development and adult life. The final group, Physical Environment, identifies characteristics of the county's ecosystem and its conditions.

***County Health Ranking Comparison from 2013 to 2016***

<b>Ranking Area</b>	<b>Cass</b>	<b>Harrison</b>	<b>Marion</b>	<b>Panola</b>
Health Behavior	Decline from 2013	Decline from 2013	Decline from 2013	Improved from 2013
Clinical Care	Decline from 2013	Decline from 2013	Improved from 2013	Decline from 2013
Social/Economic	Decline from 2013	Improved from 2013	Improved from 2013	Improved from 2013
Physical Environment	Decline from 2013	Decline from 2013	Decline from 2013	Improved from 2013

Cass County's complete health rankings decreased in each of the four (4) statistical categories among the counties in the State of Texas: Health Behaviors ranking (150 in 2012 to 159 in 2015), Clinical Care ranking (105 in 2012 to 142 in 2015), Social and Economic Factors (173 in 2012 to 203 in 2015), and Physical Environment (136 in 2012 to 212 in 2015).

Harrison County improved their position, compared to the county's position in 2012, among the counties in Texas in Social and Economic Factors (146 to 129). The county's rank decreased in Health Behaviors (186 to 189), Clinical Care (68 to 75), and Physical Environment (139 to 224).

Marion County slightly improved in two (2) of four (4) health statistical rankings and drastically fell in two of four health statistical rankings. Clinical Care and Social and Economic Factors in Marion County improved (129 to 106) and (203 to 194), respectively. Marion County experienced a drastic decline from 2012 to 2015 in Health Behaviors (158 to 235) and Physical Environment (120 to 223).

In Panola County all but one statistical health grouping decreased. The only group that improved among all counties in Texas from 2012 to 2015 was Clinical Care (92 to 84). All other county rankings decreased from 2012 to 2015: Health Behaviors (146 to 152), Social and Economic Factors (75 to 111), and Physical Environment (138 to 162).

The County Health Rankings for the primary service area indicate that while the population is making some improvements, the population is frequently below the state average on health rankings. This creates a significant impact to Good Shepherd since it is one of the few health care facilities in the area.

**Exhibit 1**  
**Good Shepherd Medical Center**  
**Summary of Inpatient & Outpatient Discharges by Zip Code**

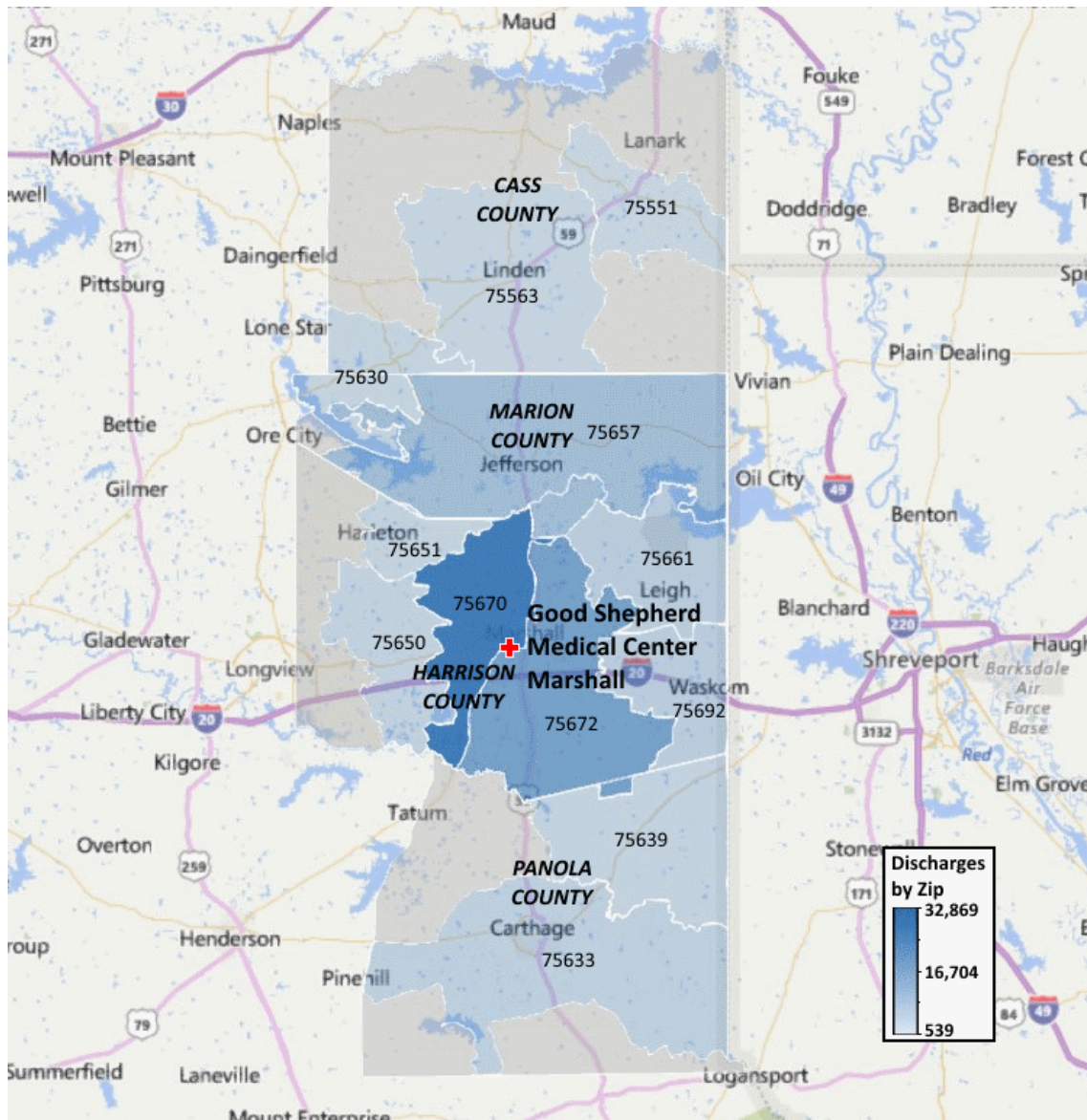
	City	Zip Code	Discharges	Percent Discharges
<b>Harrison County</b>				
	Marshall	75670	16407	35.0%
	Marshall	75671	999	2.1%
	Marshall	75672	10447	22.3%
	Karnack	75661	1807	3.9%
	Waskom	75692	1755	3.7%
	Hallsville	75650	774	1.7%
	Harleton	75651	680	1.5%
		Total Harrison	27,853	79.8%
<b>Marion County</b>				
	Avinger	75630	462	1.0%
	Jefferson	75657	4,697	10.0%
		Total Marion	5,159	14.8%
<b>Panola County</b>				
	Carthage	75633	1,198	1.8%
	De Berry	75639	715	1.5%
		Total Panola	1,913	5.5%
<b>Cass County</b>				
	Linden			
	Atlanta	75563	420	0.9%
		75551	119	0.3%
		Total Cass	539	1.5%
		Total	34,925	

*Note: Community zip codes were identified as key community zip codes based on the qualification that 1) 80% of the Hospital's discharge population was found in those zip codes, 2) the zip codes is a continuous county and 3) has greater than 1% of the discharges.*

## Community Details

### *Identification and Description of Geographical Community*

The following map geographically illustrates Good Shepherd's community by showing the community zip codes shaded by the number of inpatient discharges. The map below displays the Medical Center'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 community. It also provides the breakout of the community between the male and female population, age distribution, race/ethnicity and the Hispanic population.

**Exhibit 2**  
**Demographic Snapshot**  
**Good Shepherd Medical Center - Marshall**

### DEMOGRAPHIC CHARACTERISTICS

	Total Population		Cass	Harrison	Marion	Panola
Cass County, TX	30,344	Total Male Population	14,525	32,555	5,177	11,560
Marion County, TX	66,467	Total Female Population	15,819	33,912	5,262	12,317
Panola County, TX	10,439					
Harrison County, TX	23,877					
Total Service Area	131,127					
Texas	25,639,372					
United States	311,536,591					

### POPULATION DISTRIBUTION

Age Distribution									
Age Group	Percent of Total				Community	Texas	Percent of Total TX	United States	Percent of Total US
	Cass	Harrison	Marion	Panola					
0 - 4	1,734	4,563	493	1,548	6%	1,934,973	7.55%	20,052,112	6.44%
5 - 17	5,176	12,362	1,455	4,275	18%	4,989,934	19.46%	53,825,364	17.28%
18 - 24	2,238	6,594	586	2,115	9%	2,634,158	10.27%	31,071,264	9.97%
25 - 34	3,146	8,033	989	2,859	11%	3,690,303	14.39%	41,711,276	13.39%
35 - 44	3,548	8,169	1,177	2,801	12%	3,510,980	13.69%	40,874,160	13.12%
45 - 54	4,209	9,183	1,678	3,249	14%	3,435,096	13.40%	44,506,268	14.29%
55 - 64	4,270	8,450	1,727	3,240	13%	2,707,582	10.56%	37,645,104	12.08%
65+	6,023	9,113	2,334	3,790	16%	2,736,346	10.67%	41,851,043	13.43%
Total	30,344	66,467	10,439	23,877	100%	25,639,372	100%	311,536,591	100%

### RACE

Race Distribution					
Race	Cass	Harrison	Marion	Panola	Percent of Total Community
White Non-Hispanic	24,797	49,701	7,846	18,852	77.17%
Black Non-Hispanic	5,176	15,257	2,482	4,237	20.71%
Asian and Pacific Island Non-Hispanic	139	342	81	70	0.48%
All Others	232	1,167	30	719	1.64%
Total	30,344	66,467	10,439	23,878	100%

### HISPANIC POPULATION

Percent of Total									
	Cass	Harrison	Marion	Panola	Community	Texas	Percent of Total TX	United States	Percent of Total US
Hispanic	1,149	7,602	359	230	7.12%	9,717,727	37.90%	51,786,592	16.62%
Non-Hispanic	29,195	58,865	10,080	23,648	92.88%	15,921,645	62.10%	259,749,999	83.38%
Total	30,344	66,467	10,439	23,878	100%	25,639,372	100%	311,536,591	100%

Source: Community Commons (ACS 2008-2012 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 community by race illustrates different categories of race, such as white, black, Asian, other and multiple races. White non-Hispanics make up 93% of the community.

*Exhibit 3* reports the percentage of population living in Inside MSA and Outside MSA areas. Inside MSA areas are identified using population density, count and size thresholds. Inside MSA areas also include territory with a high degree of impervious surface (development). Outside MSA areas are all areas that are not Inside MSA.

**Exhibit 3**  
**Good Shepherd Medical Center**  
**Inside/Outside MSA Population**

County	Percent Inside MSA	Percent Outside MSA
Cass	25.99%	74.01%
Harrison	43.95%	56.05%
Marion	0.00%	100.00%
Panola	27.28%	72.72%
<b>TEXAS</b>	84.70%	15.30%
<b>UNITED STATES</b>	80.89%	19.11%

*Source: Community Commons*



## ***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 community. The following exhibits are a compilation of data that includes household per capita income, employment rates, poverty, uninsured population and educational attainment for the community. These standard measures will be used to compare the socioeconomic status of the community to the state of Texas and the United States.

### ***Income and Employment***

*Exhibit 4* presents the per capita income for the CHNA community. This includes all reported income from wages and salaries, as well as income from self-employment, interest or dividends, public assistance, retirement and other sources. The per capita income in this exhibit is the average (mean) income computed for every man, woman and child in the specified area. Panola is the only county that has a per capita income that is above the state of Texas.

**Exhibit 4**  
**Good Shepherd Medical Center**  
**Per Capita Income**

County	Total Population	Total Income (\$)	Per Capita Income (\$)
Cass	23,434	\$610,022,912	\$26,032
Harrison	49,542	\$1,544,411,776	\$31,174
Marion	8,491	\$212,299,008	\$25,003
Panola	18,054	\$633,329,088	\$35,080
<b>TEXAS</b>	25,639,372	\$667,104,706,560	\$26,019
<b>UNITED STATES</b>	311,536,608	\$8,771,308,355,584	\$28,155

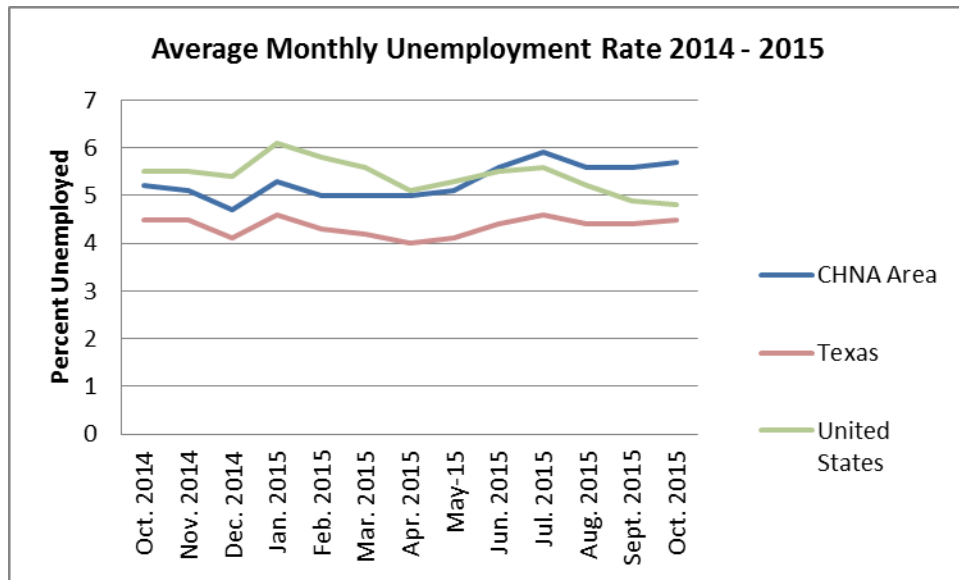
*Source : Community Commons*



### *Unemployment Rate*

*Exhibit 5* presents the average annual unemployment rate from 2004 - 2013 for the community defined as the community, as well as the trend for Texas and the United States. On average, the unemployment rate for the community is on target with the state of Texas United States and equivalent with the United States.

