

# Community Health Needs Assessment

# 2022

BROWNWOOD MARKET



# Table of Contents

---

Executive Summary.....	3
About Hendrick Health.....	4
Our Mission	4
Our Vision	4
Community Health Needs Assessment Approach .....	6
Brown County .....	8
Community Demographics Summary .....	12
Social Determinants of Health	15
Population Health	30
Qualitative Research Approach .....	45
Community Stakeholder Interviews and Focus Group Discussions	45
Community Health Needs Assessment Survey .....	50
Community Needs Prioritization Methodology.....	52
Appendices.....	54
Appendix A: Hendrick Staff Survey Results	55
Appendix B: Stakeholder Interview Guide	58
Appendix C: Community Survey Questions	61

## Executive Summary

Hendrick Health’s Community Health Needs Assessment (CHNA) for its Brownwood market was conducted to help the health system’s leadership and decision-makers to better understand the needs of the community, as they seek to provide health and community-based services and programs that meet the needs of the Greater Brownwood community. The CHNA includes a combination of quantitative and qualitative research designed to evaluate the perspectives and opinions of community stakeholders and healthcare consumers – especially those from underserved populations. The methodology of the CHNA helped the Hendrick Health team to identify and prioritize community-wide needs, as well as supported the organization’s continued community engagement.

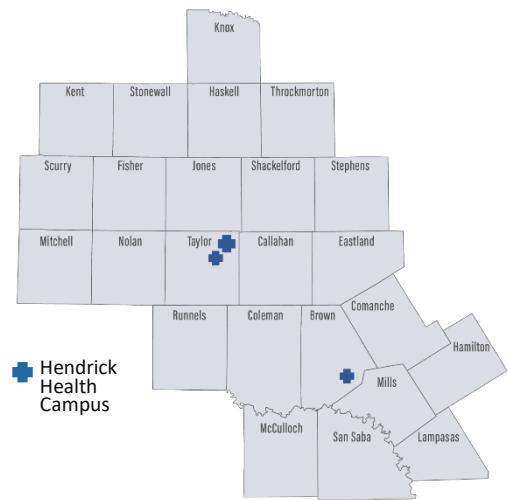
The major sections of the methodology include an overview of the community served, qualitative research including one-on-one interviews and focus groups, a community-wide survey, and an evidence-based needs prioritization process.

# About Hendrick Health



Hendrick Medical Center | Hendrick Medical Center Brownwood | Hendrick Medical Center South

Hendrick Health was founded in 1924 as a not-for-profit healthcare institution in response to a community need for quality health care. Throughout the decades, Hendrick has grown with the community, offering a wide range of comprehensive healthcare services to a 24-county area in the Texas Midwest. In 2020, Hendrick Medical Center became Hendrick Health and expanded to three campuses—Hendrick Medical Center and Hendrick Medical Center South in Abilene; and Hendrick Medical Center Brownwood in Brownwood. Through this acquisition, Hendrick Health has increased its capacity, expanded access to quality healthcare in the region and improved continuity of care for Texas Midwest residents. <sup>1</sup>



Hendrick Health Service Area and Campuses

## Our Mission

To deliver high quality healthcare emphasizing excellence and compassion consistent with the healing ministry of Jesus Christ.

## Our Vision

To be the leading health care provider of choice, in our region and beyond, recognized for enhancing quality, expanding access, and excelling in patient engagement.

<sup>1</sup> Hendrick Health.

## Hendrick Medical Center Brownwood



Hendrick Medical Center Brownwood

Hendrick Medical Center Brownwood (HMCB), formerly Brownwood Regional Medical Center, has been offering quality, compassionate care to the Central Texas area since 1969. After becoming part of Hendrick Health in 2020, HMCB is now able to provide some of the most advanced healthcare services and treatments to its community. Service lines and specialties continue to expand in multiple areas, including cardiology, gastroenterology, women’s services, orthopedics, oncology and robotic-assisted surgeries. Emergency care through the Level IV Trauma Center is available 24/7 with on-site access to helicopter transport. Hendrick Health continues to increase access to care for patients throughout Brown County and the surrounding area.<sup>2</sup>

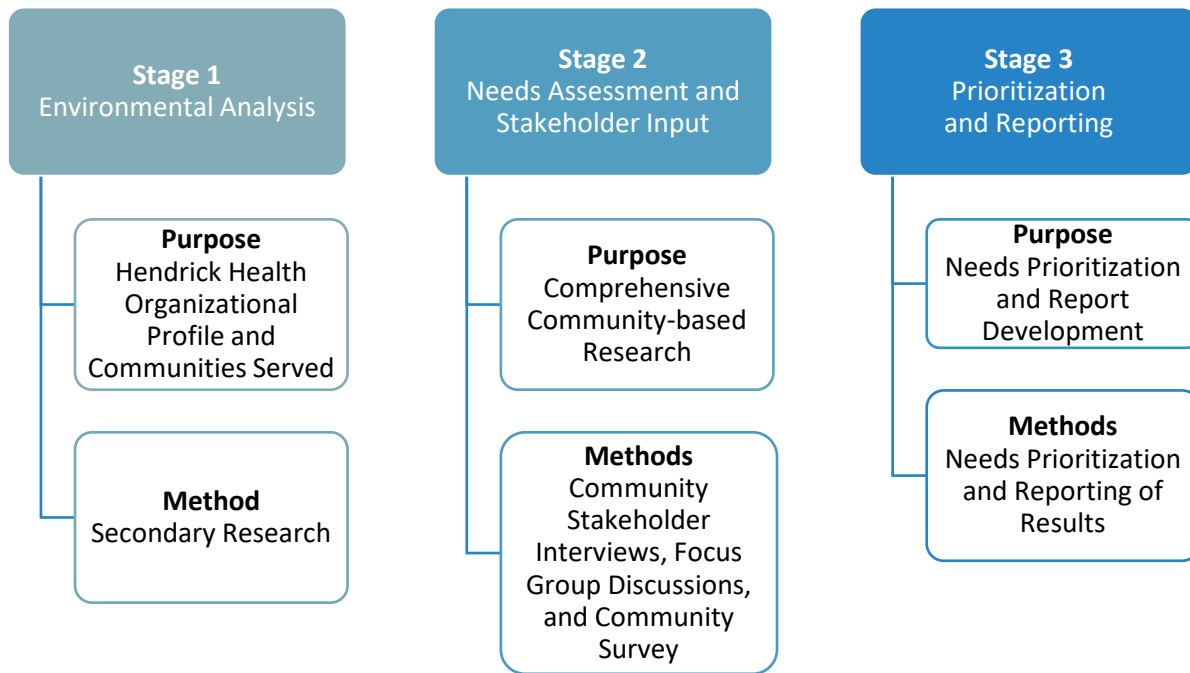
---

<sup>2</sup> Hendrick Medical Center Brownwood, formerly Brownwood Regional Medical Center.



# Community Health Needs Assessment Approach

The methodology for this community health needs assessment (CHNA) includes a combination of quantitative and qualitative research methods designed to evaluate the perspectives and opinions of community stakeholders and healthcare consumers – especially those from underserved populations. The methodology used prioritized the community’s needs, supported the organization’s continued community engagement and developed a broad, community-based list of needs. The major sections of the methodology include the following:



This CHNA was completed during the third year of the ongoing COVID-19 pandemic. The pandemic has caused an increase in anxiety, depression, and fear and has brought to light both the importance of and lack of health services and associated providers. The primary research – both qualitative and quantitative – indicates that the pandemic has caused some residents to delay getting the appropriate care necessary for both management of chronic conditions and some acute conditions. The long-term effects on both health and society will be discovered in the coming years.

## Data Limitations

In general, secondary data uses the most current data sets available. The dramatic changes throughout 2020 and 2021 caused by the pandemic may impact some of the traditional projection tools and data collection methodology. For example, the U.S. Census American Community Survey (ACS), which provides detailed population and housing information, revised its messaging, altered mailing strategies, and made sampling adjustments to accommodate the National Processing Center's staffing limitations.<sup>3</sup> Where relevant, the impacts or new data due to the COVID-19 pandemic are noted.

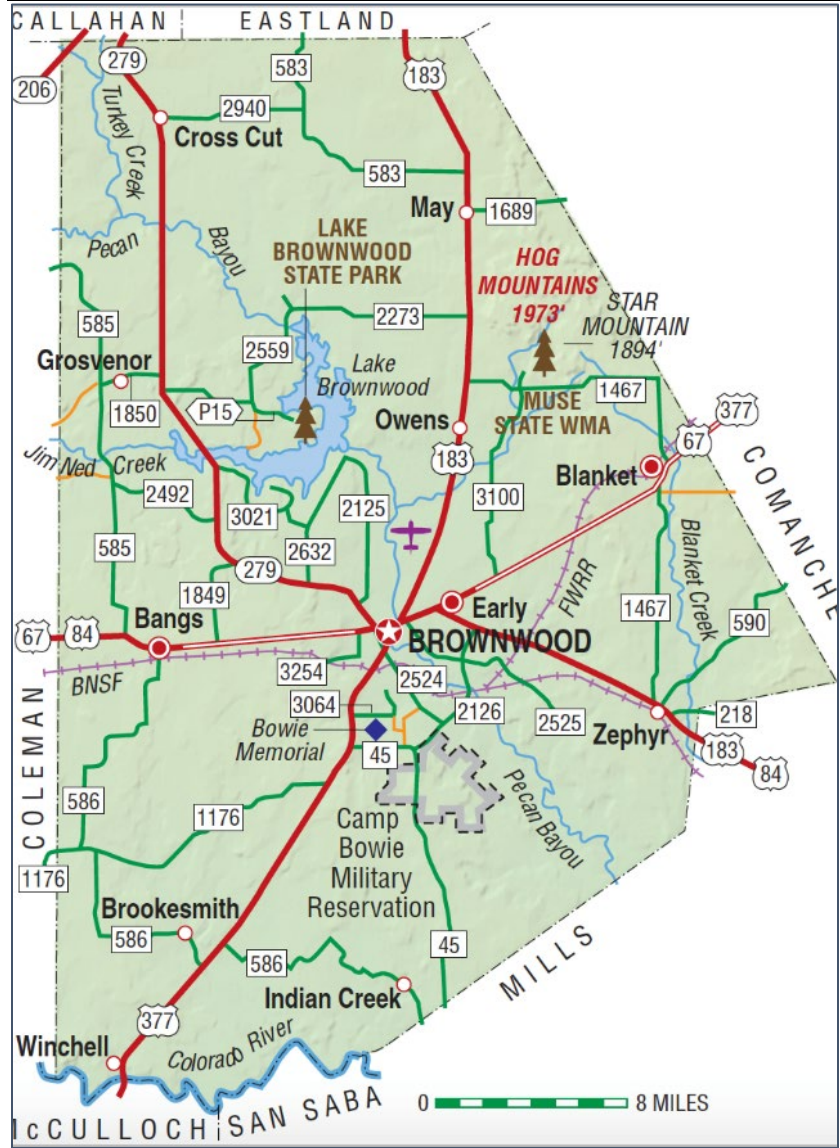
---

<sup>3</sup> U.S. Census Bureau. Measuring the Impact of COVID-19 on Businesses and People: Lessons from the Census Bureau's Experience, 2021.

# Brown County

Hendrick Medical Center Brownwood and its affiliated providers and services are located in Brownwood, Texas, and serve primarily residents of Brown County with a total population of 37,855.

Exhibit 1: Brown County



Source: Texas Almanac <sup>4</sup>

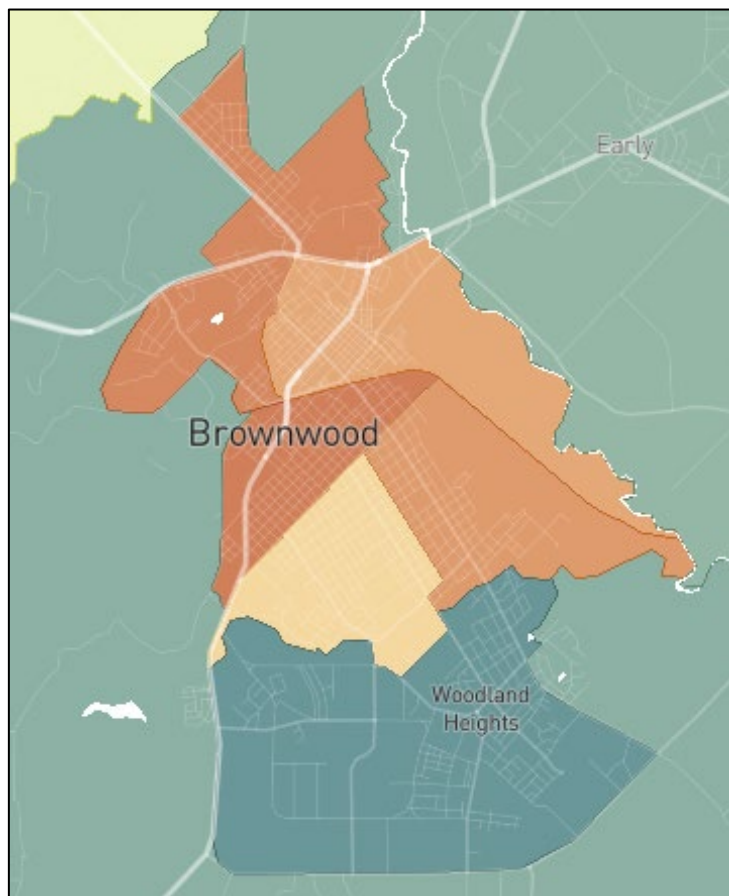
<sup>4</sup> Texas Almanac.



## The Opportunity Atlas

The Opportunity Atlas allows users to analyze census data to track economic and social factors among individuals born in distinct geographic regions. To further illustrate the needs and disparities of the Hendrick Medical Center Brownwood service area, **Exhibit 2** captures the median household income at age 35 in Brown County. Areas highlighted in blue and green represent higher income opportunities for children raised in those respective area, while orange and brown indicate lower income opportunities. In Brown County, the median household income is approximately \$34,000. However, there is an area of potential economic strain (i.e., north of Woodland Heights) where the household income ranges from approximately \$32,000 to downward of \$25,000 annually.

*Exhibit 2: Household Income at Age 35*

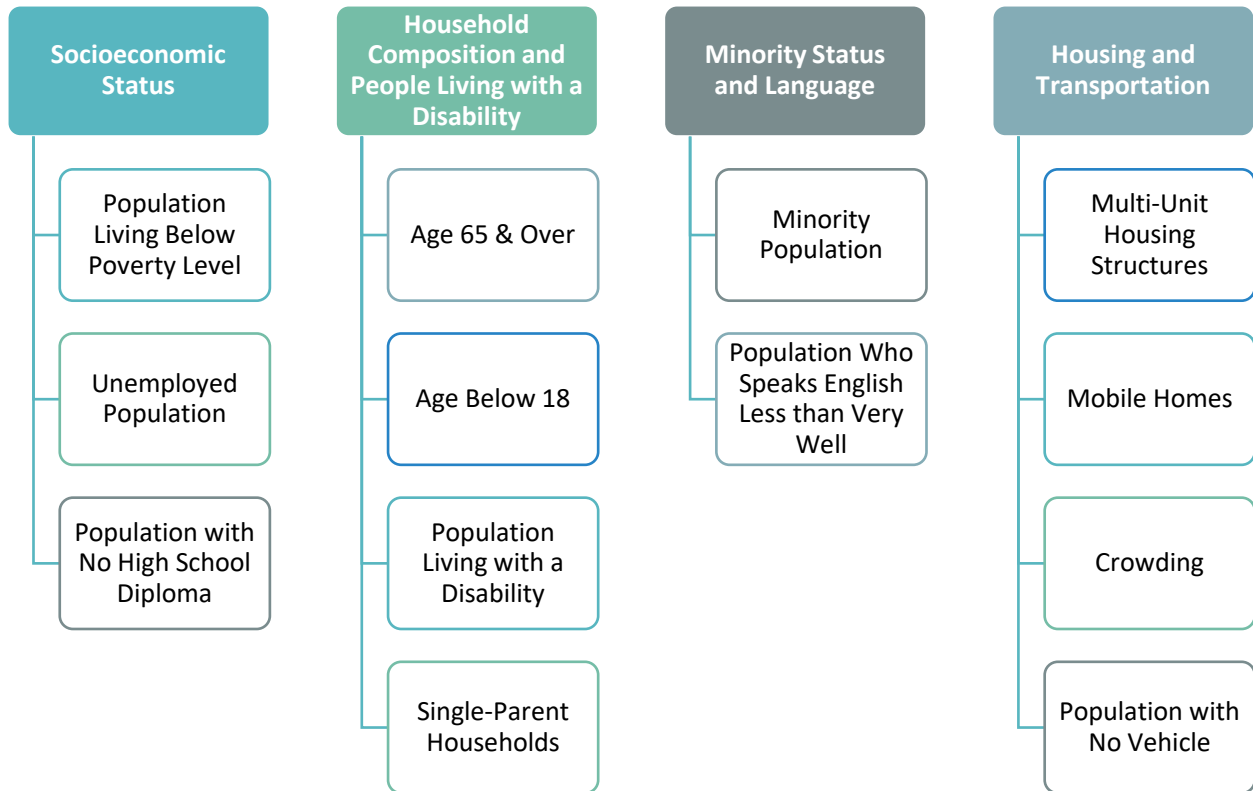


Source: The Opportunity Atlas <sup>5</sup>

<sup>5</sup> The Opportunity Atlas.

## The Social Vulnerability Index

The Social Vulnerability Index (SVI) helps identify areas of need in the community. Developed by the Centers for Disease Control and Prevention (CDC) as a metric for analyzing data to identify vulnerable populations, the measures in the SVI are categorized within the domains of Socioeconomic Status, Household Composition and Disability, Minority Status and Language, Housing, and Transportation. This tool may be used to rank overall population wellbeing and mobility, relative to county and state averages, as well as determine the most vulnerable populations during disaster preparedness and global pandemics.



