

Texas Health Resources — Denton-Wise Region

Texas Health Presbyterian Hospital Denton



2022 Community Health Needs Assessment



Table of Contents

Executive Summary	3	Community Focus Groups	25
Introduction & Purpose	3	Listening Session	26
Acknowledgements	3	Prioritization Process	27
Letter from Our CEO	3	Initial ZIP Code Prioritization	27
Regional Leadership Councils	4	Prioritization Results	28
Consultants	4	Prioritization to Final ZIP Codes and Health Priorities	28
Introduction	5	Health Priority Ares	28
Texas Health Resources Health System	5	Data Limitations	31
Denton-Wise of Texas Health Resources	6	Opportunities for On-Going Work and Future Impact	32
Facility Description	6	Solutions	33
Impact Since Last CHNA	7	Disparities and Barriers	33
Community Feedback	10	COVID-19 Snapshot	34
Methodology	11	Looking Ahead	36
Overview	11	Conclusion	37
Building on 2019 CHNA Process	11	Appendices	38
Overview of ZIP Code Reassessment	12		
CHNA Process and Texas Health ZIP Code Prioritization	12		
Denton-Wise ZIP Codes Prioritization	12		
Health Equity Index	13		
Demographics	14		
Population	15		
Age	15		
Race/Ethnicity	16		
Language	17		
Social and Economic Determinants of Health	18		
Income	19		
Poverty	19		
Food Insecurity	20		
Unemployment	20		
Education	21		
Transportation	21		
Denton-Wise Health Care Utilization	22		
Primary Methodology	24		
Community Key Informant Interviews	24		



Executive Summary

Introduction & Purpose

Texas Health is pleased to present its 2022 Community Health Needs Assessment (CHNA) for the Denton-Wise Region in the Dallas/Fort Worth area. This CHNA report provides an overview of the process and methods used to identify and prioritize significant health needs across the Denton-Wise Region's service area federally required by the Affordable Care Act.

The purpose of this CHNA is to offer a deeper understanding of the health needs across the region and guide Texas Health planning efforts to address needs in actionable ways and with community engagement. Findings from this report will be used to identify and develop efforts to address disparities, improve health outcomes, and focus on social determinants of health to improve the health and quality of life of residents in the community.

Acknowledgements

The development of Texas Health's CHNA was a collective approach that included Texas Health employees, community-serving organizations, and community members from within areas of focus that gave us input and knowledge of issues and solutions and those who share our commitment to improve health and quality of life. The 2022 CHNA planning effort pushed Texas Health beyond our traditional primary service area to directly impact prioritized health needs in areas of the community with the greatest health need. This was an integral step to ensuring our ability to understand the needs of the community and develop programs and services that will positively impact the health and well-being of those we serve.

Letter from Our CEO

Improving the health and well-being of our communities is a journey, not a race.

Texas Health develops a CHNA every three years to help us build programs that meet the specific needs of our communities. We collect data through key informant interviews, which included in-depth interviews with community leaders and residents, and focus groups to obtain a better understanding of the community needs.

Behavioral health, chronic disease, access to health services, and health care navigation and literacy continue to be prevailing issues in the communities served by Texas Health.

That's why instead of turning our focus elsewhere, we're diving deeper into these issues to address the health disparities and social and environmental conditions that affect overall health and well-being.

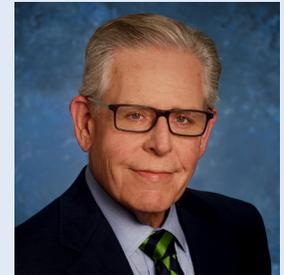
In this report, we're going to share our approach to how we have moved towards addressing challenges by focusing on solutions.

You'll see the prevailing issues we've identified in various communities such as depression, high blood pressure and lack of health insurance. We've also explored the social determinants driving those negative health outcomes, such as isolation and lack of public transportation and access to healthy food.

The 2022 CHNA report highlights the community voice and represents our vision — partnering with you for a lifetime of health and well-being. Because we believe that collaboration is at the core of every solution.

By working together, we continue to make a difference.

Sincerely,



A handwritten signature in blue ink that reads "Barclay E. Berdan".

Barclay Berdan, FACHE,
Chief Executive Officer,
Texas Health Resources



A handwritten signature in black ink that reads "Jeff Reecer".

Jeff Reecer
President/CEO

Regional Leadership Councils

Texas Health Community Impact Leadership Councils represent five unique regions in the Texas Health service area; Tarrant/Parker, Denton-Wise, Collin, Dallas/Rockwall; and Southern (Ellis, Erath, Hood, Johnson, and Kaufman counties). The Texas Health Community Impact Leadership Councils are comprised of community leaders responsible for recommending outcome-driven programs and collaborations. The Texas Community Impact Board was created to serve as a system-wide strategic advisory group as well as a fiduciary board, which in 2022 was responsible for allocating \$8.0 million dollars across all five regions. In the Denton-Wise Region \$1.3 million was allocated for the 2023-2024 grant cycle.

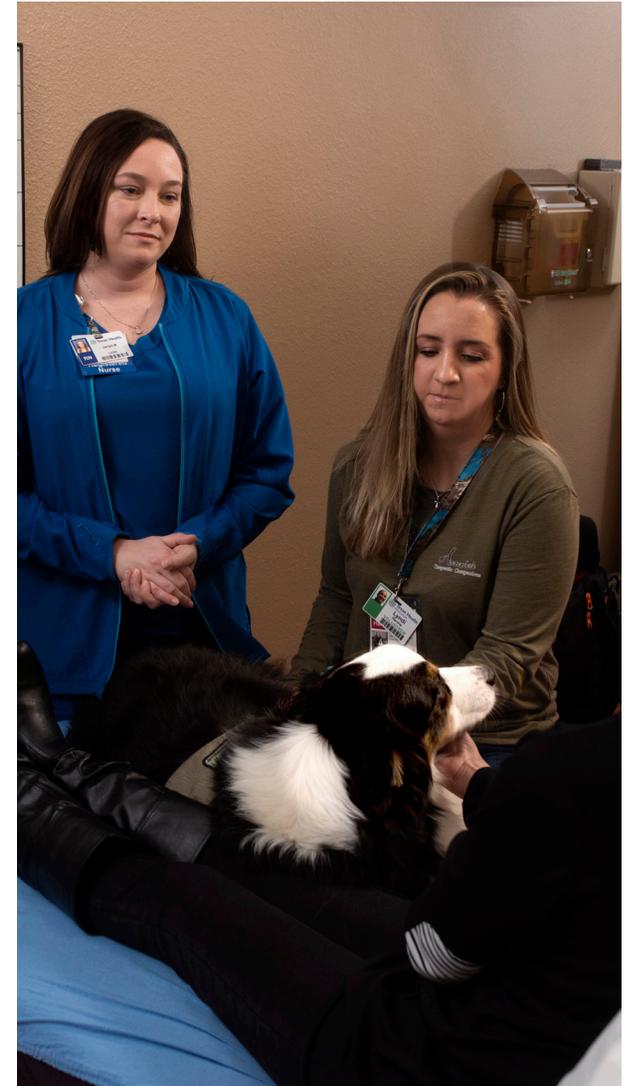
Texas Health Community Impact brings together agencies from different sectors — education, healthcare, government, grassroots organizations and others — to make measurable change in communities where social determinants of health contribute to poor overall health. These investments are designed to improve the health of the most vulnerable and underserved. Efforts are currently focused on connecting people to appropriate resources that help address behavioral health and food insecurity, which the pandemic exacerbated. The Texas Health Community Impact Board allocates funding to the Leadership Councils based on the regional strategic plans. The Texas Health Community Impact Leadership Councils award the grants to specific projects.

The following organizations are represented on the Texas Health Community Impact Leadership Councils for Denton-Wise Region. These organizations were actively engaged in the prioritization process for the region.

- City of Lewisville
- Community Members from Denton and Bridgeport
- Cultivar Capital
- Denton County Defense Office
- Denton County Public Health
- Environments for Health Architecture
- Maximus
- Refuge Ministries
- St. Andrew Presbyterian Church
- Texas Woman's University
- United Way Denton County
- University of North Texas
- Wise County Sherriff's Office

Consultants

Texas Health commissioned Conduent Healthy Communities Institute (HCI) to support report preparation for its 2022 CHNA. HCI works with clients across the nation to drive community health outcomes by assessing needs, developing focused strategies, identifying appropriate intervention programs, establishing monitoring systems, and implementing performance evaluation processes. To learn more about Conduent Healthy Communities Institute, please visit <https://www.conduent.com/community-population-health>. The following HCI team members were involved in the development of this report: Eileen Aguilar, MS – Public Health Consultant; Margaret Mysz, MPH – Community Data Analyst; Olivia Dunn – Community Data Analyst; Samreen Fathima, MPH – Research Associate; Clarice Pan – Research Assistant, Gautami Shikare, Research Assistant, MPH and Dari Goldman, MPH – Senior Project Specialist.



Introduction

Texas Health Resources Health System

Texas Health is a faith-based, nonprofit health system that cares for more patients in North Texas than any other provider.

With a service area that consists of 16 counties and more than 7 million people, the system is committed to providing quality, coordinated care through its Texas Health Physicians Group and 29 hospital locations under the banners of Texas Health Presbyterian, Texas Health Arlington Memorial, Texas Health Harris Methodist, and Texas Health Huguley. Texas Health access points and services, ranging from acute-care hospitals and trauma centers to outpatient facilities and home health and preventive services, provide the full continuum of care for all stages of life. The system has more than 4,100 licensed hospital beds, 6,400 physicians with active staff privileges, and more than 25,000 employees. For more information about Texas Health, call 1-877-THR-WELL, or visit www.TexasHealth.org.

Mission

To improve the health of the people in the communities we serve.

Vision

To partner with you for a lifetime of health and well-being.

Values

- **Respect** Respecting the dignity of all persons, fostering a corporate culture characterized by teamwork, diversity and empowerment.
- **Integrity** Conduct corporate and personal lives with integrity; relationships based on loyalty, fairness, truthfulness and trustworthiness.
- **Compassion** Sensitivity to the whole person, reflective of God's compassion and love, with particular concern for the poor.
- **Excellence** Continuously improving the quality of service through education, research, competent and innovative personnel, effective leadership and responsible stewardship of resources.

Texas Health is moving beyond episodic sick care, by focusing on anticipating communities' needs and offering affordable and personalized products and experiences as the organization seeks to meet consumers' health and well-being needs for their lifetime. Texas Health has elevated the needs and preferences of consumers as the unifying voice that focuses on every aspect of the organization.



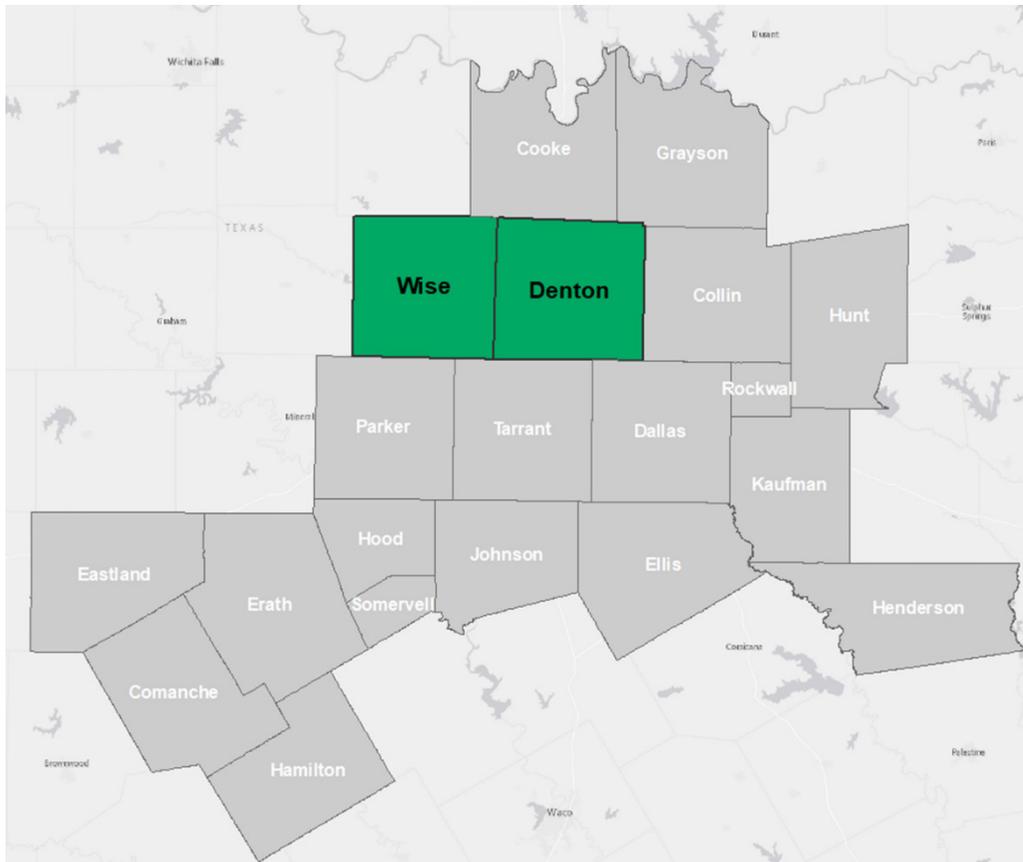
Denton-Wise Region of Texas Health Resources

This report covers the population and geographic area for Texas Health Community Impact Denton-Wise Region. Denton County¹ is located in the north central part of Texas. Denton serves as the county seat to a county population of approximately 941,647 citizens according to the 2021 U.S Census Record, a population increase of 36.7 percent since the 2020 Census. Wise County² lies to the west of Denton County and has a smaller population of approximately 71,714 citizens according to the 2021 U.S. Census Record. This is a population increase of 16.0 percent since the 2010 Census. The map in Figure 1 highlights the Denton/Wise Region among the other counties that fall into the Texas Health service area. For this CHNA, special attention has been given to the needs of vulnerable populations, unmet health needs or gaps in services, and input from the community.

1. Denton County. (2022). Your County <https://www.dentoncounty.gov/>

2. Wise County Texas. (2022). History <https://www.co.wise.tx.us/>

FIGURE 1. TEXAS HEALTH SERVICE AREA COUNTIES: DENTON-WISE REGION



Facility Description

Texas Health Presbyterian Denton

Proudly serving Denton County and surrounding areas since 1987, Texas Health Presbyterian Hospital Denton is committed to providing personalized, quality care in a setting close to home. The new 215,000-square-foot Center for Women opened in 2022 and includes Women and Infants' Services, Breast Center, Rehabilitation Services, and Cardiac Rehab. Texas Health Denton provides the only Level III designated Neonatal Intensive Care Unit (NICU) in Denton, offering advanced neonatal care to our tiniest patients. Certified by The Joint Commission as a Primary Stroke Center and Chest Pain Center, Texas Health Denton is a proud part of the Denton community.



Impact Since Last CHNA

The CHNA process should be viewed as a three-year cycle. An important part of that cycle is revisiting the progress made on priority topics from previous CHNAs. By reviewing the actions taken to address priority areas and evaluating the impact of these actions in the community, an organization can better focus and target its efforts during the next CHNA cycle.