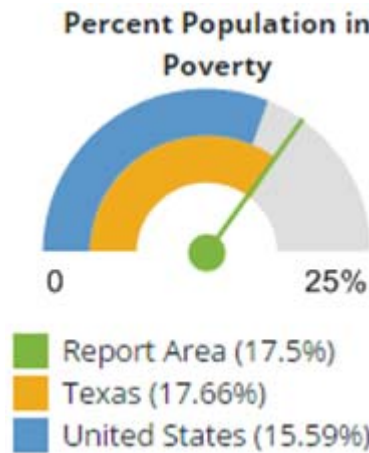
**Exhibit 5**



*Data Source: U.S. Department of Labor, Bureau of Labor Statistics. 2015 – May.*

## 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.



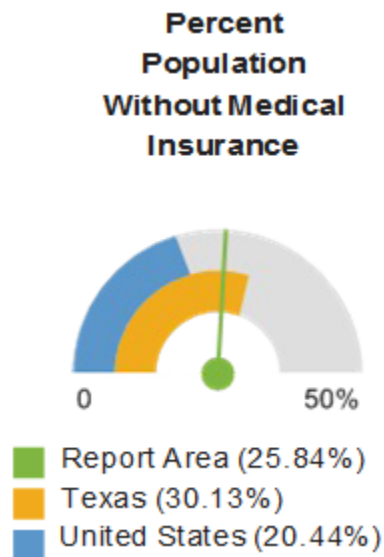
Report Area	Total Population	Population in Poverty	Percent Population in Poverty
Report Area	128,411	22,476	17.5%
Cass County, TX	29,803	6,218	20.86%
Harrison County, TX	65,199	10,618	16.29%
Marion County, TX	10,128	2,416	23.85%
Panola County, TX	23,281	3,224	13.85%
Texas	25,478,976	4,500,034	17.66%
United States	306,226,400	47,755,608	15.59%

Note: This indicator is compared with the state average.

Data Source: US Census Bureau, [American Community Survey](#), 2010-14. Source geography: Tract

***Uninsured***

*Exhibit 7* reports the percentage of the total civilian non-institutionalized population without health insurance coverage. This indicator is relevant because lack of insurance is a primary barrier to health care access, including regular primary care, specialty care and other health services that contribute to poor health status. Over 19,550 persons are uninsured in the CHNA community. Marion County has the highest uninsured rate of 28.42%.



### 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.

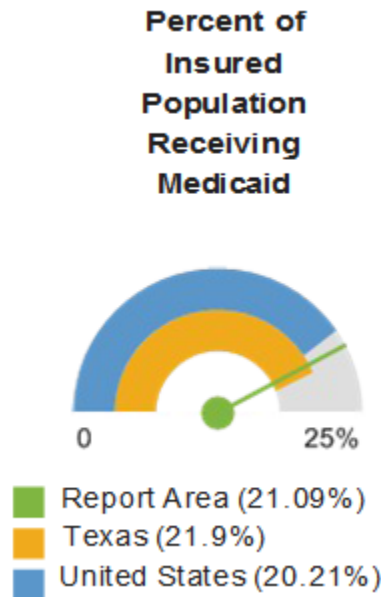


Exhibit 8	Total Population (For Whom Insurance Status is Determined)	Population with Any Health Insurance	Population Receiving Medicaid	Percent of Insured Population Receiving Medicaid
Total CHNA Community	129,204	102,241	21,565	21.09%
Cass County, TX	29,778	23,719	5,531	23.32%
Harrison County, TX	65,549	51,030	10,046	19.69%
Marion County, TX	10,304	7,972	2,222	27.87%
Panola County, TX	23,573	19,520	3,766	19.29%
Texas	25,158,370	19,412,064	4,251,929	21.9%

*Note: This indicator is compared with the state average.*

*Data Source: US Census Bureau, [American Community Survey](#), 2009-13.*

*Data Source: US Census Bureau, [Small Area Health Insurance Estimates](#), 2013.*

## Education

*Exhibit 9* presents the population with an Associate's level degree or higher in each county versus Texas and the United States.

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 obtaining an Associate's degree or higher is below the state percentage.

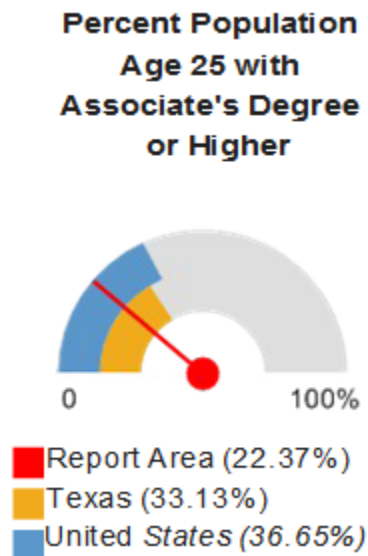


Exhibit 9	Total Population Age 25	Population Age 25 with Associate's Degree or Higher	Percent Population Age 25 with Associate's Degree or Higher
Total CHNA Community	87,988	19,685	<b>22.37%</b>
Cass County, TX	21,196	4,037	<b>19.05%</b>
Harrison County, TX	42,948	11,081	<b>25.8%</b>
Marion County, TX	7,905	1,437	<b>18.18%</b>
Panola County, TX	15,939	3,130	<b>19.64%</b>
Texas	16,080,307	5,327,302	33.13%
United States	206,587,856	75,718,936	36.65%

Note: This indicator is compared with the state average.

Data Source: US Census Bureau, [American Community Survey](#). 2009-13.

## 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.

**Grocery Stores, Rate  
(Per 100,000 Population)**

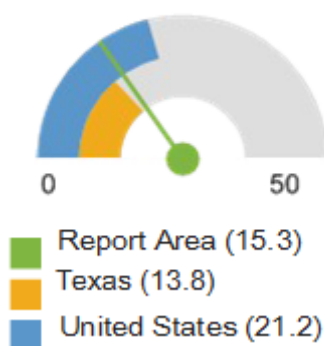


Exhibit 10	Total Population	Number of Establishments	Establishments, Rate per 100,000 Population
Total CHNA Community	130,437	20	<b>15.3</b>
Cass County, TX	30,464	4	<b>13.13</b>
Harrison County, TX	65,631	11	<b>16.76</b>
Marion County, TX	10,546	2	<b>18.96</b>
Panola County, TX	23,796	3	<b>12.61</b>
Texas	25,145,561	3,473	13.8
United States	312,732,537	66,286	21.2

Note: This indicator is compared with the state average.

Data Source: US Census Bureau, [County Business Patterns](#). Additional data analysis by [CARES](#), 2013.

### 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.

#### Percent Population with Low Food Access

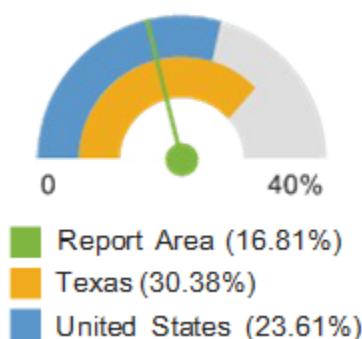


Exhibit 11	Total Population	Population with Low Food Access	Percent Population with Low Food Access
Total CHNA Community	130,437	21,929	16.81%
Cass County, TX	30,464	3,446	11.31%
Harrison County, TX	65,631	11,749	17.9%
Marion County, TX	10,546	1,155	10.95%
Panola County, TX	23,796	5,579	23.45%
Texas	25,145,561	7,639,114	30.38%
United States	308,745,538	72,905,540	23.61%

Note: This indicator is compared with the state average.

Data Source: US Department of Agriculture, Economic Research Service, [USDA - Food Access Research Atlas](#), 2010



### 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 Cass, Marion, and Panola Counties do not have any fitness establishments available to the residents.

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

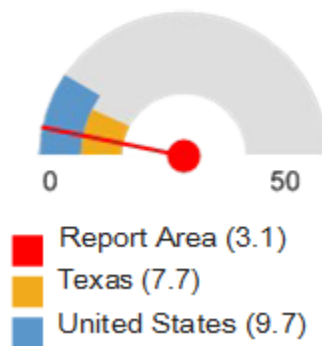


Exhibit 12	Total Population	Number of Establishments	Establishments, Rate per 100,000 Population
Total CHNA Community	130,437	4	3.1
Cass County, TX	30,464	0	0
Harrison County, TX	65,631	4	6.09
Marion County, TX	10,546	0	0
Panola County, TX	23,796	0	0
Texas	25,145,561	1,932	7.7
United States	312,732,537	30,393	9.7

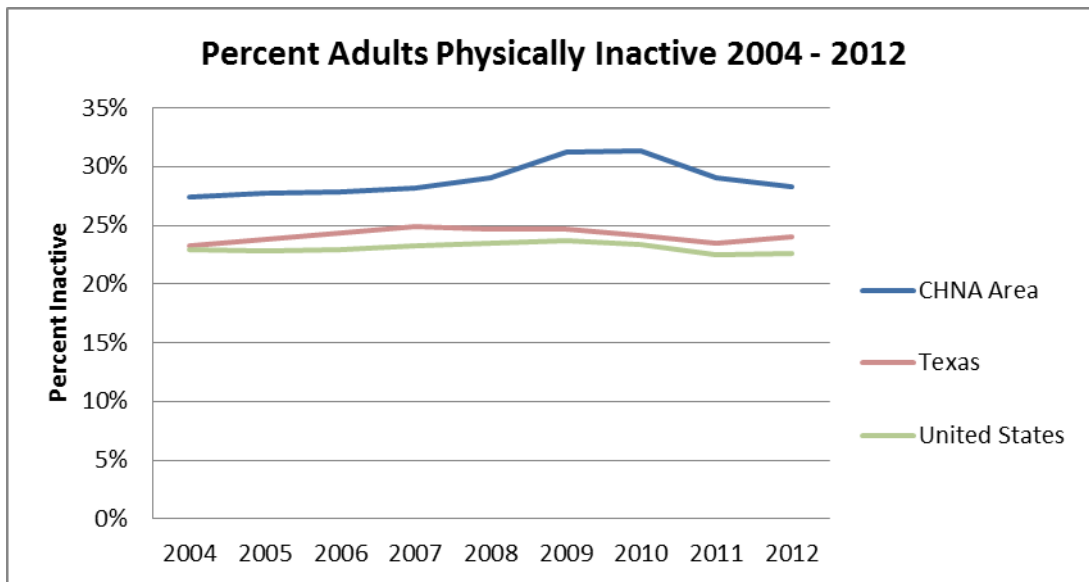
Note: This indicator is compared with the state average.

Data Source: US Census Bureau, [County Business Patterns](#). Additional data analysis by [CARES](#), 2013.

### Physical Activity

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. Although the trend saw a decrease in 2009, the percentage of adults physically inactive within the community has slightly increased since 2004.

**Exhibit 13**



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

## 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 un-insurance, 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.

**Primary Care Physicians,  
Rate per 100,000 Pop.**

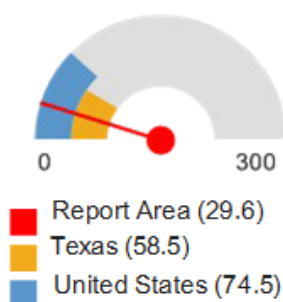


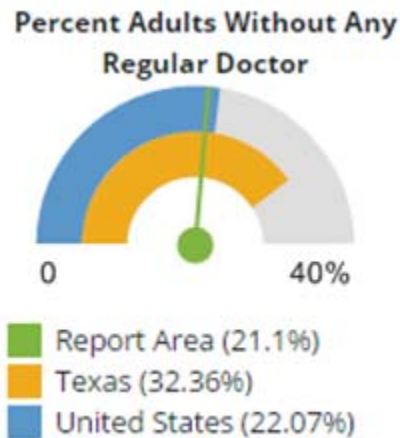
Exhibit 14	Total Population, 2012	Primary Care Physicians, 2012	Primary Care Physicians, Rate per 100,000 Pop.
Total CHNA Community	131,960	39	29.6
Cass County, TX	30,166	11	36.5
Harrison County, TX	67,450	18	26.7
Marion County, TX	10,324	0	0
Panola County, TX	24,020	10	41.6
Texas	26,059,203	15,254	58.5
United States	313,914,040	233,862	74.5

*Note: This indicator is compared with the state average.*

*Data Source: US Department of Health & Human Services, Health Resources and Services Administration*

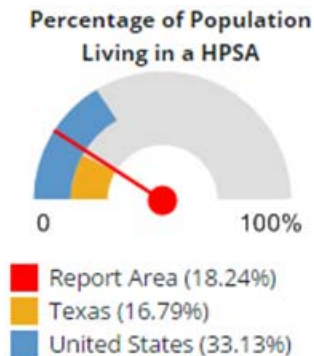
***Lack of a Consistent Source of Primary Care***

*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.



### 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, 100% of the residents from all counties within the CHNA community are living in a health professional shortage area.



Report Area	Survey Population (Adults Age 18+)	Total Adults Without Any Regular Doctor	Percent Adults Without Any Regular Doctor
Report Area	98,981	20,864	21.1%
Report Area	Total Area Population	Population Living in a HPSA	Percentage of Population Living in a HPSA
Report Area	130,437	23,796	18.24%
Cass County, TX	30,464	0	0%
Harrison County, TX	65,631	0	0%
Marion County, TX	10,546	0	0%
Panola County, TX	23,796	23,796	100%
Texas	25,145,561	4,222,353	16.79%
United States	308,745,538	102,289,607	33.13%

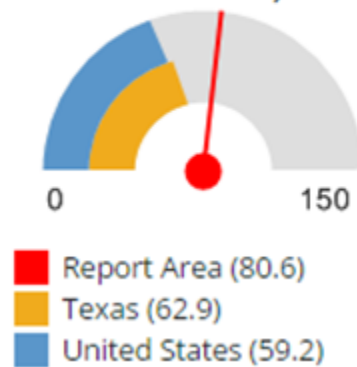
Note: This indicator is compared with the state average.