The following data was gathered from the 2015-2019 American Community Survey 5-Year Estimates. Notable SVI characteristics seen in **Exhibit 3** are compared across the United States, Texas, and Brown County.

*Exhibit 3: Social Vulnerability Index*

	United States	Texas	Brown County
Total Population	324,697,795	28,260,856	37,855
Population Living Below Poverty Level	13.4%	14.7%	12.6%
Unemployed Population <sup>6</sup>	3.6%	3.8%	3.4%
Median Household Income	\$62,843	\$61,874	\$48,365
Age 65 & Older	15.6%	12.3%	19.5%
Age Under 18	22.6%	26.0%	22.2%
Population Living with a Disability	12.6%	11.5%	16.3%
Single-Parent Households	18.4%	19.1%	13.1%
Minority Population <sup>7</sup>	39.3%	58.0%	28.4%
Population Who Speaks English Less than Very Well <sup>8</sup>	8.4%	13.7%	3.6%
Multi-Unit Housing Structures	26.3%	25.0%	10.3%
Mobile Homes	6.2%	7.1%	17.9%
Population with No Vehicle	8.6%	5.3%	4.8%

Source: U.S. Census Bureau American Community Survey 5-Year Estimates, 2015-2019

<sup>6</sup> Data from U.S. Bureau of Labor Statistics, Local Area Unemployment Statistics Information & Analysis. State & county data as of April 2022. Rates are not seasonally adjusted.

<sup>7</sup> Population that does not identify as "White."

<sup>8</sup> "Speak English less than "very well."

## Community Demographics Summary

The following data provides a comprehensive overview of select demographic measures that describe the Hendrick Medical Center Brownwood service area.

The table below indicates the percentage of the population who identified as one race through the U.S. Census Bureau 2015-2019 American Community Survey. Brown County is predominantly made up of residents identifying as white. However, more one-fifth (22.2%) identify as Hispanic or Latino, predominantly Mexican. This is not a unique trait to Brown County, as Texas consists of a nearly 40% Hispanic and Latino population versus 18% in the United States.

*Exhibit 4: Population by Gender, Race, and Ethnicity*

	United States	Texas	Brown County
<b>Total Population</b>	324,697,795	28,260,856	37,855
Male	49.2%	49.7%	49.3%
Female	50.8%	50.3%	50.7%
<b>Race &amp; Ethnicity</b>			
White	60.7%	42.0%	71.6%
Black or African American	12.3%	11.8%	3.5%
American Indian & Alaska Native	0.7%	0.3%	0.3%
Asian	5.5%	4.7%	0.7%
Native Hawaiian & Other Pacific Islander	0.2%	0.1%	0.0% <sup>9</sup>
Some other race	0.2%	0.2%	0.0% <sup>10</sup>
<b>Hispanic or Latino</b>			
Mexican	18.0%	39.3%	22.2%
Puerto Rican	1.7%	0.7%	0.1%
Cuban	0.7%	0.3%	0.0%
Other Hispanic or Latino	4.3%	4.7%	1.6%
Not Hispanic or Latino	82.0%	60.7%	77.8%

Source: U.S. Census Bureau American Community Survey 5-Year Estimates, 2015-2019

<sup>9</sup> The U.S. Census Bureau reports population data to the first decimal point. Brownwood is home to persons identifying as Native Hawaiian and Other Pacific Islander. However, since the population is so small, the Census Bureau data does not reflect the true size of the population.

<sup>10</sup> Ibid.

Nearly one-fifth (19.5%) of Brown County residents are ages 65 or older. It is important to note that while all age groups have unique and ever-changing health needs, older populations are more likely to require more health care services as average health care spending increases in tandem with age.

*Exhibit 5: Population by Age*

	United States	Texas	Brown County
<b>Median Age</b>	38.1	34.6	41.5
Under 5	6.1%	7.1%	5.2%
5 to 9	6.2%	7.2%	5.9%
10 to 14	6.4%	7.4%	6.7%
15 to 19	6.5%	7.1%	7.4%
Under 18	22.6%	26.0%	22.2%
20 to 24	6.8%	7.1%	6.0%
25 to 34	13.9%	14.7%	11.9%
35 to 44	12.6%	13.5%	11.2%
45 to 54	13%	12.5%	12.3%
55 to 59	6.7%	5.9%	7.5%
60 to 64	6.2%	5.3%	6.4%
65 to 74	9.1%	7.4%	11.1%
75 to 84	4.6%	3.6%	6.2%

Source: U.S. Census Bureau American Community Survey 5-Year Estimates, 2015-2019

- The median age of Brown County residents (41.5) is approximately seven years older than the statewide median (34.6).

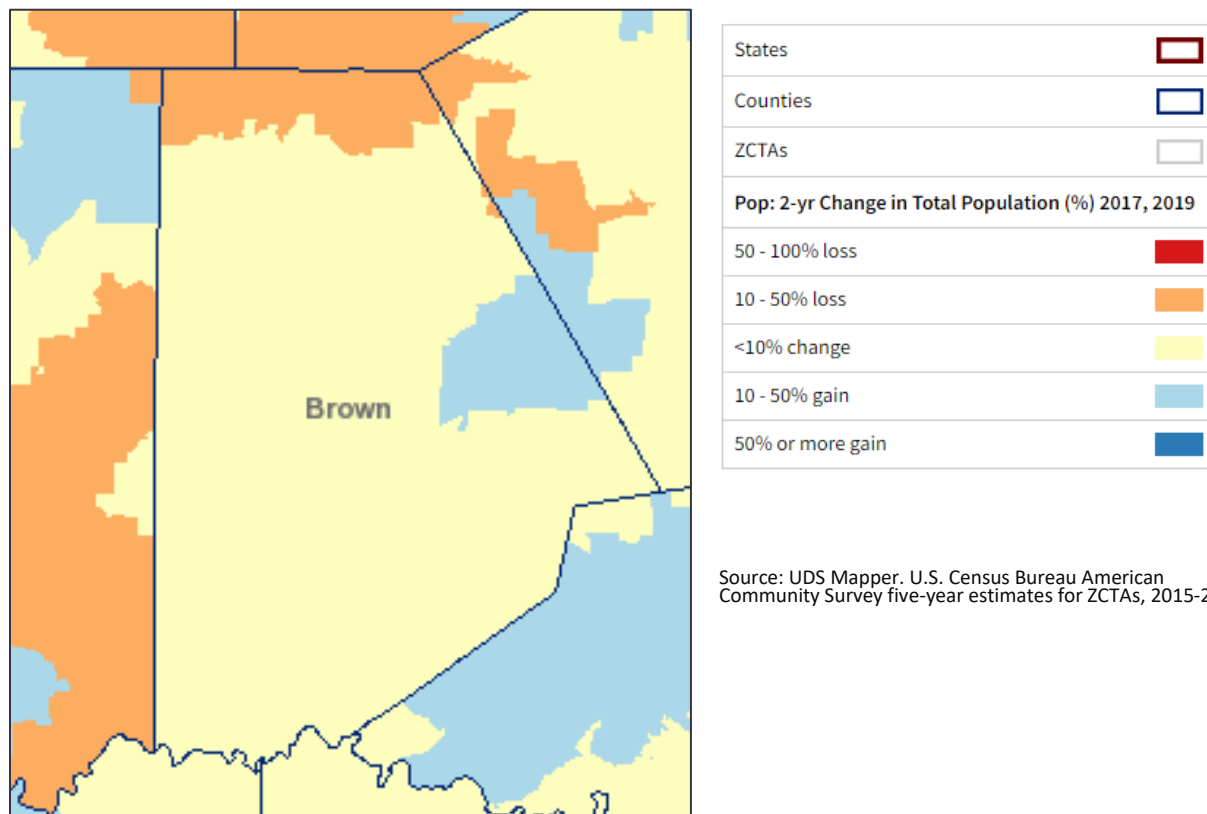
**Exhibit 6** indicates the total population change over a two-year period by available zip codes in Brown County. Areas in Bangs and Zephyr experienced a population decline within the two-year period. The largest growth area was in Blanket. The map below indicates population gain and loss from 2017 to 2019.

*Exhibit 6: Two-Year Change of Total Population, Brown County*

	2017 to 2019 Population Change
Bangs	-5.1%
Blanket	5.6%
Brookesmith	-1.9%
Brownwood	-1.7%
Early	17.1%
May	10.5%
Zephyr	3.0%

Source: UDS Mapper. U.S. Census Bureau American Community Survey 5-year estimates for ZCTAs, 2015-2019

*Exhibit 7: Map of Population Gain & Loss, 2017 to 2019*



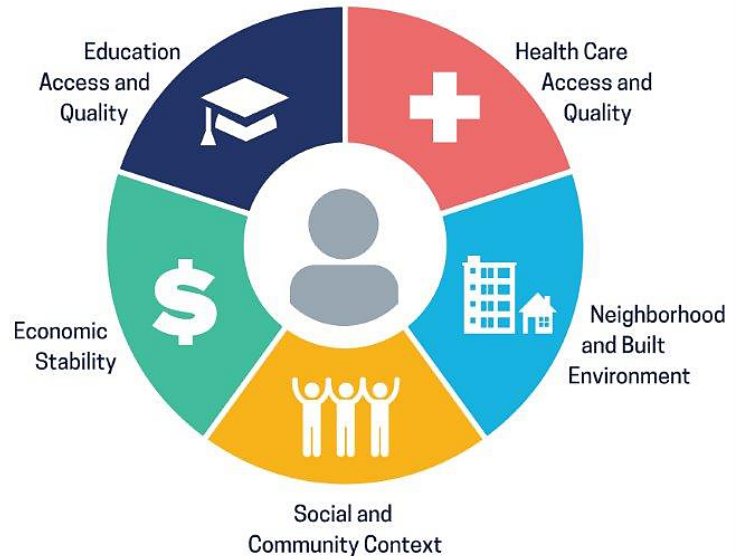
Source: UDS Mapper. U.S. Census Bureau American Community Survey five-year estimates for ZCTAs, 2015-2019



## Social Determinants of Health

Social determinants of health (SDoH) are the conditions of the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks.<sup>11</sup> They are the wider set of forces and systems shaping the conditions of daily life. These forces and systems include economic policies and systems, development agendas, social norms, social policies, and political systems. Social determinants have an important influence on health inequities — the unfair and avoidable differences in health status seen within and between counties. In counties at all levels of income, health and illness follow a social gradient: the lower the socioeconomic position, the worse the health.<sup>12</sup>

## Social Determinants of Health



Source: Healthy People 2030

Efforts to improve health in the United States have traditionally looked to the healthcare system as the key driver of health and health outcomes. However, there has been increased recognition that improving health and achieving health equity requires broader approaches to address the social, economic, and environmental factors that influence health.<sup>13</sup>

<sup>11</sup> Healthy People 2030, Social Determinants of Health.

<sup>12</sup> World Health Organization, Social Determinants of Health.

<sup>13</sup> The Kaiser Family Foundation. Beyond Health Care: The Role of Social Determinants in Promoting Health and Health Equity, 2018.

# Economic Stability

Economic stability is a known social determinant of health, as people living in poverty are less likely to have access to healthcare, healthy food, stable housing, and opportunities for physical activity. These disparities indicate that people living in poverty are more likely to die from preventable diseases.<sup>14</sup> Research suggests that low-income status is associated with adverse health consequences, including shorter life expectancy, higher infant mortality rates, and other poor health outcomes.<sup>15</sup>

Socioeconomic diversity exists within the Hendrick Medical Center Brownwood service area. The 2021 federal poverty level for a family of four is \$26,500 annually. Approximately one in four (23.1%) of households in Brown County earn less than \$25,000 per year – meaning nearly a quarter of the population may face more urgent financial hardships.

*Exhibit 8: Median Annual Household Income*

	United States	Texas	Brown County
<b>Total Households</b>	120,756,048	9,691,647	14,409
Less than \$10,000	6.0%	6.1%	6.2%
\$10,000 to \$14,999	4.3%	4.0%	4.4%
\$15,000 to \$24,999	8.9%	8.9%	12.5%
\$25,000 to \$34,999	8.9%	9.3%	13.0%
\$35,000 to \$49,999	12.3%	12.5%	15.1%
\$50,000 to \$74,999	17.2%	17.6%	19.5%
\$75,000 to \$99,999	12.7%	12.5%	11.4%
\$100,000 to \$149,999	15.1%	15.0%	11.1%
\$150,000 to \$199,999	6.8%	6.7%	3.3%
\$200,000 or more	7.7%	7.4%	3.5%
<b>Median Household Income</b>	<b>\$62,843</b>	<b>\$61,874</b>	<b>\$48,365</b>

Source: U.S. Census Bureau American Community Survey 5-Year Estimates, 2015-2019

- Fewer than half (48.8%) of Brown County households earn more than \$50,000 per year – a data point notably lower than Texas (59.2%) and US (59.5%).
- Median household income is important to note because socioeconomic status can directly impact healthcare by causing inequities in health distribution, resource distribution, and quality of life.<sup>16</sup>

<sup>14</sup> Social Determinants of Health, Economic Stability.

<sup>15</sup> American Academy of Family Physicians, Poverty and Health - The Family Medicine Perspective.

<sup>16</sup> American Psychological Association.

The Massachusetts Institute of Technology (MIT) developed the Living Wage Calculator to estimate the cost of living in communities or region based on typical expenses. This tool helps individuals, communities, and employers determine a local wage rate that allows residents to meet minimum standards of living.<sup>17</sup>

In 2019, the living wage in the United States for a family of four is \$16.54, or \$68,808 per year before taxes, a 40-cent increase from \$16.14 in 2018.<sup>18</sup> In 2022, the minimum wage for the state of Texas remains at \$7.25 per hour, which is equal to the federal minimum wage. However, the living wage of Texas is almost double its current minimum wage.

*Exhibit 9: Living Wage Calculator and Annual Expenses for Texas*

<b>Texas</b>	<b>1 Adult, 0 Children</b>	<b>1 Adult, 1 Child</b>	<b>1 Adult, 2 Children</b>	<b>2 Working Adults, No Children</b>	<b>2 Working Adults, 1 Child</b>	<b>2 Adults, 2 Children</b>
Food	\$3,177	\$4,670	\$6,990	\$5,825	\$7,238	\$9,305
Child Care	\$0	\$7,042	\$14,083	\$0	\$7,042	\$14,083
Medical	\$2,760	\$8,866	\$8,554	\$6,270	\$8,554	\$8,694
Housing	\$9,333	\$12,799	\$12,799	\$10,489	\$12,799	\$12,799
Transportation	\$5,113	\$9,378	\$11,672	\$9,378	\$11,672	\$13,896
Civic	\$1,811	\$3,889	\$3,554	\$3,889	\$3,554	\$4,127
Required annual income after taxes	\$21,225	\$44,396	\$54,392	\$40,538	\$56,003	\$69,120
Annual taxes	\$4,064	\$8,321	\$10,180	\$7,937	\$8,243	\$11,205
Required annual income before taxes	\$29,134	\$59,652	\$72,977	\$56,899	\$56,955	\$80,325
Living Wage	\$14.01	\$28.68	\$35.09	\$11.32	\$15.64	\$19.31
Poverty Wage	\$6.13	\$8.29	\$10.44	\$8.29	\$5.22	\$6.30
Minimum Wage	\$7.25	\$7.25	\$7.25	\$7.25	\$7.25	\$7.25

<b>Brown County</b>	<b>1 Adult, 0 Children</b>	<b>1 Adult, 1 Child</b>	<b>1 Adult, 2 Children</b>	<b>2 Working Adults, No Children</b>	<b>2 Working Adults, 1 Child</b>	<b>2 Adults, 2 Children</b>
Food	\$3,177	\$4,670	\$6,990	\$5,825	\$7,238	\$9,305
Child Care	\$0	\$5,346	\$10,692	\$0	\$5,346	\$10,692
Medical	\$2,760	\$8,866	\$8,554	\$6,270	\$8,554	\$8,694
Housing	\$6,000	\$8,748	\$8,748	\$7,128	\$8,748	\$8,748
Transportation	\$5,113	\$9,378	\$11,672	\$9,378	\$11,672	\$13,896
Civic	\$1,811	\$3,889	\$3,554	\$3,889	\$3,554	\$4,127
Required annual income after taxes	\$21,737	\$45,584	\$55,355	\$37,177	\$50,257	\$61,678
Annual taxes	\$3,524	\$7,390	\$8,974	\$6,027	\$8,147	\$9,999
Required annual income before taxes	\$25,261	\$52,974	\$64,329	\$43,204	\$58,404	\$71,677
Living Wage	\$12.14	\$25.47	\$30.93	\$10.39	\$14.04	\$17.23
Poverty Wage	\$6.13	\$8.29	\$10.44	\$4.14	\$5.22	\$6.30
Minimum Wage	\$7.25	\$7.25	\$7.25	\$7.25	\$7.25	\$7.25

Source: MIT, Living Wage Calculation for Texas, 2020-2021

<sup>17</sup> MIT, Living Wage Calculator

<sup>18</sup> A family of four is defined as two working adults and two children.

