



Shriners Children's Texas Community Health Needs Assessment 2022

Prepared by: Shriners Children's Texas Assessment Advisory Team

Contents

Shriners Children’s at a Glance.....	3
Purpose.....	6
Process and Methods	15
Key Findings	17
Action Plan	35
Conclusion	43
Exhibits.....	45

Shriners Children's at a Glance

Shriners Children's® is a health care system with locations in the U.S., Canada and Mexico. Our staff is dedicated to improving the lives of children by providing pediatric specialty care, conducting innovative research, and offering outstanding educational programs for medical professionals. Children up to age 18 with orthopedic conditions, burns, spinal cord injuries, and cleft lip and palate are eligible for care, regardless of the families' ability to pay. Within these broad service lines, many types of care are provided. For example, some locations offer reconstructive plastic surgery, treatment for craniofacial abnormalities, or care for sports injuries. Generally, care is provided until age 18, although, in some cases, it may be extended to age 21. All services are provided in a compassionate and family-centered environment. Our patients are our priority. We take the time to care and to listen. At Shriners Children's, every patient and family can expect respectful, compassionate, expert care.

The mission of Shriners Children's is to:

Provide the highest quality care to children with neuromusculoskeletal conditions, burn injuries, and other special health care needs within a compassionate, family-centered, and collaborative care environment.

Provide for the education of physicians and other health care professionals.

Conduct research to discover new knowledge that improves the quality of care and quality of life of children and families.

This mission is carried out without regard to race, color, creed, sex or sect, disability, national origin, or ability of a patient or family to pay.

Shriners Children's is committed to its' employees and the diverse patient population which Shriners Children's serves. As a result, no person will be discriminated against because of race, religion, color, sex, sexual orientation, gender identity or expression, age, marital status, citizenship, national origin, genetic information, disability or any other protected class as outlined in applicable state or local regulations.

About Shriners Children's Texas

In January 2021, Shriners Children's Texas merged the Houston Orthopedic Hospital and the Galveston Burn Hospital into one facility and have consolidated their specialty pediatric healthcare services to one location.

The dedication to the children and their families remains the same — transforming children's lives with exceptional healthcare in a patient and family-centered environment. Operating on the same campus will position Shriners Children's Texas to achieve our strategic goals for the future. This change provides us with a modernized and integrated approach to meeting our patients' needs.

Shriners Children's Texas is changing lives every day through innovative pediatric specialty care, research, and outstanding medical education. All services are provided in a family-centered environment, regardless of the families' ability to pay.

Shriners Children's Texas is a world-renowned hospital dedicated to improving the lives of children by providing pediatric specialty care, innovative research, and outstanding teaching programs for medical and healthcare professionals. Children up to age 18 with orthopedic conditions, burns, and cleft lip and palate are eligible for care and receive all services in a family-centered environment.

Our hospital is a licensed 30-bed pediatric specialty hospital and is the only American Burn Association verified pediatric burn center in Texas. Other specialty services, which uniquely identify us, include; a pediatric orthopedic department, an approved Cleft Lip and Palate team, a pediatric Orthotic & Prosthetic department, a Motion Analysis Center and a Tissue Bank. The hospital has a pediatric intensive care unit, ambulatory outpatient day surgery program, outpatient clinic (hospital-based and outreach), as well as a telehealth program.

Shriners Children's Texas is affiliated with the University of Texas Medical Branch (UTMB Health) in Galveston Texas. The partnership is a result of our efforts to collaborate with a leading academic medical center to help reach more children through leveraging the clinical expertise of each organization. Shriners Children's Texas has been a training site for UTMB's surgical critical care fellows, general surgery residents, plastic surgery residents, anesthesiology residents, psychology students, medical students, nursing students, and other health care professionals for over 50 years.

Shriners Children's Texas Assessment Advisory Team

Mary Glendening, MSN, RN, FACHE – Hospital Administrator

Ronald Mlcak, Ph.D., MBA – Administrative Director, Ancillary Services

Margaret Dannenmaier – Administrative Coordinator

Kenya Gibbs – Physician Liaison

Jana Smidt – Physician Liaison



Purpose

A Community Health Needs Assessment (CHNA) is a report based on epidemiological, qualitative, and comparative methods that assess the health issues in a hospital organization's community and that community's access to services related to those issues.

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

This assessment is designed and intended to meet the IRS needs assessment requirement as it is currently understood and interpreted by Shriners Children's leadership.

Shriners Children's Commitment to the Community

After consulting with experts regarding the IRS language pertaining to the CHNA, Shriners Children's can meet the unmet health needs of their respective communities by virtue of the services that we already provide.