Data Source: US Department of Health & Human Services, Health Resources and Services Administration, [Health Resources and Services Administration](#). April 2016. Source geography: HPSA

### 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.

**Preventable Hospital Events,  
Age-Adjusted Discharge Rate  
(Per 1,000 Medicare  
Enrollees)**



Report Area	Total Medicare Part A Enrollees	Ambulatory Care Sensitive Condition Hospital Discharges	Ambulatory Care Sensitive Condition Discharge Rate
Report Area	16,460	1,326	80.6
Cass County, TX	4,826	472	97.9
Harrison County, TX	6,644	477	71.9
Marion County, TX	1,951	118	60.9
Panola County, TX	3,039	257	84.7
Texas	2,030,887	127,787	62.9
United States	58,209,898	3,448,111	59.2

Note: This indicator is compared with the state average.

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 Cass, Harrison, Marion and Panola county 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 Good Shepherd 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:

<b>Lifestyle</b>	<b>Primary Disease Factor</b>
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



<b>Lifestyle</b>	<b>Primary Disease Factor</b>
Driving at excessive speeds	Trauma Motor vehicle crashes
Lack of exercise	Cardiovascular disease Depression
Overstressed	Mental illness Alcohol/drug abuse Cardiovascular disease

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

## Leading Causes of Death and Health Outcomes

*Exhibit 18.1 and Exhibit 18.2* reflect the leading causes of death for the community and compare the rates to the state of Texas and the United States.

**Exhibit 18.1**

**Good Shepherd Medical Center  
Selected Causes of Resident Deaths: Number and Crude Rate**

	Cass		Harrison		Texas		United States	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Cancer	80	264.7	129	195.2	37,243	145.3	577,313	185.4
Heart disease	116	381.48	143	215.12	38,738	151.17	600,899	192.95
Ischaemic heart disease	75	246.2	83	125.8	23,779	92.8	390,568	127.43
Lung disease	19	64.02	42	63.96	9,198	35.89	142,214	45.66
Stroke	27	88.4	33	50.1	9,194	35.9	131,470	42.9
Unintentional injury	19	61.38	37	55.82	9,336	36.43	125	40.05
Motor vehicle	8	27.7	18	26.9	3,356	13.1	34,139	11
Suicide	7	21.8	10	14.8	2,938	11.5	39,308	12.6

**Exhibit 18.2**

**Good Shepherd Medical Center  
Selected Causes of Resident Deaths: Number and Crude Rate**

	Marion		Panola		Texas		United States	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Cancer	35	338.6	55	229.4	37,243	145.3	577,313	185.4
Heart disease	33	313.69	55	229.44	38,738	151.17	600,899	192.95
Ischaemic heart disease	21	200.8	34	141.5	23,779	92.8	390,568	127.43
Lung disease	15	145.37	18	73.69	9,198	35.89	142,214	45.66
Stroke	9	84.2	12	51.1	9,194	35.9	131,470	42.9
Unintentional injury	5	49.73	17	69.5	9,336	36.43	125	40.05
Motor vehicle	2	23	10	43.5	3,356	13.1	34,139	11
Suicide	3	26.8	4	15.9	2,938	11.5	39,308	12.6

*Source: Community Commons 2007-2011*

The tables above show leading causes of death within each county 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 yellow represent the county and corresponding leading cause of death that is greater than the state rate. As the tables indicate, all of the leading causes of death above are greater than the Texas rate.

## **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 CHNA 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 on the following summary measures:

- ✓ Health outcomes – rankings are based on an equal weighting of one length of life (mortality) measure and four quality of life (morbidity) measures.
- ✓ Health factors – rankings are based on weighted scores of four types of factors:
  - Health behaviors (nine measures);
  - Clinical care (seven measures);
  - Social and economic (nine measures); and
  - Physical environment (five measures)

A more detailed discussion about the ranking system, data sources and measures, data quality and calculating scores and ranks can be found at the website for County Health Rankings ([www.countyhealthrankings.org](http://www.countyhealthrankings.org)).

As seen in *Exhibit 19.1 – 19.4*, the relative health status of each county within the community will be compared to the state of Texas as well as to a national benchmark. The current year information is compared to the health outcomes reported on the prior community health needs assessment and the change in measures is indicated. 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.

The counties in the CHNA Community experienced a wide fluctuation in county ranking changes from 2012 to 2015. Both Harrison County (Mortality Rank:185 to 173 and Morbidity Rank:167 to 155) and Marion County (220 to 219 and 221 to 134) improved their county ranking in relation to the other 237 counties in Texas. Panola County experience an improved Morbidity Rank (142 to 99), but a drop in their Mortality Rank (156 to 178). Cass County experienced a drop in both rankings (165 to 215 and 198 to 215).

The CHNA Community counties are all in the bottom 25% ranking in mortality (*i.e.*, premature death before 75) rankings among all Texas counties. The poor mortality score rank illustrates the critical role Good Shepherd plays in the CHNA Community.

**Exhibit 19.1**  
**Good Shepherd Medical Center - Marshall**  
**County Health Rankings – Health Outcomes**

	Cass County 2012	Cass County 2015	Change	Texas 2015	Top U.S. Performers 2015
<i>Mortality</i>	*	165	** 215	↑	
<b>Premature death</b> – Years of potential life lost before age 75 per 100,000 population (age-adjusted)	9,699	10,275	↑	6,650	5,200
<i>Morbidity</i>	*	198	** 215	↑	
<b>Poor or fair health</b> – Percent of adults reporting fair or poor health (age-adjusted)	N/A	36%	↑	18%	10%
<b>Poor physical health days</b> – Average number of physically unhealthy days reported in past 30 days (age-adjusted)	5.4	5.2	↓	3.7	2.5
<b>Poor mental health days</b> – Average number of mentally unhealthy days reported in past 30 days (age-adjusted)	3.8	2.9	↓	3.3	2.3
<b>Low birth weight</b> – Percent of live births with low birth weight (<2500 grams)	9.5%	9.0%	↓	8.4%	5.9%

\* Rank out of 221 Texas counties in 2010

\*\* Rank out of 237 Texas counties in 2015

Note: N/A indicates unreliable or missing data

Source: *Countyhealthrankings.org*

**Exhibit 19.2**  
**Good Shepherd Medical Center - Marshall**  
**County Health Rankings – Health Outcomes**

	Harrison County 2012	Harrison County 2015	Change	Texas 2015	Top U.S. Performers 2015
<i>Mortality</i>	*	185	** 173	↓	
<b>Premature death</b> – Years of potential life lost before age 75 per 100,000 population (age-adjusted)	10,393	9,113	↓	6,650	5,200
<i>Morbidity</i>	*	167	** 155	↓	
<b>Poor or fair health</b> – Percent of adults reporting fair or poor health (age-adjusted)	20%	18%	↓	18%	10%
<b>Poor physical health days</b> – Average number of physically unhealthy days reported in past 30 days (age-adjusted)	3.5	3.8	↑	3.7	2.5
<b>Poor mental health days</b> – Average number of mentally unhealthy days reported in past 30 days (age-adjusted)	4.2	4.8	↑	3.3	2.3
<b>Low birth weight</b> – Percent of live births with low birth weight (<2500 grams)	9.2%	9.6%	↑	8.4%	5.9%

\* Rank out of 221 Texas counties in 2010

\*\* Rank out of 237 Texas counties in 2015

Note: N/A indicates unreliable or missing data

Source: *Countyhealthrankings.org*

**Exhibit 19.3**  
**Good Shepherd Medical Center - Marshall**  
**County Health Rankings – Health Outcomes**

	Marion County 2012	Marion County 2015	Change	Texas 2015	Top U.S. Performers 2015
<i>Mortality</i>	*	220	** 219	↓	
<b>Premature death</b> – Years of potential life lost before age 75 per 100,000 population (age-adjusted)	14,160	10,452	↓	6,650	5,200
<i>Morbidity</i>	*	221	** 134	↓	
<b>Poor or fair health</b> – Percent of adults reporting fair or poor health (age-adjusted)	N/A	N/A		18%	10%
<b>Poor physical health days</b> – Average number of physically unhealthy days reported in past 30 days (age-adjusted)	7.0	N/A		3.7	2.5
<b>Poor mental health days</b> – Average number of mentally unhealthy days reported in past 30 days (age-adjusted)	5.0	N/A		3.3	2.3
<b>Low birth weight</b> – Percent of live births with low birth weight (<2500 grams)	10.5%	8.7%	↓	8.4%	5.9%

\* Rank out of 221 Texas counties in 2010

\*\* Rank out of 237 Texas counties in 2015

Note: N/A indicates unreliable or missing data

Source: Countyhealthrankings.org

**Exhibit 19.4**  
**Good Shepherd Medical Center - Marshall**  
**County Health Rankings – Health Outcomes**

	Panola County 2012	Panola County 2015	Change	Texas 2015	Top U.S. Performers 2015
<b>Mortality</b>	*	** 178	↑		
<b>Premature death</b> – Years of potential life lost before age 75 per 100,000 population (age-adjusted)	9,490	9,210	↓	6,650	5,200
<b>Morbidity</b>	*	** 99	↓		
<b>Poor or fair health</b> – Percent of adults reporting fair or poor health (age-adjusted)	16%	15%	↓	18%	10%
<b>Poor physical health days</b> – Average number of physically unhealthy days reported in past 30 days (age-adjusted)	5.3	4.8	↓	3.7	2.5
<b>Poor mental health days</b> – Average number of mentally unhealthy days reported in past 30 days (age-adjusted)	6.0	NA		3.3	2.3
<b>Low birth weight</b> – Percent of live births with low birth weight (<2500 grams)	7.3%	8.1%	↑	8.4%	5.9%

\* Rank out of 221 Texas counties in 2010

\*\* Rank out of 237 Texas counties in 2015

Source: Countyhealthrankings.org

The above tables show that mortality outcomes ratings have improved for Harrison and Marion counties. Mortality outcomes ratings have declined for Cass and Panola counties. However, morbidity ranking have improved for all counties but Cass County where morbidity rankings have declined.

A number of different health factors shape a community's health outcome. The County Health Rankings model includes four types of health factors: health behaviors, clinical care, social and economic and the physical environment. The following summary shows some of the major improvements from prior year to current year and challenges faced by each county in the Medical Center's community. The improvements/challenges shown below in *Exhibits 20* were determined using a process of comparing the rankings of each county's health outcome in the current year to the rankings in 2012. If the current year rankings showed an improvement or decline of 4% or four points, they were included in the charts below. Please refer to Appendix D for the full list of health factor findings and comparisons between prior year information reported and current year information.



**Exhibit 20**

**Cass County:**

Improvements	Challenges
Primary care physicians - ratio of population to primary care physicians increased from 3,249:1 to 2,742:1	Physical inactivity - Percent of adults age 20 and over reporting no leisure time physical activity decreased from 34% to 29%
Preventable hospital stays - Hospitalization rate for ambulatory - care sensitive conditions per 1,000 Medicare enrollees decreased from 109 to 98	Sexually Transmitted Infections – chlamydia rate per 100,000 population increased from 260 to 308
	High school graduation - percent of ninth grade cohort that graduates in 4 years from 97% to 93%

**Harrison County:**

Improvements	Challenges
Some college - Percent of adults age 25-44 years with some post - secondary education increased from 47.9% to 52.2%	Sexually Transmitted Infections – chlamydia rate per 100,000 population increased from 289 to 482
Violent crime rate - Violent crime rate per 100,000 population (age-adjusted) decreased from 456 to 405.	Primary care physicians - ratio of population to primary care physicians decreased from 2,899:1 to 3,747:1
Preventable hospital stays - hospitalization rate for ambulatory - care sensitive conditions per 1,000 Medicare enrollees decreased from 89 to 72	

**Panola County:**

Improvements	Challenges
Primary care physicians - ratio of population to primary care physicians increased from 3,312:1 to 2,402:1	Sexually Transmitted Infections – chlamydia rate per 100,000 population increased from 247 to 446

**Marion County:**

<b>Improvements</b>	<b>Challenges</b>
Teen birth rate - Per 1,000 female population, ages 15-19 decreased from 70 to 57	Sexually Transmitted Infections – chlamydia rate per 100,000 population increased from 199 to 262
Preventable hospital stays - hospitalization rate for ambulatory - care sensitive conditions per 1,000 Medicare enrollees from 108 to 61	Mammography screening - percent of female Medicare enrollees that receive mammography screening from 57.9% to 52.1%
High school graduation - percent of ninth grade cohort that graduates in 4 years increased from 83% to 98%	Violent crime rate - Violent crime rate per 100,000 population (age-adjusted) increased from 404 to 550.
Some college - Percent of adults age 25-44 years with some post- secondary education increased from 42.4% to 54.1%	
Unemployment percent of population age 16+ unemployed but seeking work decreased 10.3% to 6.9%	
Children in poverty - percent of children under age 18 in poverty decreased from 35% to 28%	

As can be seen from the summarized tables above, there are several areas of the community that have room for improvement when compared to the state statistics and prior years; however, there are also significant improvements made within each county from the prior year CHNA report.

The following exhibits show a more detailed view of certain health outcomes and factors. The percentages for each county and the community as a whole are compared to the state of Texas.