The previous Texas Health CHNA was conducted in 2019. The priority areas were:

- Awareness, Health Literacy and Navigation
- Behavioral Health
- Chronic Disease

Texas Health built upon efforts from the 2019 CHNA to directly target communities and populations who disproportionately experience the prioritized health challenges identified above. Of the activities implemented, the most notable are detailed on the next page:



Behavioral Health

- **Texas Health Community Impact:** In 2019, Texas Health launched the Texas Health Community Impact initiative to address behavioral health issues and the barriers to social determinants of health for individuals residing in Texas Health designated high-need ZIP codes. Through this initiative, Texas Health has awarded over \$10M to community-based organizations to date. This Texas Health initiative aims to advance the prevention and management of social, physical, and behavioral health in underserved communities, with the goal of reducing health disparities and improving health equity. The initiative calls on agencies from different sectors — education, health care, government, grassroots organizations, and others — to unite against the CHNA-identified health and social issues.

Chronic Disease Prevention and Management

- **Evidence Based Programs – Chronic Disease Self-Management Program (CDSMP); Diabetes Self-Management Program (DSMP); Chronic Pain Self-Management Program (CPSMP) and A Matter of Balance (AMOB):** Texas Health began offering the Evidence-Based Programs in 2013, in collaboration with local community partners to address the chronic disease prevention and management priority identified in the CHNA. These nationally recognized programs enable participants to build the self-confidence and motivation they need to manage the challenges of living with a chronic disease. Participants are adults experiencing chronic health conditions such as hypertension, arthritis, heart disease, stroke, lung disease, and diabetes. Initially, the program workshops were exclusively in-person; however, telephonic, virtual, and guided self-study formats were adopted in 2020 to maintain safe distancing due to the onset of the COVID-19 pandemic. These formats continued to be the most prevalent in 2021, due to the ongoing COVID-19 pandemic. With the assistance of the local Area Agencies on Aging, eight CDSMP workshops and 18 CDSMP guided self-study formats; 15 DSMP

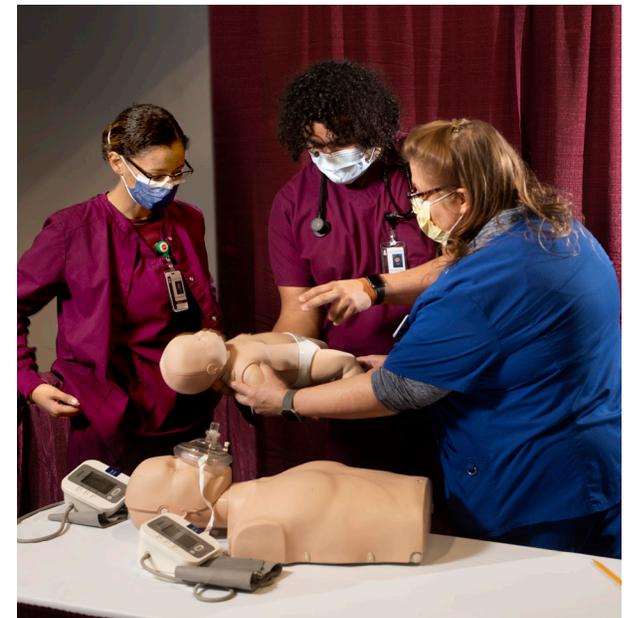
workshops and 12 DSMP guided self-study formats; six CPSMP workshops and four CPSMP guided self-study, and 17 AMOB workshops were offered to community members.

- **Clinic Connect:** Historically, Texas Health has funded the work of local community health clinics in our mission to improve the health of the people in the communities we serve. In 2016, Texas Health launched Clinic Connect, a streamlined process for receiving and evaluating funding requests from clinics that reach vulnerable populations and serve as outpatient resources for our acute care hospitals. The goal of Clinic Connect is to create a collaborative relationship with local non-profit community-based clinics by providing financial support, educational opportunities, information sharing, and expanded services to improve healthcare access and quality for underserved, vulnerable populations. Clinics receiving funds are required to report on specific process and outcome measures, including average wait time for appointments and the percentage of diabetic patients whose A1c levels are less than nine percent. Texas Health awarded over \$795,000 to community clinics across Metroplex to date.

- **Wellness for Life – Mobile Health Program:** The Wellness for Life mobile health teams deliver preventive and chronic disease management services traveling across the greater Dallas-Fort/Worth (DFW) area to reach medically underserved communities. Our team of family nurse practitioners, registered nurses, community health workers, and mammography technologists provide prevention and early detection services and teach evidence-based practices in partnership with community-based health clinics and organizations. Utilizing state-of-the-art mobile health vehicles, the medical team delivers essential healthcare services at churches, schools, grocery stores, community centers, and public parks. The ethnically and culturally diverse health care team creates a welcoming environment that fosters trusting relationships. In 2021, Texas Health improved access to care by delivering the following healthcare services to community members: 10,882 COVID-19 vaccine

doses, 1,772 screening mammograms, 177 cervical exams, and 68 colon kits.

- **Healthy Education Lifestyle Program (HELP):** The Healthy Education Lifestyle Program (HELP) is an innovative way of delivering diabetes and hypertension management for uninsured populations. Every HELP visit is comprised of three key components: an individual visit with a mid-level practitioner, including necessary lab testing; an education session by the nurse to increase health literacy; and social determinants of health support. HELP provides program participants with ongoing health coaching and education resources to support patients learning to effectively manage their chronic disease and to encourage them to take an active role in reducing the negative toll their chronic conditions will otherwise take on their lives. The monthly office visits ensure those who are uninsured gain access to lab tests and medications necessary to help them effectively self-manage their disease. HELP has seen impressive results, including improvement in individual bio-metric scores. In 2021, HELP was able to serve 1,475 individuals across the system.



Access, Health Literacy, and Navigation

• *Health to Housing Program: A Pathway to Healing Collaborative:*

In partnership with Austin Street Center and City Square Housing, Texas Health launched the Health to Housing program in September 2020 to provide medical respite care to homeless adults discharged from Texas Health Dallas (THD). Using a three-pronged approach, patients receive medical services such as medication management, wound care, blood pressure screening, physical therapy; case management services such as job training, connection to supplemental benefits; and appropriate housing solutions. Since launching in September 2020, the Health to Housing program has served over 57 homeless individuals.

• *YES Dallas:* The YES Dallas Initiative is a truly collaborative project aimed at reducing the barriers to physical activity by providing middle school age children in the Pleasant Grove community of Dallas with sports and nutritional resources to promote health and overall wellness. Texas Health and collaborators will increase the participation of at least 130 socio-economically disadvantaged youth in sports. The grant provides access to nutrition education, physical literacy resources, athletic training, and community education both in-person and virtually. To date this program has served over 99 adolescents.

• *Texas Health Community Vaccination Program:* Texas Health Community COVID-19 Vaccination launched in January 2021 to in response to Texas Health's aim to provide equitable care. With the understanding the individuals in medically underserved communities may have limited access to the COVID-19 Vaccine. The Mobile Health team included COVID-19 vaccination to its services. Partnering with approximately 74 community-based organizations, and with grant support from the Communities Foundation of Texas (CFT) and the Human Resources Services Administration (HRSA), Texas Health administered 10,878 COVID-19 Vaccines to 6,013 individuals across 210 community clinics, in addition to educating 6,310 individuals and raising awareness of the COVID-19 vaccine.

• *Texas Health Sexual Assault Nurse Examiner Program:*

The Sexual Assault Nurse Examiner (SANE) program provides compassionate and comprehensive care for patients who have experienced sexual assault. Part of the SANE department is the Safety and Well-Being Prevention Program (SWBPP) which offers violence prevention education, awareness and professional development programs to schools, businesses, and community organizations across the system. SWBPP focuses on protective and risk factors that bring awareness to violence. Topics of the classes include dynamics of a healthy relationship, teen dating violence, digital abuse and web safety, human trafficking awareness, bystander intervention training, gender socialization and violence, awareness training for parents, trauma informed response, sexual assault, and complexities of child abuse among others. To date, SANE has delivered over 69 community presentations and outreach events to more than 2,672 individuals and provided clinical services to over 776 victims of sexual assault.

• *Faith Community Nursing:* Faith Community Nursing (FCN) is a system-wide program offered by Texas Health to link faith communities with health-related resources that focus on holistic care including body, mind, and spirit. Program emphasis is placed on prevention and wellness through education, coaching, advocacy, and coordination of healthcare. Through

the strong relationships with faith organizations (churches, synagogues, mosques), the FCN program can reach people outside of the traditional hospital or clinic setting to provide education and resources that help improve the health and well-being of individuals across North Texas. FCN promotes wellness, prevention, and wholeness before, during and after disease. The program also creates safe and sacred places for healing and advocates for compassion, mercy and dignity at Christian, Jewish and Muslim congregations. In 2021, the FCN program worked with 106 congregations (reaching 131,322 people) and 297 volunteer nurses and lay health promoters to serve communities across North Texas. Flu vaccinations were given to 5,180 uninsured and high-risk community members who may not otherwise have received preventative care. In addition, over \$1.7 million in health-related cost savings and avoidance was recorded by the congregations we work with. Savings included health care dollars and the cost to provide for social determinants of health. Due to COVID-19, FCNs also supported faith communities with consultation and implementation of infection prevention measures and COVID vaccine education and information. Additionally, the FCN team provided nursing leadership for five of the Texas Health COVID Vaccine Clinics that vaccinated thousands of North Texas residents.



Blue Zones Project

Blue Zones Project is a community-led well-being improvement initiative that focuses on changing the environment around us to make healthy choices easier. In early 2019, Blue Zones Project work moved under the umbrella of North Texas Healthy Communities (NTHC), the community outreach arm of Texas Health that focuses on the delivery of community benefit through well-being improvement initiatives. NTHC continues to work to sustain Blue Zones Project's momentum while expanding support into high-need schools, faith communities, worksites, and neighborhoods identified by Texas Health's CHNA.

During the pandemic, Blue Zones shifted its focus to address pandemic-related needs in underserved communities by distributing food, developing vaccination awareness campaigns, and promoting community vaccination clinics. Since the last CHNA, this program has engaged over 365 participating organizations and served over 95,000 individuals.

Community Feedback

The 2019 Texas Health Resources CHNA Reports and Implementation Strategies were made available to the public via the website <https://www.texashealth.org/community-engagement/community-health-improvement-chi/community-health-needs-assessment>. In order to collect comments or feedback, a unique email was used: THRCHNA@texashealth.org. No comments had been received on the preceding CHNA via the email at the time this report was written.



Methodology

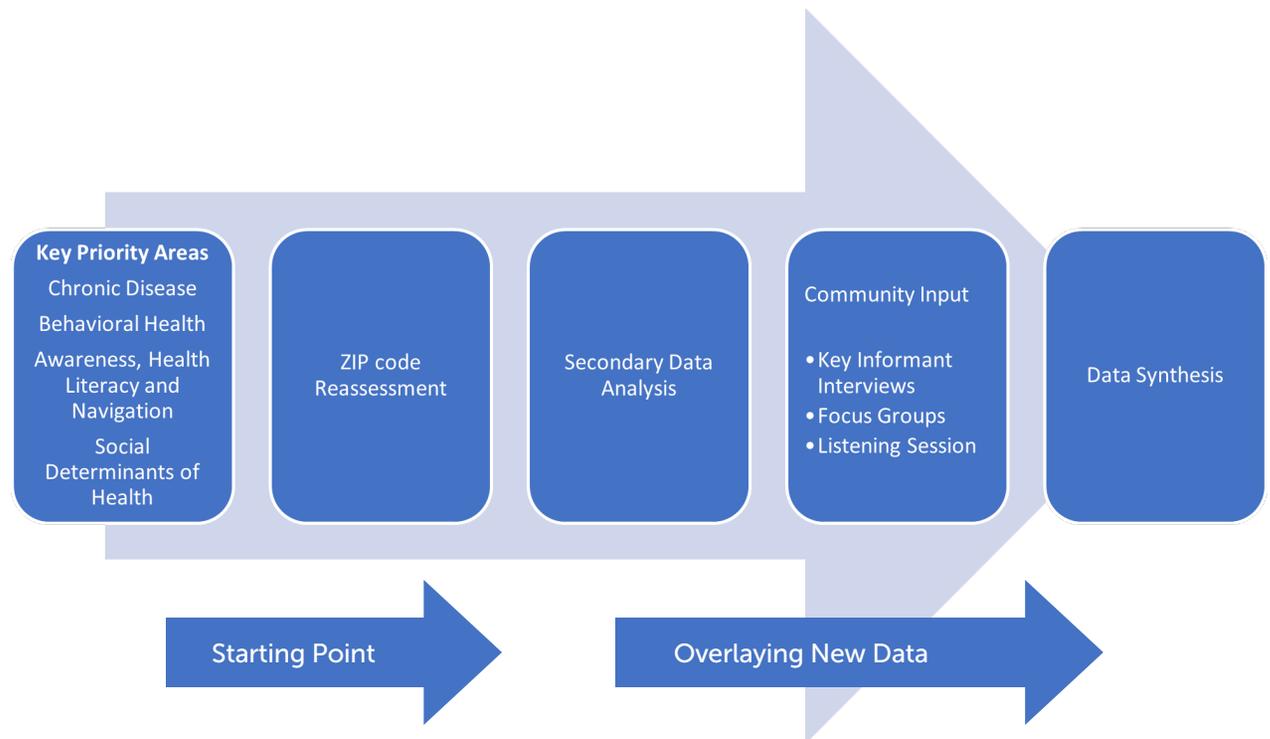
Overview

Two types of data were used in this assessment: primary and secondary data. Primary data is data collected directly from main sources in the community. Primary data was obtained through focus groups and key informant interviews. Secondary data is health indicator data that has been collected by public sources such as government health departments.

Building on 2019 CHNA Process

For the 2022 CHNA process, Texas Health built on key findings and achievements from the 2019 CHNA process and Implementation Strategy. This process included over 463 ZIP codes within the Texas Health primary and secondary service areas. In Figure 2, Texas Health, with the support of five regional community councils, utilized primary and secondary data to narrow the geography down to 56 prioritized ZIP codes. These communities were experiencing disproportionate health outcomes in the areas of Chronic Disease, Behavioral Health and Awareness, and Health Literacy and Navigation.

FIGURE 2. CHNA TIERED PROCESS



Overview of ZIP Code Reassessment

The ZIP code reassessment included the Conduent HCI project team reviewing, analyzing, and synthesizing the Health Equity Index, a tool developed by Conduent Healthy Communities Institute. This tool measures socioeconomic need and seven key indicators available for 20 counties (Collin, Comanche, Dallas, Denton, Eastland, Ellis, Erath, Henderson, Hood, Hunt, Johnson, Kaufman, Parker, Rockwall, Tarrant, Wise, Cooke, Somervell, Grayson, and Hamilton), which includes 463 ZIP codes that receives services through Texas Health hospitals and joint ventures. The following indicators were used to reassess and determine Texas Health priority ZIP codes for its 2022 cycle:

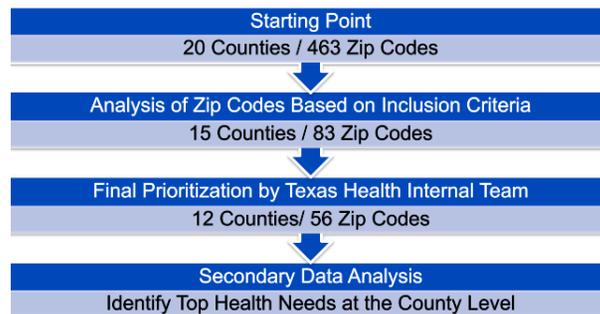
- Demographics
- Median household income
- Percent of uninsured adults
- Percent of people living below the poverty level (200 percent)
- Unemployment rate
- Percent receiving SNAP assistance
- Educational attainment for adults 25+ with a high school degree

Data were analyzed at the ZIP code level when available. Findings from the analysis were used to identify fifteen counties and 83 priority ZIP codes for the 2022 CHNA process.