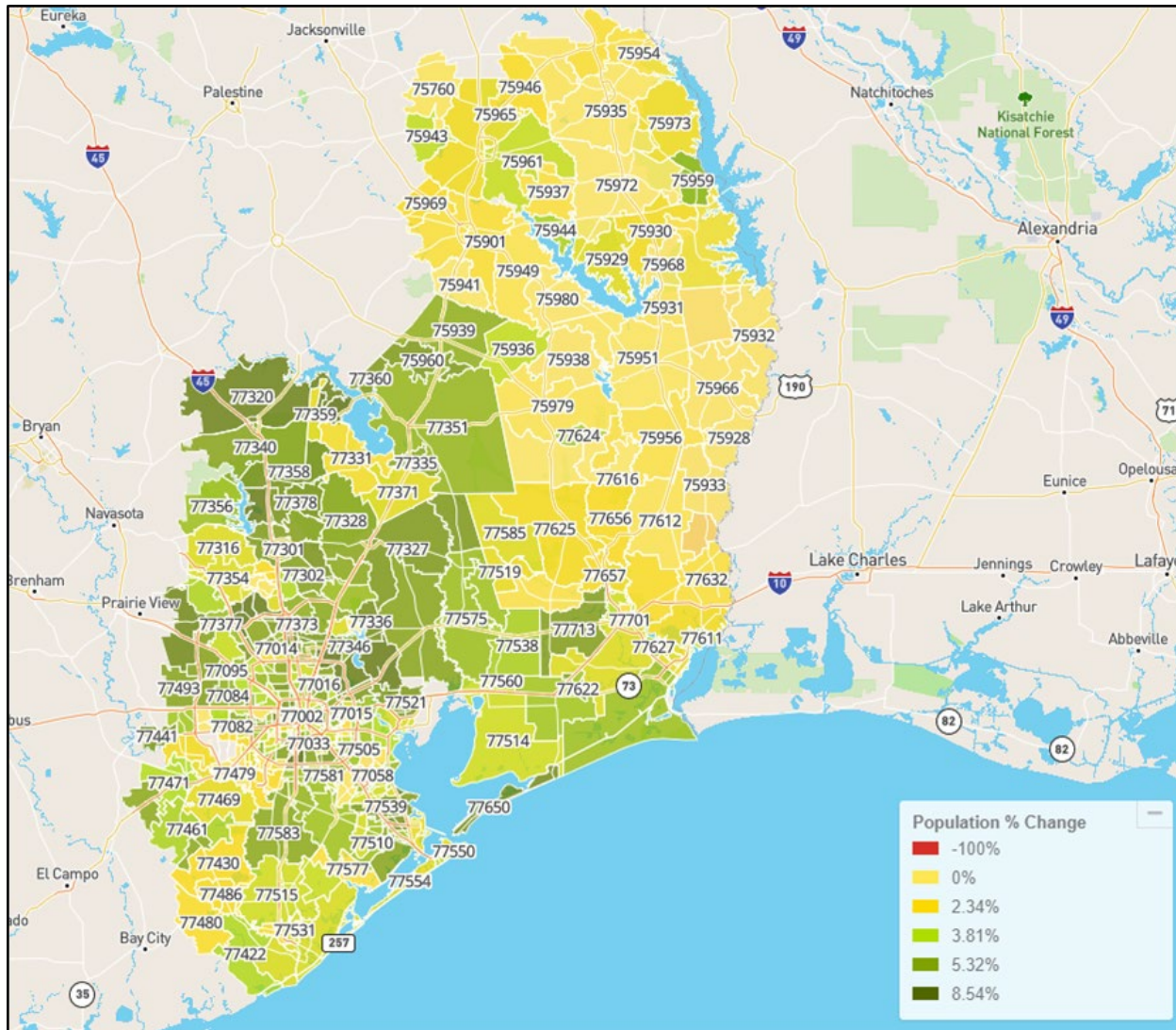
Our Community



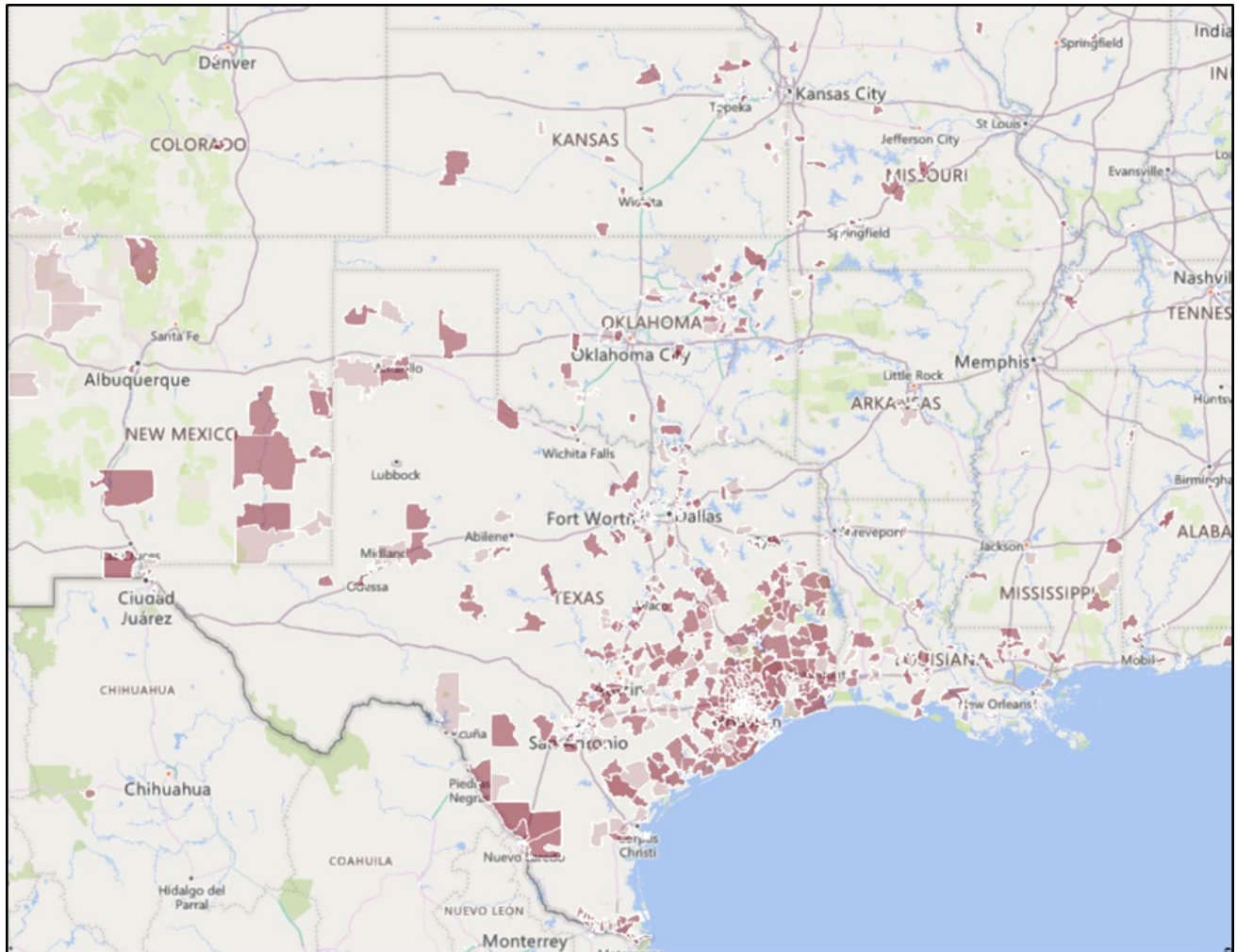
Shriners Children's Texas is a referral-based hospital. Eighty percent of our Primary Service Area (PSA) includes patients from Texas, as well as from the Southeastern United States ([Map 1](#)).⁸ The second map ([Map 2](#)) represents the overall U.S. catchment area for 2021. The majority of the encounters occur in the Gulf Coast and southeast Texas area.⁹ Our secondary catchment area includes patients from across the U.S., Mexico, Central America, and other international countries. For the purposes of this CHNA, we have elected to concentrate our efforts on 21 counties surrounding Shriners Children's Texas and will be referred to in this document as the "Region" ([Map 3](#)).

By focusing on this Region, we feel confident that the CHNA will reveal relevant information, which will act as a portal through which to better understand the community health needs of those we serve. Based on the results of the 2022 CHNA, Shriners Children's Texas plans to integrate systems of care to ensure that patients within our community receive the right care, at the right time, and in the right setting (within our scope of service), while providing necessary services identified by our primary and secondary data findings and feedback gathered from our CHNA.

Map 1. Shriners Children's Texas Primary Service Area Demographic Map
(0-17 Yrs. Old)
Market 5 Year Change



Map 2. Shriners Children's Texas Overall U.S. Catchment Area
2021



Note: The mauve color does not represent the number of unique patients from that area.

Map 3. Shriners Children's Texas CHNA Targeted
"Region 21 Counties"



Overview of Shriners Children's Texas "Region"

The defined Region for Shriners Children's Texas is comprised of 21 surrounding counties covering almost 17,976.45 square miles and is home to approximately 7,614.835 million individuals.¹ The Region includes both metropolitan and rural areas and has some of the most rapidly expanding neighborhoods and communities throughout the State of Texas.

Demographically, the age of the Region is similar to that of both Texas and the United States (U.S.). Twenty-six percent of the Region is made up of 0-17-year-olds, compared to (26%) in Texas and (22%) in the United States overall. In the greater than 65 age group, the age of the Region is slightly lower (11.30%) than Texas (12.25%) and marginally lower than the U.S. (15.64%). Additionally, the racial composition of the Region is similar to both Texas and the U.S. The breakdown of the Region is approximately (66%) Caucasian, (18%) Black, (7%) Asian and (9.27%) fall into "other" categories. It is noted that (36%) of the region's population is reported as being Hispanic of any descent. In looking at Texas as a whole, (74%) of the population are Caucasian, (12%) Black, (4.80%) Asian, and (9.1%) falling into "other" categories, while the breakdown of the U.S. stands at (72.49%) Caucasian, (12.70%) Black, (5.52%) Asian and (9.29%) listed as "other".¹

The Region is comprised of both the Southeast and Gulf Coast economies which are similar to that of Texas and includes a mixture of oil, natural gas, fuel processing/manufacturing, biomedical research, health care, agriculture, and tourism.¹⁹ Natural resources range from sandy beaches along the Gulf Coast to large intercostal waterways and dense forests in East Texas.²⁰ Furthermore, the Region is home to two of the biggest petrochemical complexes in the nation (Texas City and the Golden Triangle-Beaumont/Port Arthur/Orange) and also one of the world's largest chemical manufacturing complexes in the world (Brazoria County). Additionally, the Region is home to some of the most productive agricultural areas in the State with poultry, cattle, and timber industries helping fuel the economies throughout East Texas.

The Region supports one of the most important locations for global aerospace and the aviation industry. On the Gulf Coast, Houston is the legendary home to NASA mission control and dozens of related spaceflight contractor firms and general commercial airlines.

The Region is home to major waterways that support five shipping ports including the Port of Houston, Port of Galveston, Port of Texas City, Port of Beaumont, and Port of Freeport. The ports support industry, military, tourism, commercial shrimping, and recreational boating. Large employers in the Region include the Texas Medical Center, Dow Chemical, Valero, Marathon Oil, Eastman Chemicals, University of Texas Medical Branch, Schlumberger Technology Corp, and Chevron-Phillips. Additionally, the Region supports hundreds of small public and private businesses. State, federal and local governments are also a significant employer throughout the Region.^{16, 17, 18}

Regarding socioeconomic indicators, the average household income of the Region is higher (\$94,242) than both Texas (\$87,260) and the U.S. (\$88,607). The unemployment rate is higher in the Region (5.5%) than that of Texas (4.8%) and the U.S. (4.3%). The percentage of adults living at or below the poverty level in the Region (14.10%) is slightly lower than Texas (14.73%) and higher than the U.S. (13.42%). Roughly eleven percent of the Region's children are uninsured. This number is about the same as Texas (10.81%) and higher than the U.S. (5.08%). Additionally, 20.42% of the population in the region are on Medicaid, as compared to 20.32% in Texas and 22.20% in the U.S.^{1, 3, 8}

The healthcare infrastructure for the Region has numerous limitations. The number of primary care physicians per 100,000 population in the Region is lower (59.91) than both Texas (60.89) and the U.S. (75.81). The number of Federally Qualified Health Centers per 100,000 population in the Region (1.80) is lower than Texas (2.00) and the U.S. (3.10). The number of Health Professional Shortage Area (HPSA) Designations per 100,000 population in the region (170), is lower than Texas (677) and the U.S. 11,028). These totals include primary care facilities, mental health care facilities, and dental health care facilities.⁸ This indicator is relevant because a shortage of health professionals contributes to access and health status issues. Within the report area, there are 742,328 people living in a Health Professional Shortage Area, which represents 9.7% of the total population. Shortages among healthcare professionals were also identified with Nurse

Practitioners (rate per 100,000 population) being slightly higher in the Region (35.35) as compared to Texas (33.23) and lower than the U.S. (42.36). The number of mental health care providers per 100,000 population was lower in the Region (106.5) than that of Texas (121.2) and the U.S. (261.6).⁹



The Goals of this CHNA are:

- To provide a baseline measure for critical health and socio-economic indicators within the Region.
- To identify needed community health services that fall within our scope of practice and limits of specialization.
- To establish benchmarks and monitor trends in the health status of Shriners Children's Texas Regional residents.
- Improve the quality of health care through data collection, analysis and reporting.
- To offer a platform for collaboration among community groups that include hospitals, emergency rooms, physicians, health care workers, public health departments, Texas EMS for Children Advisory Council, Texas Governor's EMS and Trauma Pediatric Advisory Council, emergency medical technicians (first responders), and health educators as appropriate.
- To act as a resource for individuals, agencies and institutions looking to identify community health needs and priorities.
- To assist with community benefits requirements as outlined in the Patient Protection and Affordable Care Act.



Process and Methods

Shriners Children's Texas has determined that a current and comprehensive community health needs assessment is essential to the development and understanding of the Region's needs. Much thought and effort was put forth into creating a process that would document useful information to health care organizations, community-based health, and social service organizations, as well as the community. This CHNA served as an important starting point for Shriners Children's Texas and facilitated the understanding of everyday health and social needs relevant to our community and our patient population.

A CHNA Assessment Advisory Team was tasked with the design, implementation, and completion of the CHNA. The Advisory Team provided input, designed and approved the surveys, reviewed the primary and secondary findings, prioritized results from the CHNA, developed action plans and shaped the final version of this report.

As Shriners Children's Texas is a referral hospital and does not have an emergency room, we felt it necessary to involve the EMS community and referring pediatricians in a collaborative partnership approach to better understand the needs of our community.

Shriners Children's Texas took a multidimensional approach including utilization of primary data from surveys, community input from EMS officials and pediatricians, as well as secondary data from publically available sources. The primary data includes two community health needs surveys - one distributed to Pediatricians in the Region, and the other electronically sent to EMS Agencies in the Region.

The survey distributed to the pediatricians identifies their practice patterns as it relates to specialty care services utilized, referral patterns, reasons for referral to Shriners Children's Texas, patient insurance status, reasons why patients did not receive all the services they needed, as well as concerns about pediatric care in Texas.

The survey sent to the EMS agencies identifies transfer patterns for burn patients, reasons for referring to Shriners Children's Texas, patient insurance status, if the EMS agencies utilized protocols, and experience with burn care education. Responses from the surveys were analyzed and reported as percentages. (Note: Since Shriners Children's Texas does not have an emergency room, emergent orthopedic patients are not directly transferred to our facility by EMS agencies at this time.)

Secondary data includes a regional community health needs report which was composed of 21- county Regional profiles. The profiles were collected from publically available websites including, U.S. Census Bureau, American Community Survey, U.S. Department, Bureau of Labor Statistics, Center for Disease Control and Prevention, U.S. Department of Health and Human Services Centers for Medicare and Medicaid, the Texas Medical Board, and SparkMap. The regional profile illustrates the general health of individuals and

communities. Data regarding health care delivery systems, health resources, socio-economic factors, as well as cultural and environmental effects on community health are also presented.