### 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.

**Percent Adults with  
Diagnosed Diabetes  
(Age-Adjusted)**

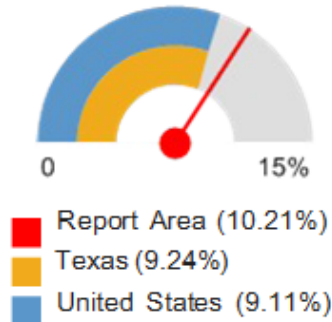


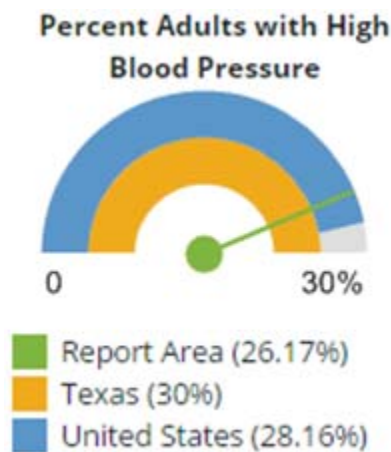
Exhibit 21	Total Population Age 20	Population with Diagnosed Diabetes	Population with Diagnosed Diabetes, Crude Rate	Population with Diagnosed Diabetes, Age-Adjusted Rate
Report Area	96,431	11,580	12.01	<b>10.21%</b>
Cass County, TX	22,585	2,936	13	<b>10.3%</b>
Harrison County, TX	48,181	5,589	11.6	<b>10.4%</b>
Marion County, TX	8,152	1,076	13.2	<b>10%</b>
Panola County, TX	17,513	1,979	11.3	<b>9.7%</b>
Texas	18,357,669	1,698,171	9.25	9.24%
United States	234,058,710	23,059,940	9.85	9.11%

*Note: This indicator is compared with the state average.*

*Data Source: Centers for Disease Control and Prevention, [National Center for Chronic Disease Prevention and Health Promotion](#). 2012.*

### High Blood Pressure (Adult)

Per *Exhibit 22* below, 18,693 or 26.17% of adults aged 18 and older have been told by a doctor that they have high blood pressure or hypertension. The community percentage of high blood pressure among adults is higher than the percentage of Texas and the United States.



Report Area	Total Population (Age 18+)	Total Adults with High Blood Pressure	Percent Adults with High Blood Pressure
Report Area	97,948	18,693	<b>26.17%</b>
Cass County, TX	23,256	6,744	<b>29%</b>
Harrison County, TX	48,183	11,949	<b>24.8%</b>
Marion County, TX	8,649	no data	suppressed
Panola County, TX	17,860	no data	suppressed
Texas	17,999,726	5,399,918	30%
United States	232,556,016	65,476,522	28.16%

Note: This indicator is compared with the state average.

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

### Obesity

Of adults aged 20 and older, 32.2% 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. All five counties have a BMI percentage greater than the state rate.

#### Percent Adults with BMI > 30.0 (Obese)

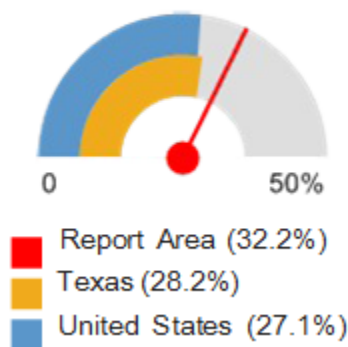


Exhibit 23	Total Population Age 20	Adults with BMI > 30.0 (Obese)	Percent Adults with BMI > 30.0 (Obese)
Total CHNA Community	96,565	31,223	<b>32.2%</b>
Cass County, TX	22,642	6,951	<b>30.8%</b>
Harrison County, TX	48,239	15,919	<b>32.8%</b>
Marion County, TX	8,155	2,691	<b>33.1%</b>
Panola County, TX	17,529	5,662	<b>32.2%</b>
Texas	18,326,228	5,204,739	28.2%
United States	231,417,834	63,336,403	27.1%

Note: This indicator is compared with the state average.

Data Source: Centers for Disease Control and Prevention, [National Center for Chronic Disease Prevention and Health Promotion](#). 2012.

### 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 that of the information available, all counties except for Panola County have higher rates of poor dental health than the state and national rates.

#### Percent Adults with Poor Dental Health

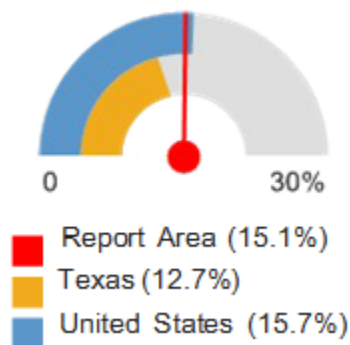


Exhibit 24	Total Population (Age 18 )	Total Adults with Poor Dental Health	Percent Adults with Poor Dental Health
Total CHNA Community	97,482	14,716	<b>15.1%</b>
Cass County, TX	23,172	2,841	<b>12.3%</b>
Harrison County, TX	47,876	10,152	<b>21.2%</b>
Marion County, TX	8,705	0	<b>0%</b>
Panola County, TX	17,729	1,723	<b>9.7%</b>
Texas	17,999,726	2,279,845	12.7%
United States	235,375,690	36,842,620	15.7%

Note: This indicator is compared with the state average.

Data Source: Centers for Disease Control and Prevention, [Behavioral Risk Factor Surveillance System](#). Additional data analysis by [CARES](#). 2006-10.

### 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.

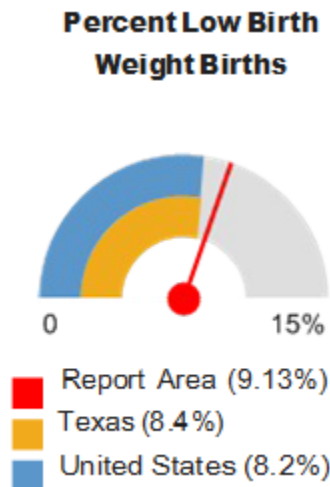


Exhibit 25	Total Live Births	Low Weight Births (Under 2500g)	LowWeightBirths, Percent of Total
Total CHNA Community	11,396	1,041	<b>9.13%</b>
Cass County, TX	2,450	221	<b>9%</b>
Harrison County, TX	6,062	582	<b>9.6%</b>
Marion County, TX	756	66	<b>8.7%</b>
Panola County, TX	2,128	172	<b>8.1%</b>
Texas	2,759,442	231,793	8.4%
United States	29,300,495	2,402,641	8.2%
<u>HP 2020 Target</u>			<b>&lt;= 7.8%</b>

Note: This indicator is compared with the state average.

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



## **Community Input – Key Stakeholder Surveys**

Surveying key stakeholders (community members who represent the broad interest of the community, persons representing vulnerable populations or persons with knowledge of or expertise in public health) is a technique employed to assess public perceptions of the county's health status and unmet needs. These surveys 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***

Surveys were distributed to 188 key stakeholders. Stakeholders were determined based on a) their 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. We received 53 individual key stakeholder responses to our inquiries.

Participants provided comments 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

Feedback was also solicited regarding community improvements seen since the Medical Center's previous Community Health Needs Assessment in 2013.

Survey questions were provided in narrative form and respondents provided free text responses. Please refer to *Appendix E* for a copy of the survey questions. This technique does not provide a quantitative analysis of the stakeholders' opinions but reveals community input for 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 (see *Appendix E* for a list of key stakeholders) worked for the following types of organizations and agencies:

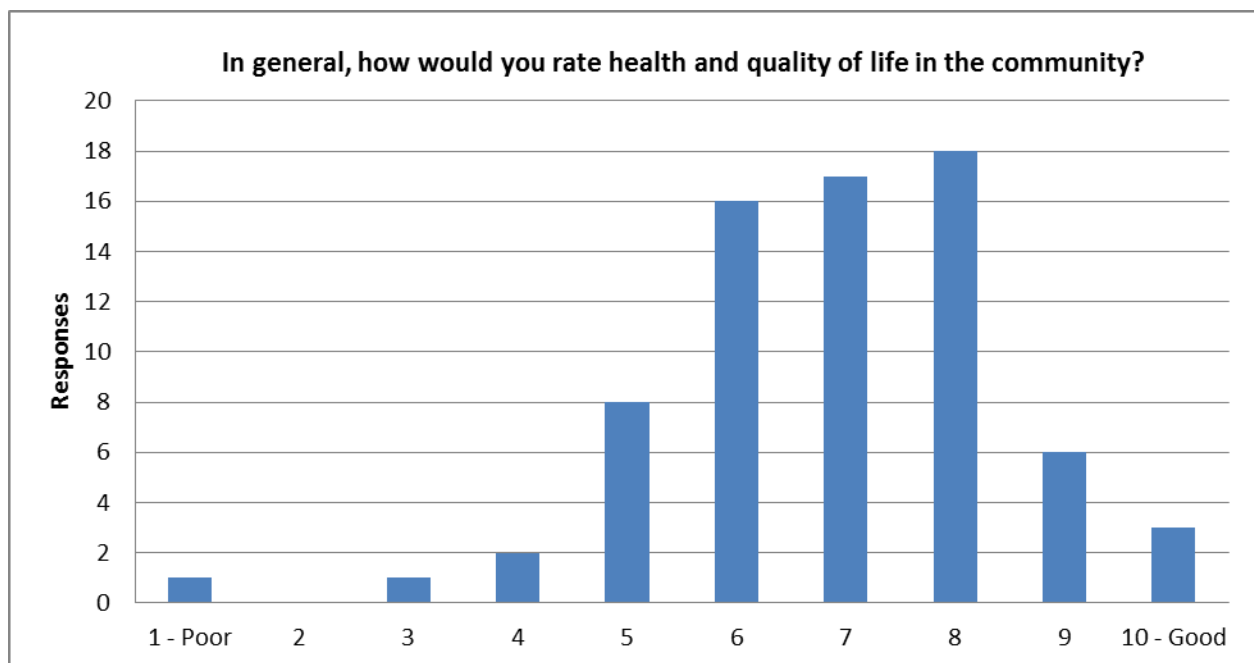
- ✓ Good Shepherd Medical Center
- ✓ Social service agencies
- ✓ Public service agencies (Emergency services, Fire services)
- ✓ Local government agencies
- ✓ Public health agencies
- ✓ Other medical providers
- ✓ Community centers

## **Key Stakeholder Survey Results**

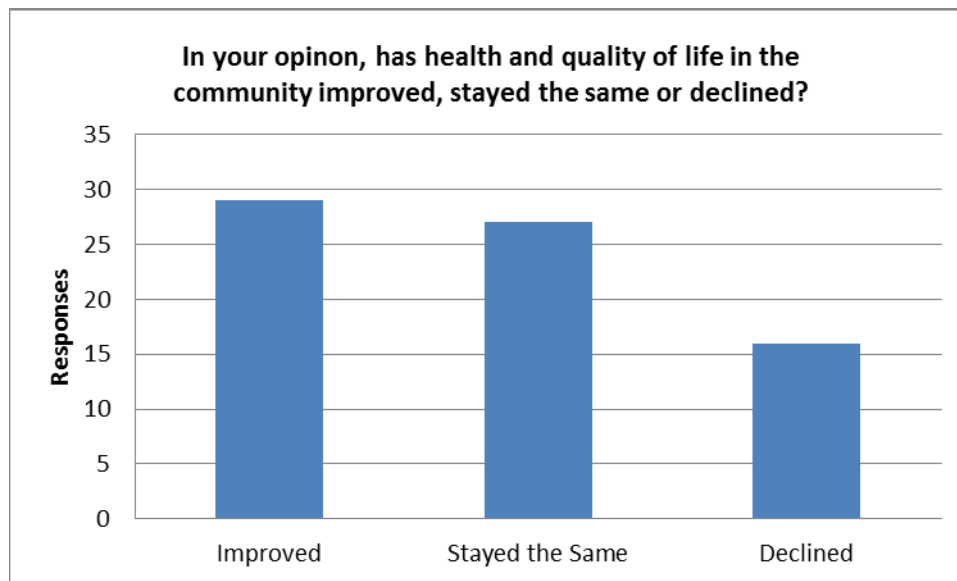
The questions on the survey are grouped into five major categories for discussion. The survey questions for each key stakeholder were identical. A summary of the stakeholders' responses by each of the categories follows. Paraphrased quotes are included to reflect some commonly held opinions and direct 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 communities. 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. Lastly, key stakeholders were asked to provide support for their answers.



Key stakeholders were asked if health and quality of life in the community has improved, stayed the same or declined.



Respondents were then asked to explain why health and quality of life in the community has improved, stayed the same or declined, stakeholders note that improvements have occurred as a result of the community promoting healthier lifestyles through exercise and better eating habits, improvements to hospital facilities and recruiting and awareness of the importance of prevention in the community and with health care providers. Additionally, improvements have resulted from an attitude shift in the community toward improving quality of life and a healthy lifestyle. Respondents also noted that additional specialists have come to the community recently.

Stakeholders who felt health and quality of life had declined stated that many individuals have lost their jobs and health insurance due to the recent decline in the energy sector of the economy, the need for additional doctors in the community, crime rates in the community and little progression with providing mental health services. Respondents also noted that high rates of obesity and chronic diseases have negatively impacted the community's quality of life. The cost of health care and the lack of coverage by insurance was also noted as a challenge to the community especially with health plans with high deductibles and Medicaid coverage.

Lack of mental health services in the community was also attributed to negatively impacting the health and quality of life in the community. Many key stakeholders stated there was a severe shortage of mental health services in the community, specifically outpatient mental health services. While there are a few services available, many who need services lack education regarding behavioral health and resist treatment due to the stigma attached to mental health conditions.

## **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. BKD also asked the key stakeholders to provide their opinions as to if these groups of people have a more difficult time obtaining necessary/preventive medical services.

Respondents noted that persons living with low-incomes or in poverty are 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. Transportation was felt to be a major barrier for persons with few financial resources. The elderly were also identified as a population that is faced with challenges accessing care due to limited transportation, isolation and fixed incomes.

Stakeholders also commented that individuals with mental health concerns, substance abuse issues as well as the homeless population have a significantly difficult time accessing health services and typically have a lower quality of life. Additionally, several stakeholders noted that since Medicaid was not expanded in Texas as a part of the Affordable Care Act, many individuals do not have Medicaid coverage that would allow them to more easily access health care services.