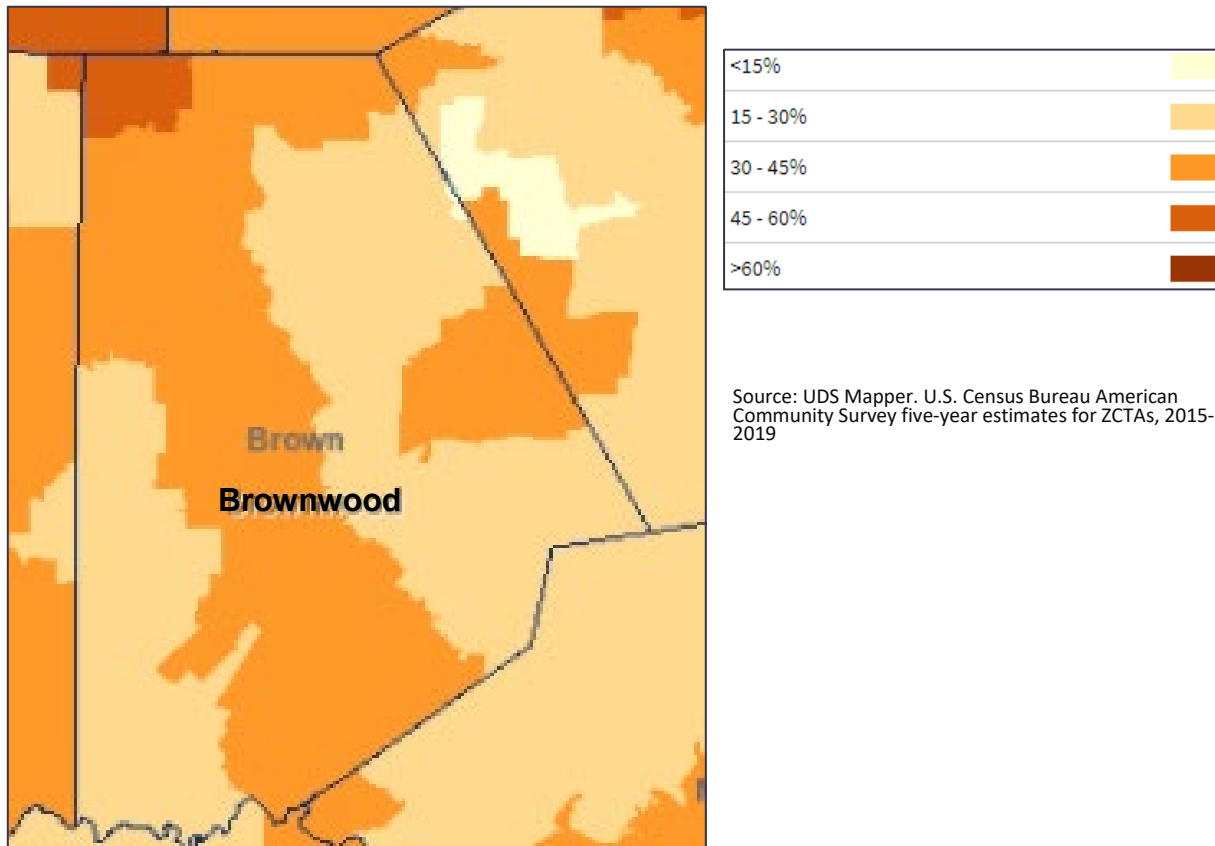
**Exhibit 10** indicates the total number of people living below 200% of the federal poverty level. Shades of orange, dark orange, and red on the map indicate low-income communities that may face more barriers to accessing healthcare. Zip code tabulated areas (ZCTAs) indicate that approximately 41% of the Brownwood population are considered to be low-income households.

*Exhibit 10: Low-Income Communities in Brown County*

	Percent of Low-Income Population
Bangs	27.5%
Blanket	33.9%
Brookesmith	18.7%
Brownwood	41.0%
Early	26.0%
May	21.5%
Zephyr	23.8%

Source: UDS Mapper. U.S. Census Bureau American Community Survey five-year estimates for ZCTAs, 2015-2019

*Exhibit 11: Map of Low-Income Communities*



Poverty indicators show that more people in Brown County have not earned a high school diploma (15.8%) in comparison to Texas (14.6%). Brown County also has a higher percentage of people living with a disability compared to Texas (16.3%, 11.5%, respectively).

*Exhibit 12: Select Poverty-related Indicators*

	United States	Texas	Brown County
Population Living Below Poverty	13.4%	14.7%	12.6%
Children Living in Poverty (> 18)	18.5%	20.9%	16.4%
Unemployed Population <sup>19</sup>	3.6%	3.8%	3.4%
No High School Diploma	12.6%	14.6%	15.8%
Population Living with a Disability	12.6%	11.5%	16.3%
Population Who Speaks English Less than Very Well	8.4%	13.7%	3.6%
Population with No Vehicle	8.6%	5.3%	4.8%
Uninsured Population	8.8%	17.2%	14.5%

Source: U.S. Census Bureau American Community Survey 5-Year Estimates, 2015-2019

<sup>19</sup> Data from U.S. Bureau of Labor Statistics, Local Area Unemployment Statistics Information & Analysis. State & county data as of April 2022. Rates are not seasonally adjusted.

## Neighborhood and Built Environment

The neighborhood and community environments where people live have a major impact on an individual’s health and well-being. Many people in the United States live in neighborhoods with high rates of violence, unsafe air or water, and other health and safety risks.<sup>20</sup>

### Housing and Basic Needs

The U.S. Department of Housing and Urban Development (HUD) defines cost burden as when a household is spending 30% to 50% of their household income on housing and severely cost-burdened as when a household is spending more than 50% of their household income on housing expenses.<sup>21</sup>

Approximately 20% of Brown County residents spend 35% or more of their household income on monthly mortgage payments. Housing-related cost-burden is expected to grow if US economic trends worsen. Trends are slightly worse for renters, as nearly one-third of renters (29.5%) in Brown County spend 35% or more of their income for rent.

*Exhibit 13: Selected Monthly Owner Costs as a Percentage of Household Income*

	United States	Texas	Brown County
<b>Housing Units with A Mortgage<sup>22</sup></b>	48,182,974	3,431,098	4,147
Less than 20.0%	45.9%	46.9%	51.5%
20.0% to 24.9%	15.7%	16.2%	10.8%
25.0% to 29.9%	10.5%	10.4%	11.6%
30.0% to 34.9%	6.9%	6.8%	5.9%
35.0% or more	20.9%	19.7%	20.3%

Source: U.S. Census Bureau American Community Survey 5-Year Estimates, 2015-2019

*Exhibit 14: Gross Rent as a Percent of Household Income*

	United States	Texas	Brown County
<b>Occupied Units Paying Rent<sup>23</sup></b>	40,366,338	3,420,397	3,462
Less than 15.0%	13.1%	13.2%	17.1%
15.0% to 19.9%	12.9%	13.6%	17.1%
20.0% to 24.9%	12.9%	13.6%	12.5%
25.0% to 29.9%	11.6%	11.8%	11.5%
30.0% to 34.9%	9.1%	9.1%	12.4%
35.0% or more	40.5%	38.6%	29.5%

Source: U.S. Census Bureau American Community Survey 5-Year Estimates, 2015-2019

<sup>20</sup> Social Determinants of Health, Neighborhood and Built Environment.

<sup>21</sup> United States Department of Housing and Urban Development. Rental Burdens, Rethinking Affordability Measures.

<sup>22</sup> Excluding units where percentage cannot be computed.

<sup>23</sup> Excluding units where percentage cannot be computed.



A housing unit is vacant if no one is living in the unit at the time of the U.S. Census Bureau American Community Survey interview, unless its occupants are only temporarily absent. In addition, a vacant unit may be one which is entirely occupied by individuals who have a usual residence elsewhere. New units not yet occupied are classified as vacant housing units if construction has reached a point where all exterior windows and doors are installed, and final usable floors are in place. Vacant units are excluded if they are exposed to the elements – if the roof, walls, windows, or doors no longer protect the interior from the elements, or if there is positive evidence (such as a sign on the house or block) that the unit is to be demolished or is condemned. Also excluded are quarters being used entirely for nonresidential purposes, such as a store or an office, or quarters used for the storage of business supplies or inventory, machinery, or agricultural products. Vacant sleeping rooms in lodging houses, transient accommodations, barracks, and other quarters not defined as housing units are not included in the data.<sup>24</sup>

Nearly a quarter of housing units in Brown County are considered vacant housing units (24.1%) – more than double that of Texas. Brown County is home to Lake Brownwood State Park, covering 537.5 acres scattered with seasonal housing units like vacation homes that often remain empty for most of the year.<sup>25</sup>

*Exhibit 15: Select Housing Indicators*

	United States	Texas	Brown County
<b>Total housing units</b>	137,428,986	10,937,026	18,979
Occupied housing units	87.9%	88.6%	75.9%
Vacant housing units	12.1%	11.4%	24.1%
Homeowner vacancy rate	1.6	1.6	2.3
Rental vacancy rate	6.0	7.8	8.5

Source: U.S. Census Bureau American Community Survey 5-Year Estimates, 2015-2019

*Exhibit 16: Access to a Vehicle*

	United States	Texas	Brown County
<b>Households with No Vehicle Available</b>	8.6%	5.3%	4.8%
1 vehicle available	32.7%	32.7%	30.3%
2 vehicles available	37.2%	40.2%	40.5%
3 or more vehicles available	21.4%	21.8%	24.4%

Source: U.S. Census Bureau American Community Survey 5-Year Estimates, 2015-2019

- Nearly a quarter of residents (24.4%) in Brown County have access to at least three or more vehicles, higher than the statewide percentage.

<sup>24</sup> U.S. Census Bureau, Definitions & Explanations.

<sup>25</sup> Texas State Parks, Lake Brownwood State Park.

Food insecurity in children can lead to complicated health outcomes. Research suggests that “food-insecure children are at least twice as likely to report being in fair or poor health and at least 1.4 times more likely to have asthma, compared to food-secure children; and food-insecure seniors have limitations in activities of daily living comparable to those of food-secure seniors fourteen years older.”<sup>26</sup>

The pandemic has significantly changed the food landscape for many Americans, as high unemployment produced long lines at food banks, lockdowns prompted some consumers to stockpile shelf-stable groceries, and interruptions in supply chains are leaving shelves empty.<sup>27</sup>

*Exhibit 17: Food Insecurity*

2019	United States	Texas	Brown County
Food Insecurity Rate	10.9%	14.1%	15.0%
Child Food Insecurity Rate	14.6%	19.6%	20.3%
2021	United States	Texas	Brown County
Food Insecurity Rate	ND	19.6%	17.3%
Child Food Insecurity Rate	ND	23.6%	24.3%

Source: Feeding America, Map the Meal Gap

- Between 2019 and 2021, the food insecurity rate in Brown County increased from 15% to 17.3%.
- Child food insecurity rates in Brown County and in Texas increased between 2019 and 2021.

*Exhibit 18: Supplemental Nutritional Assistance Program (SNAP) Enrollment*

2021	Texas	Brown County
<b>Total Cases<sup>28</sup></b>	1,510,709	2,283
Eligible Individuals <sup>29</sup>	3,402,068	4,766
Under 5	484,468	557
5 - 17	1,242,193	1,463
18 - 59	1,265,360	2,065
60 - 64	120,479	228
65 +	289,519	453
<b>Total SNAP Payments</b>	\$502,316,183	\$641,366
<b>Average Payment/Case<sup>30</sup></b>	\$333	\$281

Source: Texas Human Services Programs, Office of Data, Analytics. Data as of November 2021

<sup>26</sup> Gunderson, Ziliak, “Food Insecurity & Health Outcomes, 2015.”

<sup>27</sup> New York University. COVID-19 Pandemic Exacerbated Food Insecurity, Especially in Families with Children, 2021.

<sup>28</sup> Case = designated group of people determined eligible to receive the SNAP benefit (can be more than one person). Counts include cases with \$0 authorized benefits.

<sup>29</sup> Eligible Individual = individual determined eligible for SNAP. Counts include all eligible individuals, regardless of receipt of benefit.

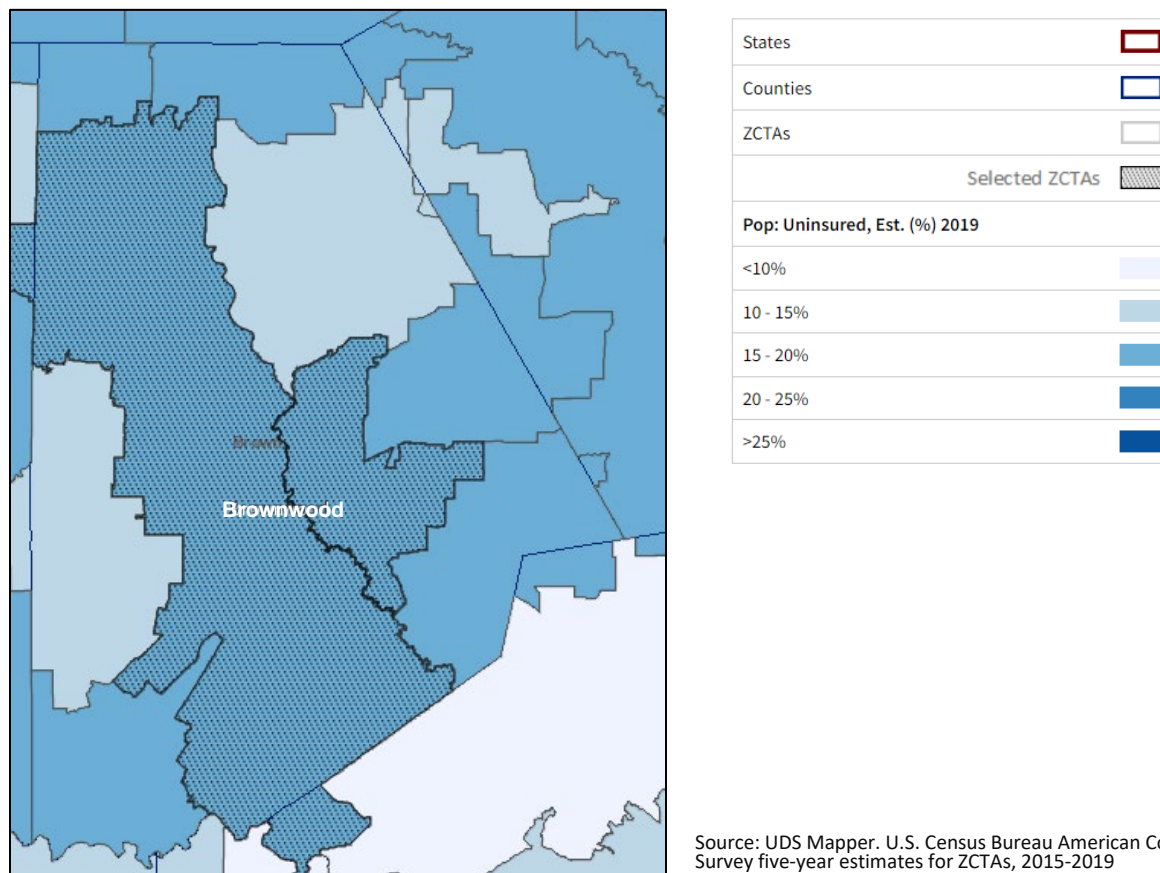
<sup>30</sup> Average Payment/Case = average dollar benefits available to the case (shared by the eligible individuals on that case).

## Healthcare Access and Quality

People without health insurance are less likely to have a primary care provider, and they may not be able to afford the necessary healthcare services and medications. Strategies to increase insurance coverage rates are critical to ensure more residents receive important healthcare services, like preventive care and treatment for chronic illnesses.<sup>21</sup> In 2020, Texas had the greatest number of uninsured adults under 65 in the United States, at least 29% of adults statewide.<sup>31</sup>

The map below displays an estimate of the percentage of the Brown County civilian, non-institutionalized population who do not have health insurance and for whom poverty status is determined. To further highlight the Brownwood area, zip code areas are shaded. In 2019, approximately 28.7% of Brown County’s population between age 18 and 64 self-reported that they did not have health insurance.<sup>32</sup> See the darker blue/gray area in **Exhibit 19** below.

*Exhibit 19: Map of Impoverished Uninsured Population*



Source: UDS Mapper. U.S. Census Bureau American Community Survey five-year estimates for ZCTAs, 2015-2019

<sup>31</sup> National Center for Coverage Innovation at Families USA. The COVID-19 Pandemic & Resulting Economic Crash, 2020.

<sup>32</sup> National Center for Chronic Disease Prevention & Health Promotion, Division of Population Health. PLACES Data.

**Exhibit 20** indicates the percentage of children ages 18 or younger with no health insurance, as well as children without health insurance who are living at or below 200% of the federal poverty level and do not have health coverage through either private (e.g., private purchase or employer-sponsored) or public (e.g., Medicaid or CHIP) insurance, according to the Census Bureau’s Small Area Health Insurance Estimates.

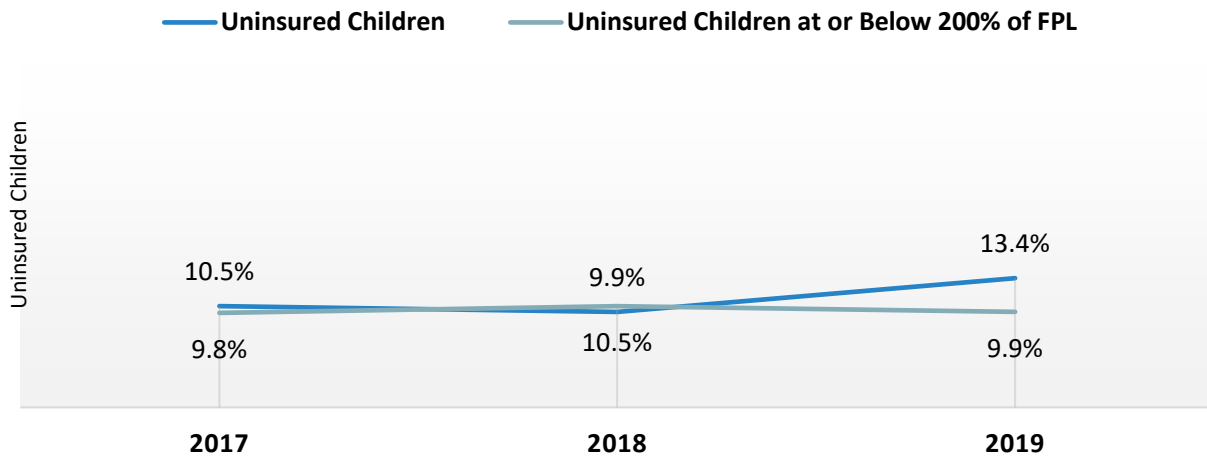
Between 2017 and 2019, the percentage of uninsured children in Brown County increased from 10.5% to approximately 13.4%, while uninsured children living at or below 200% of the federal poverty level remained steady – better than the state rate.