Texas and U.S. benchmarks were also obtained where possible. The data was then compiled, reviewed, and analyzed for accuracy, and merged into a single document. Analysis for the entire Region was conducted and then compared to Texas and U.S. benchmarks, paying particular attention to limitations in resources and the relationship of demographic and risk factors to key health challenges for the Region. Primary survey data is presented as numbers and percentages. The secondary data is presented as numbers, percentages, and rates per 100,000 population.

The completed CHNA, including a combined county regional profile, identified community needs, as well as action plans will be made available to all counties, providers, and the public by way of the Shriners Children's intranet website. This report utilizes the data and health information collected for the Region, serves as the foundation for creating our Key Findings, and guided our team in identifying and prioritizing our Community Health Needs and Action Plans. The extensive Community Health Needs Assessment project was completed, reviewed, and analyzed to better understand the current state of health and health services at the regional, county, and local levels. Based on the information contained in the CHNA, Shriners Children's Texas leadership believes it is important to frame our efforts on providing identified needed services that fit within our mission and scope of services. Therefore, community health needs were prioritized, and action plans were developed to address the identified needs including goals, objectives, timelines, and an evaluation plan for monitoring.

Key Findings

Primary Data

Primary data includes two surveys soliciting information concerning community health needs within our hospital's Region. While the response rate from the surveys was low due to the COVID pandemic and survey fatigue from practitioners and EMS professionals, we believe the results portrayed the needs and concerns of the respondents within the Region.

The first survey was distributed to 100 pediatricians in the Region. The final number returned was 46/100 or 46%. (Exhibit 1 Pgs. 46 - 48) shows the results of the survey distributed to the pediatricians revealing information regarding referral patterns, delays in receiving care, access to care, insurance status, Shriners Children's Texas reputation, and general concerns about pediatric health care in Texas. Of those pediatricians who replied, 100% stated they refer children out for fractures, 93% for scoliosis, 65% for sports injuries, 37% for orthopedic surgeons, and 28% for cleft lip and palate. Eighty-one percent of the respondents reported difficulties or delays in getting services at other locations. Of these, 57% reported delays or difficulties in receiving care for scoliosis, 43% for fractures 35% reported delays in receiving care for sports injuries, 17% for hip dysplasia, 11% for cerebral palsy, 11% for access to orthopedic surgeons and 11% for cleft lip and palate services. Fifty-seven percent of the respondents indicate the primary reason they refer patients to Shriners Children's Texas is the charity care policy, 54% for Shriners' excellent reputation, and 40% for being the only place service was available. Forty percent of the respondents refer patients for acute burn injuries, 38% for skin conditions, and 13% for reconstructive surgery. Forty-four percent of the respondents referred patients for dermabrasion, 30% for Steven-Johnson syndrome, 29% for infected wounds, and 21% for delayed wound healing. Seventy-nine percent of the respondents indicate the reason the patients did not receive care at other locations was lack of insurance, and 71% indicated the cost was too high. In reference to the greatest concerns regarding pediatric health care in Texas, 68% of the respondents stated lack of insurance, 65% cost, 49% unhealthy eating/lifestyle habits, and 25% lack of specialists.

The second survey was electronically sent to 105 EMS personnel within the Region. Twelve of 105 EMS surveys were completed and returned for a response rate of 11%. Once again, the response rate was low secondary to the COVID pandemic and survey fatigue. However, we feel that the results of the EMS survey reveal information regarding transfer patterns of burn patients, insurance status, Shriners Children's Texas reputation, use of protocols, and information regarding the need for burn education.

With regard to the EMS treatment and transfer patterns, 75% of the respondents treated pediatric burn patients, while 33% had transferred burn patients within the past 12 months. Of those agencies that transferred patients, 57% were transferred to Shriners Children's Texas. In terms of reasoning for transferring a patient to Shriners Children's Texas, 58% cited excellent reputation while 25% stated it was the only place specialized service was available. Fifty-eight percent of the EMS agencies responded that they transfer children who are uninsured "sometimes" and 33% "very often". With regard to the use of protocols, 100% indicated they were used for stabilization and transfer of burn patients. Ninety-two percent of the EMS respondents reported seeing a need for burn education. (Exhibit 2, Pgs. 49 - 53) displays the EMS survey results.

Additionally, essential information regarding the use of EMS protocols was solicited by personal communication from members of the Texas EMS for Children Advisory Council and the Texas State EMS program director. The consensus was that EMS Agencies utilize protocols approved by their local medical directors.

In summarizing the primary data from the two surveys, the common theme that falls within Shriners Children's Texas scope includes lack of access to care/services, lack of insurance, cost, and the need for burn education.

Secondary Data

The defined Region for Shriners Children's Texas is comprised of 21 surrounding counties covering almost 17,976 square miles and is home to approximately 7.6 million individuals (Table 1).¹

The population density for this area, estimated at 423.60 persons per square mile, is greater than the Texas and national average population density of 91.93 persons per square mile. The Region includes both metropolitan and rural areas and has some of the most rapidly expanding neighborhoods and communities throughout the State of Texas. Current population demographics and changes in demographic composition over time play a determining role in the types of health and social services needed by communities.

Table 1. Demographics

	Region	Texas	United States
Total Population	7,614,835	28,260,856	324,697,795
Total Land Area (Square Miles)	17,976.45	261,249.64	3,532,068.58
Population Density (Per Square Mile)	423.60	108.18	91.93

The racial composition of the Region ([Table 2](#)) is closely related to that of both Texas and the U.S. and is predominately Caucasian. Additionally, the racial makeup of the Region includes more African Americans, and Asians than the other ethnic groups, than Texas and the U.S. overall.¹ Ethnic variation in cultural norms, language comprehension, and beliefs about health may influence the mode of health care delivery and how patients respond to medical care services. This ethnic and racial variation creates a requirement for increased awareness, sensitivity, and compassion among health care workers and service providers.

Table 2. Race/Ethnicity

Population by Race	Region	Texas	U.S.
White	66.01%	73.97%	72.49%
Black	17.55%	12.13%	12.70%
Asian	7.18%	4.80%	5.52%
Native American or Alaska Native	0.43%	0.50%	0.85%
Native Hawaiian or Pacific Islander	0.06%	0.09%	0.18%
Some Other Race	6.38%	5.82%	4.94%
Multiple Race	2.40%	2.69%	3.32%
Hispanic (of any descent)	36.09%	39.34%	18.01%

In terms of age for the 0-17-year-old range, the population of the Region is slightly older than the Texas and U.S. average. ([Table 3](#)). In the 18 - 64 year age range, the Region is slightly older than Texas but similar to the U.S. averages. However, the Region average for the 65+ population is similar to Texas and lower than the U.S.¹

Table 3. Age Distribution

Population by Age	Region	Texas	U.S.
Age 0-4	7.22%	7.08%	6.09%
Age 5-17	19.11%	18.89%	16.53%
Age 18-24	9.24%	9.88%	9.44%
Age 25-34	14.92%	14.70%	13.87%
Age 35-44	14.05%	13.53%	12.62%
Age 45-54	12.79%	12.48%	12.96%
Age 55-64	11.36%	11.20%	12.86%
Age 65+	11.30%	12.25%	15.64%

Social and Economic

In terms of socio-economic indicators ([Table 4](#)), the Region faces a slightly higher unemployment rate compared to that of Texas and the U.S. overall. The percentage of individuals in the Region who did not complete high school is similar to Texas but greater than the U.S. average. The percentage of children eligible for free or reduced lunch is similar to Texas but higher than the U.S. average. Additionally, the percentage of children living below 100% of the Poverty level is similar to Texas and slightly higher than the U.S. average. The percent of the adult population living below 100% of the poverty level is similar to Texas and slightly higher than the U.S. However, due to the Regions diverse energy sector, the average household income is slightly higher than Texas or the U.S. average.

Economic and social insecurity often are associated with poor health. Poverty, unemployment, and lack of educational achievement affect access to care and a community's ability to engage in healthy behaviors. Ensuring access to social and economic resources provides a foundation for a healthy community.

Table 4. Socioeconomic Indicators

	Region Average	Texas Average	U.S. Average
Unemployment (%)	5.5	4.8	4.3
No High School Diploma (%)	16.22	16.31	12.00
Children Eligible for Free or Reduced Price Lunch (%)	56.0	55.6	43.0
Average Household Income (\$)	94,242	87,260	88,607
Children Living Below 100% Poverty Level (%)	20.24	20.92	18.52
Adult Population Below 100% FPL (%)	14.10	14.73	13.42

Insurance

The lack of health insurance is considered a key driver of health status. This indicator is relevant because lack of insurance is a primary barrier to healthcare access including regular primary care, specialty care, and other health services that contribute to poor health status.

The percentage of uninsured children in the Region is similar to Texas and significantly higher than the U.S. ([Table 5](#)). For 0-18-year-olds, (11%) of the Region are uninsured, as compared to (10.8%) in Texas and (5.0%) in the U.S. For the adults 19-64 years old, the percent of the uninsured in the Region is similar to Texas and higher than the U.S. (12%).

Table 5. Insurance

	Region	Texas	U.S.
Uninsured Age 0-18	11.04	10.81	5.08
Uninsured Age 19-64	24.10	23.33	12.42
Population Receiving Medicaid	1,258,826	4,673,487	64,716,091

Healthcare Workforce and Access to Care

Based on the quantitative and qualitative community health assessments, the current health care resources and infrastructure of the Region are inadequate. ([Table 6](#)). Federally Qualified Health Centers promote and provide care to vulnerable populations throughout the community, while Health Professional Shortage Areas indicate a shortage in either primary care, dental care, mental health care, or a combination of all three.^{8,9}

The rate of Federally Qualified Health Centers in the Region (1.8) is slightly less than Texas (2.0) and significantly less than the U.S. rate (3.1). This is important because Federally Qualified Health Centers are community assets that provide health care to vulnerable populations. There are 170 facilities designated as Health Professional

Shortage Areas in the Region as compared to 677 in Texas and 11,028 in the U.S. The number of primary care providers per 100,000 population in the Region (59.91) is similar to Texas (60.89) and significantly less than the U.S. (75.81). The rate of mental health care providers per 100,000 population in the Region (106) is lower than Texas (121) and significantly lower than the U.S. (261). Additionally, the number of mid-level providers per 100,000 population in the Region (35.3) is similar to Texas (33) and significantly less than the U.S. (42). These indicators are relevant because a shortage of Federally Qualified Health Centers, Health Professional Shortage Areas, and health care professionals contribute to lack of access and health status issues.