Several of the key stakeholders noted there are language barriers and transportation barriers for the Hispanic population living in the community. The language barrier and lack of legal status for many of these immigrant workers limits the health care services they are able to access, particularly preventative services.

### **3. Barriers**

The key stakeholders were asked what barriers or problems keep community residents from obtaining necessary health services and improving health in their community. The majority of the key stakeholders noted that affordability and financial barriers were primary barriers to accessing health care. Stakeholders indicated that this was due to the economic downturn in the energy section and individuals losing their jobs and health insurance. Additionally, stakeholders indicated that for those who have insurance, it often provides insufficient coverage.

Insufficient primary care physicians in the community was also noted as a barrier to improved health and quality of life. Additionally, stakeholders noted that there is a lack of public awareness of existing community based health programs and services that are currently offered.

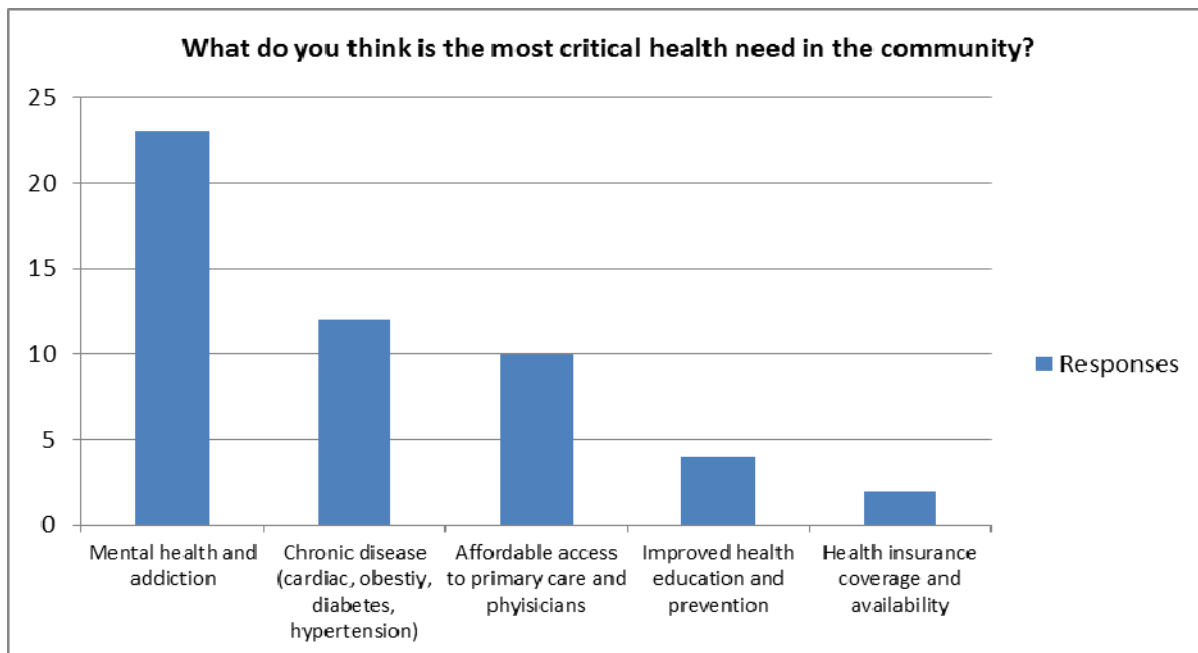
*“The community is in need of family practitioners and specialty physicians. There is also too few mental health agencies, physicians, and facilities willing to take in these patients.”*

Lack of services and funding for mental health was also noted as a significant barrier to community health and quality of life.

#### 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:

- Mental/behavioral health services and addiction services;
- Chronic disease (cardiac, obesity, diabetes, hypertension);
- Affordable access to primary care and physicians;
- Improved health education and prevention; and
- Health insurance coverage and availability.



Mental health was indicated as the most critical health need in the community by nearly half of the respondents.

*“Many of our homeless population also struggle with mental illnesses. This makes their care needs more complex. While we are working on improving this care, we still have a lot of work to do.”*

The stakeholders were asked if there are any issues related to economic development, affordable housing, poverty, education, healthy nutrition, physical activity and drug and alcohol abuse that the hospital specifically should be addressing. Stakeholders responded that drug and alcohol abuse, general health education of the community including the importance of nutrition and physical activity.

In order to address these most critical health issues in the community, stakeholders suggested a more focused effort on health education and community leaders increasing investments in community resources and population health.

*“This burden cannot lie solely on the demands of the hospitals and physicians. We as health care providers do need to branch out of the four walls of the hospitals and be more visible in the community. Education and wellness needs to start earlier in life.”*

*“As a community, we can come together to create ways to improve health such as assess safety in the community for individuals who like to walk; assess quality of sidewalks for walkers, assess restaurants' quality of foods and offer incentives for restaurants with menu items lower than 20g of fat, etc.”*

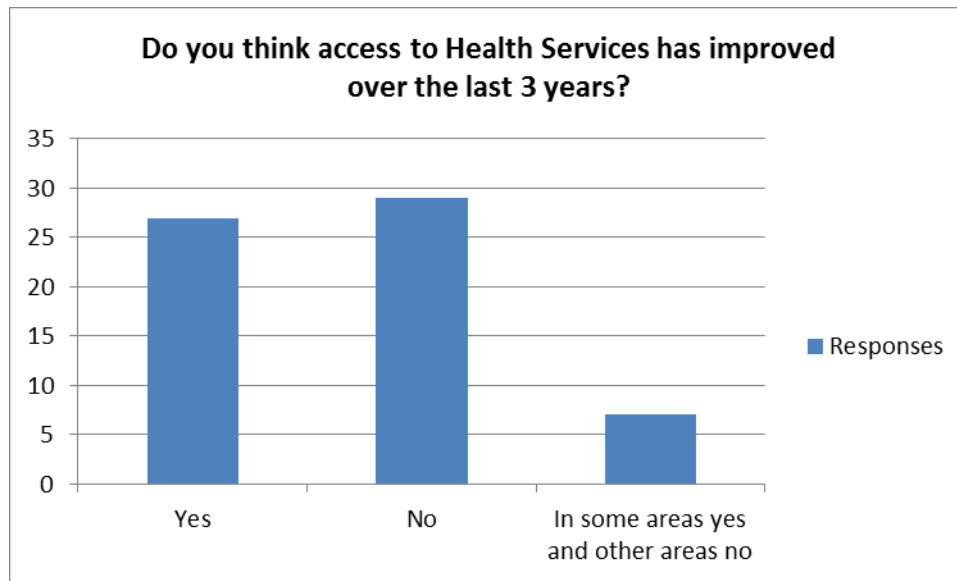
Additional comments focused on improving mental health services and increasing the number of mental health practitioners in the area by first recognizing the mental health issue in the area as well as provide education to the community on mental health issues.

**5. Feedback on health improvements in the community since the prior Community Health Needs Assessment.**

In an effort to evaluate changes in health and health behavior since the 2013 Community Health Needs Assessment, several questions asked about additional significant health needs that were not identified in the 2013 Community Health Needs Assessment. The needs identified in the previous assessment included: Uninsured/lack of access to services (cost), Obesity, Heart Disease, Lack of mental health services, Lack of primary care physicians, Physical inactivity, Diabetes, Poor Nutrition, Utilization of emergency room for episodic care, lack of health education. Additional needs that were identified by stakeholders in this year's survey included:

- Improving Medicaid funding and access to Medicaid;
- Additional health education;
- Substance abuse disorders;
- Homeless population; and
- High deductible insurance plans causing health care to be too expensive.

During the 2013 Community Health Needs Assessment, a significant community need for access to health services emerged as a trend. As a part of this year's survey, stakeholders were asked if they thought Health Services have improved over the past 3 years. The chart below shows the results:



Respondents who responded yes commented that there are more specialists and urgent care facilities available. Some respondents commented that there are more services available but community members may not be taking advantage of those resources.

Those respondents who said that health services have not improved over the last 3 years commented that poor economic trends have results in community members making poor decisions related to their health care, a lack of primary care physicians and a need for increased public awareness about health services and programs that are free and highly subsidized and how to access them.

Respondents were asked how they would rate the hospital's efforts in communicating how they are addressing the identified community health needs. The majority of respondents said that they had at least received communication on how the hospital is addressing needs and many respondents stated that they would rate the hospital's efforts as "good." Respondents stated that they appreciate the mailings and other communications of involvement in the community and new services. Respondents from the local health departments felt that the hospital is doing a good job communicating available resources. Some respondents noted that the hospital should help make the community more aware of newer services such as the NorthPark Medical Plaza and how to access these services.

Respondents were asked about the hospital's role in addressing the identified health needs of the community and they stated that the hospital should contribute to the message about the importance of preventive health care with the aid of media and schools. Additionally, the hospital should be a leader in the community in responding to local health needs including health education, prevention and outreach services to the community.



## **Key Findings**

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

- In general, respondents thought the health and quality of life in the community is good and has either remained the same or improved in the past few years.
- The greatest health concern in the community is mental and behavioral health. Forty-five percent of respondents stated that mental health is the most critical health issue in the community.
- Chronic disease (heart disease, obesity, and hypertension) and affordable access to primary care physicians were the second and third highest ranked critical health issues in the community.
- Many respondents noted that the economic downturn in the energy sector has created unemployment and a loss of health insurance resulting in individuals not being able to access necessary health services.
- Respondents noted that the impact of high deductible and Health Insurance Exchange plans have resulted in many community members not being able to afford health care services. Additionally, respondents noted that the lack of Medicaid expansion in Texas has left many individuals uninsured.
- The addition of specialists in the community and new clinics were seen as positively impacting community health.
- There were mixed views on the health services offered in the community, among those respondents who were aware of community services they noted that the community offers adequate health services. Those respondents who may not be aware of community services noted that better communication of available services was needed.
- Many respondents noted a need for a long term investment in the community to promote healthier lifestyles including additional educational programs on nutrition and health, infrastructure that supports activity include parks, sidewalks and other facilities.
- Education on health issues, preventative care and nutritional information is limited. There is a significant need for community outreach programs aimed to educate patients and those within and around the community.

## **Health Issues of Vulnerable Populations**

According to Dignity Health's Community Need Index (see Appendices), Good Shepherd'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 zip codes that have the highest need in the community are 75602 (Longview) and 75670 (Marshall).

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 surveys 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
  - Lack of mental health services
  - Access to primary care physicians
  - High cost of health care prevents needs from being met
  - Healthy lifestyle and health nutrition education
  - Access to food
- Elderly
  - Transportation
  - Lack of health knowledge regarding how to access services
  - Cost of prescriptions
- Immigrant Population
  - Language barriers
  - Transportation
  - Healthy living education

## **Information Gaps**

This assessment was designed to provide a comprehensive and broad picture of the health in the overall community served by Good Shepherd; 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 surveys.

## **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, Good Shepherd 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 Good Shepherd'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 Good Shepherd CHNA community.

### ***Health Outcomes and Factors***

An analysis of the County Health Rankings health outcomes and factors data was prepared for each county within Good Shepherd'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.

### ***Primary Data***

Health needs identified through key informant surveys 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 surveys 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, primary causes for inpatient hospitalization, 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

- Obesity/Heart Disease/Diabetes and other Chronic Diseases
- Lack of Mental Health Providers/Services
- Lack of Access to Services
- Healthy Behaviors/Lifestyle Choices
- Poor Nutrition/Limited Access to Healthy Food Options
- Lack of Primary Care Physicians/Hours
- Substance Abuse
- Physical Inactivity
- Adult Smoking/Tobacco Use
- Lack of Health Knowledge/Education
- Children in Poverty/Homelessness
- Access to Exercise Opportunities
- Uninsured/Limited Insurance
- Diabetic Screen Rates
- Transportation
- Sexually Transmitted Infections
- Language/Cultural Barriers

### *Management's Prioritization Process*

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

- ✓ Current area of hospital focus;
- ✓ Established relationships with community partners to address the health need; and
- ✓ Organizational capacity and existing infrastructure to address the health need.

Based on the criteria outlined above, the leadership team ranked each of the health needs. As a result of the priority setting process, there are identified priority areas that will be addressed through Good Shepherd's Implementation Strategy for fiscal years 2017-2019.

Good Shepherd's next steps include developing an implementation strategy to address these priority areas. The timeline for implementation of these priority areas is during the fiscal years 2017-2019.

**Exhibit 26**  
**Good Shepherd Medical Center - Marshall**  
**Prioritization of Health Needs**

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	
	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 *
<b>Behavior</b>						
Obesity/Heart Disease/Diabetes and other chronic disease	5	5	3	5	4	22
Lack of Mental Health Providers/Services	5	3	4	5	2	19
Lack of Access to Services	5	3	4	5	2	19
Healthy Behaviors/Lifestyle Choices	5	4	4	4	2	19
Poor Nutrition/Limited Access to Healthy Food Options	5	4	4	3	2	18
Lack of Primary Care Physicians/Hours	4	2	3	5	4	18
Substance Abuse	5	4	2	5	1	17
Physical Inactivity	5	3	4	4	1	17
Adult Smoking/Tobacco Use	5	5	3	2	2	17
Lack of Health Knowledge/Education	5	1	4	4	2	16
Children in Poverty/Homelessness	5	2	5	2	2	16
Access to Exercise Opportunities	5	3	3	4	1	16
Uninsured/Limited Insurance	4	1	4	4	2	15
Diabetic screen rates	4	2	5	2	1	14
Transportation	4	1	5	2	1	13
Sexually Transmitted Infections	2	5	3	1	2	13
Language/ Cultural barriers	2	1	4	3	1	11

\*Highest potential score = 25

## 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*

Good Shepherd has 149 acute beds and is one of the few hospital facilities located within the CHNA community. Residents of the community also take advantage of services provided by hospitals in neighboring counties, as well as services offered by other facilities and providers.

*Exhibit 27* summarizes hospitals available to the residents of the four counties in which the community resides.