CHNA Process and Texas Health ZIP Code Prioritization

The CHNA process began with reviewing 15 counties and 83 ZIP codes. HCI analyzed the ZIP codes based on the HCI inclusion criteria and Texas Health reviewed the data, ranked the ZIP codes and a final prioritization list was created with 12 counties and 56 ZIP codes. Figure 3 illustrates how the 12 counties and 56 ZIP codes were identified.

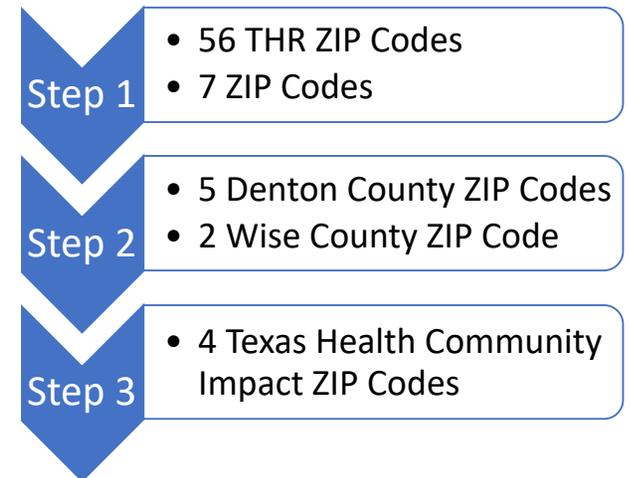
FIGURE 3. METHODOLOGY OVERVIEW



Denton-Wise ZIP Codes Prioritization

The Denton-Wise Region is comprised of seven prioritized ZIP codes: five in Denton County and two in Wise County. The purpose of the deeper dive into the ZIP codes during this CHNA process was to purposefully identify areas of impact where place-based programs could be built, grown and replicated through investments. ZIP codes were ranked on perceived need and identified need per the Health Equity Index (a measure of socioeconomic need). The results yielded the seven ZIP codes from which four community impact ZIP codes were identified. An extensive data review and data gathering, including key data indicators were conducted in these areas. The diagram in Figure 4 summarizes the overall ZIP code prioritization process for the 2022 CHNA.

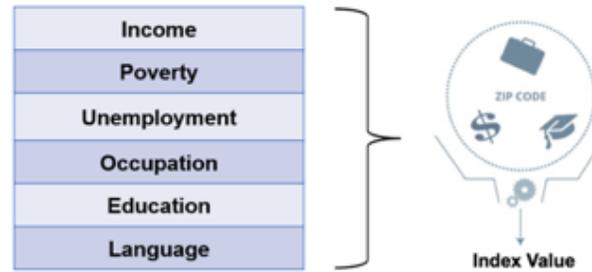
FIGURE 4. ZIP CODE PRIORITIZATION



Health Equity Index

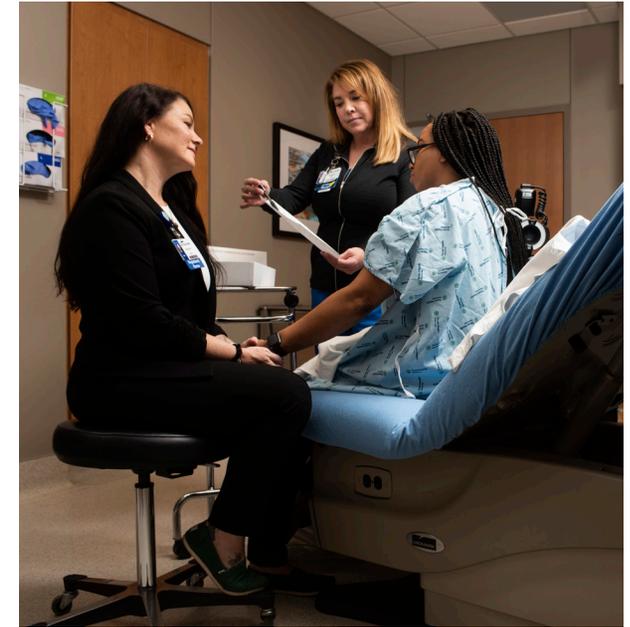
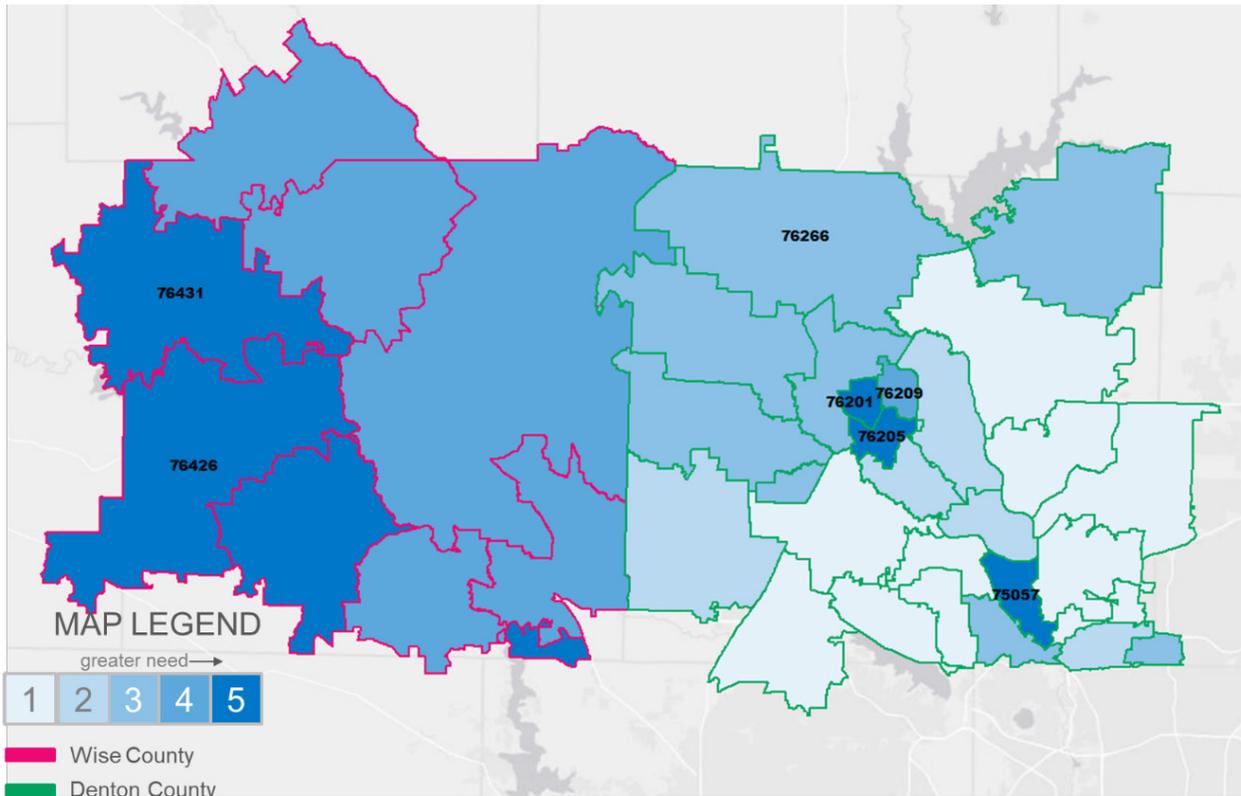
Figure 5 is an illustration of the HEI (Health Equity Index) (formerly, SocioNeeds Index). The HEI incorporates estimates for six different social and economic determinants of health that are associated with poor health outcomes. The data, which cover income, poverty, unemployment, occupation, educational attainment, and linguistic barriers, are then standardized and averaged to create one composite index value for every ZIP code in the United States. The areas must have a population of at least 200. ZIP codes have index values ranging from zero to 100, where higher values are estimated to have the highest socioeconomic need and are correlated with poor health outcomes including preventable hospitalizations and premature death.

FIGURE 5. HEALTH EQUITY INDEX



The map in Figure 6 highlights HEI values for ZIP codes across the Denton-Wise Region. Darker shades of blue indicate a higher index value and thus higher levels of need within those ZIP codes. As shown in Table 1, 76431, 76426, 76201, 76205, and 75057 ZIP codes are identified as highest need in the HEI.

FIGURE 6: DENTON-WISE REGIONAL HEI MAP



COUNTY	ZIP CODE	HEI VALUE
Denton	75057	68.9
	76201	70.3
	76205	61.1
	76209	52.1
	76266	30
Wise	76426	68.9
	76431	78.8

Demographics

The following section explores the demographic profile of the Texas Health Denton-Wise Region service area. It is important to understand the demographics of a community because it can significantly impact its health profile. Communities are becoming more diverse with different races and ethnicities, gender identities, ages, and socioeconomic groups. Each component has its own unique needs and requires varied approaches to health improvement efforts³. All demographic estimates are sourced from American Community Survey one-year (2019) or five-year (2015-2019) estimates unless otherwise indicated.



3. National Academies Press (US); 2008. Institute of Medicine (US) Roundtable on Health Disparities. Challenges and Successes in Reducing Health Disparities: Workshop Summary. <https://www.ncbi.nlm.nih.gov/books/NBK215371/> DOI: 10.17226/12154

Population

According to the U.S. Census Bureau's 2015-2019 American Community Survey, the Denton-Wise Region had a combined population of 122,669. Table 2 shows the population breakdown for the prioritized ZIP codes within the Denton-Wise Region. ZIP codes 76201 and 76209 are the most heavily populated in the region and are both located in Denton County.

TABLE 2 POPULATION ESTIMATES FOR PRIORITIZED ZIP CODES IN THE DENTON AND WISE REGION

COUNTY	ZIP CODE	TOTAL POPULATION ESTIMATE
Denton	75057	14,960
	76201	28,601
	76205	21,326
	76209	25,689
	76266	16,112
Wise	76426	12,351
	76431	3,630

Age

As shown in Figure 7, 24.3 percent of Denton County and 24.7 percent of Wise County is under 18 years old. The Denton-Wise Region has a similar proportion of residents under 18 compared to the state (25.5 percent) and a higher proportion compared to the nation (22.3 percent).

Figure 8 illustrates that 10.5 percent of the population in Denton County and 15.1 percent of the population in Wise County are adults over the age of 65. Denton County has a smaller proportion of older adults compared to the State of Texas (12.9 percent) and the U.S. (16.5 percent), while Wise County's proportion of residents over 65 years is larger than the proportion in Texas.

Figure 9 shows that Denton County and Wise County have a smaller proportion of residents under 5 years old (6.1 percent and 6.2 percent, respectively) compared to Texas (6.9 percent) and a similar proportion compared to the U.S. (6.0 percent).



FIGURE 7. POPULATION UNDER 18

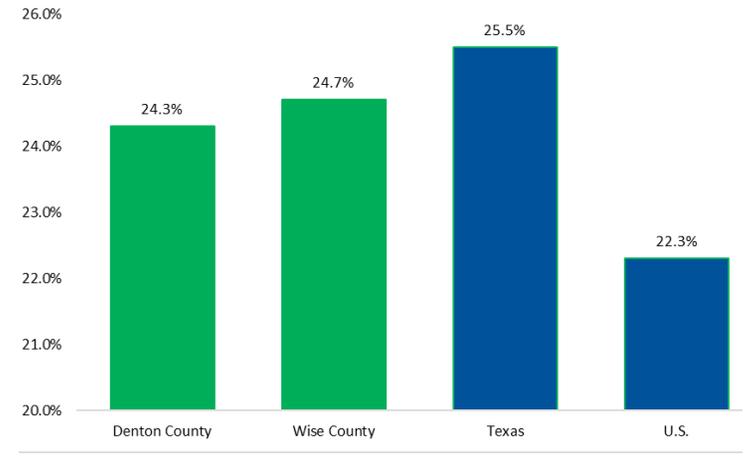


FIGURE 8. POPULATION OVER 65

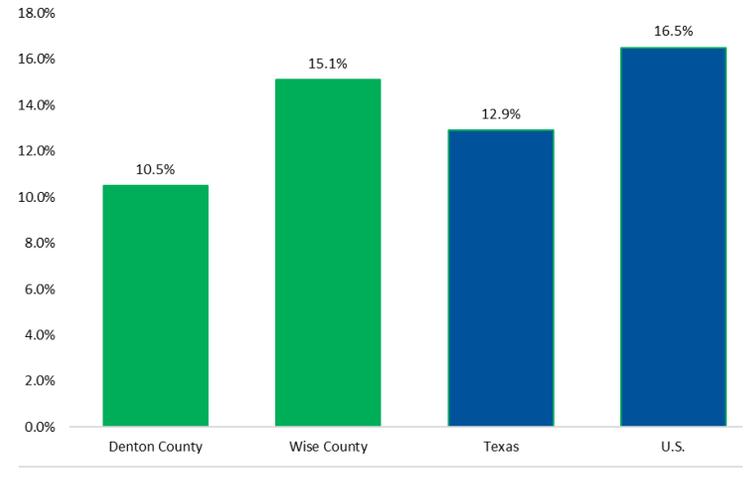
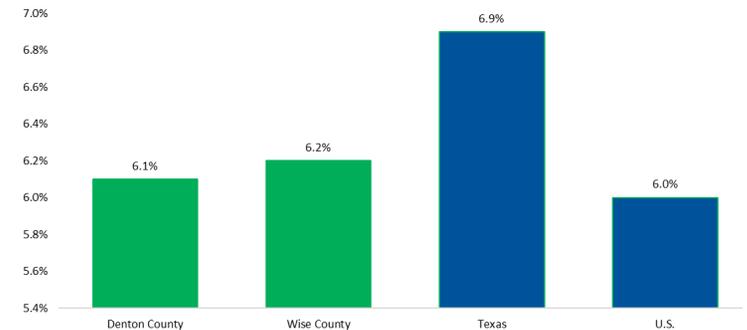