**Table 6: Health Care Resources
(Rates per 100,000)**

	Region	Texas	U.S.
Federally Qualified Health Centers	1.80	2.00	3.10
Facilities Designated as Health Professional Shortage Areas	170	677	11,028
Primary Care Physicians	59.91	60.89	75.81
Mental Health Care Provider	106.5	121.2	261.6
Mid-Level Providers – Nurse Practitioners	35.35	33.23	42.36

Health Behaviors

Community Health Challenges/Behavior Characteristics

Most communities in the Region face similar health-related challenges in terms of behavioral characteristics ([Table 7](#)). Common unhealthy behavior characteristics throughout the Region include physical inactivity, excessive drinking, and smoking. The Regional average rate of physical inactivity (22.4%) is higher than Texas (21.9%) and similar to the U.S. (22%) averages. The Regions smoking rate is similar to both Texas and the U.S. average. Furthermore, the Region reported lower rates of excessive drinking, with an average of (17.3%) as compared to (18.97%) in Texas and (19.17%) in

the U.S.¹¹ Health behaviors such as poor diet, lack of exercise, and substance abuse contribute to poor health outcomes.

Table 7. Health Behaviors

	Region Average	Texas Average	U.S. Average
Physical Inactivity	22.4	21.9	22.0
Tobacco Usage (%) Adults (age 18 & older)	15.9	15.6	15.3
Excessive Drinking (%) Adults Self-Reporting, 2018	17.33	18.97	19.17

Physical Environment

Environmental factors show that the Region is significantly limited in providing resources necessary for a healthy lifestyle (Table 8). The average rate per 100,000 population who have restricted access to healthy foods for the Region (22.52) is lower than Texas (25.0) and similar to the United States (22.22). Furthermore, the rate of access to recreational facilities in the Region per 100,000 (10.95) is similar to Texas (10.59) and lower than the U.S. (12.23).^{12, 13}

**Table 8. Physical Environment
(Rates per 100,000)**

	Region Average	Texas Average	U.S. Average
Low Food Access (%)	22.52	25.00	22.22
Recreational Facilities Rate (per 100,000)	10.95	10.59	12.23

Health Outcomes

Population with Any Disability

This indicator reports the percentage of the total civilian non-institutionalized population with a disability (Table 9). The Region has a total population of 7,520,511 for whom disability status has been determined, of which 757,058 or 10.07% have any disability. This indicator is relevant because disabled individuals comprise a vulnerable population that requires targeted services and outreach by providers.

Table 9 – Population with Any Disability

	Region	Texas	U.S.
Total Population (For Whom Disability Status is Determined)	7,520,511	27,792,957	319,706,872
Population with a Disability	757,058	3,187,623	40,335,099
Population with a Disability %	10.07	11.47	12.62

Mortality-Opioid Overdose

This indicator reports a five-year average rate of death due to opioid overdose per 100,000 population (Table 10). This indicator is relevant because opioid overdose is the leading cause of injury deaths in the United States. Within the Region, there are 2,106 deaths due to opioid overdose. This represents an age-adjusted rate of 5.6 per 100,000 population.

Table 10 - Opioid Overdose Mortality

	Region	Texas	U.S.
Total Population	7,608,571	28,266,806	325,134,494
Five Year Deaths	2,106	6,932	219,489
Crude Death Rate	5.6	4.9	13.5
Age-Adjusted Death Rate	5.6	4.9	13.7

Unintentional Injuries

Two other important findings from the CHNA that are related include a high mortality rate from unintentional injuries as well as motor vehicle crashes (Table 11). This indicator is relevant because accidents are a leading cause of death in the United States. The average mortality rate (per 100,000 population) for unintentional injury in the Region (39.0) is similar to Texas (38.5) and significantly lower than the U.S. (47.5). Additionally, the regional average for mortality related to motor vehicle crashes is lower (12.0) than Texas (13.2) and higher than the U.S. (11.3).¹⁴ This is relevant since motor vehicle crashes often times result in burn and orthopedic injuries.

Table 11 - Unintentional Injuries
(Rates per 100,000)

	Region Average	Texas Average	U.S. Average
Unintentional Injury (Accident)	39.0	38.5	47.5
Motor Vehicle Crash	12.0	13.2	11.3

Secondary data includes a Shriners Children's Texas Region health needs assessment summary report (see Shriners Children's Texas Region Profile, ([Exhibit 3](#), pages 54 - 56). The combined county profile was collected from publicly available websites including Sparkmap (<http://sparkmap.org>), U.S. Census Bureau, U.S. Department of Labor, U.S. Department of Health & Human Services, Centers for Medicare and Medicaid Services, U.S. Department of Agriculture, and the Economic Research Service. The Regional profile illustrates the general health of individuals and communities. Data regarding health care delivery systems, health resources, and information regarding socio-economic, cultural, and environmental effects on community health are also presented.

Additionally, the summary data for all the health needs were identified through analyzing the secondary data collected from numerous sources as mentioned above. The main community health needs portrayed in the secondary data sets that fall within our scope were; lack of insurance, mental health provider shortages, and mid-level provider shortages.

([Table 12](#)) includes a summary of all Shriners Children's Texas Region's Community Health Needs identified by the secondary data collected from the quantitative CHNA and from the secondary data (qualitative community assessment).

Table 12 - Summary

CHN Number	Community Health Need	Region	Texas	U.S.
CHN.1	Access Barriers: Lack of Personal Resources <ul style="list-style-type: none"> - Average I Household Income - Unemployment Rate - Children Living at or Below FPL 	\$94,2425 5.5% 20.24%	\$87,260 4.8% 20.92%	\$88,607 4.3% 18.52%
CHN.2	Access Barriers: Lack of Insurance <ul style="list-style-type: none"> - Uninsured Under Age 18 	11.04%	10.81%	5.08%
CHN.3	Access Barriers: Lack of Qualified Healthcare Resources per 100,000 population <ul style="list-style-type: none"> - Lack of Federally Qualified Health Centers 	1.8	2.0	3.10
CHN.4	Access Barriers: Primary Care Physician Shortage <ul style="list-style-type: none"> - Physicians per 100,000 - Number of Primary Care HPSA's 	59.91 61	60.89 247	75.81 3,979
CHN.5	Mental/Behavioral Health Provider Shortage <ul style="list-style-type: none"> - Number of Mental Health HPSA's - Mental Health Care Provider Rate (per 100,000 population) 	58 106.5	217 121.2	3,617 261.6
CHN.6	Mid-Level Provider Shortage <ul style="list-style-type: none"> - Nurse Practitioners per 100,000 	35.35	33.23	42.36

2022 CHNA Prioritization Process/Grid

Primary and secondary data identified multiple Community Health Needs (CHN), many are outside the scope of services provided at Shriners Children's Texas. Therefore, Shriners Children's Texas utilized a prioritization grid to help identify which Community Health Needs should be addressed. For the prioritization grid to be utilized, the following definitions were used:

- Organization Capacity – hospital can address the issue.
- Infrastructure – hospital has programs, systems, staff, and support resources in place to address the issue.
- Partners – the hospital has established community partners (relationships) to address the issue.
- Investment – existing resources are committed to the issue.
- Focus Area – the hospital has acknowledged competencies and expertise to address the issue and the issue fits into the scope of service.
- High/Low Priority – how the hospital rates the findings



Tables 13-15 demonstrate the prioritization results used to identify key community health needs. Table 16 identifies the four prioritized community health needs that will provide the greatest impact on our Community and Region and fall within our scope of services.

Table 13 utilized the prioritization grid to qualify Community Health Needs as determined by the primary data collected from the survey of Pediatricians

Table 13

Health Need	Organizational Capacity	Infrastructure	Partners	Investment	Focus Area	High or Low Priority
	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No	High or Low
<u>Referral Patterns:</u> 100% of physicians referred patients for orthopedic issues, 40% for acute burn injuries, 38% for skin conditions, and 13% for reconstructive surgery.	Yes	Yes	Yes	Yes	Yes	High
<u>Access Barriers:</u> Delays in getting healthcare services from specialist in community.	No	No	No	No	No	High
<u>Access Barriers:</u> Delays in getting services for Scoliosis 57%, fractures 43%, and sports injury 35%.	Yes	Yes	Yes	Yes	Yes	High
<u>Access Barriers:</u> 79% Lack of Insurance and cost of care 71%	Yes	Yes	Yes	Yes	Yes	High

Health Need	Organizational Capacity	Infrastructure	Partners	Investment	Focus Area	High or Low Priority
	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No	High or Low
<u>Referral Patterns:</u> 57% of Pediatricians refer patients to Shriners due to "Charity Care Policy", 54% due to "Excellent Reputation", 40% due to only place available, and 14% due to "In-network"	Yes	Yes	Yes	Yes	Yes	High
<u>Referral Patterns:</u> Primary reason for referral to Shriners: 40% for Acute Burn Injuries, 38% for Skin Conditions, and 13% for Reconstructive Surgery	Yes	Yes	Yes	Yes	Yes	High
<u>Referral Patterns:</u> Referral to Shriners for Secondary Reconstructive Conditions: 44% for Dermabrasion, 30% for Microdermabrasions, and 21% for Facial Burn Deformities	Yes	Yes	Yes	Yes	Yes	High
<u>Referral Patterns:</u> Referral to Shriners for Soft Tissue Conditions: 30% Stevens-Johnson Syndrome, 11% for Soft Tissue Infections, and 6% for Toxic Epidermal Necrosis	Yes	Yes	Yes	Yes	Yes	High
<u>Major Concerns:</u> Pediatric Health in Texas: 68% no Insurance and 65% Cost of care	Yes	Yes	Yes	Yes	Yes	High

Table 14 utilized the prioritization grid to quality Community Health Needs as determined by the primary data collected from the survey of EMS Agencies
Table 14

Health Need	Organizational Capacity	Infrastructure	Partners	Investment	Focus Area	High or Low Priority
	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No	High or Low
<u>Access Barriers:</u> Treatment of burn patients: 75.0% of EMS agencies treated burn patients within the past 12 months	No	No	No	No	No	Low
<u>Transfer Barriers:</u> Pediatric Burn Patients: 33.3% of EMS agencies transferred pediatric burn patients within the past 12 months	No	No	No	No	No	Low
<u>Access Barriers:</u> Transfer burn patients to Shriners: 25.0% of EMS agencies transferred patients to Shriners	Yes	Yes	Yes	Yes	Yes	High
<u>Access Barriers:</u> Transferred patients to Shriners because of reputation: 58.3% of EMS agencies transferred patients to Shriners due to excellent reputation	Yes	Yes	Yes	Yes	Yes	High
<u>Access Barriers:</u> Lack of Insurance: 58.3% of EMS agencies reported transferring patients without insurance "sometimes"	No	No	No	No	No	Low
<u>Use of Protocols:</u> 100% of EMS agencies utilize protocols for stabilization and transfer of burn patients	Yes	Yes	Yes	Yes	Yes	High

Health Need	Organizational Capacity	Infrastructure	Partners	Investment	Focus Area	High or Low Priority
	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No	High or Low
<u>Knowledge Barriers:</u> 91.7% of EMS agencies see the need for burn education and would be interested in receiving burn education	Yes	Yes	Yes	Yes	Yes	High

After reviewing the results from the pediatrician and EMS surveys, Shriners Children's Texas feels that we are meeting the needs of the community in the capacity that is under our direct control. We have increased marketing efforts and expanded our marketing campaigns to inform the community that we can take referrals for orthopedic, burn care, and cleft lip and palate. The Community Health Needs that fall within our scope relate to increasing knowledge that Shriners Children's Texas is a referral hospital for burns and orthopedic care. Furthermore, Shriners Children's Texas can, and does, provide burn care education for EMS agencies and to our community partners.