**Exhibit 27**  
**Good Shepherd Medical Center**  
**Summary of Area Hospitals and Health Centers**

Facility	Address	County
* ETMC Carthage	409 West Cottage, Carthage, TX 75633	Panola

*Source: US Hospital Finder*

### ***Other Health Care Facilities***

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

**Exhibit 28**  
**Good Shepherd Medical Center - Marshall**  
**Summary of Rural Health Centers & FQHCs**

Facility	Facility Type	Address	County
East Texas Medical Center Carthage Health Center	Rural Health Clinic	409 Cottage Road Suite A, Carthage, TX 75633	Panola
East Texas Pediatrics	Rural Health Clinic	618 S Grove Ste 100, Marshall, TX 75670	Harrison
Ellington RHC	Rural Health Clinic	1011 S William St, Atlanta, TX	Cass
ETMC First Physicians Clinic	Rural Health Clinic	702 Davis St, Carthage, TX 75633	Panola
PhyNet	Rural Health Clinic	402 N Kaufman, Linden, TX 75563	Cass
Marshall Health Clinic	Rural Health Clinic	805 Lindsey, Marshall, TX 75670	Harrison
Marshall Pediatric Clinic	Rural Health Clinic	707 S Grove St, Marshall, TX, 75670	Harrison
Genesis Primecare Marshall	Federally Qualified Health Center	401 N Grove St Ste A, Marshall, TX 75670	Harrison
Genesis Primecare	Federally Qualified Health Center	502 E Rusk St, Marshall, TX 75670	Harrison
Genesis Primecare - Jefferson	Federally Qualified Health Center	106 N Alley St, Jefferson, TX 75657	Marion

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

Good Shepherd's CHNA community also has a number of clinics inside various retail facilities, including Walgreens and CVS. These clinics are expanding past providing only flu shots, but also providing checkups and treatments to a growing list of ailments.



## **APPENDICES**

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

**Good Shepherd Medical Center - Marshall**  
**Analysis of CHNA Data**

***Analysis of Health Status-Leading Causes of Death***

		(A)		(B)		If (B)>(A), then "Health Need"
		10% of		County Rate Less		
		U.S. Crude Rates	U.S. Crude Rate	County Rate	U.S. Adjusted Crude Rate	
<b>Cass County:</b>						
Cancer		185.8	18.6	264.7	78.9	Health Need
Heart Disease		197.5	19.8	381.5	184.0	Health Need
Lung Disease		44.9	4.5	64.0	19.2	Health Need
Stroke		42.9	4.3	88.4	45.5	Health Need
Unintentional Injury		39.9	4.0	61.4	21.5	Health Need
<b>Harrison County</b>						
Cancer		185.8	18.6	195.2	9.4	
Heart Disease		197.5	19.8	215.1	17.6	
Lung Disease		44.9	4.5	125.8	80.9	Health Need
Stroke		42.9	4.3	64.0	21.1	Health Need
Unintentional Injury		39.9	4.0	55.8	16.0	Health Need
<b>Panola County</b>						
Cancer		185.8	18.6	229.4	43.6	Health Need
Heart Disease		197.5	19.8	229.4	31.9	Health Need
Lung Disease		44.9	4.5	141.5	96.6	Health Need
Stroke		42.9	4.3	51.1	8.2	Health Need
Unintentional Injury		39.9	4.0	69.5	29.6	Health Need
<b>Marion County</b>						
Cancer		185.8	18.6	338.6	152.8	Health Need
Heart Disease		197.5	19.8	313.7	116.2	Health Need
Lung Disease		44.9	4.5	145.4	100.5	Health Need
Stroke		42.9	4.3	84.2	41.3	Health Need
Unintentional Injury		39.9	4.0	49.7	9.9	Health Need

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

	National Benchmark	(A) 30% of National Benchmark	County Rate	(B) County Rate Less National Benchmark	If (B)>(A), then "Health Need"
<b>Cass County:</b>					
Adult Smoking	14.0%	4.2%	27.0%	13.0%	Health Need
Adult Obesity	25.0%	7.5%	29.0%	4.0%	
Food Environment Index	8.4	3	6.0	2	
Physical Inactivity	20.0%	6.0%	29.0%	9.0%	Health Need
Access to Exercise Opportunities	92.0%	27.6%	44.0%	48.0%	Health Need
Excessive Drinking	10.0%	3.0%			
Alcohol-Impaired Driving Deaths	14.0%	4.2%	27.0%	13%	Health Need
Sexually Transmitted Infections	138	41	308	170	Health Need
Teen Birth Rate	20	6	57	37	Health Need
Uninsured	11.0%	3.3%	22.0%	11.0%	Health Need
Primary Care Physicians	1045	314	2742	1697	Health Need
Dentists	1377	413	3370	1993	Health Need
Mental Health Providers	386	116	5055	4669	Health Need
Preventable Hospital Stays	41	12	98	57	Health Need
Diabetic Screen Rate	90.0%	27.0%	79.0%	11.0%	
Mammography Screening	70.7%	21.2%	52.4%	18.3%	
Violent Crime Rate	59	18	284	225	Health Need
Children in Poverty	13.0%	3.9%	32.0%	19.0%	Health Need
Children in Single-Parent Households	20.0%	6.0%	42.0%	22.0%	Health Need
<b>Harrison County:</b>					
Adult Smoking	14.0%	4.2%	23.0%		
Adult Obesity	25.0%	7.5%	32.0%	7.0%	
Food Environment Index	8.4	3	6.2	2	
Physical Inactivity	20.0%	6.0%	30.0%	10.0%	Health Need
Access to Exercise Opportunities	92.0%	27.6%	56.0%	36.0%	Health Need
Excessive Drinking	10.0%	3.0%	17.0%		
Alcohol-Impaired Driving Deaths	14.0%	4.2%	37.0%	23%	Health Need
Sexually Transmitted Infections	138	41	482	344	Health Need
Teen Birth Rate	20	6	57	37	Health Need
Uninsured	11.0%	3.3%	24.0%	13.0%	Health Need
Primary Care Physicians	1045	314	3747	2702	Health Need
Dentists	1377	413	5145	3768	Health Need
Mental Health Providers	386	116	3934	3548	Health Need
Preventable Hospital Stays	41	12	72	31	Health Need
Diabetic Screen Rate	90.0%	27.0%	85.0%	5.0%	
Mammography Screening	70.7%	21.2%	59.0%	11.7%	
Violent Crime Rate	59	18	405	346	Health Need
Children in Poverty	13.0%	3.9%	26.0%	13.0%	Health Need
Children in Single-Parent Households	20.0%	6.0%	38.0%	18.0%	Health Need

	National Benchmark	(A) 30% of National Benchmark	County Rate	(B) County Rate Less National Benchmark	If (B)>(A), then "Health Need"
<b>Marion County:</b>					
Adult Smoking	14.0%	4.2%	36.0%		
Adult Obesity	25.0%	7.5%	34.0%	9.0%	Health Need
Food Environment Index	8.4	3	5.9	3	
Physical Inactivity	20.0%	6.0%	33.0%	13.0%	Health Need
Access to Exercise Opportunities	92.0%	27.6%	35.0%	57.0%	Health Need
Excessive Drinking	10.0%	3.0%	N/A		
Alcohol-Impaired Driving Deaths	14.0%	4.2%	38.0%	24%	Health Need
Sexually Transmitted Infections	138	41	262	124	Health Need
Teen Birth Rate	20	6	57	37	Health Need
Uninsured	11.0%	3.3%	26.0%	15.0%	Health Need
Primary Care Physicians	1045	314		-1045	
Dentists	1377	413	10235	8858	Health Need
Mental Health Providers	386	116	10235	9849	Health Need
Preventable Hospital Stays	41	12	61	20	Health Need
Diabetic Screen Rate	90.0%	27.0%	83.0%	7.0%	
Mammography Screening	70.7%	21.2%	52.1%	18.6%	
Violent Crime Rate	59	18	555	496	Health Need
Children in Poverty	13.0%	3.9%	28.0%	15.0%	Health Need
Children in Single-Parent Households	20.0%	6.0%	31.0%	11.0%	Health Need
<b>Panola County:</b>					
Adult Smoking	14.0%	4.2%	29.0%		
Adult Obesity	25.0%	7.5%	32.0%	7.0%	
Food Environment Index	8.4	3	6.6	2	
Physical Inactivity	20.0%	6.0%	30.0%	10.0%	Health Need
Access to Exercise Opportunities	92.0%	27.6%	27.0%	65.0%	Health Need
Excessive Drinking	10.0%	3.0%	N/A		
Alcohol-Impaired Driving Deaths	14.0%	4.2%	22.0%	8%	Health Need
Sexually Transmitted Infections	138	41	446	308	Health Need
Teen Birth Rate	20	6	53	33	Health Need
Uninsured	11.0%	3.3%	22.0%	11.0%	Health Need
Primary Care Physicians	1045	314	2402	1357	Health Need
Dentists	1377	413	3978	2601	Health Need
Mental Health Providers	386	116	23870	23484	Health Need
Preventable Hospital Stays	41	12	85	44	Health Need
Diabetic Screen Rate	90.0%	27.0%	86.0%	4.0%	
Mammography Screening	70.7%	21.2%	52.5%	18.2%	
Violent Crime Rate	59	18	266	207	Health Need
Children in Poverty	13.0%	3.9%	20.0%	7.0%	Health Need
Children in Single-Parent Households	20.0%	6.0%	32.0%	12.0%	Health Need

### ***Analysis of Primary Data – Key Informant Surveys***

Poverty  
Lack of Convenient Ambulatory Care  
Lack of Health Knowledge/Education  
Healthy Behaviors/Lifestyle Choices  
Lack of Mental Health Services  
Substance Abuse  
Obesity  
Heart Disease  
Poor Nutrition/Lack of Healthy Food Options  
Transportation  
Shortage of Adult Dental Services  
Pre-Natal Care  
Uninsured  
Lack of Physicians  
Cost of Health Care  
Good Employment Opportunities

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

Population	Issues
<b>Uninsured/Working Poor Population</b>	<p>Transportation</p> <p>Access to primary care physicians</p> <p>High cost of health care prevents needs from being met</p> <p>Healthy lifestyle and health nutrition education</p> <p>Access to food</p> <p>Lack of mental health services</p> <p>Lack of adult dental services</p>
<b>Elderly</b>	<p>Transportation</p> <p>Lack of health knowledge regarding how to access services</p> <p>Cost of prescriptions</p> <p>Lack of adult dental services</p>
<b>Immigrant Population</b>	<p>Language barriers</p> <p>Transportation</p> <p>Healthy living education</p>