FIGURE 9. POPULATION UNDER 5



Race/Ethnicity

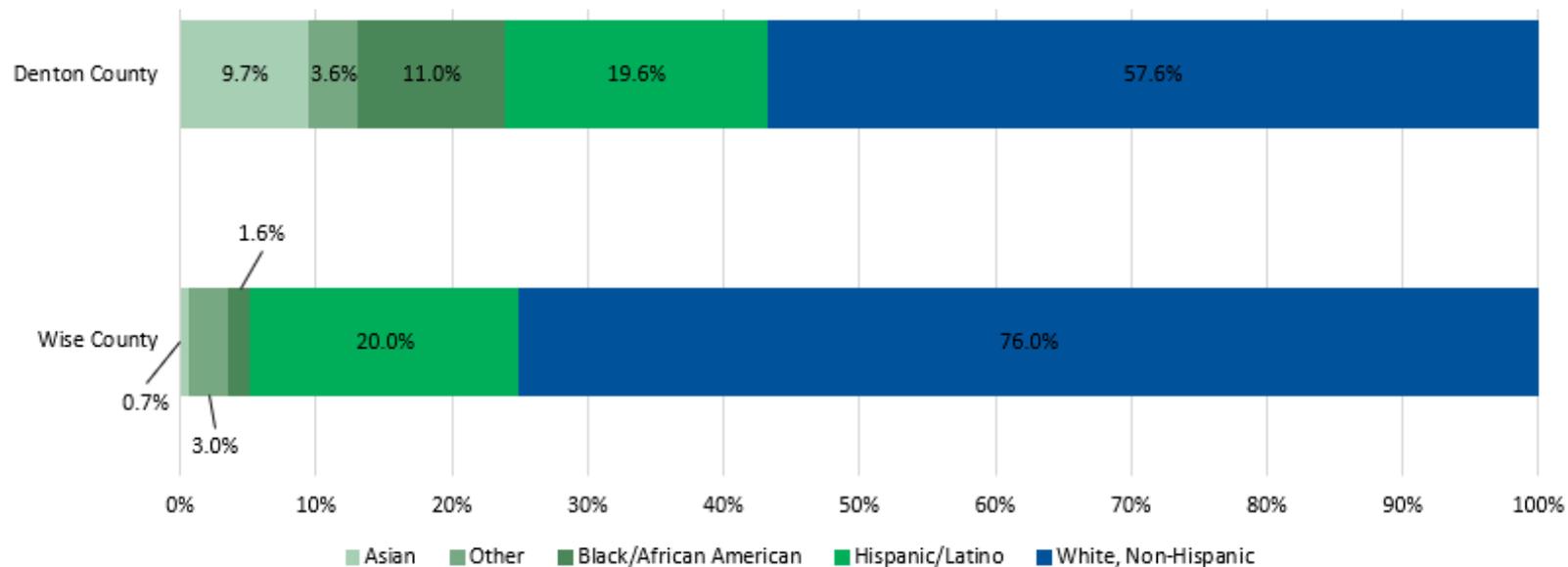
The race and ethnicity composition of a population is important in planning for future community needs, particularly for schools, businesses, community centers, health care, and childcare. Race and ethnicity data are also useful for identifying and understanding disparities in housing, employment, income, and poverty.

Figure 10 shows the racial composition of residents in Denton County and Wise County. Denton County has a racial composition with 57.6 percent of residents identifying as White, Non-Hispanic; 19.6 percent as Hispanic or Latino (of any race); 11.0 percent as Black or African American; 9.7 percent as Asian; and 3.6 percent as American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, "Some other race," or "Two or more races."

Wise County has a racial composition with 76.0 percent of residents identifying as White, Non-Hispanic; 20.0 percent as Hispanic or Latino (of any race); 1.6 percent as Black or African American; 0.7 percent as Asian; and 3.0 percent as American Indian and Alaska Native, Native Hawaiian and Other Pacific Islander, "Some other race," or "Two or more races."



FIGURE 10. RACE/ETHNICITY OF THE DENTON-WISE REGION



Language

Language is an important factor to consider for outreach efforts to ensure that community members are aware of available programs and services.

FIGURE 11. POPULATION (5+) THAT SPEAKS A LANGUAGE OTHER THAN ENGLISH AT HOME

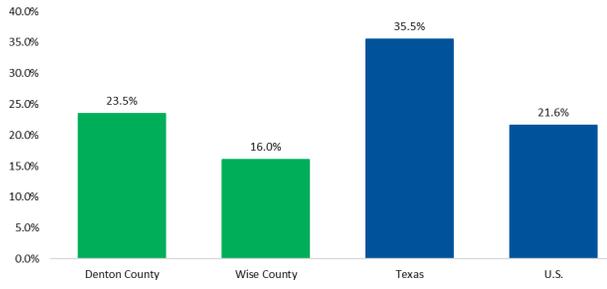


Figure 11 shows the proportion of residents in the Denton-Wise Region who speak a language other than English at home. Both Denton County (23.5 percent) and Wise County (16.0 percent) have a lower percentage of residents who speak a language other than English at home compared to Texas (35.5 percent).

As shown in Table 3, ZIP codes 75057 and 76209 in Denton County have the largest proportion of residents who speak a language other than English at home (40.3 percent and 26.7 percent, respectively). In these ZIP codes, 36.1 percent and 23.8 percent, respectively, speak Spanish at home. This is an important consideration for the effectiveness of services and outreach efforts, which may be more effective if conducted in languages other than English alone.

As shown in Table 4, ZIP codes 76426 in Wise County and 76201 in Denton County have larger portions of their populations who have difficulty speaking English at home (8.2 percent and 4.9 percent, respectively).

TABLE 3. POPULATION (5+) WHO SPEAKS A LANGUAGE OTHER THAN ENGLISH AT HOME BY PRIORITIZED ZIP CODE

COUNTY	ZIP CODE	PERCENT POPULATION THAT SPEAKS A LANGUAGE OTHER THAN ENGLISH AT HOME	PERCENT POPULATION THAT SPEAKS SPANISH AT HOME
Denton	75057	40.3%	36.1%
	76201	21.8%	13.2%
	76205	25.1%	16.4%
	76209	26.7%	23.8%
	76266	13.9%	12.9%
	76426	24.8%	23.8%
Wise	76431	10.2%	10.1%

TABLE 4. POPULATION (14+) WITH DIFFICULTY SPEAKING ENGLISH BY PRIORITIZED ZIP CODE

COUNTY	ZIP CODE	PERCENT POPULATION WITH DIFFICULTY SPEAKING ENGLISH
Denton	75057	4.1%
	76201	4.9%
	76205	4.1%
	76209	3.5%
	76266	0.8%
Wise	76426	8.2%
	76431	8.2%



Social and Economic Determinants of Health

This section explores the economic, environmental, and social determinants of health in the Denton-Wise Region's service area. Social determinants of health are the conditions in which people are born, grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life ⁴.

4. Office of Disease Prevention and Health Promotion. (2014). *Healthy People 2020: Social Determinants of Health*. Retrieved from Healthy People 2020: <https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health>



Income

Median household income reflects the relative affluence and prosperity of an area. Areas with higher median household incomes are likely to have a greater share of educated residents and lower unemployment rates. Those with greater wealth are more likely to have a higher life expectancy and reduced risk of a range of health conditions including heart disease, diabetes, obesity, and stroke. Poor health can also contribute to reduced income by limiting one's ability to work⁵.

FIGURE 12. MEDIAN HOUSEHOLD INCOME

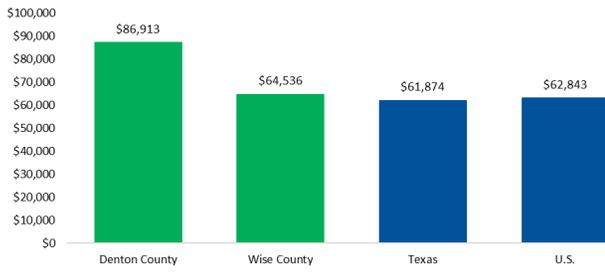


Figure 12 shows the median household income of Denton County is \$86,913 which is above the values of the Texas state value of \$61,874 and the U.S. value of \$62,843. Meanwhile, the median household income of Wise County (\$64,536) is similar to the Texas state and national value.

5. Robert Wood Johnson Foundation. Health, Income, and Poverty. <https://www.rwjf.org/en/library/research/2018/10/health--income-and-poverty-where-we-are-and-what-could-help.html>

6. Office of Disease Prevention and Health Promotion. "Poverty | Healthy People 2020." *Healthypeople.gov*, 2014, www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-health/interventions-resources/poverty.

Poverty

The Census Bureau sets federal poverty thresholds every year and varies by the size of family and ages of family members. A high poverty rate is both a cause and a consequence of poor economic conditions. A high poverty rate indicates that local employment opportunities are not sufficient to provide for the local community. Through decreased buying power and decreased taxes, poverty is associated with lower quality schools and decreased business survival.⁶

Figure 13 shows the percentage of people living below the poverty level for Denton County (7.6 percent) and Wise County (10.7 percent). Both values are lower than the Texas state value (14.7 percent) and the U.S. value (13.4 percent).

Figure 14 shows the percentage of people living below the poverty level by race/ethnicity. For both Denton

County and Wise County, the Hispanic/Latino and Native Hawaiian/Pacific Islander groups have the highest percentages of people living below the poverty level compared to other groups. The lowest percentages of people living in poverty in Wise County were from Asian and American Indian/Alaska Native groups while the lowest percentages in Denton County were from White, non-Hispanic and Asian groups.

FIGURE 13. PEOPLE LIVING BELOW POVERTY LEVEL

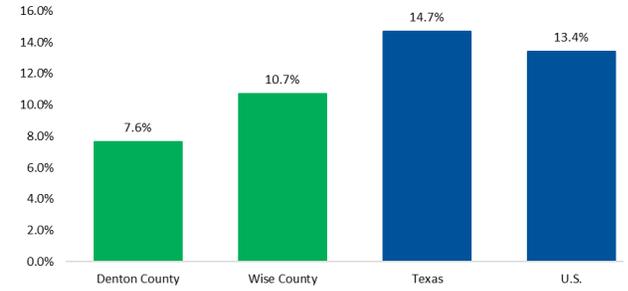
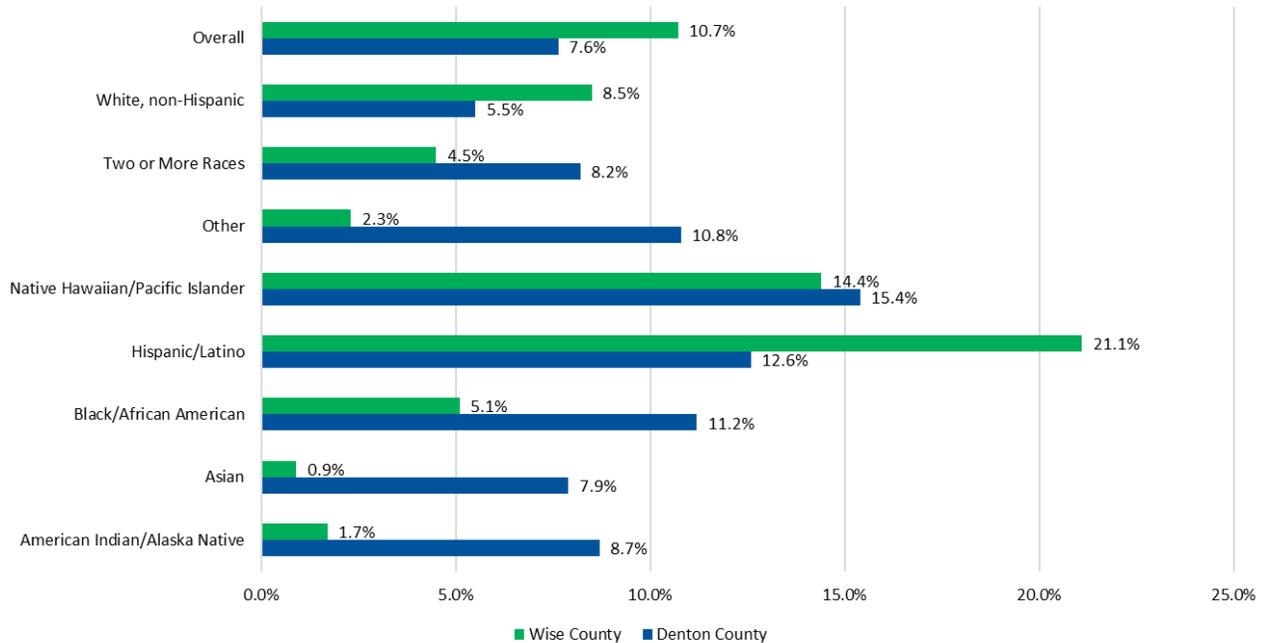


FIGURE 14. PEOPLE LIVING BELOW POVERTY LEVEL BY RACE/ETHNICITY



Food Insecurity

The Supplemental Nutrition Assistance Program (SNAP) is a federal assistance program that provides low-income families with electronic benefit transfers (EBTs) that can be used to purchase food. The goal of the program is to increase food security and reduce hunger by increasing access to nutritious food.⁷

FIGURE 15. HOUSEHOLDS WITH CHILDREN RECEIVING SNAP

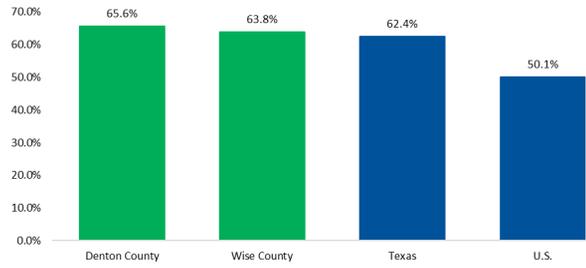


Figure 15 shows the percentage of households receiving food stamps/SNAP benefits with children under 18 years old. Denton County (65.6 percent) and Wise County (63.8 percent) both have similar percentages to both the Texas state value (62.4 percent) and higher than the U.S. value (50.1 percent.)

7. USDA. "Supplemental Nutrition Assistance Program (SNAP) | USDA-FNS." Usda.gov, 2018, www.fns.usda.gov/snap/supplemental-nutrition-assistance-program

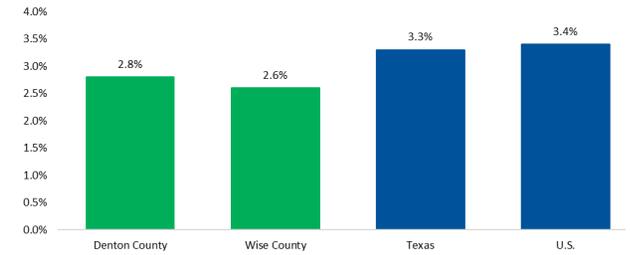
8. U.S. Department of Health and Human Services, Healthy People 2030. <https://health.gov/healthypeople/objectives-and-data/social-determinants-health/literature-summaries/employment>

Unemployment

The unemployment rate is a key indicator of the local economy. Unemployment occurs when local businesses are not able to supply enough appropriate jobs for local employees and/or when the labor force is not able to supply appropriate skills to employers. A high rate of unemployment has personal and societal effects. During periods of unemployment, individuals are likely to feel severe economic strain and mental stress. Unemployment is also related to access to health care, as many individuals receive health insurance through their employer. A high unemployment rate places strain on financial support systems, as unemployed persons qualify for unemployment benefits and food stamp programs.⁸

Figure 16 shows the percentage of unemployed workers in the civilian labor force. The percentage in Denton County (2.8 percent) and Wise County (2.6 percent) is slightly lower compared to both the Texas state value (3.3 percent) and the U.S. value (3.4 percent).