*Exhibit 20: Child Healthcare Access*

	Texas		Brown County	
	Uninsured Children	Uninsured Children at or Below 200% of FPL	Uninsured Children	Uninsured Children at or Below 200% of FPL
2019	12.7%	16.0%	13.4%	9.9%
2018	11.1%	13.8%	9.9%	10.5%
2017	10.7%	13.4%	10.5%	9.8%

Source: U.S. Census Bureau, Small Area Health Insurance Estimates

*Exhibit 21: Uninsured Children in Brown County*



Source: U.S. Census Bureau, Small Area Health Insurance Estimates

## Healthcare Workforce

The ratio of primary care physicians and dentists represents the number of individuals served by one provider, if the population was equally distributed across providers within a country, state, or county. For example, if a county has a population of 50,000 and has 20 primary care physicians, the ratio would be 2,500:1. The value on the right side of the ratio is always 1 or 0; 1 indicates that there is at least one provider in the county, and 0 indicates there are no providers in the county.

In Texas there are approximately 1,630 residents per primary care physicians overall. Brown County presents a higher ratio of 1,720 residents per primary care physician.

*Exhibit 22: Residents per Healthcare Provider Ratio<sup>33</sup>*

	United States	Texas	Brown County
Primary Care Physicians <sup>34</sup>	1,010:1	1,630:1	1,720:1
Dentists	1,210:1	1,660:1	2,352:1

Source: County Health Rankings & Roadmaps

*Exhibit 23: Proportion of Registered Nurses by Practice Setting in Texas*

Inpatient Hospital Care	57.2%
Outpatient Hospital Care	8.0%
Other	7.3%
Home Health Agency	6.0%
Physician or Dentist/Private Practice	3.8%
School/College Health	3.1%
Nursing Home/Extended Care Facility	2.9%
Freestanding Clinic	2.9%
Business Industry	2.6%
Community/Public Health	2.4%
School of Nursing	1.4%
Self-employed/Private Practice	1.0%
Military Installation	0.7%
Rural Health Clinic	0.4%
Temporary Agency/Nursing Pool	0.3%

Source: Texas Department of State Health Services. Health Care Workforce, 2019

- A majority of registered nurses (RNs) in Texas are in the inpatient hospital care setting, followed by outpatient hospital care.

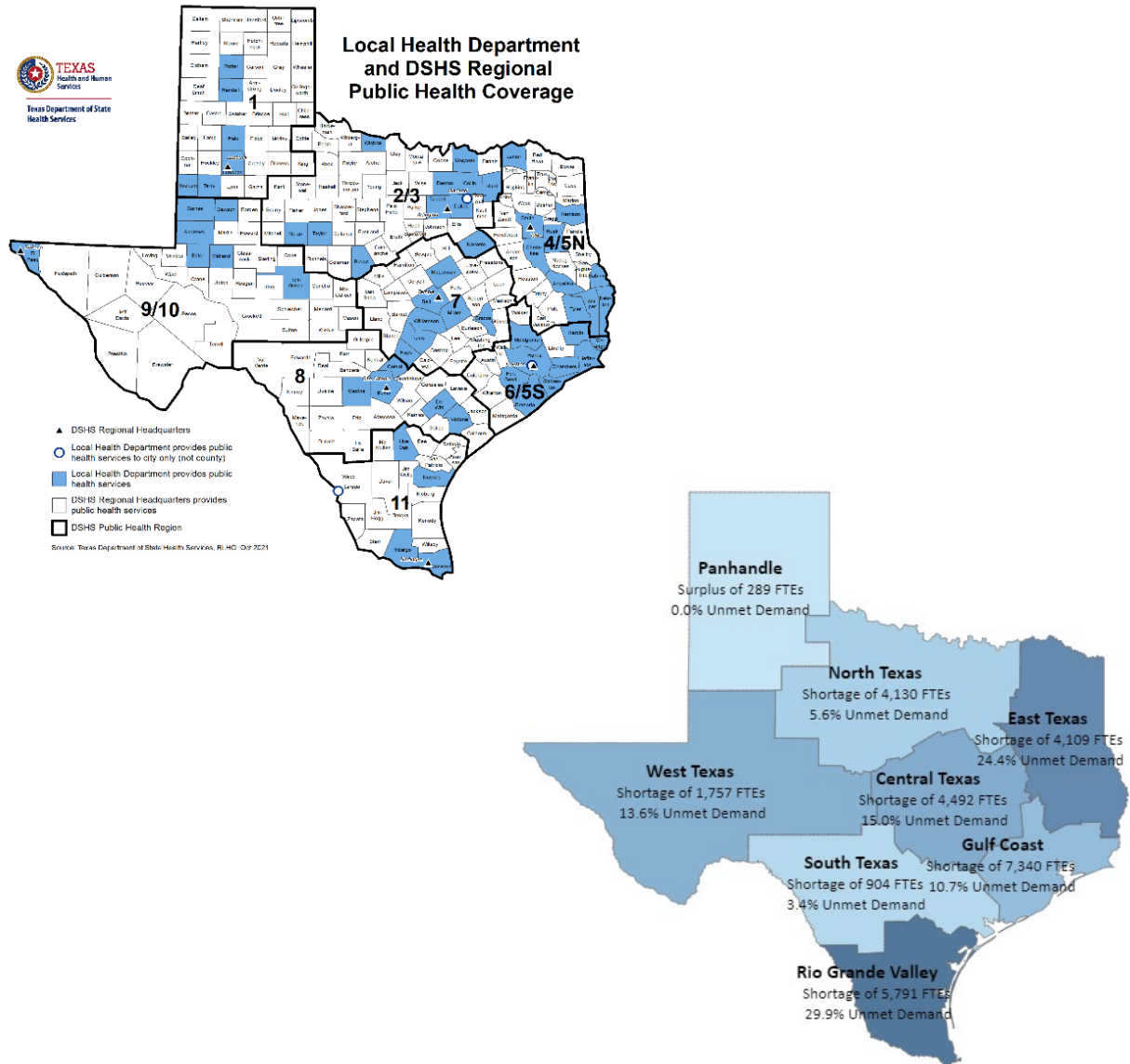
The Texas Department of State Health Services Workforce Supply and Demand Projections data tool indicates the estimated number of select healthcare providers who will be in the workforce (supply) and

<sup>33</sup> Primary Care Providers, 2019 data.  
Dentists, 2020 data.

<sup>34</sup> Primary Care Physicians include both MD and Dos and does not include obstetrics/gynecology.

how many in each region Texas communities will need (demand) at various point in time over the next eight years (2022 to 2030).<sup>35</sup> The following data highlights North Texas and West Texas. Please note that North Texas refers to public health region two and three, while West Texas covers region four and five.<sup>36</sup>

*Exhibit 24: Texas Public Health Regions*



Source: Texas Health & Human Services

<sup>35</sup> Texas Department of State Health Services Texas Health Data website's Workforce Supply & Demand Projections.

<sup>36</sup> Texas Health & Human Services, Texas Public Health Regions.



As of 2019, there was no current unmet need for Nurse Practitioners in North Texas. Projections indicate that Texas will have 7,569 full-time Nurse Practitioners in the workforce, leaving a surplus of more than 5,000.

By 2030, Texas will need almost 50,000 more registered nurses (RNs) than the projected supply, leaving this sector of the workforce needing at least 15% more RNs. North and West Texas are also estimated to have a shortage of at least a 12.8% to 4.2% shortage of RNs, as well.

*Exhibit 25: Projected Nurse Practitioner and Physician Supply and Demand*

2030	Texas		North Texas		West Texas	
	Supply	Demand	Supply	Demand	Supply	Demand
All Nurse Practitioners	42,417	25,139	12,999	7,569	1,990	1,155
Primary Care NPs	36,073	6,694	10,465	2,024	1,606	310
Registered Nurses	283,656	333,602	86,731	99,470	14,928	15,575
All Physicians	68,362	77,703	20,614	23,734	2,893	3,473

Source: Texas Department of State Health Services. Texas Health Data, Health Care Workforce Supply & Demand Projections

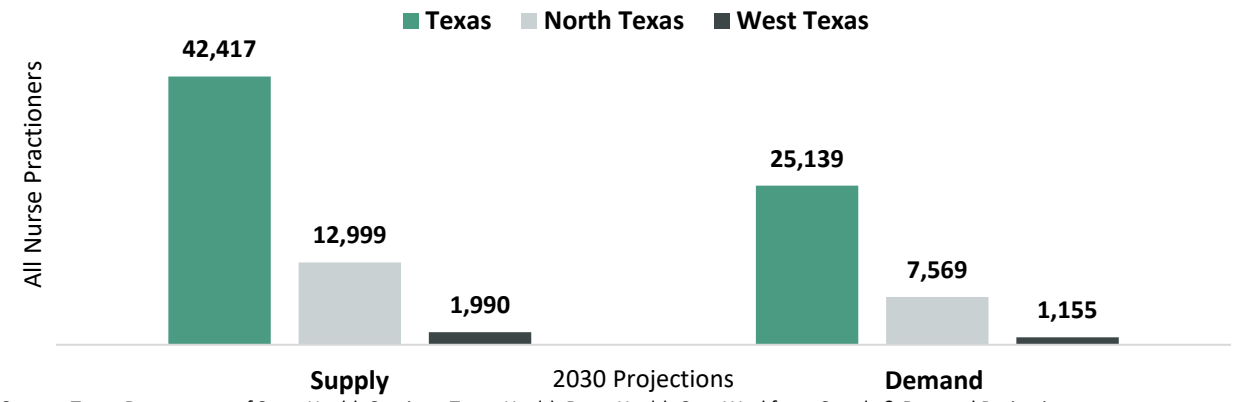
*Exhibit 26: Projected Unmet Need of Healthcare Workforce*

2030	Texas		North Texas		West Texas	
	FTE Unmet Need	% Unmet Need	FTE Unmet Need	% Unmet Need	FTE Unmet Need	% Unmet Need
All Nurse Practitioners	-17,277	0.0%	-5,430	0.0%	-745	0.0%
Primary Care NPs	-29,379	0.0%	-8,441	0.0%	-1,296	0.0%
Registered Nurses	49,946	15.0%	12,739	12.8%	647	4.2%
All Physicians	9,341	12.0%	3,120	13.1%	580	16.7%

Source: Texas Department of State Health Services. Texas Health Data, Health Care Workforce Supply & Demand Projections

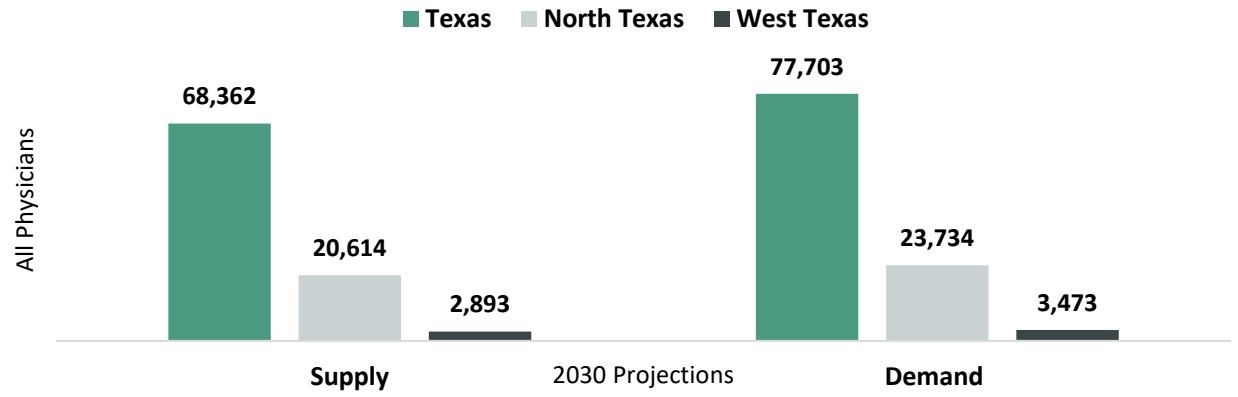
- Texas will need an estimated 9,341 more physicians than what is projected in the workforce. North Texas will need at least 3,100 more primary care physicians than the current projections expected by 2030, leaving a 13.1% unmet need.
- West Texas will experience the most severe shortage of physicians (16.7%). While the Health Care Workforce Supply and Demand Projections report classifies Brown County as North Texas, Brown County likely is more similar to West Texas, since North Texas includes the Dallas/Fort Worth metro area, which may skew the data slightly for North Texas.

*Exhibit 27: Projected Nurse Practitioner Supply and Demand*



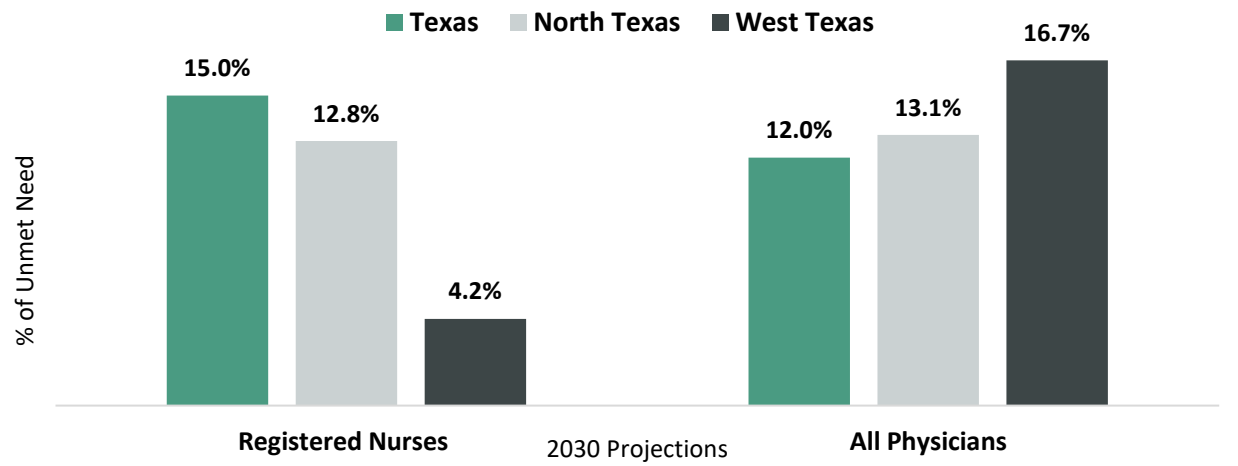
Source: Texas Department of State Health Services. Texas Health Data, Health Care Workforce Supply & Demand Projections

*Exhibit 28: Projected Physicians Supply & Demand*



Source: Texas Department of State Health Services. Texas Health Data, Health Care Workforce Supply & Demand Projections

*Exhibit 29: Projected Unmet Need of Health Care Workforce*



Source: Texas Department of State Health Services. Texas Health Data, Health Care Workforce Supply & Demand Projections

## Emergency Care Profile

*Exhibit 30: Emergency Department Visits*

	Texas	Brown County
<b>Outpatient</b>		
Total Outpatient Visits	8,452,193	15,543
% of ED Visits Not Admitted	84.5%	93.5%
<b>Inpatient</b>		
Total Admitted Visits	1,548,845	1,081
% of ED Visits Admitted	15.5%	6.5%

Source: Hendrick Health, FY 2021 Data

*Exhibit 31: Outpatient Emergency Department Visits in by Gender and Age*

	0-17	18-44	45-64	65-74	75 +
Female	1,172	3,508	2,097	1,034	1,154
Male	1,151	2,337	2,047	1,072	1,058

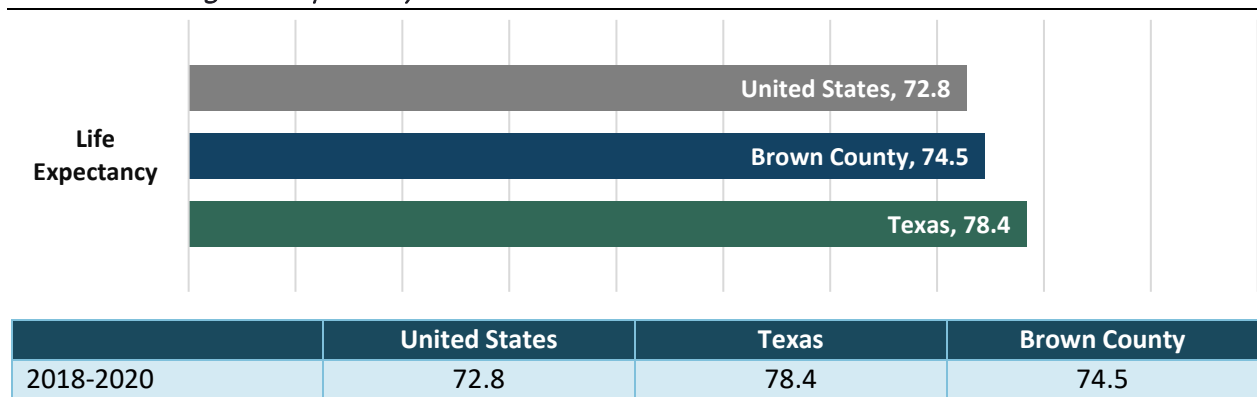
Source: Hendrick Health, FY 2021 Data

## Population Health

Population health focuses on improving health outcomes for large groups of people by identifying and monitoring individual patients within groups of people or communities.<sup>37</sup> Examining life expectancy, chronic disease prevalence, risk factors, and other health-related data is vital to understanding the full picture of the overall health of populations.