## **APPENDIX B**

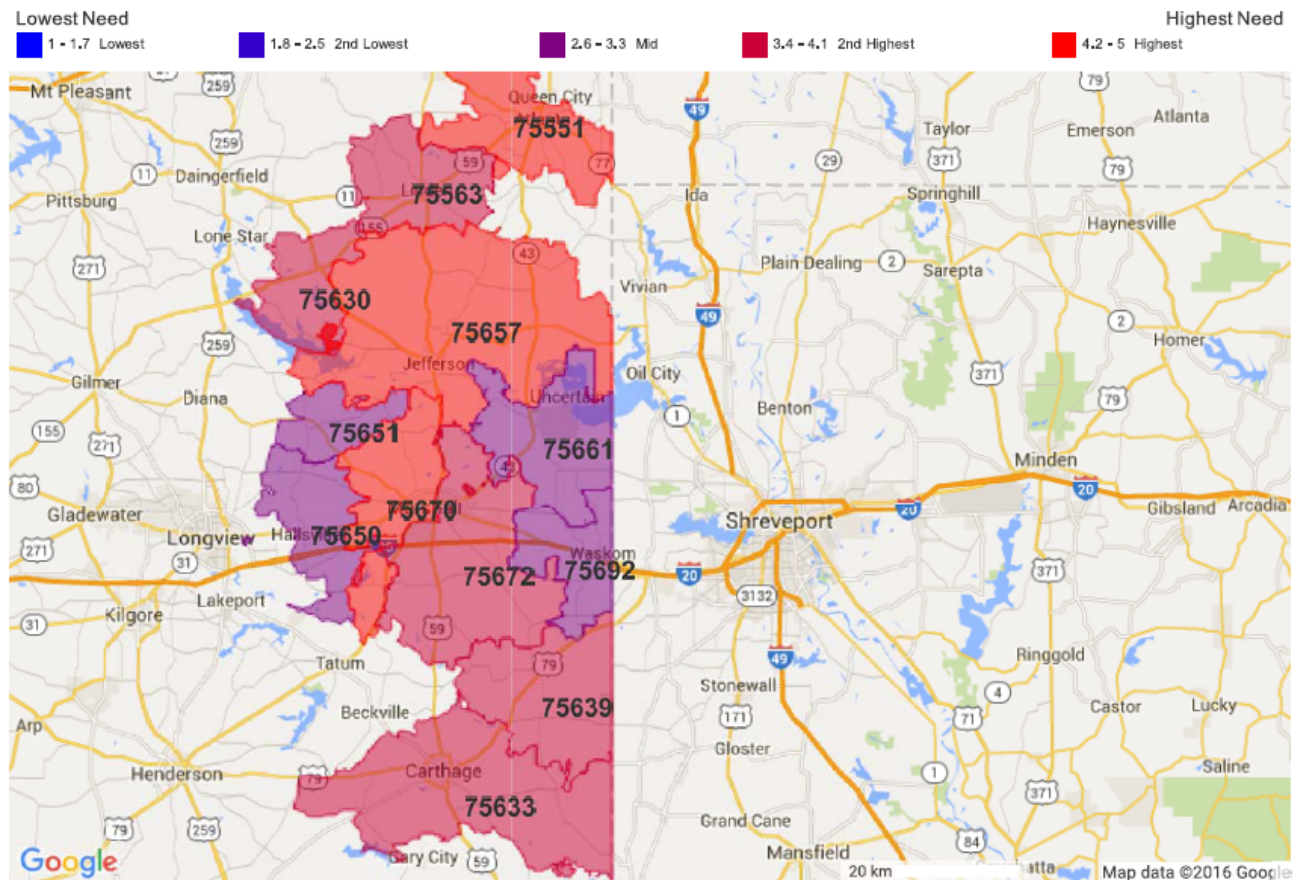
### **SOURCES**



DATA TYPE	SOURCE	YEAR(S)
Discharges by Zip Code	Hospital	FY 2015
Population Estimates	The Nielson Company	2015
Demographics - Race/Ethnicity	Community Commons via American Community Survey <a href="http://www.communitycommons.org/">http://www.communitycommons.org/</a>	2015
Demographics - Income	Community Commons via American Community Survey <a href="http://www.communitycommons.org/">http://www.communitycommons.org/</a>	2009 - 2013
Unemployment	Community Commons via US Department of Labor <a href="http://www.communitycommons.org/">http://www.communitycommons.org/</a>	2015
Poverty	Community Commons via US Census Bureau, Small Areas Estimates Branch <a href="http://www.census.gov">http://www.census.gov</a>	2009 - 2013
Uninsured Status	Community Commons via US Census Bureau, Small area Health Insurance Estimates <a href="http://www.communitycommons.org/">http://www.communitycommons.org/</a>	2009 - 2013
Medicaid	Community Commons via American Community Survey <a href="http://www.communitycommons.org/">http://www.communitycommons.org/</a>	2009 - 2013
Education	Community Commons via American Community Survey <a href="http://www.communitycommons.org/">http://www.communitycommons.org/</a>	2009 - 2013
Physical Environment - Grocery Store Access	Community Commons via US Census Bureau, County Business Patterns <a href="http://www.communitycommons.org/">http://www.communitycommons.org/</a>	2013
Physical Environment - Food Access/Food Deserts	Community Commons via US Department of Agriculture <a href="http://www.communitycommons.org/">http://www.communitycommons.org/</a>	2010
Physical Environment - Recreation and Fitness Facilities	Community Commons via US Census Bureau, County Business Patterns <a href="http://www.communitycommons.org/">http://www.communitycommons.org/</a>	2013
Physical Environment - Physically Inactive	Community Commons via US Centers for Disease Control and Prevention <a href="http://www.communitycommons.org/">http://www.communitycommons.org/</a>	2012
Clinical Care - Access to Primary Care	Community Commons via US Department of Health & Human Services <a href="http://www.communitycommons.org/">http://www.communitycommons.org/</a>	2012
Clinical Care - Lack of a Consistent Source of Primary Care	Community Commons via US Department of Health & Human Services <a href="http://www.communitycommons.org/">http://www.communitycommons.org/</a>	2011 - 2012
Clinical Care - Population Living in a Health Professional Shortage Area	Community Commons via US Department of Health & Human Services <a href="http://www.communitycommons.org/">http://www.communitycommons.org/</a>	2015
Clinical Care - Preventable Hospital Events	Community Commons via Dartmouth College Institute for Health Policy & Clinical Practice <a href="http://www.communitycommons.org/">http://www.communitycommons.org/</a>	2012
Leading Causes of Death	Community Commons via CDC National Vital Statistics System <a href="http://www.communitycommons.org/">http://www.communitycommons.org/</a>	2007 - 2011
Health Outcomes and Factors	County Health Rankings <a href="http://www.countyhealthrankings.org/">http://www.countyhealthrankings.org/</a> & Community Commons <a href="http://www.communitycommons.org/">http://www.communitycommons.org/</a>	2015 & 2006 - 2012
Health Care Resources	Community Commons, CMS.gov, HRSA	

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

## Map of Community Needs Index Scores for CHNA Community Based on Dignity Health's Community Need Index (CNI)



Zip Code	CNI Score	Population	City	County	State
75551	4.2	10266	Atlanta	Cass	Texas
75563	4	4725	Linden	Cass	Texas
75630	3.8	2458	Avinger	Marion	Texas
75633	3.8	14242	Carthage	Panola	Texas
75639	3.4	3367	De Berry	Panola	Texas
75650	3	9036	Hallsville	Harrison	Texas
75651	3	1956	Harleton	Harrison	Texas
75657	4.2	8911	Jefferson	Marion	Texas
75661	3.2	2914	Kamack	Harrison	Texas
75670	4.8	18231	Marshall	Harrison	Texas
75672	3.8	17132	Marshall	Harrison	Texas
75692	3.2	5522	Waskom	Harrison	Texas

Source: <http://cni.chw-interactive.org>

**APPENDIX D**  
**COUNTY HEALTH RANKINGS**

**Good Shepherd Medical Center  
County Health Rankings – Health Factors**

	Cass County 2012	Cass County 2015	Change	Texas 2015	Top Performers 2015**
<i>Health Behaviors</i>	*	150	159	↑	
<b>Adult smoking</b> – Percent of adults that report smoking at least 100 cigarettes and that they currently smoke	N/A	27.0%		17.0%	14.0%
<b>Adult obesity</b> – Percent of adults that report a BMI >= 30	30.0%	29.0%	↓	29.0%	25.0%
<b>Food environment index</b> – Index of factors that contribute to a healthy food environment, 0 (worst) to 10 (best)	N/A	6.0		6.4	8.4
<b>Physical inactivity</b> – Percent of adults age 20 and over reporting no leisure time physical activity	34.0%	29.0%	↓	23.0%	20.0%
<b>Access to exercise opportunities</b> – Percentage of population with adequate access to locations for physical activity	N/A	44.0%		84.0%	92.0%
<b>Excessive drinking</b> – Percent of adults that report excessive drinking in the past 30 days	N/A	N/A		16.0%	10.0%
<b>Alcohol-impaired driving deaths</b> – Percentage of driving deaths with alcohol involvement	N/A	27.0%		33.0%	14.0%
<b>Sexually transmitted infections</b> – Chlamydia rate per 100K population	260.0	308.0	↑	488.0	138.0
<b>Teen birth rate</b> – Per 1,000 female population, ages 15-19	58.0	57.0	↓	55.0	20.0
<i>Clinical Care</i>	*	105	142	↑	
<b>Uninsured adults</b> – Percent of population under age 65 without health insurance	23.0%	22.0%	↓	25.0%	11%
<b>Primary care physicians</b> – Ratio of population to primary care physicians	3,249:1	2,742:1	↓	1,708:1	1,045:1
<b>Dentists</b> – Ratio of population to dentists	N/A	3,370:1		1,940:1	1,377:1
<b>Mental health providers</b> – Ratio of population to mental health providers	N/A	5,055:1		1,034:1	386:1
<b>Preventable hospital stays</b> – Hospitalization rate for ambulatory-care sensitive conditions per 1,000 Medicare enrollees	109.0	98.0	↓	63.0	41
<b>Diabetic screening</b> – Percent of diabetic Medicare enrollees that receive HbA1c screening	80.0%	79.0%	↓	83.0%	90%
<b>Mammography screening</b> – Percent of female Medicare enrollees that receive mammography screening	53.2%	52.4%	↓	58.9%	70.7%

**County Health Rankings – Health Factors**  
**Cass County, continued**

	Cass County 2012	Cass County 2015	Change	Texas 2015	Top Performers 2015**
<i>Social and Economic Factors</i>	*	173	203	↑	
<b>High school graduation</b> – Percent of ninth grade cohort that graduates in 4 years	97.0%	93.0%	↓	88.0%	N/A
<b>Some college</b> – Percent of adults aged 25-44 years with some post-secondary education	51.4%	48.8%	↓	58.6%	71.0%
<b>Unemployment</b> – Percent of population age 16+ unemployed but seeking work	11.0%	9.2%	↓	6.3%	4.0%
<b>Children in poverty</b> – Percent of children under age 18 in poverty	32.0%	32.0%		25.0%	13.0%
<b>Income inequality</b> – Ratio of household income at the 80th percentile to income at the 20th percentile	N/A	4.9		4.8	3.7
<b>Children in single-parent households</b> – Percent of children that live in household headed by single parent	42.0%	41.0%	↓	33.0%	20%
<b>Social associations</b> – Number of membership associations per 10,000 population	N/A	17.9		7.8	22.0
<b>Violent crime rate</b> – Violent crime rate per 100,000 population (age-adjusted)	284.0	284.0		422.0	59.0
<b>Injury deaths</b> – Number of deaths due to injury per 100,000 population	N/A	95.0		55.0	50.0
<i>Physical Environment</i>	*	136	212	↑	
<b>Air pollution-particulate matter days</b> – Average daily measure of fine particulate matter in micrograms per cubic meter	1	10.7	↑	9.6	9.5
<b>Drinking water safety</b> – Percentage of population exposed to water exceeding a violation limit during the past year	N/A	1.0%		7.0%	0%
<b>Severe housing problems</b> – Percentage of household with at least one of four housing problems: overcrowding, high housing costs or lack of kitchen or plumbing facilities	N/A	12.0%		18.0%	9%
<b>Driving alone to work</b> – Percentage of the workforce that drives alone to work	N/A	85.0%		80.0%	71%
<b>Long commute, driving alone</b> – Among workers who commute in their car alone, the percentage that commute more than 30	N/A	39.0%		35.0%	15%

\* Rank out of 221 Texas counties in 2010, rank out of 237 Texas counties in 2015

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

Note: N/A indicates unreliable or missing data

Source: Countyhealthrankings.org

**Good Shepherd Medical Center  
County Health Rankings – Health Factors**

	Harrison County 2012	Harrison County 2015	Change	Texas 2015	Top Performers 2015**
<i>Health Behaviors</i>	*	186	189	↑	
<b>Adult smoking</b> – Percent of adults that report smoking at least 100 cigarettes and that they currently smoke	22.0%	23.0%	↑	17.0%	14.0%
<b>Adult obesity</b> – Percent of adults that report a BMI $\geq 30$	34.0%	32.0%	↓	29.0%	25.0%
<b>Food environment index</b> – Index of factors that contribute to a healthy food environment, 0 (worst) to 10 (best)	N/A	6.2		6.4	8.4
<b>Physical inactivity</b> – Percent of adults age 20 and over reporting no leisure time physical activity	34.0%	30.0%	↓	23.0%	20.0%
<b>Access to exercise opportunities</b> – Percentage of population with adequate access to locations for physical activity	N/A	56.0%		84.0%	92.0%
<b>Excessive drinking</b> – Percent of adults that report excessive drinking in the past 30 days	N/A	17.0%		16.0%	10.0%
<b>Alcohol-impaired driving deaths</b> – Percentage of driving deaths with alcohol involvement	N/A	37.0%		33.0%	14.0%
<b>Sexually transmitted infections</b> – Chlamydia rate per 100K population	289.0	482.0	↑	488.0	138.0
<b>Teen birth rate</b> – Per 1,000 female population, ages 15-19	54.0	57.0	↑	55.0	20.0
<i>Clinical Care</i>	*	68	75	↑	
<b>Uninsured adults</b> – Percent of population under age 65 without health insurance	25.0%	24.0%	↓	25.0%	11%
<b>Primary care physicians</b> – Ratio of population to primary care physicians	2,899:1	3,747:1	↑	1,708:1	1,045:1
<b>Dentists</b> – Ratio of population to dentists	N/A	5,145:1		1,940:1	1,377:1
<b>Mental health providers</b> – Ratio of population to mental health providers	N/A	3,934:1		1,034:1	386:1
<b>Preventable hospital stays</b> – Hospitalization rate for ambulatory-care sensitive conditions per 1,000 Medicare enrollees	89.0	72.0	↓	63.0	41
<b>Diabetic screening</b> – Percent of diabetic Medicare enrollees that receive HbA1c screening	86.0%	85.0%	↓	83.0%	90%
<b>Mammography screening</b> – Percent of female Medicare enrollees that receive mammography screening	61.5%	59.0%	↓	58.9%	70.7%

County Health Rankings – Health Factors  
Harrison County, continued

	Harrison County 2012	Harrison County 2015	Change	Texas 2015	Top Performers 2015**
<i>Social and Economic Factors</i>	*	146	129	↓	
<b>High school graduation</b> – Percent of ninth grade cohort that graduates in 4 years	90.0%	93.0%	↑	88.0%	N/A
<b>Some college</b> – Percent of adults age 25-44 years with some post-secondary education	47.9%	52.2%	↑	58.6%	71.0%
<b>Unemployment</b> – Percent of population age 16+ unemployed but seeking work	8.8%	6.4%	↓	6.3%	4.0%
<b>Children in poverty</b> – Percent of children under age 18 in poverty	26.0%	26.0%		25.0%	13.0%
<b>Income inequality</b> – Ratio of household income at the 80th percentile to income at the 20th percentile	N/A	5.1		4.8	3.7
<b>Children in single-parent households</b> – Percent of children that live in household headed by single parent	35.0%	38.0%	↑	33.0%	20%
<b>Social associations</b> – Number of membership associations per 10,000 population	N/A	12.8		7.8	22.0
<b>Violent crime rate</b> – Violent crime rate per 100,000 population (age-adjusted)	456.0	405.0	↓	422.0	59.0
<b>Injury deaths</b> – Number of deaths due to injury per 100,000 population	N/A	77.0		55.0	50.0
<i>Physical Environment</i>	*	139	224	↑	
<b>Air pollution-particulate matter days</b> – Average daily measure of fine particulate matter in micrograms per cubic meter	N/A	10.3		9.6	9.5
<b>Drinking water safety</b> – Percentage of population exposed to water exceeding a violation limit during the past year	N/A	29%		7.0%	-
<b>Severe housing problems</b> – Percentage of household with at least one of four housing problems: overcrowding, high housing costs or lack of kitchen or plumbing facilities	N/A	13%		18.0%	9%
<b>Driving alone to work</b> – Percentage of the workforce that drives alone to work	N/A	84.0%		80.0%	71%
<b>Long commute, driving alone</b> – Among workers who commute in their car alone, the percentage that commute more than 30	N/A	28.0%		35.0%	15%