FIGURE 16. UNEMPLOYED WORKERS IN CIVILIAN LABOR FORCE



Education

Graduating from high school is an important personal achievement and is essential for an individual's social and economic advancement. Graduation rates can also be an important indicator of the performance of an educational system. Having a bachelor's degree opens career opportunities in a variety of fields and is often a prerequisite for higher-paying jobs.⁹

FIGURE 17. PEOPLE AGE 25+ WITH A HIGH SCHOOL DEGREE OR HIGHER

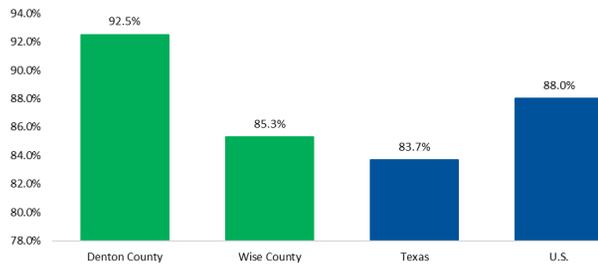


Figure 17 shows the percentage of People 25 Years or Older with a High School Degree or Higher. Wise County (85.3) has a similar percentage to the Texas state value (83.7 percent) and the U.S. value (88.0 percent), while Denton County (92.5 percent) has a higher percentage compared to the other three comparisons.

FIGURE 18. PEOPLE AGE 25+ WITH A BACHELOR'S DEGREE OR HIGHER

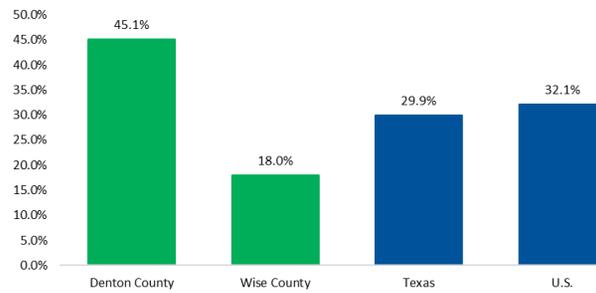


Figure 18 shows the Percentage of People 25 Years or Older with a Bachelor's Degree or Higher. While Denton County (45.1 percent) is higher than the Texas state value (29.9 percent) and the U.S. value (32.1 percent), Wise County (18.0 percent) is lower than all three comparisons.

Transportation

Lengthy commutes cut into workers' free time and can contribute to health problems such as headaches, anxiety, and increased blood pressure.¹⁰ Longer commutes require workers to consume more fuel, which is both expensive for workers and damaging to the environment.¹¹

FIGURE 19. MEAN TRAVEL TIME TO WORK (MINUTES)

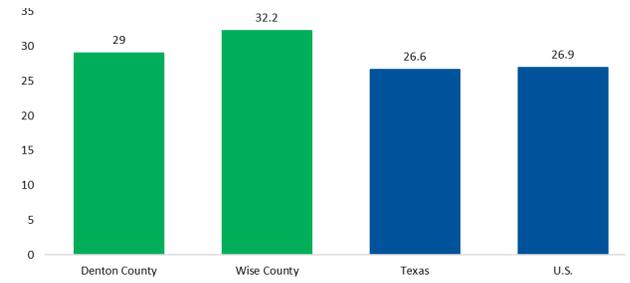


Figure 19 shows the mean travel time to work for Denton County (29 minutes) and Wise County (32.2 minutes). Both counties are higher than the Texas state value (26.6 minutes) and the U.S. value (26.9 minutes).



9. Robert Wood Johnson Foundation, Education and Health. <https://www.rwjf.org/en/library/research/2011/05/education-matters-for-health.html>

10. Hoehner, Christine M., et al. "Commuting Distance, Cardiorespiratory Fitness, and Metabolic Risk." *American Journal of Preventive Medicine*, vol. 42, no. 6, June 2012, pp. 571–578, 10.1016/j.amepre.2012.02.020.

11. Shapiro RJ, H. K. (2002). Conserving energy and preserving the environment: The role of public transportation. *American Public Transportation Association*.

Denton-Wise Health Care Utilization

Texas Health patient utilization data were provided by DFWHC (Dallas Fort Worth Hospital Council) Foundation and analyzed by HCI at the ZIP code level based on patients' resident ZIP codes listed in discharge summaries¹². Age-adjusted rates were calculated using the 2010 Census Standard Population estimates and data are available for ZIP codes if case counts are above 1 and the population is greater than 300 for the 2017-2019 three-year rolling period. The information below highlights relevant utilization data for this region, with community impact ZIP codes highlighted. Rates are calculated per 10,000 population.

12. DFWHC Foundation Regional Data, Q1-Q4, 2017-2019. DFWHC Foundation, Irving Texas. October 19, 2021

Figure 20 shows the Age-Adjusted ER (Emergency Room) Visit Rate due to Diabetes by ZIP code for the region. The highest rates are within Denton County and the community impact ZIP code 75057 has the highest rate in the region (Table 6).

FIGURE 20. AGE-ADJUSTED ER VISIT RATE DUE TO DIABETES

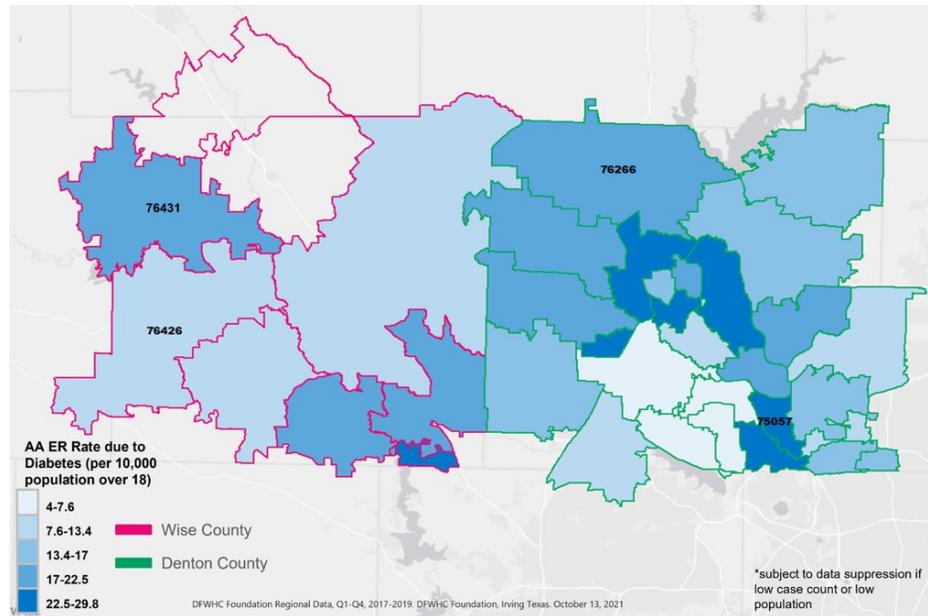


TABLE 6. AGE-ADJUSTED EMERGENCY ROOM VISIT RATES DUE TO DIABETES

COUNTY	ZIP CODE	RATE (PER 10,000 POP OVER 18)
Denton	75057	24
	76266	18.3
Wise	76426	12.4
	76431	18.0

Figure 21 shows the Age-Adjusted ER Visit Rate due to Type 2 Diabetes for the region by ZIP code. The highest rates are within Denton County and the community impact ZIP code 75057 has the highest rate in the region (Table 7).

FIGURE 21. AGE-ADJUSTED ER VISIT RATE DUE TO TYPE 2 DIABETES

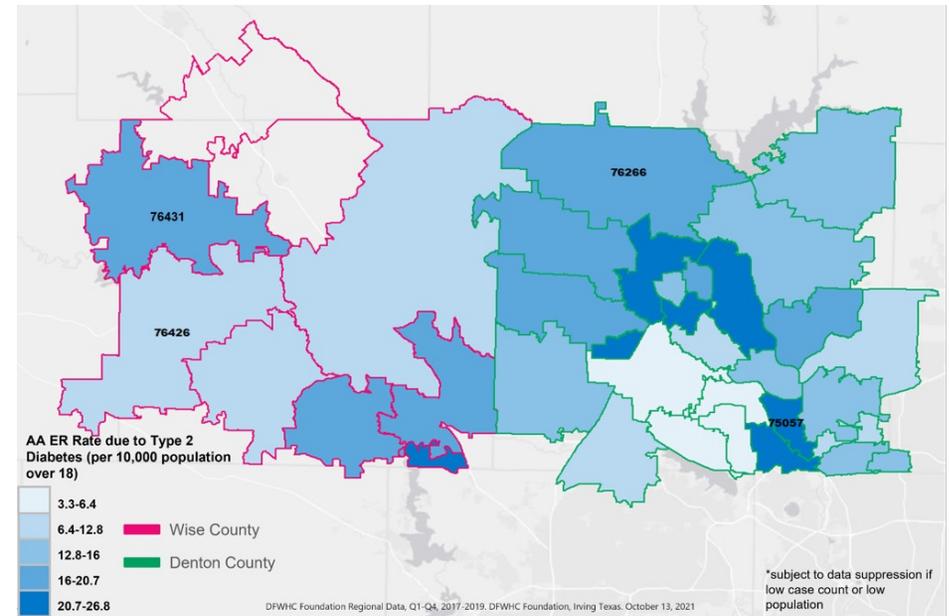


TABLE 7. AGE-ADJUSTED ER VISIT RATES DUE TO TYPE 2 DIABETES

COUNTY	ZIP CODE	RATE (PER 10,000 POP OVER 18)
Denton	75057	22
	76266	17.4
Wise	76426	11.7
	76431	18.0

Figure 22 shows the Age-Adjusted ER Visit Rate due to Hypertension: The highest rates are within Denton County and the community impact ZIP code 75057 has the highest rate in the region (Table 8).

FIGURE 22. AGE-ADJUSTED ER VISIT RATE DUE TO HYPERTENSION

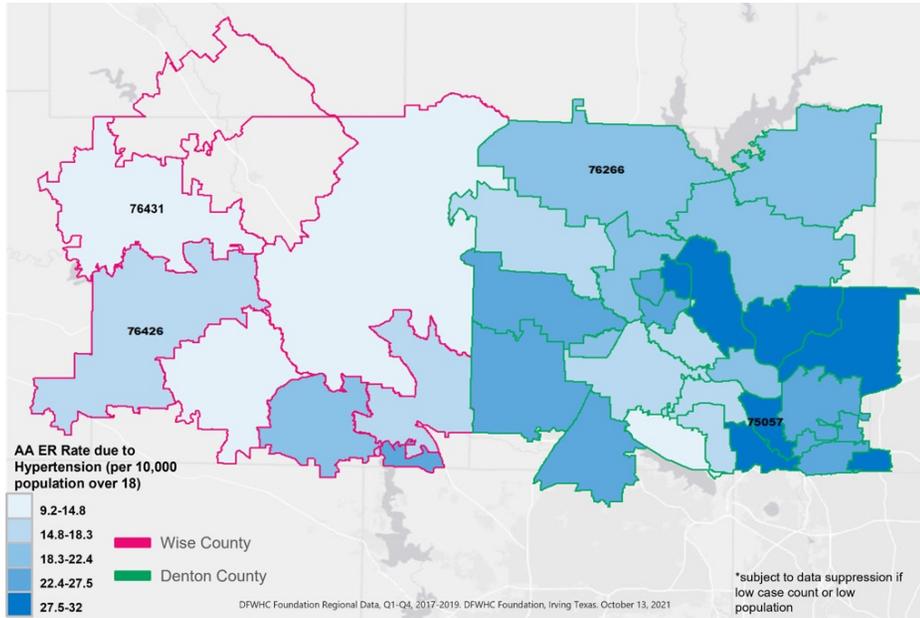
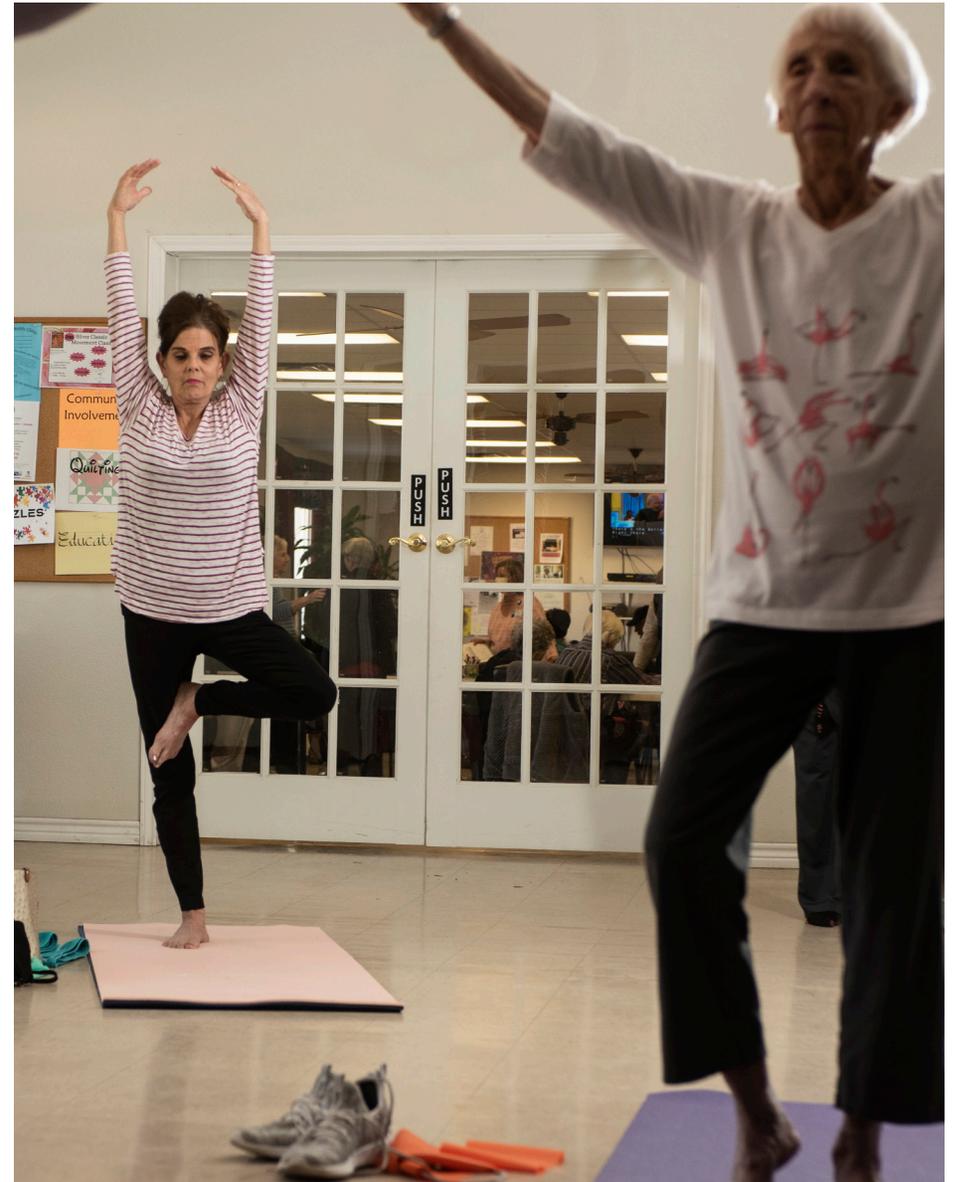


TABLE 8. AGE-ADJUSTED ER VISIT RATES DUE TO HYPERTENSION

COUNTY	ZIP CODE	RATE (PER 10,000 POP OVER 18)
Denton	75057	32
	76266	21.5
Wise	76426	17.2
	76431	14.8



Primary Methodology

Community Key Informant Interviews

Key informant interviews (KIIs) were conducted with leaders and staff from organizations that provide services directly to the community and officials that represent governmental and non-governmental entities. Interviewees invited to participate were recognized as having expertise in public health, special knowledge of community health needs, representing the broad interests of the community served by the hospital, and/or being able to speak to the needs of medically underserved or vulnerable populations.