In Texas, the average number of years a person can expect to live ranges from 72.0 to 87.6 years, depending on location and other factors. The 2018-2020 average life expectancy of Brown County residents (74.5 years) was slightly lower than the statewide average age of 78.4.

*Exhibit 32: Average Life Expectancy*



Source: County Health Rankings & Roadmaps

*Exhibit 33: Premature Death Rate*

Per 100,000 Population	United States	Texas	Brown County
2018-2020	5,600	7,000	9,900

Source: County Health Rankings & Roadmaps

- The premature death rate measures the age-adjusted rate of years of potential life lost before age 75 per 100,000 population.
- Brown County has a higher premature death rate than compared to Texas and a much higher rate compared to the United States.

<sup>37</sup> HealthIT.Gov, Population & Public Health.

In 2019, a higher percentage of residents in Brown County self-reported their health status as poor or fair compared to the state and nation rates. Additionally, Brown County residents self-reported experiencing more poor physical health days in the past 30 days.

*Exhibit 34: Self-Reported Health Status*

2019	United States	Texas	Brown County
Poor or Fair Health	15.0%	21.0%	22.0%
Poor Physical Health Days	3.4	3.6	4.2

Source: County Health Rankings & Roadmaps

### Self-Reported Health Status Indicator Key

#### POOR OR FAIR HEALTH

The percentage of adults in a county who consider themselves to be in poor or fair health.

#### POOR PHYSICAL HEALTH DAYS

The average number of physically unhealthy days reported in the past 30 days, based on responses to the Behavioral Risk Factor Surveillance Survey question: *“Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?”*

Preventable hospital stays may be classified as both a quality and access measure, as some literature describes hospitalization rates for ambulatory care sensitive conditions primarily as a proxy for access to primary healthcare.<sup>38</sup> The COVID-19 pandemic has decreased the delivery of preventive care services, which may cause delayed diagnoses, increased mortality, and increased healthcare costs.

*Exhibit 35: Preventable Hospital Stays<sup>39</sup>*

2019	United States	Texas	Brown County
Preventable Hospital Stays	ND	4,255	3,007

Source: County Health Rankings & Roadmaps

*Exhibit 36: Preventive Health*

2019	United States	Texas	Brown County
Mammogram Screening <sup>40</sup>	52.0%	39.0%	39.0%
Influenza Vaccinations <sup>41</sup>	55.0%	46.0%	40.0%

Source: County Health Rankings & Roadmaps

<sup>38</sup> County Health Roadmaps & Rankings, Preventable Hospital Stays.

<sup>39</sup> Preventable hospital stays Rate of hospital stays for ambulatory-care sensitive conditions per 100,000 Medicare enrollees.

<sup>40</sup> Percentage of female Medicare enrollees ages 65-74 that received an annual mammography screening.

<sup>41</sup> Percentage of fee-for-service (FFS) Medicare enrollees that had an annual flu vaccination.

## Chronic Disease Indicators

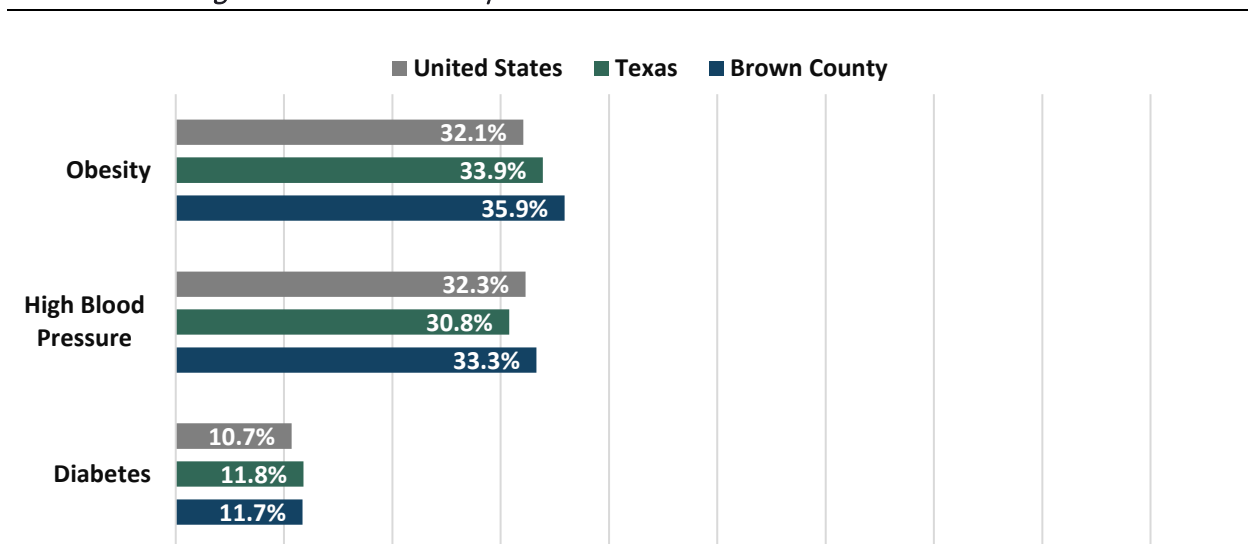
**Exhibit 37** displays the prevalence of select chronic diseases with an additional column to indicate the difference between state and county-wide figures. Please note, that negative numbers indicate prevalence is lower than the statewide rates. The rates of self-reported chronic diseases in Brown County are predominantly slightly above statewide rates. The rates of self-reported chronic diseases in Brown County are predominantly in line with, or slightly above, statewide rates.

*Exhibit 37: Chronic Disease Summary*

2019	United States <sup>42</sup>	Texas <sup>43</sup>	Brown County	County Difference (%) to Texas
Arthritis	26.0%	20.0%	22.1%	2.1%
Asthma	9.7%	7.0%	8.5%	1.5%
Chronic Obstructive Pulmonary Disease	6.5%	5.0%	6.8%	1.8%
Chronic Kidney Disease	2.9%	3.3%	2.9%	-0.4%
Coronary Heart Disease	3.9%	3.1%	5.9%	2.8%
Diabetes	10.7%	11.8%	11.7%	-0.1%
High Blood Pressure	32.3%	30.8%	33.3%	2.5%
Obesity	32.1%	33.9%	35.9%	2.0%

Source: National Center for Chronic Disease Prevention & Health Promotion, Division of Population Health. PLACES Data

*Exhibit 38: Leading Chronic Diseases Comparison*



Source: National Center for Chronic Disease Prevention & Health Promotion, Division of Population Health. PLACES Data

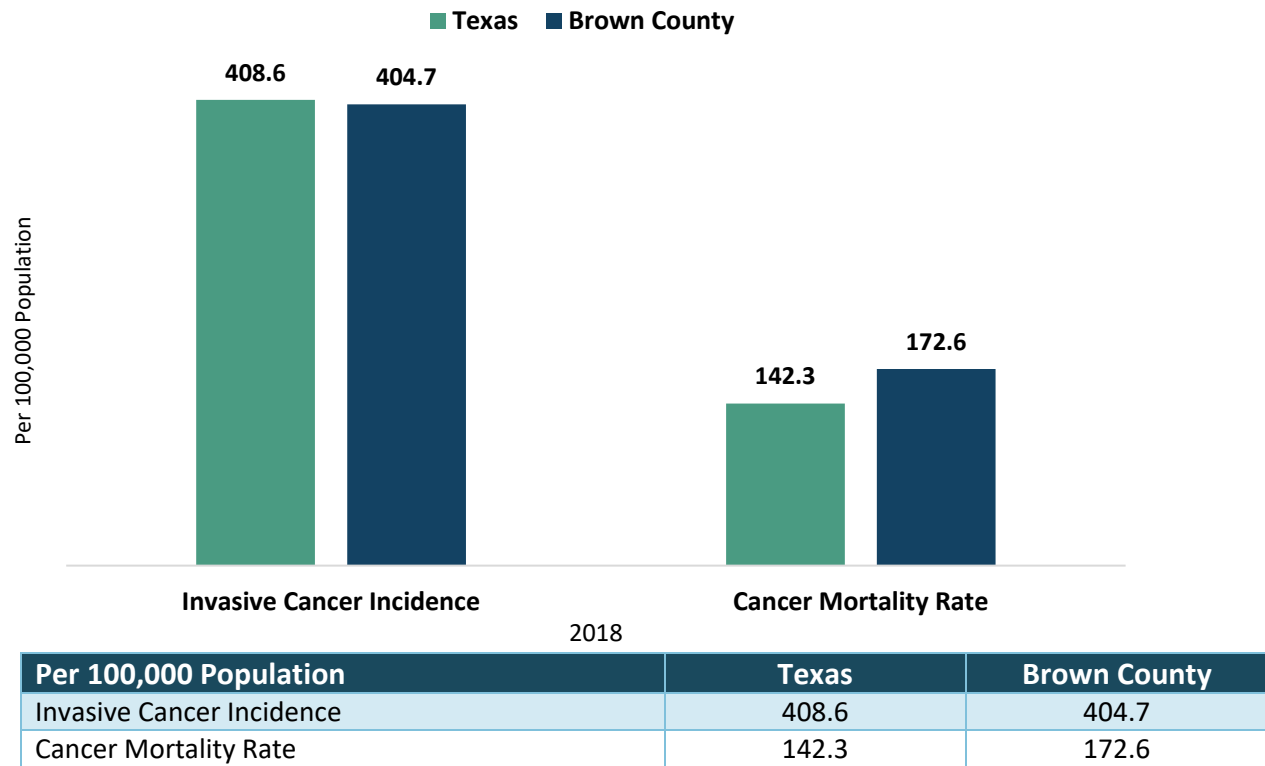
<sup>42</sup> All States & DC (median). Data from National Center for Chronic Disease Prevention & Health Promotion, Division of Population Health. BRFSS Prevalence & Trends Data, 2019.

<sup>43</sup> Texas Statewide Data from National Center for Chronic Disease Prevention & Health Promotion, Division of Population Health. BRFSS Prevalence & Trends Data, 2019.



In 2018, the age-adjusted, cancer-related mortality rate was approximately 173 deaths per 100,000 population in Brown County, higher than the state rate (142.3). Additionally, lung cancer presents the highest mortality rate out of the selected types below, nearly 31 deaths per 100,000 people, followed by breast cancer (**Exhibit 40**).

*Exhibit 39: Cancer-Related Indicators*



Source: Texas Department of State Health Services. Texas Cancer Registry, 2018

*Exhibit 40: Cancer-Related Deaths in Texas*

Cancer Type	Mortality Rate Per 100,000 Population	Case Count
Lung and Bronchus	30.6	8,725
Female Breast	20.1	3,117
Prostate	17.5	1,979
Colon and Rectum	13.7	3,901
Pancreas	10.1	2,905
Liver and Intrahepatic Bile Duct	8.4	2,509
Ovary	6	942
Leukemias	5.9	1,614
Non-Hodgkin Lymphoma	5.1	1,402
Corpus and Uterus	4.3	685

Source: U.S. Cancer Statistics Working Group. U.S. Cancer Statistics Data Visualizations Tool, 2018

Similar to preventive screenings and routine check-ups, sexually transmitted infection (STI) testing was hindered in early 2020. Healthcare clinics closed entirely or limited in-person visits to symptomatic patients only; while at the same time, decreased routine healthcare visits, increased unemployment and loss of health insurance, as well as STI test kit and laboratory supply shortages, may have contributed to reduced screening during the pandemic.<sup>44</sup>

*Exhibit 41: Sexually Transmitted Infections<sup>45</sup>*

Per 100,000	Texas		Brown County	
	2019	2020	2019	2020
Gonorrhea	152.5	200.9	42.3	63.4
Chlamydia	445.1	466.0	340.7	356.5
Primary and Secondary Syphilis	8.1	9.3	ND	ND

Source: National Center for HIV, Viral Hepatitis, STD & TB Prevention

*Exhibit 42: HIV and AIDS Indicators<sup>46</sup>*

Per 100,000	Texas		Brown County	
	2019	2020	2019	2020
HIV prevalence	400.9	405.3	124.0	117.6
HIV diagnoses	18.3	14.8	ND	ND

Source: National Center for HIV, Viral Hepatitis, STD & TB Prevention

<sup>44</sup> Centers for Disease Control & Prevention. Division of STD Prevention, National Center for HIV, Viral Hepatitis, STD & TB Prevention, 2022.

<sup>45</sup> Due to the impact of the COVID-19 pandemic, data for 2020 and 2021 should be interpreted with caution.

<sup>46</sup> A data suppression rule is applied if the population denominator is less than 100 or total case count is one to four (technical notes).

## Maternal Health

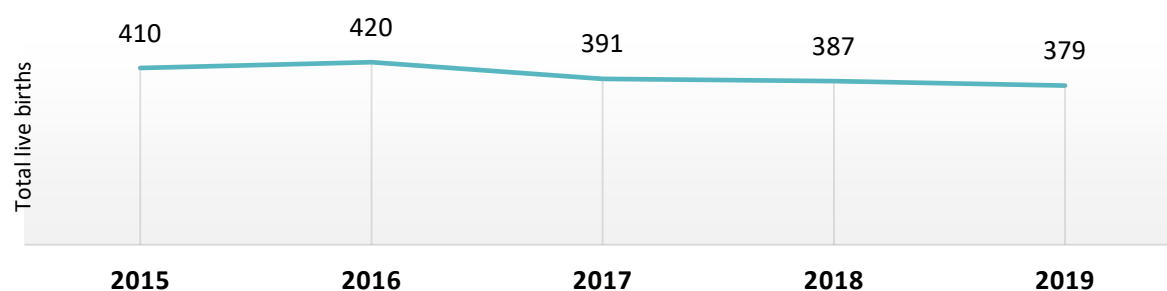
Maternal health is the health of women during pregnancy, childbirth, and the postpartum period. Optimizing maternal health is an important public health goal nationwide, crucial to the well-being of future generations. The urgency of this goal is even more apparent during challenging times, like the current pandemic, which has highlighted striking health disparities within communities.<sup>47</sup> The five-year trend in Texas and Brown County indicates a decline in total births per year.

*Exhibit 43: Trend of Annual Births*

Year	Texas	Brown County
2019	377,710	379
2018	376,354	387
2017	381,876	391
2016	396,999	420
2015	403,439	410

Source: Texas Department of State Health Services, Texas Health Data. Live Births, 2019

*Exhibit 44: Trend of Annual Births in Brown County*



Source: Texas Department of State Health Services, Texas Health Data. Live Births, 2019

*Exhibit 45: Percentage of Births by Race and Ethnicity<sup>48</sup>*

2019	Texas	Brown County
White	32.4%	68.4%
Black/African American	12.3%	4.0%
Hispanic	47.6%	27.8%
Other	7.7%	ND

Source: Texas Department of State Health Services, Texas Health Data. Live Births

- In 2019, more than a quarter of all mothers who gave birth in Brown County identified as Hispanic (27.8%) compared to nearly half of all mothers statewide (47.6%).

<sup>47</sup> U.S. Department of Health & Human Services, Office of Surgeon General. The Surgeon General's Call to Action to Improve Maternal Health, 2020.

<sup>48</sup> Texas Vital Statistics data exclude unknown values and masks low counts with “—”. If a geographic area has no counts for one or more of the selected variables, that row will not show in the table. The location variables (region, county, ZIP) refer to the mother’s residence.

*Exhibit 46: Percentage of Infant Fatalities by Race and Ethnicity in Texas*

2019	Number	Percent of Total Deaths
Hispanic	908	43.8%
Non-Hispanic White	564	27.2%
Non-Hispanic Black	498	24.0%
Non-Hispanic Other	103	5.0%

Source: Texas Department of State Health Services, Texas Health Data. Infant Deaths

**Exhibit 47** indicates five leading causes of death for infants, from birth to one year old, statewide. The leading cause of death in 2019 was in the category of Congenital Malformations, Deformations, and Chromosomal Abnormalities, accounting for approximately 22.7% of all infant fatalities (2,073).