\* Rank out of 221 Texas counties in 2010, rank out of 237 Texas counties in 2015

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

Note: N/A indicates unreliable or missing data

Source: *Countyhealthrankings.org*



Good Shepherd Medical Center  
County Health Rankings – Health Factors

	Panola County 2012	Panola County 2015	Change	Texas 2015	Top Performers 2015**
<i>Health Behaviors</i>	*	146	152	↑	
<b>Adult smoking</b> – Percent of adults that report smoking at least 100 cigarettes and that they currently smoke	N/A	29.0%		17.0%	14.0%
<b>Adult obesity</b> – Percent of adults that report a BMI >= 30	30.0%	32.0%	↑	29.0%	25.0%
<b>Food environment index</b> – Index of factors that contribute to a healthy food environment, 0 (worst) to 10 (best)	N/A	6.6		6.4	8.4
<b>Physical inactivity</b> – Percent of adults age 20 and over reporting no leisure time physical activity	27.0%	30.0%	↑	23.0%	20.0%
<b>Access to exercise opportunities</b> – Percentage of population with adequate access to locations for physical activity	N/A	27.0%		84.0%	92.0%
<b>Excessive drinking</b> – Percent of adults that report excessive drinking in the past 30 days	N/A	N/A		16.0%	10.0%
<b>Alcohol-impaired driving deaths</b> – Percentage of driving deaths with alcohol involvement	N/A	22.0%		33.0%	14.0%
<b>Sexually transmitted infections</b> – Chlamydia rate per 100K population	247.0	446.0	↑	488.0	138.0
<b>Teen birth rate</b> – Per 1,000 female population, ages 15-19	58.0	53.0	↓	55.0	20.0
<i>Clinical Care</i>	*	92	84	↓	
<b>Uninsured adults</b> – Percent of population under age 65 without health insurance	23.0%	22.0%	↓	25.0%	11%
<b>Primary care physicians</b> – Ratio of population to primary care physicians	3,312:1	2,402:1	↓	1,708:1	1,045:1
<b>Dentists</b> – Ratio of population to dentists	N/A	3,978:1		1,940:1	1,377:1
<b>Mental health providers</b> – Ratio of population to mental health providers	N/A	23,870:1		1,034:1	386:1
<b>Preventable hospital stays</b> – Hospitalization rate for ambulatory-care sensitive conditions per 1,000 Medicare enrollees	107.0	85.0	↓	63.0	41
<b>Diabetic screening</b> – Percent of diabetic Medicare enrollees that receive HbA1c screening	84.0%	86.0%	↑	83.0%	90%
<b>Mammography screening</b> – Percent of female Medicare enrollees that receive mammography screening	56.0%	52.5%	↓	58.9%	70.7%

**County Health Rankings – Health Factors**  
**Panola County, continued**

	Panola County 2012	Panola County 2015	Change	Texas 2015	Top Performers 2015**
<i>Social and Economic Factors</i>	*	75	111	↑	
<b>High school graduation</b> – Percent of ninth grade cohort that graduates in 4 years	85.0%	86.0%	↑	88.0%	N/A
<b>Some college</b> – Percent of adults age 25-44 years with some post-secondary education	49.7%	50.9%	↑	58.6%	71.0%
<b>Unemployment</b> – Percent of population age 16+ unemployed but seeking work	7.3%	5.1%	↓	6.3%	4.0%
<b>Children in poverty</b> – Percent of children under age 18 in poverty	21.0%	20.0%	↓	25.0%	13.0%
<b>Income inequality</b> – Ratio of household income at the 80th percentile to income at the 20th percentile	N/A	4.9		4.8	3.7
<b>Children in single-parent households</b> – Percent of children that live in household headed by single parent	31.0%	32.0%	↑	33.0%	20%
<b>Social associations</b> – Number of membership associations per 10,000 population	N/A	10.4		7.8	22.0
<b>Violent crime rate</b> – Violent crime rate per 100,000 population (age-adjusted)	266.0	266.0		422.0	59.0
<b>Injury deaths</b> – Number of deaths due to injury per 100,000 population	N/A	92.0		55.0	50.0
<i>Physical Environment</i>	*	138	162	↑	
<b>Air pollution-particulate matter days</b> – Average daily measure of fine particulate matter in micrograms per cubic meter	N/A	10.0	↓	9.6	9.5
<b>Drinking water safety</b> – Percentage of population exposed to water exceeding a violation limit during the past year	N/A	3%		7%	-
<b>Severe housing problems</b> – Percentage of household with at least 1 of 4 housing problems: overcrowding, high housing costs or lack of kitchen or plumbing facilities	N/A	10%		18%	9%
<b>Driving alone to work</b> – Percentage of the workforce that drives alone to work	N/A	85%		80%	71%
<b>Long commute, driving alone</b> – Among workers who commute in their car alone, the percentage that commute more than 30	N/A	38%		35%	15%

\* Rank out of 221 Texas counties in 2010, rank out of 237 Texas counties in 2015

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

Note: N/A indicates unreliable or missing data

Source: *Countyhealthrankings.org*

**Good Shepherd Medical Center  
County Health Rankings – Health Factors**

	Marion County 2012	Marion County 2015	Change	Texas 2015	Top Performers 2015**
<b>Health Behaviors</b>	*	158	235	↑	
<b>Adult smoking</b> – Percent of adults that report smoking at least 100 cigarettes and that they currently smoke	N/A	36.0%		17.0%	14.0%
<b>Adult obesity</b> – Percent of adults that report a BMI >= 30	31.0%	34.0%	↑	29.0%	25.0%
<b>Food environment index</b> – Index of factors that contribute to a healthy food environment, 0 (worst) to 10 (best)	N/A	5.9		6.4	8.4
<b>Physical inactivity</b> – Percent of adults age 20 and over reporting no leisure time physical activity	31.0%	33.0%	↑	23.0%	20.0%
<b>Access to exercise opportunities</b> – Percentage of population with adequate access to locations for physical activity	N/A	35.0%		84.0%	92.0%
<b>Excessive drinking</b> – Percent of adults that report excessive drinking in the past 30 days	N/A	N/A		16.0%	10.0%
<b>Alcohol-impaired driving deaths</b> – Percentage of driving deaths with alcohol involvement	N/A	38.0%		33.0%	14.0%
<b>Sexually transmitted infections</b> – Chlamydia rate per 100K population	199.0	262.0	↑	488.0	138.0
<b>Teen birth rate</b> – Per 1,000 female population, ages 15-19	70.0	57.0	↓	55.0	20.0
<b>Clinical Care</b>	*	129	106	↓	
<b>Uninsured adults</b> – Percent of population under age 65 without health insurance	28.0%	26.0%	↓	25.0%	11%
<b>Primary care physicians</b> – Ratio of population to primary care physicians	N/A	N/A		1,708:1	1,045:1
<b>Dentists</b> – Ratio of population to dentists	N/A	10,235:1		1,940:1	1,377:1
<b>Mental health providers</b> – Ratio of population to mental health providers	N/A	10,235:1		1,034:1	386:1
<b>Preventable hospital stays</b> – Hospitalization rate for ambulatory-care sensitive conditions per 1,000 Medicare enrollees	108.0	61.0	↓	63.0	41
<b>Diabetic screening</b> – Percent of diabetic Medicare enrollees that receive HbA1c screening	80.0%	83.0%	↑	83.0%	90%
<b>Mammography screening</b> – Percent of female Medicare enrollees that receive mammography screening	57.9%	52.1%	↓	58.9%	70.7%

**County Health Rankings – Health Factors**  
**Marion County, continued**

	Marion County 2012	Marion County 2015	Change	Texas 2015	Top Performers 2015**
<i>Social and Economic Factors</i>	*	203	194	↓	
<b>High school graduation</b> – Percent of ninth grade cohort that graduates in 4 years	83.0%	98.0%	↑	88.0%	N/A
<b>Some college</b> – Percent of adults age 25-44 years with some post-secondary education	42.4%	54.1%	↑	58.6%	71.0%
<b>Unemployment</b> – Percent of population age 16+ unemployed but seeking work	10.3%	6.9%	↓	6.3%	4.0%
<b>Children in poverty</b> – Percent of children under age 18 in poverty	35.0%	28.0%	↓	25.0%	13.0%
<b>Income inequality</b> – Ratio of household income at the 80th percentile to income at the 20th percentile	N/A	6.2		4.8	3.7
<b>Children in single-parent households</b> – Percent of children that live in household headed by single parent	44.0%	31.0%	↓	33.0%	20%
<b>Social associations</b> – Number of membership associations per 10,000 population	N/A	7.7		7.8	22.0
<b>Violent crime rate</b> – Violent crime rate per 100,000 population (age-adjusted)	404.0	550.0	↑	422.0	59.0
<b>Injury deaths</b> – Number of deaths due to injury per 100,000 population	N/A	81.0		55.0	50.0
<i>Physical Environment</i>	*	120	223	↓	
<b>Air pollution-particulate matter days</b> – Average daily measure of fine particulate matter in micrograms per cubic meter	N/A	10.6		9.6	9.5
<b>Drinking water safety</b> – Percentage of population exposed to water exceeding a violation limit during the past year	N/A	11%		7.0%	-
<b>Severe housing problems</b> – Percentage of household with at least 1 of 4 housing problems: overcrowding, high housing costs or lack of kitchen or plumbing facilities	N/A	17.0%		18.0%	9%
<b>Driving alone to work</b> – Percentage of the workforce that drives alone to work	N/A	78.0%		80.0%	71%
<b>Long commute, driving alone</b> – Among workers who commute in their car alone, the percentage that commute more than 30	N/A	52.0%		35.0%	15%

\* Rank out of 221 Texas counties in 2010, rank out of 237 Texas counties in 2015

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

Note: N/A indicates unreliable or missing data

Source: *Countyhealthrankings.org*

**APPENDIX E**  
**KEY STAKEHOLDER SURVEY PROTOCOL**  
**& ACKNOWLEDGEMENTS**

## **SURVEY QUESTIONS**

1. In general, how would you rate health and quality of life in the community?  
(Scale from 1 to 10)
2. In your opinion, has health and quality of life in the community improved, stayed the same or declined?
  - a. Improved
  - b. Stayed the same
  - c. Declined
3. Why do you think it has (based on answer from previous question: improved, declined, or stayed the same)?
4. What other factors have contributed to the (based on answer to question 2: improvement, decline or to health and quality of life staying the same)
5. What barriers, if any, exist to improving health and quality of life in the community?
6. In your opinion, what are the most critical health and quality of life issues in the community?
7. What needs to be done to address these issues?
8. The prior CHNA indicated the following as the most significant health needs. Is there anything that is not on the list that should be? (Uninsured / Lack of access to services (cost), Obesity, Heart Disease, Lack of mental health services, Lack of primary care physicians, Physical inactivity, Diabetes, Poor nutrition, Utilization of emergency room for episodic care, Lack of health education)
9. What do you think is most critical health need of the community?
10. In your opinion, are any the following areas in which the hospital should be addressing? Why or why not? (Economic Development, Affordable Housing, Poverty, Education, Healthy Nutrition, Physical Activity, Drug and Alcohol Abuse)
11. Do you think access to Health Services has improved over the last 3 years? Why or why not? What needs to be done to improve access to health services in the community?
12. Are there people or groups of people in the community whose health or quality of life may not be as good as others? Who are these persons or groups?
13. Are there people or groups of people who have a more difficult time obtaining necessary/preventive medical services? If so, who are these persons or groups? Why do you think they have a more difficult time? What can be done to improve the situation?
14. How would you rate the hospital's efforts on communicating how they are addressing the identified health needs? How have you received communication regarding the hospital's efforts?
15. What do you think is the hospital's role in addressing the identified health needs of the community?

## **Key Stakeholders**

Thank you to the following individuals who participated in our key informant survey process:

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Anna Hanson, *Good Shepherd Medical Center*  
Bill Torres, *Good Shepherd Medical Center*  
Brad Osburg, *Good Shepherd Medical Center Longview*  
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Caroline Hardee, *Good Shepherd Medical Center*  
Charly Rowland, *Good Shepherd Health System*  
Cheryl Herbert, *Good Shepherd Health System Longview*  
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Chuck Reynolds, *Good Shepherd Medical Center*  
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Cyndie Salmons, *Good Shepherd Medical Center*  
Daphne Garland, *Good Shepherd Medical Center*  
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Emmanuel Elueze, *GSMC / UTHSCT*  
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Ginger Morrow, *Good Shepherd Medical Center*  
Inman White, *Community Healthcore*  
J.P. Steelman, *Longview Fire Department*  
Jane Chandler, *Good Shepherd Medical Center*  
Janis Jackson, *Good Shepherd Medical Center*  
Jennifer Ware, *Good Shepherd Medical Center*  
Jessica Stanley, *Good Shepherd Medical Center*  
Joe Carrington, *Community Healthcore*  
Joel Hale, *Rusk County Health District*  
John DiPasquale, *LEMA*  
John Jaskiewicz, *Good Shepherd Medical Center*  
John McDonald, *Good Shepherd Medical Center*  
Karen Torres, *Good Shepherd Medical Center*  
Kasha Williams, *Council District 3, Longview*  
Keith Creel, *Good Shepherd Medical Center*  
Keith Kirbow, *Good Shepherd Medical Center*  
Kelly Hall, *Longview Chamber of Commerce*  
Kim Smith, *Marshall-Harrison County Health District*

Kiran Patel, *Good Shepherd Medical Center*  
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Matt Holcomb, *Good Shepherd Medical Center*  
Marilyn Wyman, *Community Healthcore*  
Melissa Haynes, *Good Shepherd Medical Center*  
Michelle Boylan, *Good Shepherd Medical Center*  
Misti Bradshaw, *Good Shepherd Medical Center*  
November Boyd, *Good Shepherd Medical Center*  
Peggy Bellew, *Good Shepherd Medical Center*  
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Ray Delk, *Good Shepherd Medical Center*  
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