Table 15 utilized the prioritization grid to qualify Community Health Needs as determined by the secondary data collected from numerous sources.

Table 15

Health Need	Organizational Capacity	Infrastructure	Partners	Investment	Focus Area	High or Low Priority
	Yes or No	Yes or No	Yes or No	Yes or No	Yes or No	High or Low
<u>Access Barriers:</u> Lack of Personal Resources	No	No	No	No	No	Low
<u>Access Barriers:</u> Lack of Insurance	Yes	Yes	Yes	Yes	Yes	High
<u>Access Barriers:</u> Lack of Federal Qualifying Health Centers	No	No	No	No	No	Low
Primary Care Physician Shortage	No	No	No	No	No	Low
Mental/Behavioral Health Provider Shortage	Yes	Yes	Yes	Yes	Yes	High
Mid-Level Provider Shortage (NP's)	Yes	Yes	Yes	Yes	Yes	High

As Shriners Children's Texas is a pediatric hospital specializing in burn care, orthopedic care, cleft lip, and palate care the following Community Health Needs could not be addressed from the secondary data: Lack of personal resources, lack of Federally Qualified Health Centers, and primary care physician shortages. These Community Health Needs fall outside of our specialized scope of services offered, as well as our available financial and human resources.

Summary of Community Health Needs

Key Findings Relevant to Shriners Children's Texas

An extensive analysis of the CHNA data was undertaken to better understand the current state of health and health services at the local, county, and regional levels. Many cultural, socioeconomic, health and demographic characteristics of the population living in our Region influence the main CHNA concerns. The key information and data from the CHNA validate the concern for marginalized and underserved populations. Many of the community health needs identified were beyond the scope of services offered at Shriners Children's Texas. However, the predominant findings from the CHNA that is relevant to Shriners Children's Texas mission and vision and that we can positively influence include the following four prioritized community health needs (Table 16).

Community Health Needs Key Findings
Table 16

CHN Number	Health Needs Identified
1	<u>Access Barriers – Lack of Insurance</u> Increase awareness that Shriners Children's Texas accepts patients without insurance.
2	<u>Access Barriers – Lack of access to orthopedic specialist</u> Increase awareness that Shriners Children's Texas provides pediatric orthopedic services.
3	<u>Access Barriers – Health Care Provider Shortages</u> Continuing training and education for specialty care physicians, mid-level providers, behavioral health providers, and other health care professionals.
4	<u>Knowledge/Educational Barriers</u> Increase burn and orthopedic education to Pediatricians, Emergency Departments and EMS personnel.

Action Plan

2018 Action Plan and Results

Since the SHC Houston and Galveston hospitals merged into Shriners Children's Texas, we have combined the 2018 action plans. The previous Community Health Needs Assessment identified five focus areas that Shriners Children's Texas felt we could affect the most. Action plans were developed, implemented and results documented as follows:

- The first Community Health Need action plan was designed to increase public awareness that Shriners Children's Texas accepts patients without insurance or regardless of the ability to pay. Shriners Children's Texas physician liaisons reached out to over 665 contacts during the 3-year period. The Liaisons educated the public and health care workforce regarding our policy on accepting patients regardless of the ability to pay.
- The second Community Health Need action plan addressed decreasing the Health Care Provider shortages in our region by continuing to train critical care fellows, residents, medical students, mid-level providers, and mental health professionals. Over the last 3 years, Shriners Children's Texas has trained approximately 12 critical care fellows, 404 residents, medical students, and visiting health care professionals. Additionally, we have provided training for 37 mental health professionals and 18 physician assistants.
- The third Community Health Need action plan address reducing Educational/Knowledge Barriers to EMS agencies, emergency room nurses, physicians, burn care nurses, and air transport vendors on ABLS courses, pre-hospital management, basic burn care education, and transport guidelines in hopes of improving knowledge and decreasing the morbidity from accidents. Over the last 3 years, Shriners Children's Texas health care providers have provided over 72 educational programs to approximately 697 providers not only in our region but also throughout the U.S., Mexico, and the world.
- The fourth action plan addressed expanding Dental Health Care services. Within the cleft lip and palate service line, Shriners Children's Houston was able to extend its dental services. The program expanded the clinic, added a separate

dental room, and had two dentists onsite during the cleft lip and palate program. Based on how the program was structured, the services are only permissible to patients that are being seen for a related cleft lip and palate condition.

- The fifth action plan addressed encouraging the use of dental services for orthopedic service lines. Based on the corporate by-laws, this action plan could only be offered to our cleft lip and palate patients and, therefore, was not achievable.



Written Comments on 2018 Community Health Needs Assessment

Shriners Children's Community Health Needs Assessment and implementation plan was made widely available to the public on the Shriners Children's website at:

<https://www.shrinerschildrens.org/en/community-health-needs>

In addition to posting the Community Health Needs Assessment, contact information including email was listed. No comments or questions were received.

2022 Action Plan and Performance Measures:

Community Health Need 1: Access Barriers – Lack of Insurance

Table 19

Goals	Objectives	Action Steps	Implementation Timeline	Evaluation Plan for Monitoring	Responsible Department
1. Increase public awareness that Shriners Children's Texas accepts patients regardless of insurance.	1a. Increase the number of new PR/Marketing contacts by 5% in the next 3 years from baseline (2021).	1a. Work with Shriners Children's Texas PR/Marketing to increase awareness that our hospital accepts patients regardless of insurance.	1a. July 2022	1a. Determine the number of PR/Marketing/Physician liaison contacts for 2021.	1a. Marketing and Public Relations (MARCOM)
	1b. Increase the number of new physician liaison contacts by 5% in the next 3 years from baseline (2021).	1b. Work with Shriners Children's Texas physician liaison to increase the number of new contacts by 5% for the next 3 years from baseline (2021).	1b. July 2022	1b. Design and maintain a database of all Shriners Children's Texas PR/Marketing/Physician liaison contacts and track new contacts for the next 3 years.	1b. Physician Liaisons
	1c. Continue to educate the public concerning the mission of our hospital at meetings and conferences.	1c. Educate the public concerning the mission of Shriners Children's Texas at meetings and or conferences.	1c. August 2022	1c. Design and maintain a database of the number of contacts at meetings and or conferences for the next 3 years.	1c. Marketing and public relations Physician Liaison, Administrative Director Ancillary Services

Goals	Objectives	Action Steps	Implementation Timeline	Evaluation Plan for Monitoring	Responsible Department
2. Assist our uninsured patient population in accessing resources, including health insurance.	2a. Continue to increase public awareness concerning the mission of Shriners Children's Texas by providing lectures at educational conferences and at the hospital	2a. Increase public awareness concerning the mission of accepting patients regardless of the ability to pay by providing lectures at educational conferences.	2a. July 2022	2a. Determine the number of lectures at educational conferences for 2021. Design and maintain a database of all presentations at educational conferences, at the hospital for the next 3 years.	2a. Administrative Director Ancillary Services, Nursing Educator
	2b. Continue providing assistance in accessing resources.	2b. Increase assistance to our uninsured patient population in accessing resources through financial counseling	2b. October 2022	2b. Track the number of uninsured patients and those that require financial assistance including third-party coverage.	2b. Revenue Center Manager

**Community Health Need 2: Access Barriers/Lack of awareness of
Orthopedic service line
Table 20**

Goals	Objectives	Action Steps	Implementation Timeline	Evaluation Plan for Monitoring	Responsible Department
1 Increase awareness regarding Shriners Children's Texas orthopedic service line.	1. Increase the number of new PR, Marketing, and physician liaison contacts by 5% in the next 3 years from baseline (2021).	1. Work with Shriners Children's Texas PR/Marketing/physician liaisons to increase awareness that Shriners Children's Texas has an active orthopedic service line.	1. July 2022	1. Document the number of new contacts regarding the orthopedic service line.	1. Administrative Director Ancillary services, PR/Marketing, and physicians.
		2. Work with the physician liaisons and PR/Marketing to develop new marketing strategies for the orthopedic service line.	2. June 2022	2. Document the new marketing strategies and track for success.	2. Administrative Director Ancillary services, PR/Marketing, and physicians.