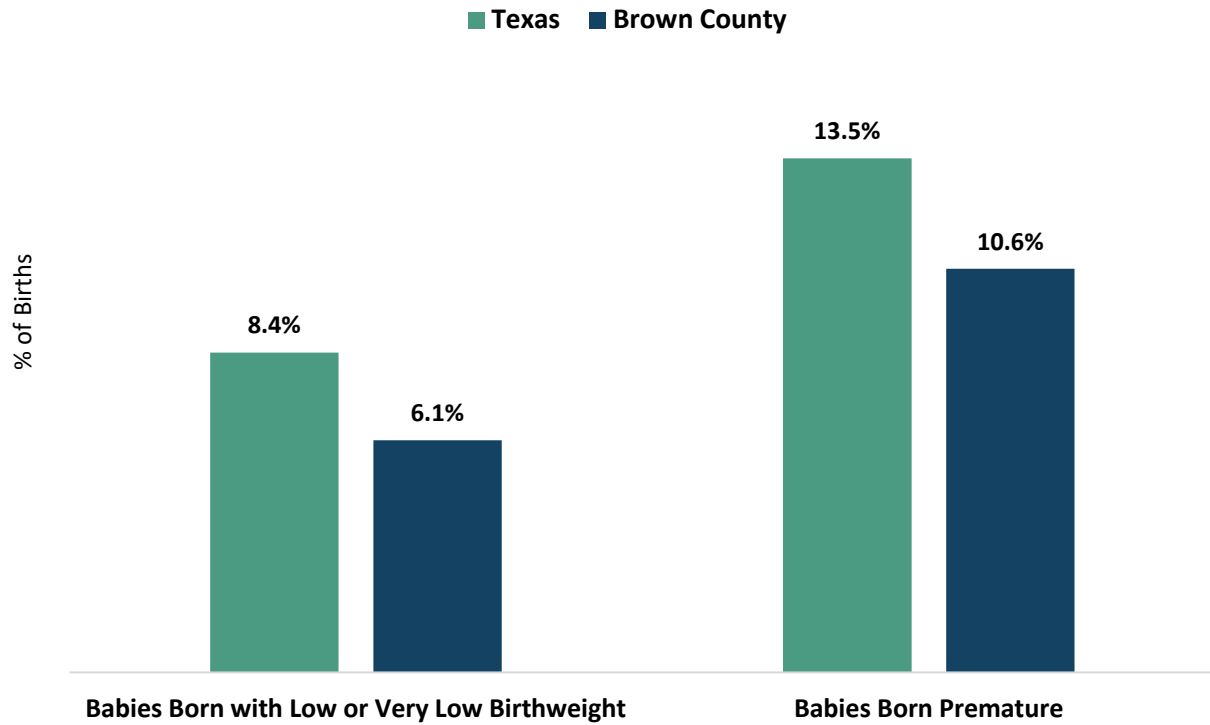
*Exhibit 47: Leading Causes of Infant Fatalities in Texas*

2019	Number	Percent of Total Deaths
Congenital Malformations, Deformations, and Chromosomal Abnormalities	471	22.7%
Disorders Related to Short Gestation and Low Birth Weight (Not elsewhere classified)	301	14.5%
Newborn Affected by Maternal Complications of Pregnancy	122	5.9%
Sudden Infant Death Syndrome	113	5.5%
Accidents (Unintentional injuries)	87	4.2%

Source: Texas Department of State Health Services, Texas Health Data. Infant Deaths

Brown County has lower rates of babies born underweight and babies born prematurely compared to the Texas average.

*Exhibit 48: Infant Characteristics<sup>49</sup>*



2019	Texas	Brown County
<b>Newborn Birth Weight</b>		
Low or Very Low Birthweight	8.4%	6.1%
<b>Newborn Gestation</b>		
Premature	13.5%	10.6%

Source: Texas Department of State Health Services, Texas Health Data. Live Births

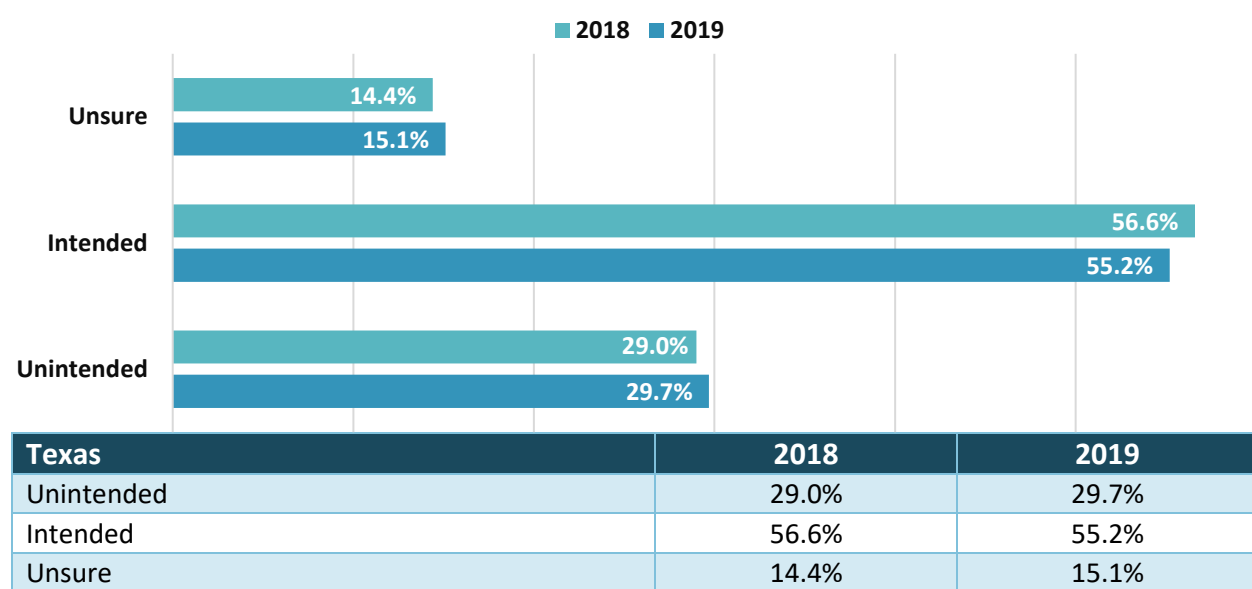
<sup>49</sup> Newborn's birthweight – low or very low birthweight includes birthweights under 2,500 grams, and normal birthweight includes birthweights 2,500 grams or greater. This data excludes unknown values and masks low counts with “—”. Newborn's gestation – whether the newborn was premature or not. Premature births include those of 36 weeks gestational age (the length of pregnancy) and below.

## Pregnancy Risk Assessment Monitoring System

The following data was collected from the Pregnancy Risk Assessment Monitoring System (PRAMS), a surveillance system designed to monitor maternal attitudes and behaviors before, during, and after pregnancy. Conducted in partnership with the Centers for Disease Control and Prevention (CDC) and the Texas Department of State Health Services (DSHS), Texas PRAMS is a population-based assessment that monitors the health and behaviors of new mothers in Texas.<sup>50</sup>

Comparison of 2018 and 2019 PRAMS data indicates a slight decline in intended pregnancies, and a very small increase in unsure or unintended pregnancies.

*Exhibit 49: Intention of Pregnancies*



Source: Texas Department of State Health Services, Texas Health Data. Pregnancy Risk Assessment Monitoring System Survey

*Exhibit 50: Intention of Pregnancy by Race and Ethnicity*

Texas	Intended		Unintended		Unsure	
	2018	2019	2018	2019	2018	2019
Black/African American	39.4%	40.3%	38.3%	32.8%	22.2%	26.9%
Hispanic	51.5%	49.6%	33.6%	37.1%	14.9%	13.2%
Other	65.0%	70.7%	18.2%	21.0%	9.3%	8.3%
White	66.5%	64.4%	22.8%	20.2%	7.8%	15.4%

Source: Texas Department of State Health Services, Texas Health Data. Pregnancy Risk Assessment Monitoring System Survey

- In 2019, approximately one-third of Black/African American (32.8%) and Hispanic (37.14%) mothers reported having unintentional pregnancies. Among Hispanic mothers, the data point represents a large increase in unintended pregnancies between 2018 and 2019.

<sup>50</sup> Texas Department of State Health Services. Texas Health Data, Pregnancy Risk Assessment Monitoring System.

The Special Supplemental Nutrition Program for Women, Infants, and Children, popularly known as WIC, is a nutrition program for pregnant, breastfeeding women and families with children younger than five.<sup>51</sup> Among mothers not experiencing intentional pregnancy, enrollment in the WIC program statewide increased between 2018 and 2019.

Additionally, of the mothers with private insurance in 2019, most (69%) had pregnancies that were intentional.

*Exhibit 51: Intention of Pregnancy by WIC Program Status*

Texas	Intended		Unintended		Unsure	
	2018	2019	2018	2019	2018	2019
Enrolled in WIC	49.1%	46.0%	34.7%	35.3%	16.3%	18.8%

Source: Texas Department of State Health Services, Texas Health Data. Pregnancy Risk Assessment Monitoring System Survey

*Exhibit 52: Intention of Pregnancy by Payer of Delivery*

Texas	Intended		Unintended		Unsure	
	2018	2019	2018	2019	2018	2019
Medicaid	47.2%	45.0%	34.4%	37.0%	18.3%	18.0%
Private Insurance	67.2%	69.0%	38.3%	19.7%	11.1%	11.4%
Self-Pay, Other, Unknown	55.8%	56.3%	33.6%	30.7%	10.1%	13.0%

Source: Texas Department of State Health Services, Texas Health Data. Pregnancy Risk Assessment Monitoring System Survey

- Among 2019 new mothers covered by private health insurance, nearly 70% had intentional pregnancies.
- Medicaid is a more common health insurance provider among women with unintended pregnancies than others in 2018 and 2019.
- Unintended pregnancies among women with private insurance decreased by nearly half from 2018 to 2019 (38.3% to 19.7%).

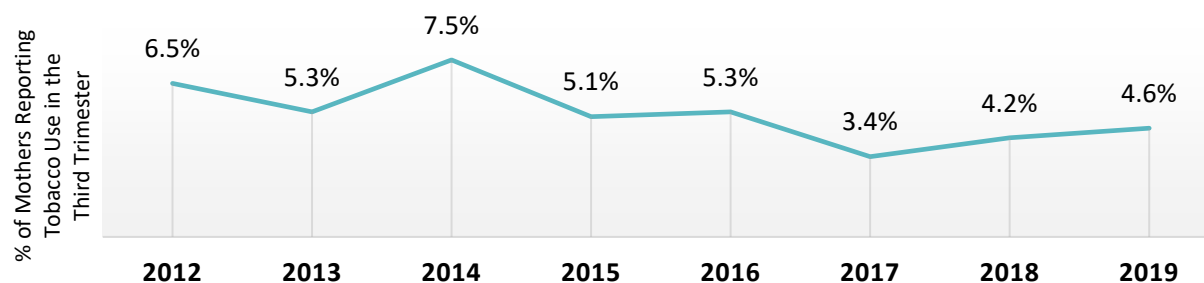
<sup>51</sup> Texas Health & Human Services, About WIC.



Mothers who smoke tobacco are more likely to deliver their babies preterm, which is a leading cause of death, disability, and disease among newborns. One in every five babies born to mothers who smoke during pregnancy has low birthweight, and mothers who are exposed to secondhand smoke while pregnant are more likely to have lower birthweight babies.<sup>52</sup>

**Exhibit 53** indicates the percentage of mothers in Texas who self-reported tobacco use through the 2019 PRAMS survey by answering the question, “*In the last three months of your pregnancy, how many cigarettes did you smoke on an average day? (presented as yes/no response).*” In 2017, this indicator hit a low but increased since then.

*Exhibit 53: Trend of Tobacco Use in the Third Trimester in Texas*



Year	Tobacco Use in the Third Trimester
2019	4.6%
2018	4.2%
2017	3.4%
2016	5.3%
2015	5.1%
2014	7.5%
2013	5.3%
2012	6.5%

Source: Texas Department of State Health Services, Texas Health Data. Pregnancy Risk Assessment Monitoring System Survey

*Exhibit 54: Tobacco Use in the Third Trimester by Maternal Race and Ethnicity*

2019	Tobacco Use in the Third Trimester
<b>Total</b>	4.6%
Hispanic	2.5%
Black/African American	7.3%
White	7.3%
Other	ND

Source: Texas Department of State Health Services, Texas Health Data. Pregnancy Risk Assessment Monitoring System Survey

- The percentage of mothers statewide who reported using tobacco in the third trimester of their pregnancy predominantly identify as Black/African American or White; rates among Hispanics are notably lower.

<sup>52</sup> Office on Smoking and Health, National Center for Chronic Disease Prevention & Health Promotion.

## Behavioral Health

Behavioral health includes the emotions and behaviors that affect overall wellbeing. Just like physical health, behavioral health has trained providers who can help patients much like a physical healthcare provider would.<sup>53</sup> **Exhibit 55** measures the age-adjusted average number of mentally unhealthy days reported in the past 30 days. Brown County residents reported more poor mental health days compared to the state and national response.

*Exhibit 55: Poor Mental Health Days*

United States	Texas	Brown County
4.0	3.9	4.7

Source: County Health Rankings & Roadmaps, 2019

A State Mental Health Authority refers to one of the 37 local mental health or behavioral health facilities that deliver mental health services in communities across Texas.<sup>54</sup> Please note, this data defines mental illness as having a diagnosable mental, behavioral, or emotional disorder, other than a developmental or substance use disorder.

State Mental Health Authorities in Texas served 16,184 more residents in 2019 compared to 2018 but did not see a notable increase in any specific age groups. Nearly one-fourth (23.2%) of mental health services treated individuals under the age of 18, while the most prevalent adult age range was between 25 and 44.

*Exhibit 56: Mental Health Service Trends by Age in Texas*<sup>55</sup>

2019										
United States	Total	0 - 12	13 - 17	18 - 20	21 - 24	25 - 44	45 - 64	65 - 74	75 +	Unk
Served by the State Mental Health Authority	8,131,606	16.0%	12.2%	4.7%	5.7%	31.4%	24.5%	3.7%	1.6%	0.1%
Adults with SMI and Children with SED Served by the State Mental Health Authority	5,638,887	16.0%	12.9%	4.4%	5.3%	5.3%	30.6%	25.7%	3.7%	0.1%
Texas	Total	0 - 12	13 - 17	18 - 20	21 - 24	25 - 44	45 - 64	65 - 74	75 +	Unk
Served by the State Mental Health Authority	416,338	11.6%	11.6%	5.0%	6.6%	35.6%	25.5%	3.1%	1.1%	0.0%
Adults with SMI and Children with SED Served by the State Mental Health Authority	394,529	11.5%	11.7%	5.0%	6.5%	35.5%	25.9%	3.7%	1.3%	0.9%

Source: Texas Mental Health National Outcome Measures, Substance Abuse & Mental Health Services Administration

<sup>53</sup> U.S. Centers for Medicare & Medicaid Services.

<sup>54</sup> Texas Health & Human Services, Find Your Local Mental Health or Behavioral Health Authority.

<sup>55</sup> Reporting Period: 9/1/2018 - 8/31/2019.

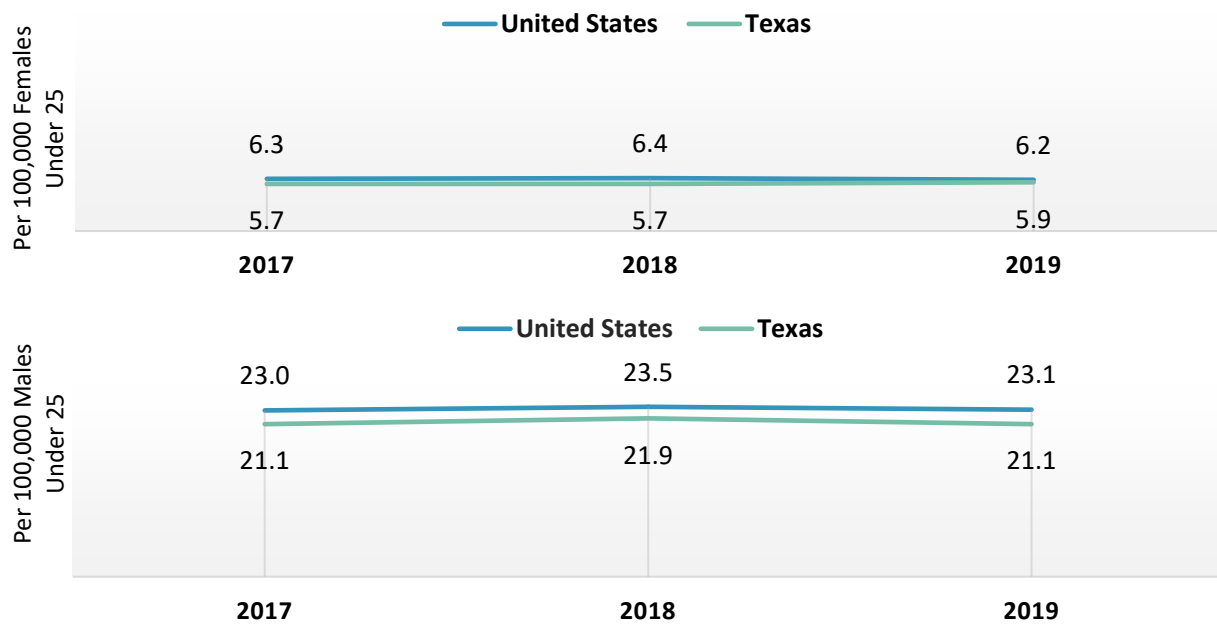
- Nearly 20,000 more adults with a Serious Mental Illness (SMI) and children with a Serious Emotional Disturbance (SED) sought State Mental Health Authority services compared to 2018 (2019, 394,529).

In 2021, the American Academy of Pediatrics declared a state of emergency regarding child and adolescent mental health.<sup>56</sup> While the figures below are not reflective of the COVID-19 pandemic, this data helps to provide a baseline as persistent data focusing on the mental health of youth.

The line graphs below indicate the trend of crude suicide rates for both females and males under the age of 25. While suicide rates for both female and male youth have remained relatively steady between 2017 and 2019. Males younger than 25 have alarmingly higher rates compared to females.

It is important to note that preliminary data on the impact of COVID-19 found that in the early months of 2021, visits to emergency departments for suspected suicide attempts increased roughly 50% for adolescent girls compared to the same period in 2019. Additionally, during 2020, the proportion of mental health-related emergency department visits among adolescents aged 12 to 17 years increased by 31% compared to that period during 2019.<sup>57</sup>

*Exhibit 57: Youth Suicide Rates by Gender*



Per 100,000 Population	2017		2018		2019	
	Female	Male	Female	Male	Female	Male
United States	6.3	23.0	6.4	23.5	6.2	23.1
Texas	5.7	21.1	5.7	21.9	5.9	21.1

Source: Centers for Disease Control & Prevention, National Centers for Injury Prevention and Control. Web-based Injury Statistics Query & Reporting System

<sup>56</sup> Pediatricians, Child & Adolescent Psychiatrists & Children’s Hospitals Declare National Emergency in Children’s Mental Health, 2021.