Forty-one individuals from all Texas Health Regions agreed to participate as key informants. The list on the right represents organizations that participated in the interviews.

The 41 KIIs took place from October 2021 through March 2022 across all five regions. Each of the 41 interviews was conducted via web conference. The questions focused on the interviewee’s background and organization, the biggest perceived health needs and barriers of concern in the community, and the impact of health issues on the populations they serve. A list of the questions asked in the KIIs can be found in Appendix B.

Alzheimer’s Association	Lewisville ISD
Arlington Police Department	Literacy Achieves
Austin City Center	Mansfield Mission Center
Bohan Farms	Meadowbrook Poly UMC
Branch Baptist Church	Mission Oak Cliff
Children’s Advocacy Center for North Texas	North Texas Behavioral Health Authority
Christian Help Center	Paluxy River Children’s Advocacy Center
City of Ennis	Wise County Center of Hope
Cleburne Fire Department	Rockwall County
Collin County Mental Health Mental Retardation Center	SafeHaven of Tarrant County
Community Lifeline Center	Safer Dallas, Better Dallas
Cooper Street YMCA	Senior Connect
Cornerstone Assistance Network	TAPS Transportation
Cross Timbers Family Services	Denton Community Center
Dallas Area Rape Crisis Center	Denton County College
Dallas Foundation	Texas Department of State Health Services
Eastside Ministries	Texas Health Community Impact Board
Erath County Extension	Texas Health Hospital Rockwall
Johnson County Family Crisis Center	Wise County
Lakepointe Church	YMCA Denton



Key Informant Analysis Results

Transcripts captured during the KIIs were uploaded to the web-based qualitative data analysis tool, Dedoose¹³. Interview excerpts were coded by relevant topic areas and key health themes. The approach used to assess the relative importance of the needs discussed in the interviews including the frequency by which a topic was described by the key informant as a barrier or challenge, and the frequency by which a topic was mentioned per interviewee.

13. Dedoose Version 8.0.35, web application for managing, analyzing, and presenting qualitative and mixed method research data (2018). Los Angeles, CA: Sociocultural Research Consultants, LLC www.dedoose.com

Community Focus Groups

Texas Health Resources and Conduent HCI conducted focus groups to gain deeper insight into perceptions, attitudes, experiences, or beliefs held by community members about their health. It is important to note that the information collected in an individual focus group is exclusive to that group and is not representative of other groups. A total of 19 virtual and in-person focus groups across all five regions were conducted from November 2021 through May 2022. In the Denton-Wise region, there were two virtual focus groups completed, both for English-speaking groups. Table 9 shows the two focus groups completed, which included a total of eight participants. Individuals recruited for focus groups included those who were living in and/or working in the Denton-Wise Region. The virtual and in-person focus group sessions lasted 60 minutes.

TABLE 9: DENTON-WISE REGION FOCUS GROUP COMPLETED

NUMBER OF SESSIONS	FACILITATION LANGUAGE	TOTAL COMMUNITY PARTICIPANTS
2	English	8

An array of residents and employees from the Denton-Wise counties provided insights when facilitators asked a series of nine questions to prompt discussion on top community health issues, barriers/challenges to health, and the impact of COVID-19. Facilitators recorded the sessions and notes from the focus groups and uploaded them to the web-based qualitative data analysis tool, Dedoose. Focus group transcripts were coded using a pre-designed codebook, organized by themes, and analyzed for significant observations. The relative importance of health and/or social need was determined, in part, by the frequency of the topic or issue discussed across all three focus groups.

The following top themes emerged from the Denton-Wise Region analysis of the transcripts:

TABLE 10: KEY INFORMANT INTERVIEWS & FOCUS GROUP THEMES — DENTON-WISE REGION

TOP HEALTH CONCERNS/ISSUES	SOCIAL DETERMINANTS OF HEALTH	IMPACTED POPULATIONS
<p>Access to Healthcare: Fragmented health care system, insurance barriers, transportation barriers, lack of providers (no children’s hospital in Denton County, no Medical Examiner in Denton County), difficulties navigating insurance/health care system (eligibility), difficult to find providers that take Medicaid & Obamacare, lack of follow up/communication for people who get connected to services</p> <p>Mental Health/Substance Use Disorder: Lack of resources in Wise County, teenagers in crisis coupled with lack of local resources in Wise County leads to waitlists/long wait times, generational trauma and ACE’s, gaps in long term care facilities/residential treatment centers for children with serious behavioral issues, no strong inpatient psychiatric care or adolescent outpatient care for mental health</p> <p>COVID-19 Impact: Delay in care/access to healthcare (provider shortages, difficulty attracting qualified counselors, PCP conditional on large constraints, loss of income led to healthcare delay), mental health/Substance abuse (increase in suicide attempts, no funding for mental health facilities in Wise County, struggle to get beds for folks in crisis in rural areas), abuse/neglect (child abuse), misinformation/mistrust in healthcare system & politicization of pandemic</p>	<p>Economic Instability/employment (loss of employment led to loss of income/health insurance)</p> <p>Food Insecurity/food accessibility (food deserts)</p> <p>Housing (lack of affordable options, increasing prices without increase in wages)</p> <p>Lack of or limited insurance</p> <p>Language barriers</p> <p>Transportation</p>	<p>Children/Adolescents</p> <p>Victims/survivors of domestic violence and child abuse</p> <p>Hispanic/Latino population</p> <p>Low-income families</p> <p>Veterans</p> <p>Rural communities</p> <p>Incarcerated individuals</p> <p>People with mental health illness/substance use disorder</p> <p>Elderly</p>

Listening Session

Texas Health and Conduent HCI conducted an online survey with key community stakeholders to capture quantitative data about Texas Health 2019 CHNA and Implementation Plan. HCI hosted a follow-up virtual discussion with the stakeholders to capture qualitative insights and feedback. Texas Health identified the community partners and extended the invitations for this discussion. Because health and wellness can be influenced by environmental matters existing outside of health care, a wide variety of community partners were invited to participate in the listening session. The main goal of the listening session was to determine opportunities to strengthen collaborations within the communities served by Texas Health Resources Health System.

A total of 13 participants completed the online survey and two attended the follow-up session. Table 11 lists the organizations who participated in the Listening Session. In Denton County, 61.54 percent of the organizations provide direct services to the community, and 30.77 percent in Wise County.

Invited community leaders were from the following sectors: education, non-profit, philanthropy, for-profit, and healthcare. At the virtual session, participants provided facilitators with additional feedback when asked questions about the results of the survey, what Texas Health was doing well, areas of opportunities in the priority areas, and what Texas Health could do to improve the awareness of the CHNA to partnering organizations and the community. Appendix B provides the detailed results of the listening session.

TABLE 11: LISTENING SESSION ORGANIZATIONS – ALL REGIONS

Alzheimer's Association	Lakepointe Church
Assistance Center of Collin County	LVTRise
Catholic Diocese of Fort Worth	STAR Council
CitySquare	Stephenville Medical and Surgical Clinic
Collin College	University of Texas at Arlington
Eastside Ministries	YMCA

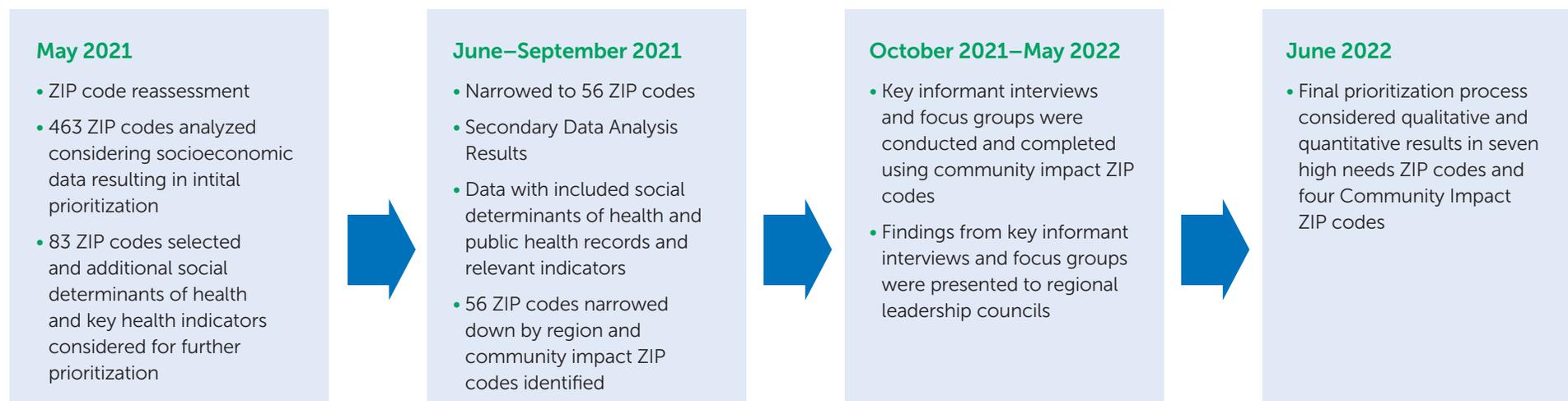


Prioritization Process

Initial ZIP Code Prioritization

To identify high-need ZIP codes within and outside the Texas Health Resource service area and to narrow the focal area from 463 ZIP codes across 12 counties to 83 ZIP codes, then to 56 ZIP codes, Texas Health utilized the SocioNeeds Index® Suite as well as other socio-demographic data and key health indicators. Of the 56 ZIP codes across the 12-county area that were considered, seven of them were identified as high-priority ZIP codes and of those, four were identified as the community impact ZIP codes from the Denton-Wise Region.

FIGURE 24. TEXAS HEALTH RESOURCES 2022 CHNA PRIORITIZATION PROCESS



Prioritization Results

Texas Health recognizes the role that systems can play in addressing social determinants of health as well as their impact on health outcomes across a broader community. Social determinants were intentionally considered as part of the data collection process to determine which social determinants of health are present in the community and how they contribute to prioritized health needs. By pinpointing specific ZIP codes to address the social determinants of health that often result in conditions such as chronic disease and premature death, Texas Health is striving to generate community-driven, collaborative solutions that break down traditional silos and address the clinical and social needs of individuals living in North Texas.



Prioritization to Final ZIP Codes and Health Priorities

In addition to considering the cumulative results of the quantitative and qualitative data collected throughout the CHNA process, Texas Health selected ZIP codes in each region based on criteria that included: 1) availability of resources, 2) availability of partners, 3) community readiness, 4) impact opportunity and 5) health needs in one or more of the prioritized health areas. In this region, the seven ZIP codes that were chosen were 75057, 76201, 76205, 76209, 76266 in Denton County, and 76426 and 76431 in Wise County. Each of the ZIP codes identified falls within Texas Health's service area. In addition to narrowing down the focus geographically based on evidence and the criteria mentioned above, Texas Health worked with the Texas Health Community Impact Leadership Council for the Denton-Wise Region in selecting issues that fell within the prioritized health areas of Awareness, Health Literacy and Navigation, Behavioral Health, and Chronic Disease. They also considered any social determinants of health that may contribute to these issues. Based on these considerations, the Texas Health Community Impact Leadership Council for the Denton-Wise Region elected to focus on Access to Healthcare, Behavioral Health and Substance Abuse and Food Insecurity. Table 12 summarizes the Health Priority Areas within each Zip code.

TABLE 12. HEALTH PRIORITY AREAS IN THE DENTON-WISE REGION

COUNTY	ZIP CODE	HEALTH PRIORITY AREA
Denton	75057	• Access to Healthcare
	76201	• Behavioral Health and Substance Abuse
	76205	
	76209	
	76266	• Food Insecurity
Wise	76426	
	76431	

Health Priority Areas

The following section provides a deeper look into each health priority to understand how findings from the primary and secondary data led to the health topic becoming a significant need. Texas Health partners with several community-based organizations (CBOs) across the region worked with the Texas Health Community Impact Leadership Councils for the Denton-Wise Region, who are comprised of key leaders from these CBOs. The Texas Health Community Impact Leadership Councils have an understanding of the community needs and are valued and trusted by residents, leaders, faith communities, and organizations. With their input, Texas Health can better understand each region's health needs to design and implement upstream solutions. The priorities are presented below.

Access to Healthcare

Access to Healthcare was selected as a priority area for the the Denton-Wise Region. Healthcare access and quality are the connection between people's access to care, understanding of healthcare services, and their own health¹⁴. Access to healthcare services was identified as a top concern in the Denton-Wise Region KIs and focus groups. Some barriers identified in the primary data collection are listed below.

Barriers

- Delay of other treatments/surgeries
- Provider shortages: difficulty finding bilingual therapists, difficulty attracting mental health counselors
- Insurance barriers: conditional on large deductible, insurance constraints, not having coverage at all (anxiety and depression increases, need for care increases, capacity decreases, barriers present)

14. Centers for Disease Control and Prevention (2022). About Social Determinants of Health (SDOH)

Behavioral Health and Substance Abuse

Behavioral Health/Mental Health and substance use disorders often occur together. More than one in four adults living with serious mental health problems also has a substance abuse problem¹⁵. Mental Health and Substance Abuse were identified as a top health concern impacting the Denton-Wise Region by key informants and focus group participants. Some challenges/barriers are listed below.