Community Health Need 3: Health Care Provider Shortage
Table 21

Goals	Objectives	Action Steps	Implementation Timeline	Evaluation Plan for Monitoring	Responsible Department
1. Decrease the healthcare provider shortage in our Region by expanding and enhancing training of the healthcare workforce.	1. Continue training of burn specialty care physicians.	1. Increase awareness of opportunities for burn specialty care training at Shriners Children's Texas.	1. July 2022	1. Document the number of physicians who receive burn care specialty training.	1. Administrative Director and Credentialing
	2. Continue training residents and medical students at Shriners Children's Texas.	2. Increase the number of training opportunities for residents and medical students.	2. July 2022	2. Utilizing hospital data, track the number of medical students and residents trained at Shriners Children's Texas.	2. Credentialing
	3. Continue training Mid-level provider students at Shriners Children's Texas.	3. Collaborate with UTMB to increase the training opportunities for Mid-level providers.	3. September 2022	3. Utilizing hospital data, track the number of Mid-level provider students trained at Shriners Children's Texas.	3. Credentialing
	4. Continue training mental health providers at Shriners Children's Texas	4. Collaborate with UTMB to increase the training opportunities for mental health professionals.	4. September 2022	4. Utilizing hospital data, track the number of mental health professionals trained at Shriners Children's Texas.	4. Credentialing
	5. Begin offering burn education training to pediatricians	5. Collaborate with pediatrician groups in the Region to offer burn care education	5. August 2022	5. Track the number of classes offered or pediatricians trained in burn care education	5. Administrative Director and Nurse Educator

Community Health Need 4: Knowledge/Education Barriers
Table 22

Goals	Objectives	Action Steps	Implementation Timeline	Evaluation Plan for Monitoring	Responsible Department
1. Provide burn care education to pediatricians, specialty care providers, health care providers, and EMS personnel	1. Increase educational/training opportunities for pediatricians, health care personnel, specialty care physicians, and EMS agencies on burn care.	1. Increase awareness of Advanced Burn Life Support protocols, basic emergency burn care, and American Burn Association referral guidelines.	1. July 2022	1. Utilizing hospital data, track the number of educational programs provided throughout the Region, U.S., and nationally. Secondly, track the number of transport courses and burn-related courses given to air transport companies throughout the region, nationally and internationally.	1. Administrative Director Ancillary Services, Nurse Educator
2. Improve patient outcomes by educating emergency departments, health care professionals, specialty physicians, and EMS personnel on burn care and the need for early transport.	2. Improve patient outcomes by monitoring admission vital signs, timeliness of transports and patient outcomes.	2. Document admission vital signs and compare to age-appropriate vital signs as well as monitor and document patient outcomes.	2. May 2022	2. Utilizing a hospital database, document timeliness of transports, admission vital signs, and patient outcomes.	2. Administrative Director
3. Provide orthopedic education to Pediatricians and other health care providers	3. Increase education/training opportunities on orthopedic care for health care providers	3. Present specialized orthopedic education at grand rounds, scientific meetings, and other educational venues.	3. August 2022	3. Utilizing hospital data, track the number of orthopedic educational programs provided throughout the Region, U.S., and nationally.	3. Medical Staff office.

Conclusion

The 2022 Community Health Needs Assessment (CHNA) was assembled to give readers an overview of Shriners Children's Texas health trends and to provide a platform to increase communication across non-governmental, as well as governmental agencies to improve the lives of children within our Region with specialized health needs. The findings from this process demonstrate that Shriners Children's Texas Region's residents include high concentrations of individuals at an increased risk for access barriers due to a lack of health care insurance. Other key findings include shortages in mental/ behavioral health care providers and mid-level practitioners. In addition to the health care worker shortages in our Region, this assessment identified the need for burn care education in our communities and beyond. Shriners Children's Texas Action Plans have been developed to target the identified priorities of the community needs assessment that fall within our scope of services and that are aligned with the mission and vision of Shriners Children's Texas.

This report has shown that trends in health outcomes are determined not just by individual-level factors, such as genetic make-up or access to medical services. Rather, the findings are the result of social, political, and environmental conditions that exist throughout our Region. By building on the analysis of this report and completing the Action Plans, Shriners Children's Texas will take significant steps to improve the health of our communities and thus influence health outcomes in our Region.

2022 Community Health Needs Assessment Report Available Online or in Print

The 2022 Community Health Needs Assessment is available at:
<https://www.shrinerschildrens.org/en/community-health-needs>

04/25/2022

Date adopted by authorized body of hospital
Shriners Children's Texas Board of Governors

Acknowledgments

Under the direction and guidance of Shriners Children's Corporate Headquarters, Shriners Children's Texas Community Health Needs Assessment Advisory Team began planning this assessment in 2021. Much thought was placed into creating both a process and document that would be useful and enlightening to health care organizations, community-based health and social service organizations, and the community at large. Shriners Children's Texas wishes to thank the following community health needs assessment partners for their support of this project:

- Shriners Children's Corporate Headquarters, Tampa, Florida
- Texas EMS for Children Advisory Council
- Regional Advisory Councils (RAC's H, Q, and R)
- Pediatricians and EMS Agencies in the Region that responded to the Surveys



Exhibits

PRIMARY DATA

Pediatrician Survey

EMS Survey



Exhibit 1 – Pages 46-48

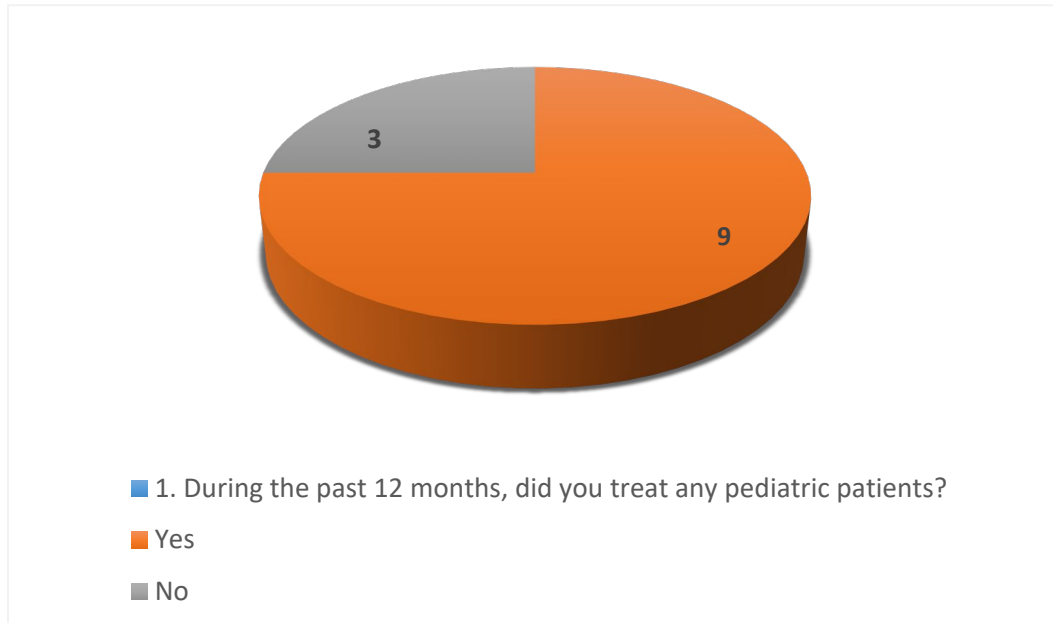
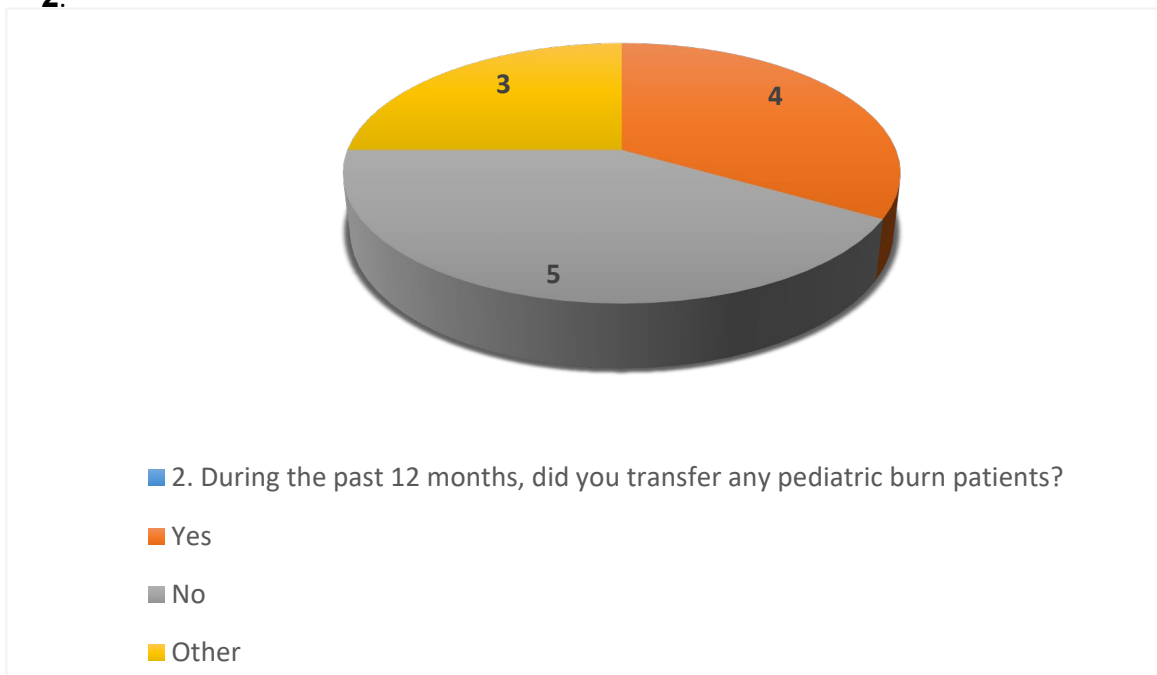
2022 Shriners Children's Texas CHNA Survey Results

Pediatricians

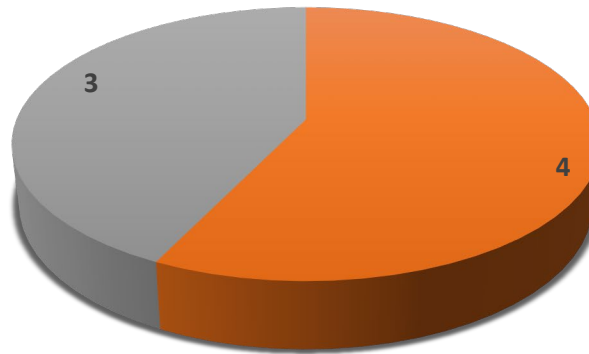
Question 1. For which specialty care services do you most often refer your patients to other providers?			
Cardiologist	15%	Neurosurgeon	40%
Dermatologist	67%	Pain Management	4%
Endocrinologist	46%	Physiatrist	11%
Gastroenterologist	46%	Plastic Surgeon	15%
Pediatric Surgeon	22%	Psychiatrist	4%
Orthopedic Surgeon	37%	Rheumatologist	52%
Otolaryngologist	57%	Thoracic Surgeon	4%
Neurologist	96%	Urologist	24%
Congenital deformities of hands/feet	20%	Cleft Lip and Palate	28%
Amputations	4%	Limb Length Discrepancies	26%
Osteogenesis Imperfecta	4%	Sports Injuries	65%
Hip Dysplasia	11%	Arthrogryposis	11%
Blount’s Disease	28%	Spasticity/Contractures due to Cerebral Palsy	13%
Scoliosis	93%	Erb’s Palsy	4%
Fractures	100%	Slipped Capital Femoral Epiphysis	4%
Other	4%		
Question 2. During the past 12 months, did your patients have difficulties or delays getting the services listed above because there were waiting lists, backlogs, services unavailable, or other problems getting appointments?			
Yes		81%	
No		13%	
No Response		6%	
If Yes, with which specialists did your patients have difficulties or delays getting services?			
Cardiologist	11%	Other	4%
Dermatologist	46%	Neurosurgeon	22%
Endocrinologist	28%	Physiatrist	17%
Gastroenterologist	22%	Plastic Surgeon	4%
Pediatric Surgeon	17%	Rheumatologist	45%
Orthopedic Surgeon	11%	Thoracic Surgeon	9%
Otolaryngologist	13%	Urologist	13%
Neurologist	35%	Cleft Lip and Palate	11%
Congenital deformities of hands/feet	4%	Limb Length Discrepancies	7%
Amputations	5%	Sports Injury	35%