<sup>57</sup> Yard E, Radhakrishnan L, Ballesteros MF, et al. Emergency Department Visits for Suspected Suicide Attempts Among Persons Aged 12–25 Years Before and During the COVID-19 Pandemic — United States, January 2019–May 2021. MMWR Morb Mortal Wkly Rep 2021; 70:888–894.

The ratio of mental health providers represents the number of individuals served by one provider, if the population was equally distributed across providers within a country, state, or county. Mental health providers are defined as psychiatrists, psychologists, licensed clinical social workers, counselors, marriage and family therapists, mental health providers that treat alcohol and other drug abuse, and advanced practice nurses specializing in mental health care.<sup>58</sup>

As of 2019, there are approximately 760 residents per mental health provider statewide, and 530 residents per mental health provider in Brown County.

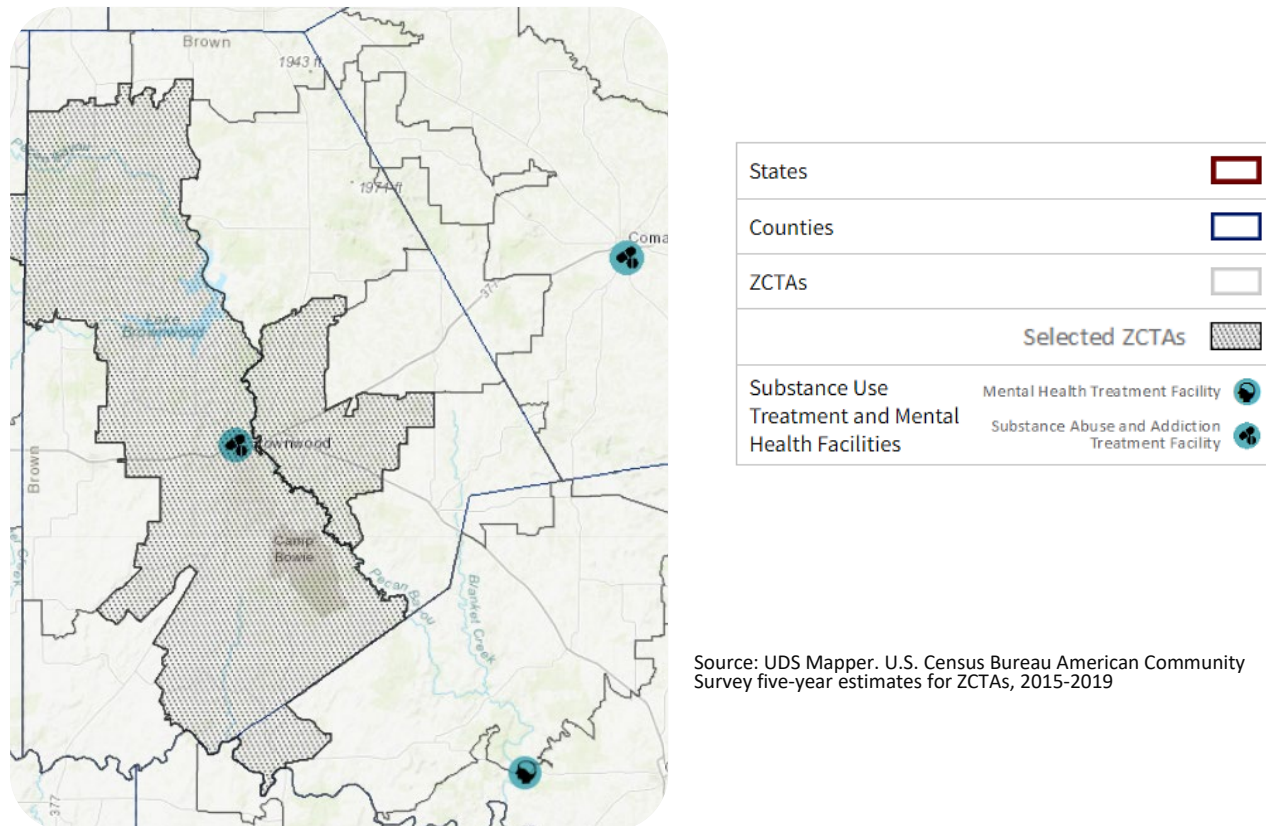
*Exhibit 58: Ratio of Mental Health Providers*

United States	Texas	Brown County <sup>59</sup>
250:1	760:1	530:1

Source: County Health Rankings & Roadmaps

**Exhibit 59** indicates locations within Brown County and outlying areas where substance use treatment and mental health facilities are located. To further highlight the Brownwood area, zip code areas are shaded.

*Exhibit 59: Map of Substance Use Treatment and Mental Health Facilities*



Source: UDS Mapper. U.S. Census Bureau American Community Survey five-year estimates for ZCTAs, 2015-2019

<sup>58</sup> County Health Rankings & Roadmaps, Mental Health Providers Description.

<sup>59</sup> Please note: The ratio of mental health providers is the same in Taylor County.

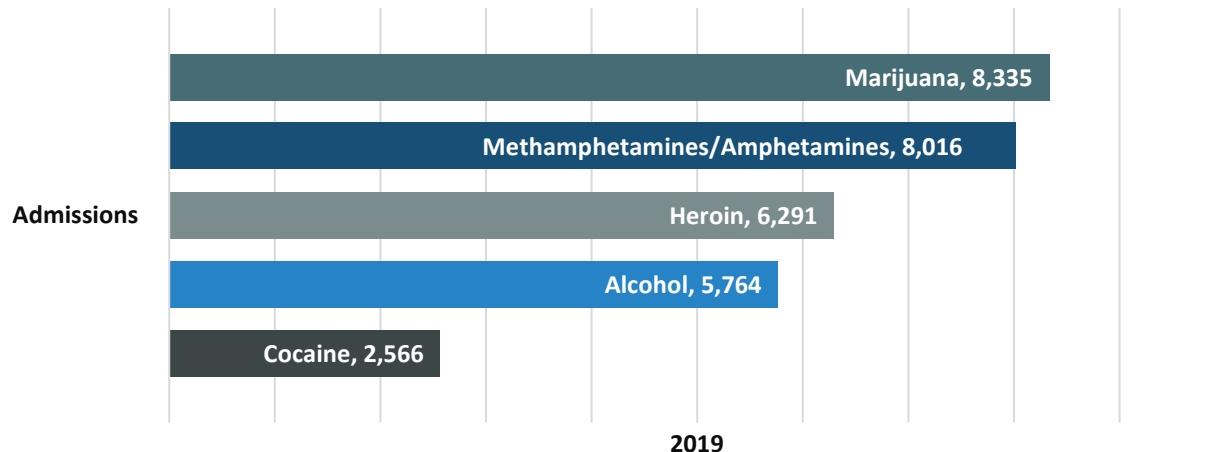
Admissions due to alcohol use increased in nearly every age group – a 17% increase for those between the ages of 30 to 34 and an 18% increase for those 40 to 44 years old. Alcohol and use of methamphetamines is highest within the 30 to 34 age group, while marijuana use is higher (crude admissions) among younger adults ages 25 to 29.

*Exhibit 60: Admissions to Publicly Funded Substance Use Treatment in Texas*

2019	Alcohol	Heroin	Cocaine	Marijuana	Methamphetamines /Amphetamines
<b>Total</b>	5,764	6,291	2,566	8,335	8,016
<b>Age</b>					
0-12	1	0	0	22	0
13 - 17	29	11	45	3,015	136
18 - 20	40	64	52	638	206
21 - 24	248	488	174	1,211	692
25 - 29	636	1,549	402	1,377	1,635
30 - 34	897	1,372	401	941	1,860
35 - 39	885	1,136	372	546	1,568
40 - 44	821	693	274	280	851
45 - 49	732	348	243	143	546
50 - 54	613	255	277	86	314
55 - 59	501	212	192	52	156
60 - 64	265	109	97	21	44
65 - 69	69	21	34	3	7
70 - 74	21	23	2	0	1
75 +	6	0	1	0	0

Source: Center for Behavioral Health Statistics & Quality, Substance Abuse & Mental Health Services Administration, Treatment Episode Data Set

*Exhibit 61: Admissions to Publicly Funded Substance Use Treatment in Texas*



## Qualitative Research Approach

The qualitative primary research methodology consisted of stakeholder interviews and focus group discussions with key community stakeholders, policymakers, and residents. More than **30** individuals were invited to participate in the qualitative research, resulting in **15** community stakeholders and members participating.

### Community Stakeholder Interviews and Focus Group Discussions

**Seven** one-on-one interviews that lasted approximately 30 minutes in length were conducted. This provided the opportunity to have in-depth and private conversations about community-wide strengths, barriers to getting care, impacts of the COVID-19 pandemic, and ideas to improve their community, as well as in-depth discussions about healthcare, social service, mental health, and other service issues with Hendrick Health leaders, community partners, and individuals from the community. Although an interview guide was used to help facilitate the conversation, participants were encouraged to speak about his or her particular areas of concern, interest, or experience (Appendix B). In addition, **three** on-site focus group discussions in Brownwood allowed community members and key stakeholders to highlight areas they see as the biggest health-related needs facing the community. Complementary to the individual interviews, the lively conversations in the focus groups added insight and depth to community needs perceptions. Focus group members were recruited from the Brown County area through mass and personal emails, one-on-one conversations, social media, and word of mouth. Many of their opinions and observations were grounded in both personal and professional experiences. The groups began with introductions, followed by broad discussion about the topic areas. Topics were then narrowed into the subjects participants identified as the biggest concerns facing their community and what possible solutions they envisioned.

## Qualitative Discussion Themes

Through both the qualitative individual interviews and focus group discussions, several themes about areas of need, or Qualitative Themes, were revealed. These Qualitative Themes which cut across, impact the subsequent needs and action areas. The themes identified in the following section are supported by the High-Level Action Areas, using de-identified illustrative observations in italics to represent respondents' consensus perspectives. In many cases, the observations highlight examples of potential interventions.

### High-Level Action Areas

The following High-Level Action Areas are mostly representative of respondents' consensus in both the qualitative interviews and the focus group discussion. These key action areas and some associated observations that are representative of respondents' consensus perspectives gathered from the interviews are included on the following pages.

*Please note that the Action Areas are in alphabetical (not prioritized) order.*



## Access to Primary Care

A primary care provider is essential in helping individuals maintain good health, preventing and identifying risk factors, coordinating and managing chronic diseases, and serving as the first point of contact in a healthcare system. Stakeholders had mixed feelings about access to primary care in the Brown County area. Many said that once an individual has a primary care provider, there are still challenges to accessing care; and, if an individual does not have one or is new to town, then it may be difficult to find a provider accepting new patients. A few providers mentioned the need for more physician-level primary care providers, because of the numerous community residents who have multiple acute chronic diseases.

*“Many providers are not taking [new] patients right now. Once you are established with a provider, then it’s much easier to see one.”*

## Behavioral Health Services for Children and Adults

Mental health was identified as one of the top needs by most stakeholders and focus group participants. The Kaiser Family Foundation has reported that, during the COVID-19 pandemic, approximately four in 10 U.S. adults have experienced symptoms of anxiety or depressive disorder, which is an increase from one in 10 adults in 2019.<sup>60</sup> According to one of the focus group participants, the majority of EMS calls made in Brownwood in 2021 were related to mental health, indicating that Brownwood residents may be experiencing more mental health challenges related to the stress of the ongoing pandemic.

*“From a law enforcement perspective, the emergency room is often our only option for mental healthcare in the county.”*

However, even before the pandemic, mental health and substance use were challenges in the Brown County area. Brownwood has limited services and providers, and the closest inpatient facility is about 90 miles away in Abilene. Oftentimes, residents experiencing a mental health crisis are brought to the hospital emergency room, which isn’t always the most appropriate place of care for individuals in crisis. Several stakeholders indicated the need for more mental health and substance use providers and services in the Brown County area.

---

<sup>60</sup> KFF. The Implications of COVID-19 for Mental Health and Substance Use. <https://www.kff.org/coronavirus-covid-19/issue-brief/the-implications-of-covid-19-for-mental-health-and-substance-use/>



## Chronic Disease Management

The Center for Disease Control and Prevention (CDC) reports that six in 10 U.S. adults have at least one chronic disease while four in 10 adults have two or more.<sup>61</sup>

Stakeholders have indicated that there is a high percentage of chronic diseases in the community due to the high poverty rate and people choosing not to seek health care. A 2021 report indicates that approximately 25% of adults reported delaying or forgoing care in the past 12 months due to concerns about COVID-19.<sup>62</sup> Several providers indicated there is a backlog of mammograms and colonoscopies due to COVID delays.

*“There are so many chronic stage three or four renal diseases. It’s hard to see a pulmonologist, rheumatologist, and a nephrologist in Brownwood.”*

## Housing, Child Care, Basic Needs, and Transportation

The ability for many Americans to have their basic needs met has been severely compromised during the COVID-19 pandemic. Necessities like paying monthly rent and buying groceries have become more difficult for families. Lack of basic needs has led to higher levels of domestic violence, toxic stress, mental health problems, and other poor health outcomes. The loss of jobs has decreased access to healthcare, including mental health services. Physical and mental wellbeing begins with access to nutritious food, safe environments, and the security of a stable home.<sup>63</sup> Housing is one of the main basic needs lacking in the community, as it is limited and expensive. Transportation and childcare are also identified by stakeholders as community needs.

## Impact of COVID-19

The impacts of the COVID-19 pandemic have been felt virtually everywhere in the world including the Brown County area. While most stakeholders felt that the community has fared well during the pandemic, there have been some challenges. Healthcare stakeholders identified ongoing supply chain issues as one of their greatest challenges because it has affected the ability to obtain critical healthcare supplies like gloves, medications, and more.

*“The supply chain is very concerning. Prices for products are higher and turnaround times longer, especially for the city. For example, vehicles.”*

---

<sup>61</sup> CDC. About Chronic Disease.

<sup>62</sup> AAFP. COVID-19 Continues to Cause Some People to Put Off Care.

<sup>63</sup> Community Commons, Basic Needs for Health & Safety.S

## Staff Shortage and Recruitment

As a rural community, recruiting new providers has been difficult according to the stakeholders interviewed. Many of the hospital-affiliated providers are older and will retire in the near future. A few stakeholders indicated that the tight housing market has made it difficult to recruit new staff because of the lack of places to live within the community. After Hendrick Health's acquisition of the Brownwood hospital, the hospital now has access to many specialist providers who may establish monthly outreach clinics to see local patients, eliminating the need for patients to drive to Abilene or elsewhere for care.

*"I don't think we have enough staffing for the medical resources that we have here. Hendrick has capacity that is not being utilized due to staff shortages."*

# Community Health Needs Assessment Survey

A community survey was conducted in the Hendrick Medical Center Brownwood service area. Of the 307 individuals who completed the survey, 68 respondents (22%) lived in Brown or Comanche counties. Approximately 80% of the respondents were female. More than 50% of the respondents were over the age of 55. Of the number of Brown and Comanche county residents who completed the survey, 89.3% reported having a family doctor, while the remaining almost 10% reported having no provider or seeking care at the emergency room or walk-in urgent care.

When asked if a survey respondent or someone in their home has needed care but not received it within the past 12 months, almost 50% reported needing medical care.

*Exhibit 62: Survey Respondents Who Needed Care But Did Not Receive Care Reasons Why*

	Reason for Not Receiving Care
Unable to afford to pay	40.0%
Unable to schedule an appointment when needed	40.0%
Do not have insurance to cover medical care	20.0%
Cannot take time off work	0.0%
Doctor’s office does not have convenient hours	20.0%
Unable to find a doctor who takes my insurance	0.0%
Am not sure how to find a doctor	0.0%
Transportation challenges	20.0%
Unable to find a doctor who knows or understands my culture, identity, beliefs, or language	0.0%
Cannot take child out of class	0.0%
Other	60.0%

Source: Community Survey

- Survey respondents were also asked the causes of why they did not receive the care they needed. Most respondents reported the inability to afford to pay for care and by being unable to schedule an appointment when needed. Respondents who selected “other” did not leave a comment describing what their challenges was.

According to survey respondents, of the top areas that need more focus in the Brown County area, mental health services for both children and adults and affordable prescription drugs are the top three needs.

*Exhibit 63: Top Needs Identified by Survey Respondents*

Rank	Brown County Area
1	Counseling services for mental health issues such as depression, anxiety, and others for adolescents and children
2	Affordable prescription drugs
3	Counseling services for mental health issues such as depression, anxiety, and others for adults
4	Emergency care and trauma services
5	Coordination of patient care between the hospital and other clinics, private doctors, or other health service providers
6	Special care (for example, case workers or "navigators") for people with chronic diseases such as diabetes, cancer, asthma, and others
7	Crisis or emergency care services for medical issues
8	Drug and other substance abuse treatment services
9	Long-term care or dementia care for seniors
10	Drug and other substance abuse early intervention services
11	Support services for children with developmental disabilities
12	Affordable health care services for individuals or families with low income
13	Healthcare services for seniors
14	Crisis or emergency care programs for mental health
15	Services to help people learn about, and enroll in, programs that provide financial support for people needing health care
16	Programs to help recovering drug and other substance use disorder patients stay healthy
17	Drug and other substance abuse education and prevention
18	Primary care services (such as a family doctor or other provider of routine care)
19	Support services for adults with developmental disabilities
20	Social services (other than health care) for people experiencing homelessness
21	Health care services for people experiencing homelessness
22	Education and job training
23	Programs for obesity prevention, awareness, and care
24	Affordable quality childcare
25	Services or education to help reduce teen pregnancy
26	Programs for heart health or cardiovascular health
27	Secure sources for affordable, nutritious food
28	Parenting classes for the "new Mom" or the "new Dad"
29	Women's health services
30	Transportation services for people needing to go to doctor's appointments or the hospital
31	Programs for diabetes prevention, awareness, and care
32	HIV/AIDS education and screening
33	HIV/AIDS treatment services
34	General public transportation

# Community Needs Prioritization Methodology

Prioritizing the community needs helps guide Hendrick Health’s leadership and facilitates consensus on program development and implementation, collaboration, and advocacy. Hendrick Health worked with community service leaders and providers, county leaders, patients, and others and used the following research to inform the list of needs:

- Secondary Research
- Qualitative Interviews and Focus Group Discussions
- Quantitative Community Survey

The results identified **34** community needs. A significant, common challenge faced by communities at this point is that the final prioritization is often based on positional authority, non-representative quantitative ranking, or some other process that does not fully incorporate disparate insights or build consensus among the stakeholders.