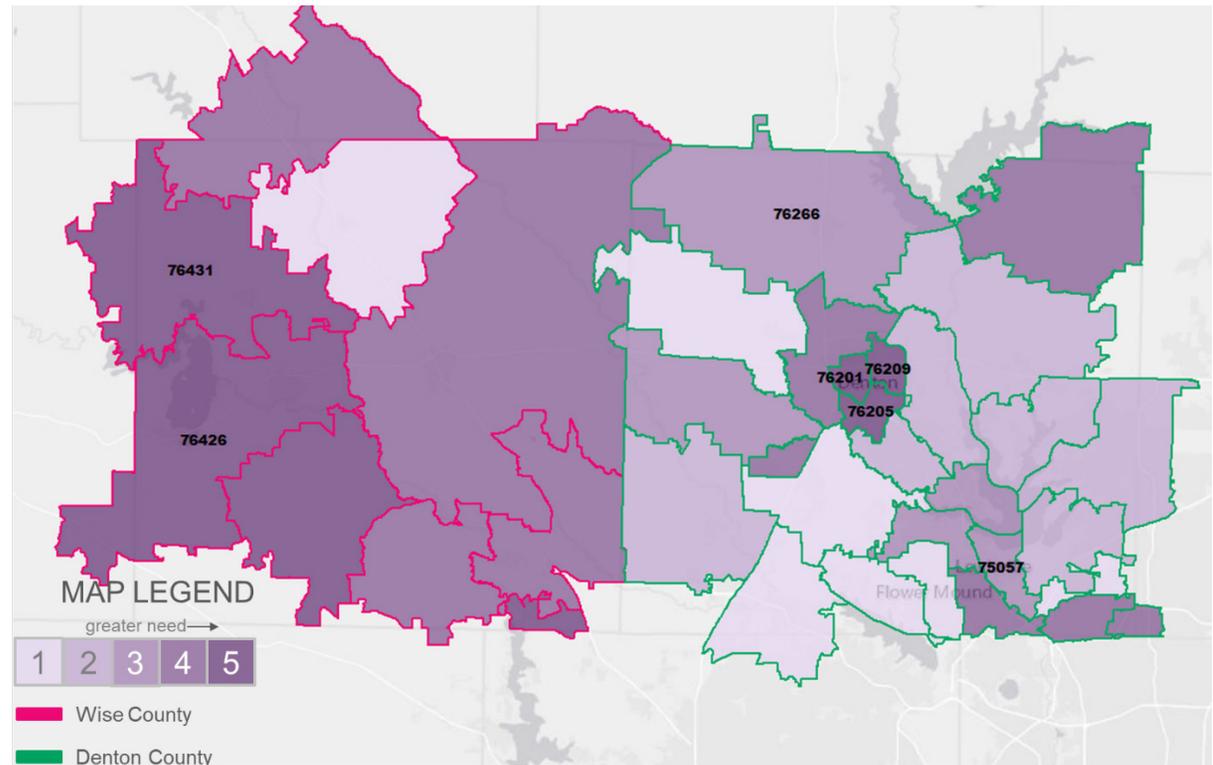
Barriers

- Biggest impact on teenagers as seen through the increase in mental health calls/needs and a spike in suicide threats/attempts
- Minimal availability of mental health resources in Wise County as they do not have funding for mental health facilities
- Struggle to get beds for folks in crisis in more rural counties
- Jail is the largest mental health provider (people getting arrested because of behavior due to a mental health issue/episode and do not get mental health resources needed)
- Lack of inpatient beds, shortage of counseling services
- Increase in anxiety and depression with the absence of healthy coping skills

Mental Health: HCI's Mental Health Index

It is important to note that Mental Health can be affected by a variety of socioeconomic factors including income, social support, socioeconomic status, gender identity, disability status, and stress caused by structural racism and other systemic barriers¹⁶. Conduent's Mental Health Index (MHI) is a measure of socioeconomic and health factors correlated with self-reported poor mental health. ZIP codes have index values ranging from zero to 100, where higher values are estimated to have the highest socioeconomic need and are correlated with poor health outcomes including preventable hospitalizations and premature death. Based on the MHI,

FIGURE 25: DENTON-WISE REGION: MENTAL HEALTH INDEX



in 2021, ZIP codes are ranked based on their index value to identify the relative levels of need, as illustrated by the map in Figure 25 and listed in Table 14. The highest need ZIP codes in this region are located mostly in Wise County and most of the prioritized ZIP codes are in high need.

15. MentalHealth.gov. (2022). Mental Health and Substance Use Co-Occurring Disorders

16. World Health Organization. (2014). Social Determinants of Mental Health. Geneva: WHO. https://apps.who.int/iris/bitstream/handle/10665/112828/9789241506809_eng.pdf

TABLE 14: DENTON-WISE PRIORITIZED ZIP CODES: MENTAL HEALTH INDEX VALUES

COUNTY	ZIP CODE	MHI VALUE
Denton	75057	23.5
	76201	52.8
	76205	50.8
	76209	63.8
	76266	23.1
Wise	76426	51.7
	76431	61.8

Food Insecurity/Access to Healthy Foods

Food insecurity is defined as a lack of consistent access to enough food for every person in a household to live an active and healthy life¹⁷. Food Insecurity was selected as a focus area in the Denton-Wise Region and was a top concern in the KIIs and focus groups. Many communities face barriers to accessing food due to having to travel far to get fresh produce, many communities are food deserts, there was a lack of knowledge knowing what healthy foods were compared to unhealthy foods, and income low-income families. In some of the 2021-2022 focus groups, participants indicated that because of the COVID-19 pandemic, accessing food was even more challenging for children/youth, families who did not have transportation to get to school to receive prepared meals in rural communities, elderly, and Hispanic/Latino populations.

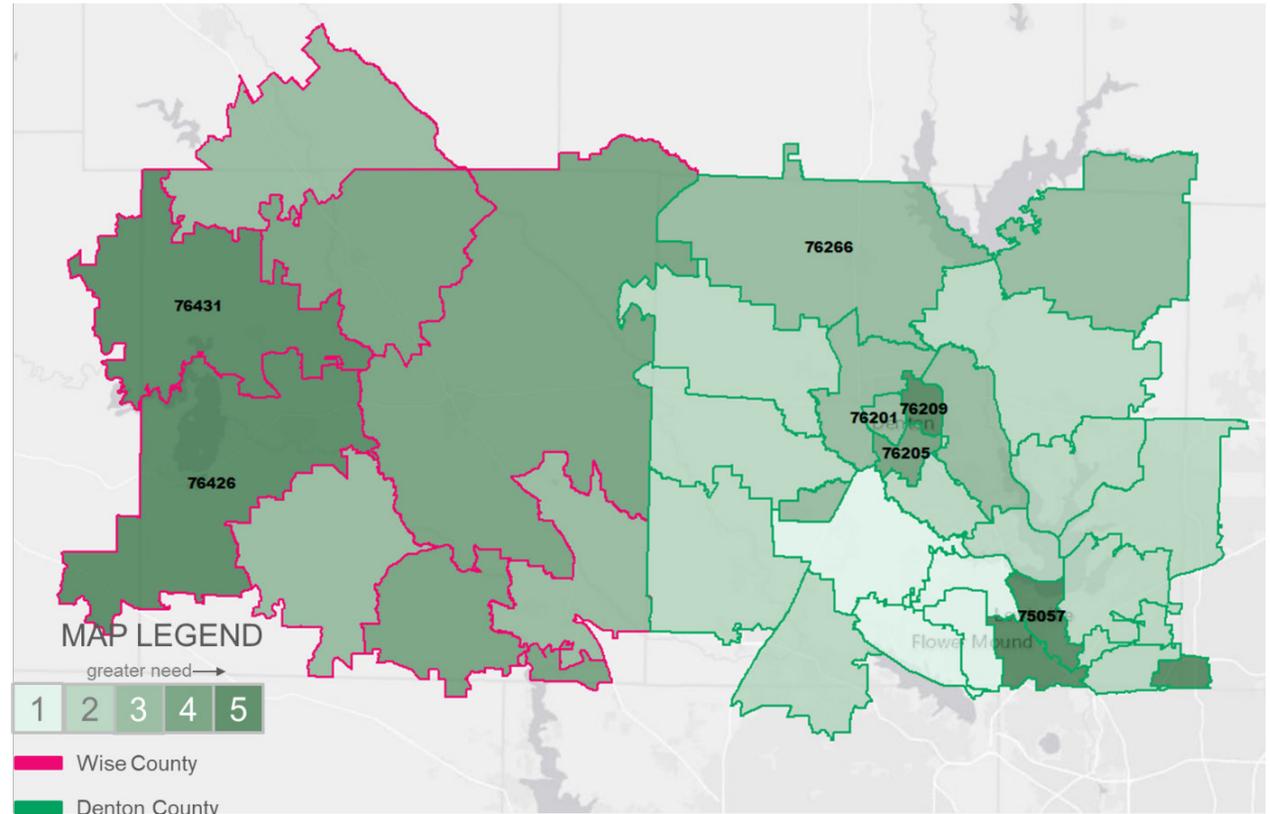
Conduent's Food Insecurity Index (FII) estimates areas of low food accessibility correlated with social and economic hardship. ZIP codes have index values ranging from zero to 100, where higher values are estimated to have the highest socioeconomic need and are correlated with poor health outcomes including preventable hospitalizations and premature death. In this index, ZIP codes are ranked based on their index value to identify the relative levels of need, as illustrated by the map in Figure 26. Most of the prioritized ZIP codes, as shown in Table 15 are identified as having the highest economic and social burden for the area. This affects Wise County more than Denton County.

TABLE 15. FII VALUES FOR PRIORITIZED ZIP CODES

COUNTY	ZIP CODE	FII VALUE
Denton	75057	61.2
	76201	37.1
	76205	50.5
	76209	56.4
	76266	38.8
Wise	76426	64.4
	76431	61.1

17. Feeding America. (2022). What is food Insecurity?. <https://www.feedingamerica.org/hunger-in-america/food-insecurity>

FIGURE 26. DENTON-WISE REGION: FOOD INSECURITY INDEX MAP



Data Limitations

Conduent HCI made substantial efforts to comprehensively collect and analyze data for this assessment. Although there is a wide range of health and health-related areas, there may be varying scope and depth of secondary data indicators and findings within each topic. Data sources do not all function, analyze and categorize information the same way which may lead to variations in results.

Secondary Data

When analyzing secondary data, some health topic areas have a robust set of indicators, while others may have a limited number of indicators available. Population health and demographic data are often delayed in their release, so data is presented for the most recent years available for any given data source. There is also variability in the geographic level at which data sets are available from census tracts or ZIP codes to statewide or national geographies. Whenever possible, the most relevant localized data is reported. Some datasets are not available for the same time span or at the same level of localization due to variations in geographic boundaries, population sizes, and data collection techniques. The Index of Disparity, used to analyze the secondary data, is also limited by the availability of subpopulation data from the data source. In some instances, there was no subpopulation data for indicators, while a select number of race/ethnic groups had minimal values.

Primary Data

For the primary data, efforts were made to include a wide range of secondary data indicators and community member expertise areas. KIIs and focus groups were conducted in all five regions of the Dallas/Fort Worth area.



Opportunities for On-Going Work and Future Impact

While identifying solutions, barriers and disparities are critical components in assessing the needs of a community, it is equally important to understand the social determinants of health and other upstream factors that influence a community's health as well. The challenges and barriers faced by a community must be balanced by identifying practical, community-driven solutions. These factors come together to inform and focus strategies to positively impact a community's health. The following section outlines opportunities for on-going work in the Denton-Wise Region as well as potential for future impact.



Solutions

This section highlights responses from the KII and focus group participants when asked about ways Texas Health could help to improve the health of residents in their community. Responses included:

Denton

- School-based health clinics: bringing community to the school
- No children's hospital in Denton County
- More consistent/routine transportation options for rural communities
- Building clinics intentionally: I.e. Texas Health acquires seven acres and builds on four areas and sells three acres to grocery store to provide access to food (not a mobile clinic but something more consistent)
- Need for acute sexual assault nurse examiners
- No medical examiner in Denton County (collation of data/aggregation of trends more difficult to identify)
- Inpatient psychiatric care, and adolescent outpatient care for mental health
- Long term behavioral facility-children (10-12)
- Funding for licensed counseling, youth programs

Wise

- Build relationships with community organizations, bridge gap in services
- Need for additional mental health facilities
- Substance disorder inpatient care/treatment facilities for uninsured population
- Addressing transportation gaps
- Stronger public education and messaging from Texas Health

Disparities and Barriers

Significant community health disparities are assessed in both the primary and secondary data collection processes. Potential disparities in the Denton-Wise Region include people below the poverty level, specifically Hispanic/Latino and Native Hawaiian/Pacific Islander populations, people 25+ with a bachelor's degree or higher in Wise County, economic instability/unemployment, housing, lack of insurance or limited insurance, language barriers, and transportation. Identifying these data-driven disparities at the regional level helps to identify the social and economic disparities that are important to consider during prioritization and will inform future efforts as well.

Barriers to health and well-being that community leaders and residents raised across the primary data sources reinforced the findings in the secondary data disparities analysis. The primary barriers included:

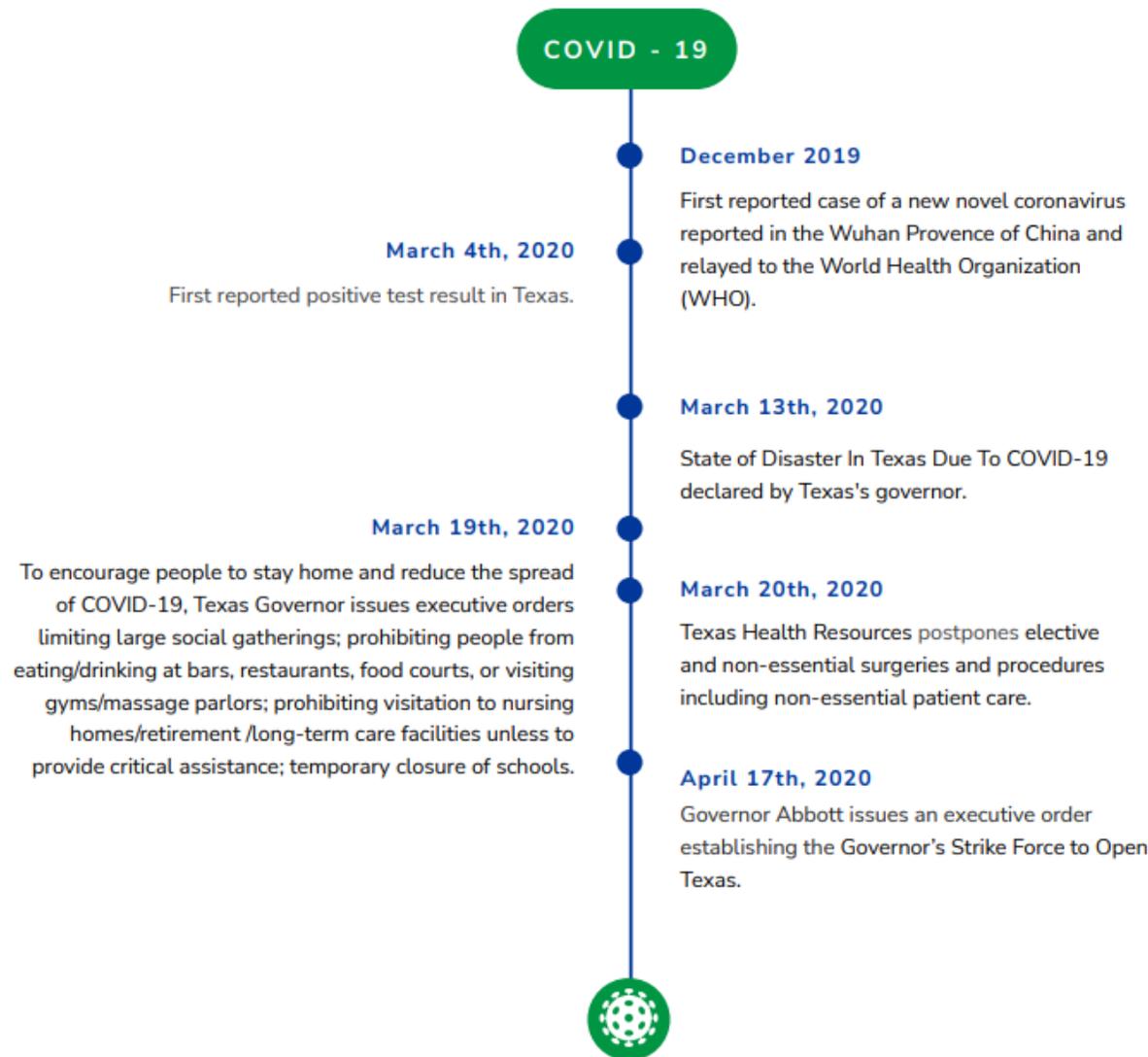
- Challenges with transportation
- Housing instability, affordable housing
- Lack of or limited health insurance
- Language barriers
- Childcare issues, unaffordable daycare for families leading to inability to work
- Child Abuse-Neglect and the increase in adverse childhood experiences (abuse, mental health issues, trauma)

While there may be resources and services available, they are predominantly centralized, and access is challenging in certain areas. The solutions, disparities and challenges highlighted in this section should be viewed as opportunities for impact, which can be integrated within the work Texas Health has initiated. These areas of opportunity will be considered for future investments, collaborations and strategic plans, moving Texas Health closer towards the goal of building healthier communities.