Osteogenesis Imperfecta	6%	Arthrogryposis	4%
Hip Dysplasia	17%	Spasticity/Contractures due to Cerebral Palsy	11%
Blount's Disease	33%	Erb's Palsy	4%
Scoliosis	57%	Slipped Capital Femoral Epiphysis	4%
Fractures	43%		
Question 3. How often did you see children who are uninsured?			
Very often	48%		
Sometimes	44%		
Never	5%		
No Response	3%		
Question 4. What is the most important reason you refer children to Shriners Children Texas?			
Charity care policy	57%		
Only place service was available	40%		
Convenience	16%		
Free-standing pediatric facility	11%		
Excellent reputation	54%		
In network	14%		
Appointment availability	5%		
Question 5. Do you routinely refer patients for the following acute conditions?			
Acute Burn Injuries	40%		
Inhalation Injuries	10%		
Reconstructive Surgery	13%		
Skin conditions	38%		
Not Applicable	11%		
Question 6. Do you routinely refer patients for any of the following Secondary Reconstructive Conditions?			
Burn Contracture Release	13%		
Revision of Hypertrophic Scars	11%		
Dermabrasion	44%		
Laser Surgery	19%		
Facial Burn Deformities	21%		
Hand and/or Foot Reconstruction	16%		
Microdermabrasion	30%		
Breast Reconstruction	5%		
Not Applicable	24%		
Other	2%		
Question 7. Do you routinely refer patients for the Management of Complicated Wounds?			
Pressure Ulcers	11%		
Delayed Wound Healing	21%		
Exposed vessels, nerves, tendons	8%		
Infected Wounds	29%		

Amputations	11%
Not Applicable	37%
Question 8. Do you routinely refer patients for the treatment of Soft Tissue Conditions?	
Soft Tissue Infections	11%
Stevens-Johnson syndrome	30%
Necrotizing Fasciitis	3%
Toxic Epidermal Necrosis	6%
Epidermolysis Bullosa	5%
Not Applicable	27%
Question 9. If your patient did not receive all the services they needed, what were the reasons?	
Cost was too much	71%
No insurance	79%
Health Plan Problem	38%
Did not accept child's insurance	32%
Not available in area	2%
Transportation problems	46%
Could not get appointment	17%
Dissatisfaction with hospital	6%
Forgot appointment	5%
Did not go to appointment	19%
Child refused to go	6%
Did not know where to go	6%
No referral	2%
Treatment is on going	11%
Lack of resources at school	16%
Question 10. What concerns you most about pediatric health care in Texas?	
Cost	65%
Lack of specialist	25%
No insurance	68%
Unhealthy eating/lifestyle habits	49%
Question 11. Are there pediatric health care services you would like to see Shriners Children's – Texas offer that we currently do not?	
Pediatric Dental	8%
General Pediatric Surgery	21%
Pediatric Diabetic Care	62%
Pediatric Craniofacial Surgery	5%
Pediatric Obesity Care	48%
Not Applicable	3%

Exhibit 2 – Pages 49-53**SHRINERS CHILDREN'S TEXAS EMS SURVEY****1.****2.**

3.

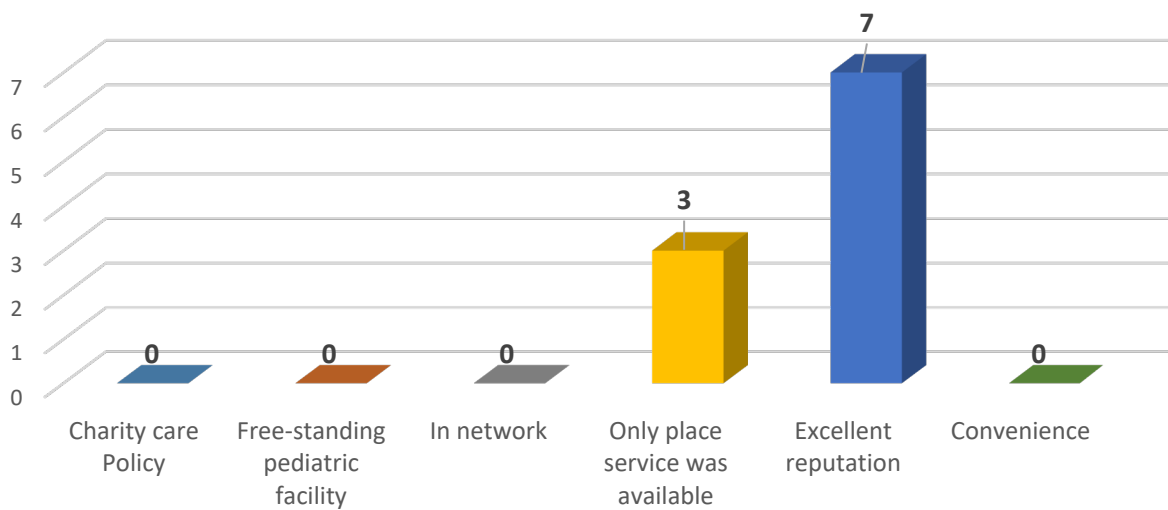


3. Does your EMS agency ever transfer pediatric burn patients to Shriners Children's Texas?

Yes

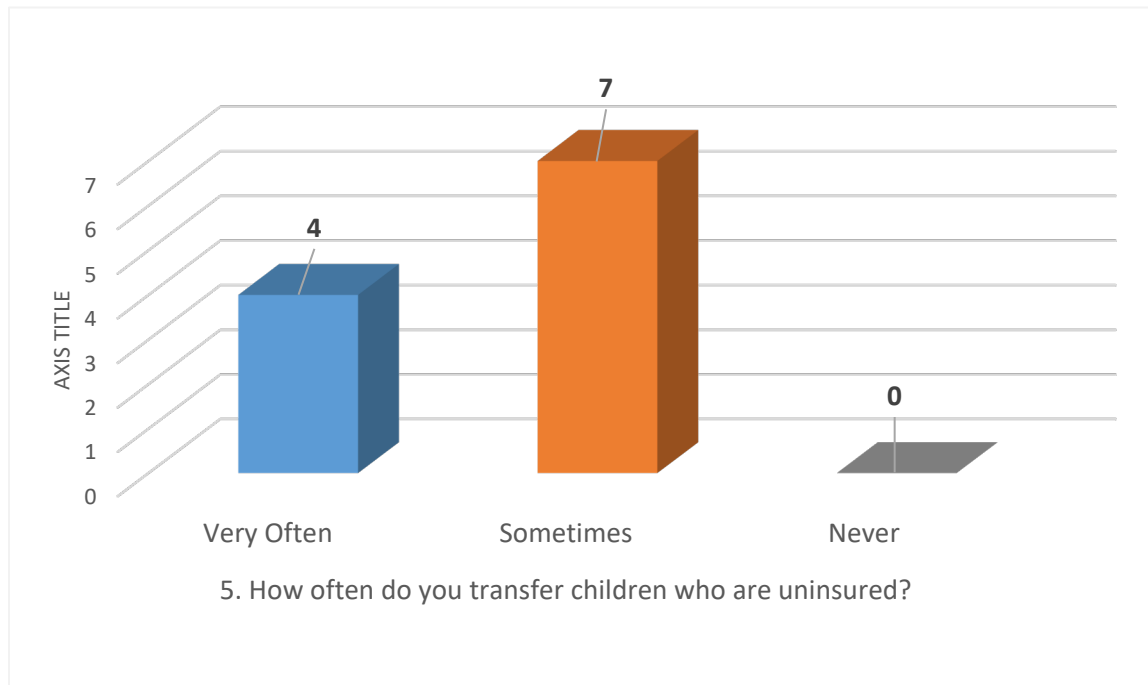
No

4.