To address this potential challenge, Crescendo worked with Hendrick Health’s leadership to implement a needs prioritization process. The results: 1) identify the core impact areas, 2) create a prioritized list of needs to be addressed, and 3) develop a sense of ownership of the ongoing initiatives developed to address the needs.



There were two steps or “rounds” in the process. The **first round** involved a short survey disseminated electronically and completed anonymously with comments. The **second step** was a virtual prioritization session to draw conclusions that would be consistent with the organization’s strategic planning process. The following table contains the final list of top needs for Hendrick Health’s Brownwood market.

*Exhibit 64: Prioritized Community Needs*

<b>Rank</b>	<b>Brownwood Market Needs</b>
1	Hospital and healthcare staff shortages including staff recruitment and provider retirement planning
2	Community awareness of available services and programs provided
3	Programs for heart health or cardiovascular health
4	Emergency care and trauma services, including critical care beds
5	Transportation services for people needing to go to doctor's appointments or the hospital
6	Accessibility of prescription medications
7	Coordination of patient care between the hospital and other clinics, private doctors, or other health service providers
8	Women's health services
9	Programs for diabetes prevention, awareness, and care
10	Mental health services for adults and children
11	Chronic disease case management or "navigators"
12	Education and referrals for financial support and community affordable health care services and programs
13	Chronic disease screenings (e.g., heart disease, stroke, high blood pressure)
14	Affordable prescription drugs
15	Primary care services (such as a family doctor or other provider of routine care)
16	Domestic violence and sexual assault prevention, intervention, and care services
17	Crisis or emergency care programs for mental health
18	Affordable quality childcare
19	Mental health stigma reduction
20	Health care services for seniors
21	Health care and social services for people experiencing homelessness
22	Drug and other substance abuse treatment, education, and prevention programs
23	Programs for obesity prevention, awareness, and care
24	Long-term care or dementia care for seniors
25	Secure sources for affordable, nutritious food
26	Support services for children and adults with developmental disabilities
27	Affordable housing

## **Appendices**

Appendix A: Hendrick Staff Survey Results

Appendix B: Stakeholder Interview Guide

Appendix C: Community Survey Questions

## Appendix A: Hendrick Staff Survey Results

Please note that due to low numbers of responses from people working in locations other than Hendrick Medical Center, cross-tabulation of responses was not helpful (n = 134). The majority of staff members who completed the survey reported working at Hendrick Medical Center.

*Exhibit 424: Staff Location*

Facility	Percent
Hendrick Medical Center	65.9%
Hendrick Medical Center South	13.2%
Hendrick Medical Center Brownwood	14.0%
Non-hospital facilities in Abilene	5.4%
Non-hospital facilities in Brownwood	1.6%

Source: Hendrick Staff Survey

*Exhibit 435: Quality of Service*

Rank the quality of service for each Hendrick Health.						
Service	Needs major improvement	Needs improvement	Neutral	Good or very good	Excellent	Good or better
Asthma Care	4.7%	2.3%	24.2%	14.1%	9.4%	23.4%
Cancer Care	3.1%	3.9%	14.1%	21.1%	26.6%	47.7%
Diabetes Care	4.7%	7.0%	14.0%	20.9%	22.5%	43.4%
Dialysis	2.4%	2.4%	12.6%	22.8%	17.3%	40.2%
Emergency Care	15.3%	13.0%	29.0%	21.4%	15.3%	36.6%
Gastroenterology	10.2%	11.8%	16.5%	17.3%	12.6%	29.9%
Heart and Vascular	2.4%	3.1%	16.5%	27.6%	27.6%	55.1%
Home Health	3.9%	3.1%	13.4%	19.7%	14.2%	33.9%
Laboratory Services	5.4%	6.2%	20.9%	27.1%	25.6%	52.7%
Neurosciences	7.1%	10.2%	11.8%	17.3%	14.2%	31.5%
Occupational Health Services	3.1%	4.6%	15.4%	14.6%	8.5%	23.1%
Orthopedics	1.6%	10.9%	22.7%	34.4%	30.5%	64.8%
Palliative Care	1.6%	4.7%	7.0%	14.1%	35.9%	50.0%
Pastoral Care	1.6%	0.8%	16.4%	19.5%	35.2%	54.7%
Pediatrics	6.3%	4.7%	11.7%	20.3%	23.4%	43.8%
Pharmacy	5.5%	2.3%	12.5%	21.9%	38.3%	60.2%
Pregnancy & Birth	6.4%	2.4%	9.6%	24.0%	31.2%	55.2%
Primary Care	7.8%	6.2%	22.5%	23.3%	21.7%	45.0%
Radiology & Diagnostic Imaging	3.9%	4.7%	19.4%	20.9%	27.9%	48.8%
Rehabilitation & Therapy	1.6%	4.7%	11.6%	23.3%	22.5%	45.7%
Sleep Disorder Treatment	1.6%	7.0%	11.7%	14.8%	12.5%	27.3%



Surgery	3.1%	2.3%	19.5%	23.4%	23.4%	46.9%
Transitional Services	4.7%	5.4%	12.4%	10.9%	6.2%	17.1%
Women's Health	3.9%	6.3%	9.4%	35.2%	21.9%	57.0%
Wound Care	0.8%	1.6%	10.2%	19.5%	22.7%	42.2%

Source: Hendrick Staff Survey

The areas where survey respondents reported need “much more focus” include capacity (hiring more nurses and other non-physician direct care providers, 73.0%), staff retention initiatives (73.0%), and services to educate the community about financial resource assistance programs (51.4%).

*Exhibit 446: Service Improvement*

<b>To what degree do the following areas need more focus or attention?</b>			
<b>Issue</b>	<b>No more focus needed</b>	<b>More focus needed</b>	<b>Much more focus needed</b>
Chronic disease education and prevention initiatives in the community	7.9%	46.5%	45.5%
Capacity – hiring more primary care providers	8.7%	47.6%	43.7%
Capacity – hiring more nurses and other non-physician direct care providers	2.5%	24.6%	73.0%
Care coordination, caseworker, or navigation services	6.5%	50.0%	43.5%
Electronic Medical Records (EMR) system efficiency	19.4%	42.9%	37.8%
Opportunities to be involved with clinical trials	14.7%	44.1%	41.2%
Linkages with doctors and others who may refer patients to Hendrick for services	17.1%	54.6%	28.4%
Linkages with doctors and others to whom Hendrick may refer patients for FOLLOW-UP care	17.2%	51.6%	31.2%
Quality initiatives that support consistent use of best practices	15.5%	50.5%	34.0%
Services to educate the community about financial resource assistance programs	11.0%	37.6%	51.4%
Staff retention initiatives, such as salary review, incentives, workplace policies, etc.	4.8%	22.2%	73.0%

Source: Hendrick Staff Survey

*Exhibit 457: Impact of COVID-19*

<b>Thinking about the past 18 + months, have you experienced any of the following due to the ongoing COVID-19 pandemic?</b>			
<b>Issue</b>	<b>Rarely</b>	<b>Sometimes</b>	<b>Frequently</b>
Burnout	17.4%	34.9%	47.7%
Anxiety	19.6%	40.6%	39.9%
Depression	43.2%	31.1%	25.8%
Considered changing professions	41.7%	27.3%	31.1%
Felt unsafe in the workplace	62.9%	26.5%	10.6%

Source: Hendrick Staff Survey

- Almost half of all respondents reported frequently feeling burnout in the past 18 months, and nearly 40% reported feeling anxiety frequently.

## Appendix B: Stakeholder Interview Guide

### Hendrick Health

#### Stakeholder Interview Guide

---

##### INTRODUCTION

Good morning [or afternoon]. My name is [Interviewer Name] from Crescendo Consulting Group. We are working with Hendrick Health in [Abilene or Brownwood] to conduct a community health needs assessment.

The purpose of this conversation is to learn more about the strengths and resources in the community as well as collect your insights regarding health care-related needs, ways that people seek services, ongoing impacts of the COVID-19 pandemic, and to identify service gaps and ways to better meet the needs of the community. We are also very interested to hear your insights about equal access to health care services and challenges or advantages that some communities may experience, if any.

We will describe our discussion in a written report; however, individual names will not be used. Please consider what you say in our conversation to be anonymous.

##### ICE-BREAKER / SELF-INTRODUCTION QUESTION

Please tell me a little about yourself and ways that you like to interact with the community where you live [where appropriate, "... and the populations your organization (or you) serves."].

##### ACCESS AND AVAILABILITY OF SERVICES

1. When you think of the good things about living in this community, what are the first things that come to mind? [PROBE: things to do, green spaces, strong sense of family, cultural diversity]
2. Generally, what are some of the challenges to living here?
3. What would you say are the two or three most urgent health care-related needs in the (these) community/communities? [PROBE: obesity, diabetes, depression]

##### AFFORDABILITY OF HEALTH CARE AND BASIC NEEDS

4. To what degree are community members or families struggling with finding and accessing quality health care? [PROBE: are there certain types of care that are more difficult to find?]
  - a. To what degree is quality primary care and/or specialty care available?
  - b. Do people struggle to find quality mental health care or treatment for substance use disorders?

- c. How are people accessing care, for example, virtual/telemedicine, face-to-face?
  - d. Are health care services equally available to everyone? Are there any barriers in access to services based on economic, race / ethnicity, gender, or other factors?
  - e. To what degree do health care providers care for patients in a culturally sensitive manner?
5. Do people in the community struggle with accessing other basic needs besides health care such as accessing nutritious/healthy food, hygiene and sexual health products, or affordable prescription medications
    - a. What are some resources or services in the community that work really well? What doesn't work?
  6. For women of reproductive age, what is access to pre-natal, OBGYN, and perinatal care like in your community? Are there any barriers in access to services?
  7. What are some of the health care challenges that seniors may experience in your community? (Probe: hospice, end of life care, specialists, etc.).

#### HEALTH EQUITY

8. Health equity is an important consideration. First, what does health equity mean to you?
9. How can you improve current services for marginalized or hard-to-reach populations – Priority Populations -- in your community?
10. What are some of the community-level actions that can be done to provide for community health and well-being more equitably?
  - a. Are there any “low hanging fruit” that could be addressed quickly?

#### SOCIAL DETERMINANTS OF HEALTH

11. How difficult is it to find safe and affordable housing in your community? Name some of the greatest challenges.
12. Describe the job market in the area before the pandemic and currently. [*PROBES: Generally, are “good” jobs here, and can people get them? Is it easy to find a full-time job with good pay, benefits, and retirement?*]
13. Do you feel there is good access to broadband and high-speed internet in the region? What are some of the challenges to not having good, reliable internet?

*If transportation has not come up yet.*

14. Does everyone typically have reliable transportation to work, the grocery store, doctors, school? If not, are there services in the community that help those without a vehicle?

15. How easy is it for families to find affordable and safe childcare in the area? What are some of the challenges or barriers?

#### VULNERABLE POPULATIONS

16. What are some of the biggest needs for those who are more vulnerable than others? How does the community support them? [*PROBE: veterans, new Americans, seniors, people living with disabilities*]

#### IMPACT OF COVID-19

17. What are one or two ways that COVID-19 has impacted the community the most? [*PROBE: community well-being, social impacts, education, or the economy*]
  - a. Which of these do you think will be short-term effects (e.g., “After COVID is behind us, so will the effects”) or long-term effects (e.g., “The impact will be long-lasting.”)?
18. How do you think COVID-19 will impact health behaviors and how people interact with the health care system or providers, such as for screenings or routine services, vaccine perceptions, virtual health care, or others?
  - b. How, if at all, has COVID-19 affected trust of health care providers or systems and the public health system?
19. How has the pandemic affected mental health or substance misuse issues?

#### ENHANCING OUTREACH AND DISSEMINATING INFORMATION

20. To what degree is health literacy a community advantage or challenge? Is there adequate health information available – especially in diverse or marginalized communities? How do you think health organizations can improve health literacy of the community?
21. How do community members generally learn about access to and availability of services in the area (e.g., on-line directory; social media; hotline; word of mouth)? What method tends to work the best or worst?
  - a. What do you think are some challenges to spreading awareness and understanding of the availability of services and ways to access them? What might help overcome the challenges?

#### MAGIC WAND

22. If you had a magic wand, what is the one thing you would do to make your community a better place?

## Appendix C: Community Survey Questions

Every three years, Hendrick Health System conducts a Community Health Needs Assessment to learn more about community health and issues that need more focus and attention. This short survey is designed to learn your thoughts and ideas on these important topics.

Thank you for being willing to share your thoughts!

The survey will take less than 6 minutes, and your comments will be kept confidential.

### 1. What is your age?

- 18 to 24
- 25 to 34
- 35 to 44
- 45 to 54
- 55 to 64
- 65 to 74
- 75 or older

### 2. What is the highest grade or year in school you completed?

- Less than high school
- Graduated high school
- Some college or vocational training
- Completed a 2-year college degree or a vocational training program
- Graduated college (4-year Bachelor Degree)
- Completed Graduate or Professional school (Masters, PhD, Lawyer)

### 3. What is your race? [Check all that apply]

- African-American
- American Indian
- Asian
- Caucasian
- Hispanic
- Mixed Race
- Other

### 4. Which of the following ranges best describes your total annual household income last year?

- Less than \$25,000
- \$25,001 to \$50,000
- \$50,001 to \$75,000
- \$75,001 to \$100,000
- More than \$100,000

5. What is your gender?

- Male
- Female
- Other

6. Do you have a family doctor or a place where you go for routine care?

- Yes, family doctor, family health center, or clinic
- Yes, emergency room, or walk-in urgent care
- No
- Other (please specify)

A "healthy" community can include a variety of things such as the availability of healthcare services (including behavioral health), social services, economic vibrancy and good jobs, environmental factors, lifestyle topics (such as obesity, smoking, substance abuse, and healthy living issues), and others. The next few questions ask you about your opinions on these issues.

7. Which of the following community and health-related issues do you feel need more focus or attention for improvement?

	No More Focus Needed	Somewhat More Focus Needed	Much More Focus Needed	Don't Know
Transportation services for people needing to go to doctor's appointments or the hospital	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Secure sources for affordable, nutritious food	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Affordable quality child care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
General public transportation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Healthcare services for people experiencing homelessness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social services (other than healthcare) for people experiencing homelessness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Education and job training	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Primary care services (such as a family doctor or other provider of routine care)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Emergency care and trauma services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Long-term care or dementia care for seniors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Affordable healthcare services for individuals or families with low income	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Affordable prescription drugs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Services to help people learn about, and enroll in, programs that provide financial support for people needing healthcare	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Counseling services for mental health issues such as depression, anxiety, and others <b>for adults</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Counseling services for mental health issues such as depression, anxiety, and others <b>for adolescents / children</b>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Support services for <b>children</b> with developmental disabilities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Support services for <b>adults</b> with developmental disabilities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Drug and other substance abuse education and prevention	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Drug and other substance abuse early intervention services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Drug and other substance abuse treatment services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Programs to help recovering drug and other substance use disorder patients stay healthy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Crisis or emergency care programs for <u>mental health</u>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Crisis or emergency care services for <u>medical</u> issues	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Coordination of patient care between the hospital and other clinics, private doctors, or other health service providers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Special care (for example, case workers or "navigators") for people with chronic diseases such as diabetes, cancer, asthma, and others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Programs for diabetes prevention, awareness, and care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Programs for heart health or cardiovascular health	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Programs for obesity prevention, awareness, and care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Healthcare services for seniors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Women's health services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Services or education to help reduce teen pregnancy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Parenting classes for the "new Mom" or the "new Dad"	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
HIV / AIDS education and screening	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
HIV / AIDS treatment services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Is there an OTHER issue that is a HIGH NEED that requires much more focus and attention? (If YES, please specify)

8. Of all the issues on the previous list, what do you think are the top one or two greatest health issues in the community?

1

2

9. What sources do you normally use to find out about healthcare providers, hospitals, your own health, or to monitor your own health? (Check your top three)

- |  |  |
|--|--|
| <input type="checkbox"/> Social media  | <input type="checkbox"/> A fitness tracker website like Fitbit or My Fitness Pal |
| <input type="checkbox"/> A hospital's website  | <input type="checkbox"/> Newspaper   |
| <input type="checkbox"/> A physicians website  | <input type="checkbox"/> Television  |
| <input type="checkbox"/> Medical websites such as WebMD or Mayo Clinic                       | <input type="checkbox"/> Radio   |
| <input type="checkbox"/> A patient portal  | <input type="checkbox"/> A physician or other healthcare worker                  |
| <input type="checkbox"/> Healthcare.gov  | <input type="checkbox"/> Magazine  |
| <input type="checkbox"/> Healthcare rating sites like HealthGrades or US News & World Report | <input type="checkbox"/> Friends and relatives                                   |

Thank you for your participation!