COVID-19 Snapshot

COVID-19 Community Impact Timeline



Sources

<https://www.who.int/>
<https://gov.texas.gov>
<https://www.businessinsider.com/coronavirus-pandemic-timeline-history-major-events-2020-3>

Introduction

At the time that Texas Health began its CHNA process, the state of Texas and the nation were continuing to deal with the novel coronavirus (COVID-19) pandemic. The process for conducting the assessment remained fundamentally the same. However, there were some adjustments made during the event to ensure the health and safety of those participating.

Pandemic Overview

On March 13, 2020, a U.S. national emergency was declared over the novel coronavirus outbreak first reported in the Wuhan Province of China in December 2019. Officially named COVID-19 by the World Health Organization (WHO), WHO declared COVID-19 a pandemic on March 11, 2020. To learn more about COVID-19 hospitalization, vaccinations, cases, and deaths in Texas, visit [Texas Department of State Health Services](#)¹⁸. Upon completion of this report in May 2022, the pandemic continued to be a health crisis across the United States and in most countries.

Community Insights

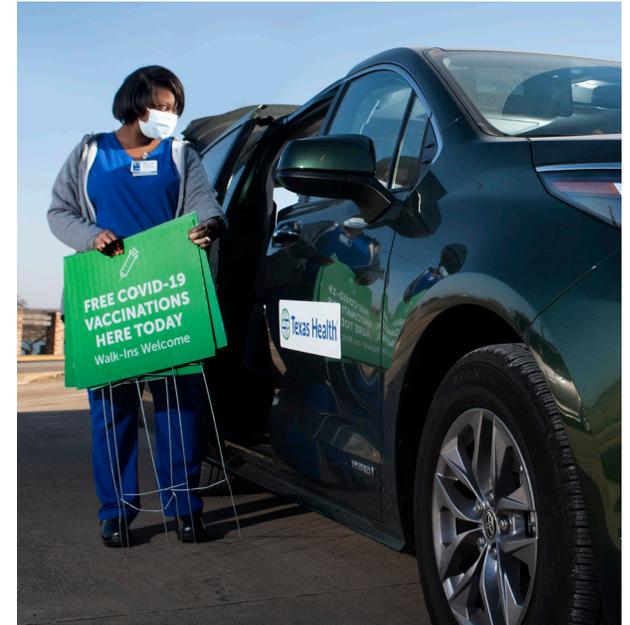
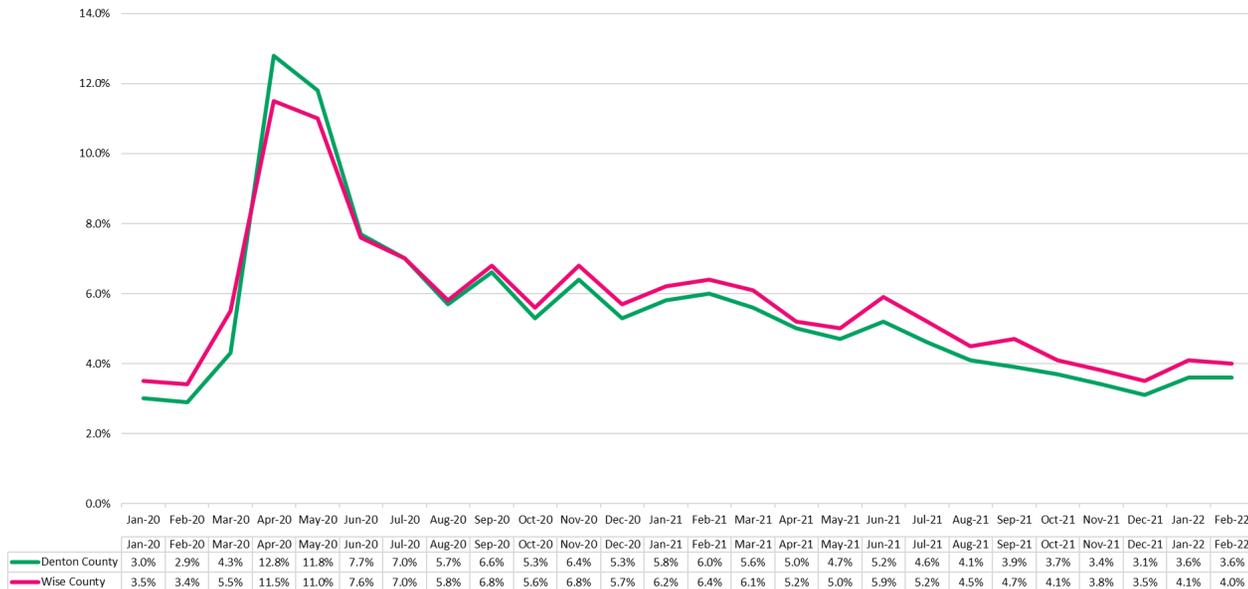
The CHNA project team looked for additional sources of secondary data and gathered primary data to provide a snapshot of the impact of COVID-19 on the Texas Health Health System service area. These data were collected from October 2021 to May 2022. Findings are reported below.

Unemployment Rates

For the Denton-Wise Region, unemployment rates rose between March and April 2020 when stay-at-home orders were first announced. As illustrated in Figure 25 below, as counties began slowly reopening some businesses in late 2020, the unemployment rate gradually began to decrease. As of early 2022, unemployment rates have stabilized and are close to pre-pandemic rates. When unemployment rates rise, there is a potential impact on health insurance coverage and health care access if jobs that are lost include employer-sponsored healthcare.

18. Texas Department of State Health Services. (2022). Texas COVID-19 Data <https://dshs.texas.gov/coronavirus/AdditionalData.aspx>

FIGURE 25: UNEMPLOYED WORKERS IN CIVILIAN LABOR FORCE, JAN 2020 – FEB 2022



COVID-19 Cases and Deaths in Texas

For current cases and deaths due to COVID-19 visit: <https://dshs.texas.gov/coronavirus/AdditionalData.aspx> or <https://www.Dentoncounty.com/en/public-health/disease-control--prevention/COVID-19.html>

Denton-Wise Region Community Feedback

Both KIIs and focus group sessions included questions to capture insights and perspectives on the health needs of the Denton-Wise Region. Participants were specifically asked about the biggest challenges their households were currently facing during COVID-19.

Key Informant Interviews and Focus Group Input

Key informants and focus group participants were asked to identify issues that were currently the biggest challenge for their households because of the COVID-19 pandemic. Data was collected between October 2021 and May 2022. Results below reflect both KIIs and focus group data combined.

COVID-19 Impact or Challenges

- Delay in care/access to healthcare
 - » Delay of other treatments/surgeries
 - » Provider shortages: difficulty finding bilingual therapists, difficulty attracting mental health counselors
 - » Insurance barriers: conditional on large deductible, insurance constraints, not having coverage at all (anxiety and depression increases, need for care increases, capacity decreases, barriers present)
- Mental Health/Substance Abuse
 - » Biggest impact on teenagers as seen through the increase in mental health calls/needs and a spike in suicide threats/attempts
 - » Minimal availability of mental health resources in Wise County as they do not have funding for mental health facilities
 - » Struggle to get beds for folks in crisis in more rural counties

- » Jail is the largest mental health provider (people getting arrested because of behavior due to a mental health issue/episode and do not get mental health resources needed)
- » Lack of inpatient beds, shortage of counseling services
- » Increase in anxiety and depression with the absence of healthy coping skills
- Abuse/neglect: child abuse
 - » increase in adverse childhood experiences (abuse, mental health issues, trauma), and statistically, that does increase health issues and decrease the life span
- Misinformation/mistrust in the healthcare system & politicization of the pandemic
 - » Affects access to care as people are reluctant to trust hospitals (misinformation from Facebook is a large source of this)

COVID-19 Socioeconomic Challenges

- Economic instability/employment
- Food insecurity/food accessibility (food deserts)
- Housing
- Lack of or limited insurance
- Language barriers
- Transportation

Recommended Data Sources

As local, state, and national data are updated and become available, these data can continue to help inform approaches to meeting existing and developing needs related to the pandemic. Recommended data sources are included below.

National Data Sources

- Center for Disease Control: <https://www.cdc.gov/coronavirus/2019-ncov/php/open-america/surveillance-data-analytics.html>
- Johns Hopkins Coronavirus Resource Center: <https://coronavirus.jhu.edu/us-map>
- NACCHO Coronavirus Resources for Health: <https://COVID19-naccho.hub.arcgis.com/>
- Feeding America (The Impact of the Coronavirus on Local Food Insecurity): https://www.feedingamerica.org/sites/default/files/2020-05/Brief_Local_percent20Impact_5.19.2020.pdf

State Data Sources

Data and recommendations from the following websites are updated regularly and may provide additional information on the impact of COVID-19 in the state of Texas and the Texas Health Resources Health System regional service area.

- Texas Department of State Health Services: <https://www.dshs.state.tx.us/coronavirus/>
 - » Unemployment Rates: <https://www.twc.texas.gov/news/texas-unemployment-rate-falls-59-percent-august>

» Denton County, Texas: <https://www.dentoncounty.com/en/public-health/disease-control---prevention/COVID-19.html>

» Wise County COVID-19 Updates: <https://www.wisecountytx.com/456/COVID-19-Update>

Looking Ahead

A total of 56 high-need ZIP codes were initially prioritized across the five Texas Health Regions and will continue to inform the work into the future. The purpose of the deeper dive into seven community impact ZIP codes during this CHNA process was to purposefully identify areas of impact where place-based programs could be built, grown and replicated through

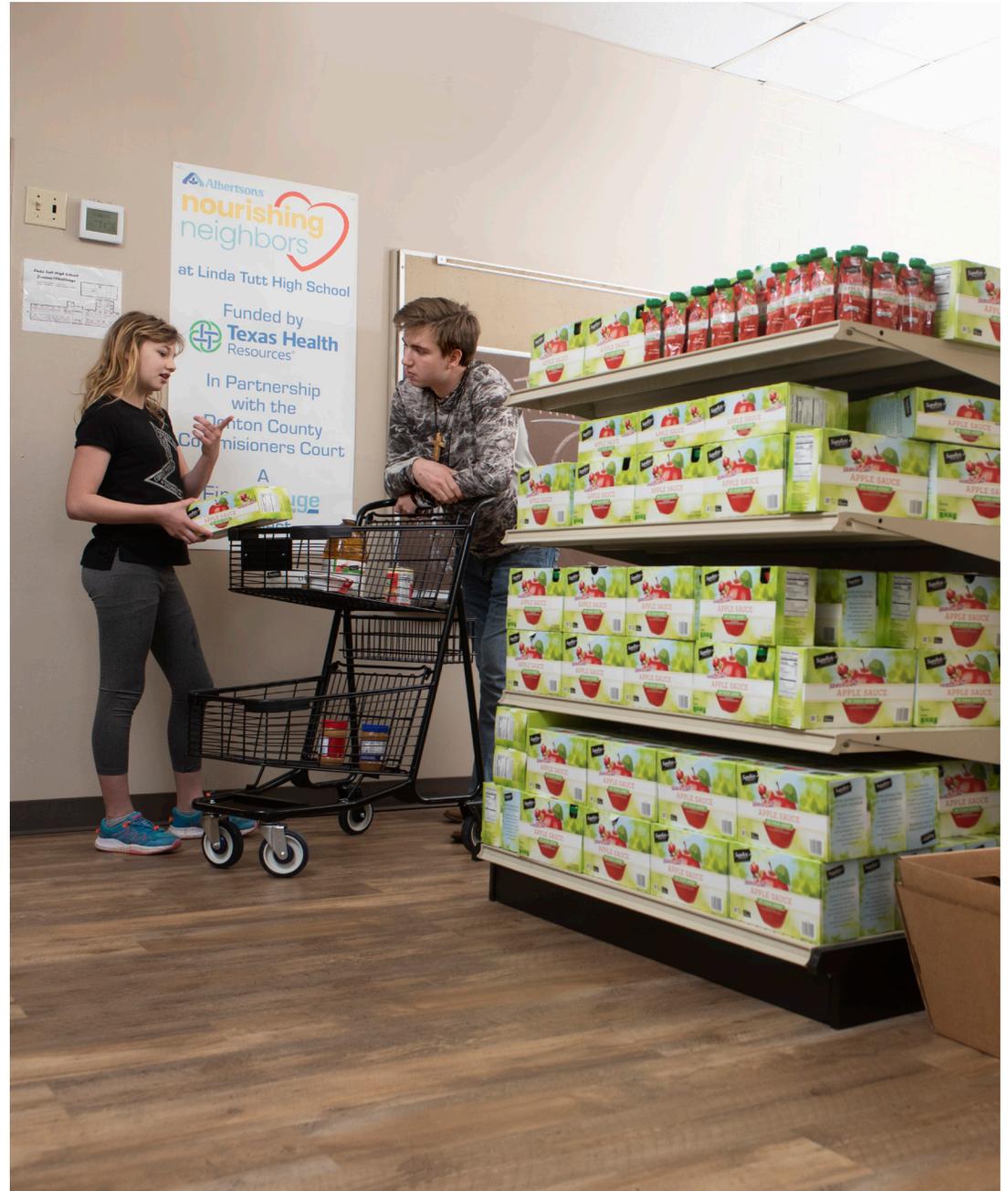
investments. Although funding will be specifically allocated to the community impact ZIP codes, work outside of these ZIP codes will continue through other community impact programming. While this strategically focused work is being implemented, Texas Health will continue working with Texas Health Community Impact Leadership Councils for the Denton-Wise Region to revisit data findings and community feedback in an iterative process. Additional opportunities will be identified to grow and expand existing work in prioritized community impact ZIP codes as well as implementing additional programming in new areas. These on-going strategic conversations will allow Texas Health to build stronger community collaborations and make smarter, more targeted investments to improve the health of the people in the communities we serve.



Conclusion

The CHNA for the Denton-Wise Region utilized a comprehensive set of secondary data indicators to measure the health and quality of life needs for the the Denton-Wise Region's primary service area and beyond. Furthermore, this assessment was informed by input from knowledgeable and diverse individuals representing the broad interests of the community. Texas Health will review these priorities more closely during the Implementation Strategy development process and design a plan for addressing these prioritized need areas moving forward.

Texas Health invites your feedback on this CHNA report to help inform the next CHNA process. If you have any feedback or remarks, please send them to THRCHNA@texashealth.org



Appendices

The following support documents are shared separately on the Texas Health Resources Community Health Improvement Website at <https://www.texashealth.org/community-health>

A. Methodology and Data Scoring Tables

B. Community Data Collection Tools

C. Community Resources and Community Partners