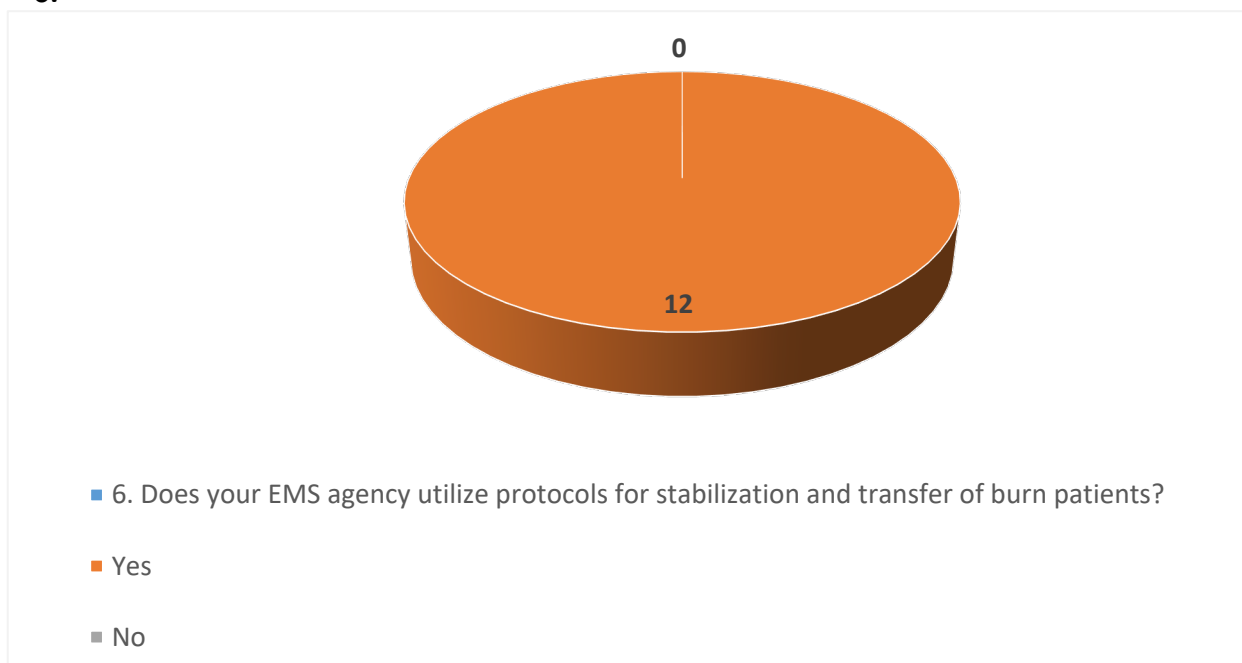


4. What is the most important reason you transfer children to Shriners Children's Texas

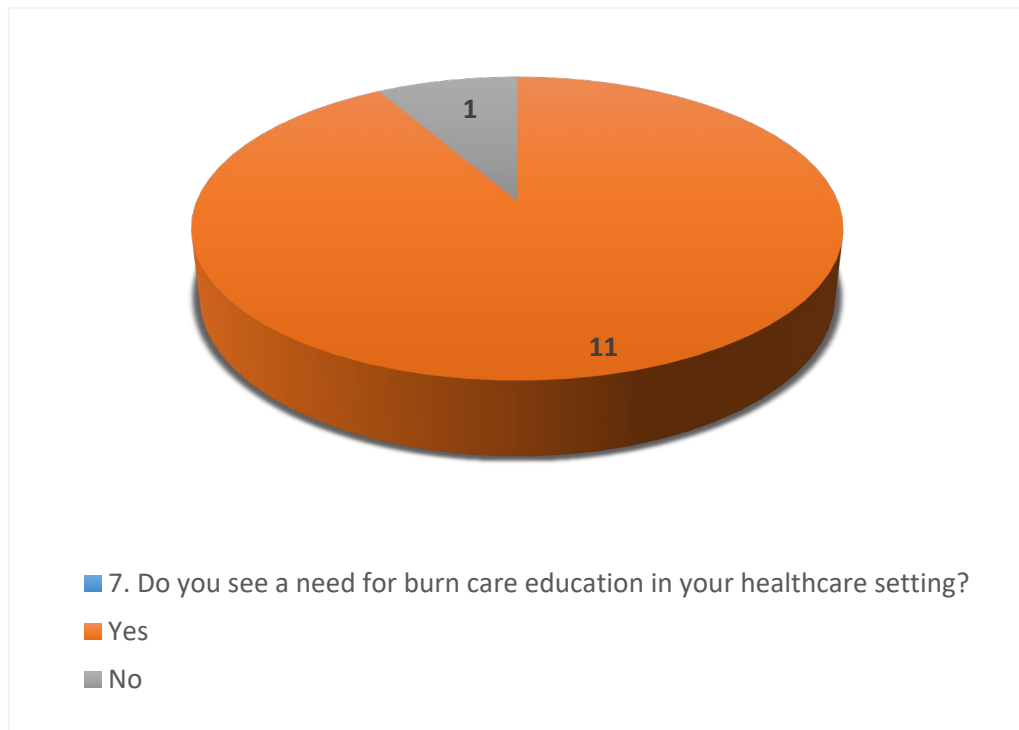
5.



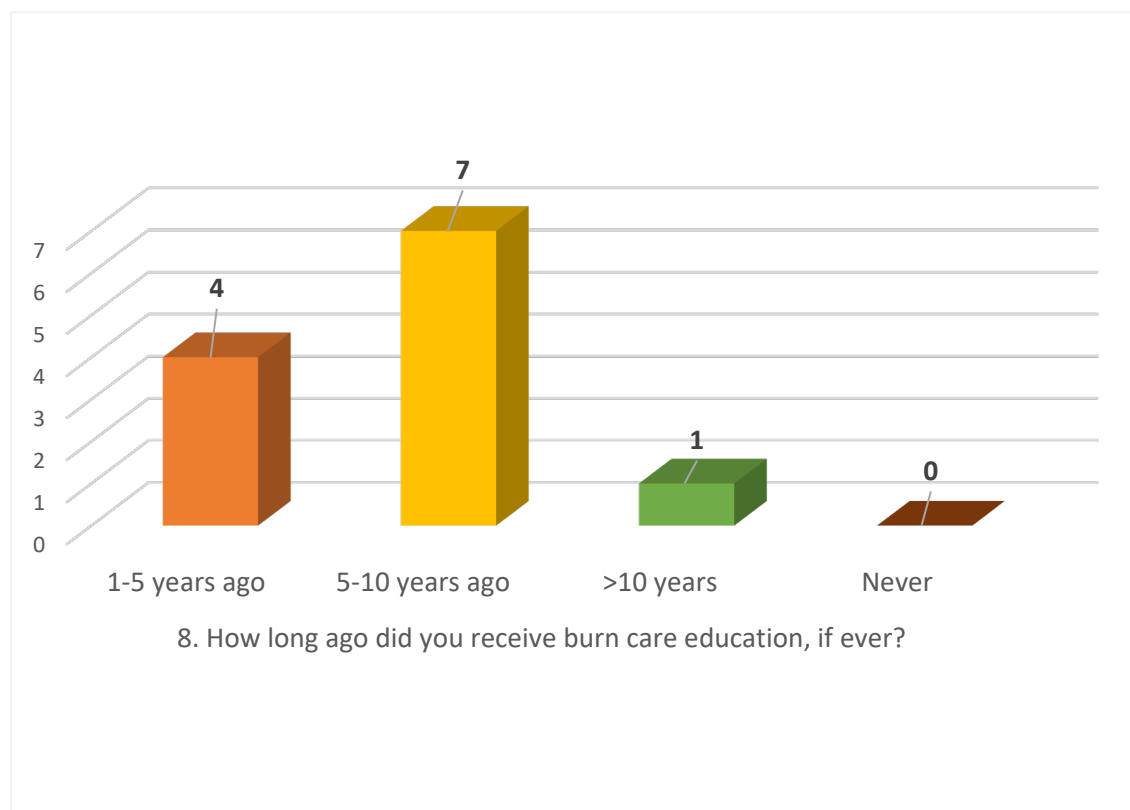
6.



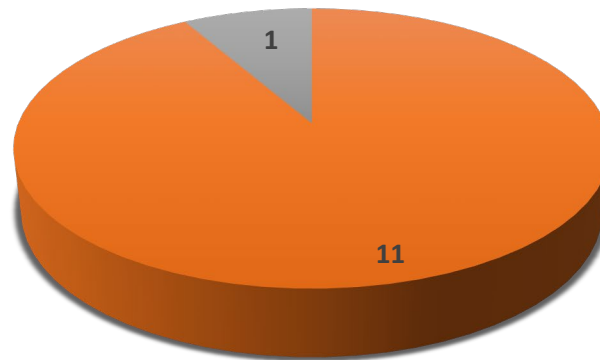
7.



8.

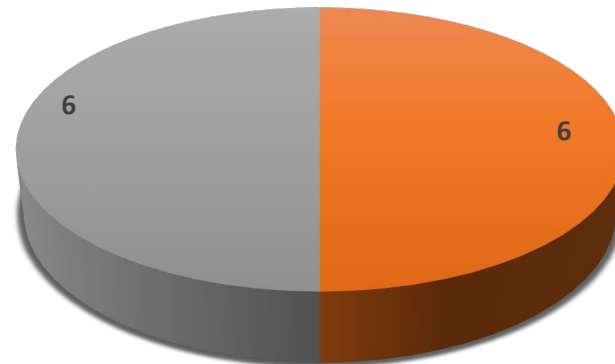


9.



■ 9. Would you be interested in burn education? ■ Yes ■ No

10.



■ 10. Have you had burn education in the past year? ■ Yes ■ No

11. What City and County do you work in?

<u>City</u>	<u>County</u>
Galveston	Galveston
Angleton	Brazoria
Jasper	Jasper
-	Brazoria, Galveston, Harris
La Marque	Galveston
Friendswood	Galveston, Harris
Baytown	Chambers, Harris
Crystal Beach	Galveston
Galveston, Hitchcock, Bacliff, Kemah	Galveston
Texas City	Galveston
Anahuac	Chambers
Liberty	Liberty

Exhibit 3 – Pages 54-56

SECONDARY DATA

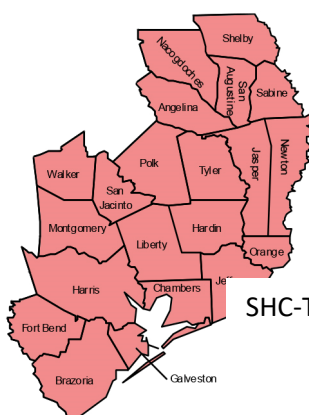
Community/Region Data

Exhibit 3. Shriners Children's Texas Regional Summary

Community Health Needs Assessment
REGIONAL SUMMARY

Geography & Population Density

Region Population	7,614.835
Texas Population	28,260.856
Region Population per Square Mile	423.60
Region Area in Square Miles	17,976.45



SHC-TX Regions

DEMOGRAPHY/POPULATION

Age	Region (%)	Texas (%)	U.S. (%)	Race/Ethnicity	Region (%)	Texas (%)	U.S. (%)
0 – 4	7.2	7.08	6.09	White	66.01	73.97	72.49
5 - 17	19.1	18.89	16.53	Black/African American	17.55	12.13	12.70
18 – 24	35.44	38.2	36.17	Asian	7.18	4.80	5.52
25 - 34	14.92	14.70	13.87	Native American or Alaska Native	0.43	0.50	0.85
35 - 44	14.05	13.53	12.62	Native Hawaiian or Pacific Islander	0.06	0.09	0.18
45 – 54	12.79	12.48	12.96	Some Other Race	6.38	5.82	4.94
55 - 64	11.36	11.20	12.86	Multiple Race	2.40	2.69	3.32
65 +	11.30	12.25	16.64	Hispanic (of any descent)	35.09	39.34	18.01

Income and Economics

	Region	Texas	U.S.		Region	Texas	U.S.
Average Household Income (\$)	\$94,242	\$87,260	\$88,607	Uninsured 0-18 Years (%)	13.19	12.67	5.62
Unemployed (%)	5.5	4.8	4.3	Uninsured 19-64 Years (%)	24.10	23.33	12.42
Living at/below FPL – Adult (%)	14.10	14.73	13.42	Medicaid Clients	1,258,826	4,673,487	64,716,091
Living at/below 100% FPL (%) - Children	20.24	20.92	18.52	No High School Diploma (%)	16.22	16.31	12.00
Population receiving SNAP (%)	11.54	11.77	11.74	Bachelor's Degree or Higher (%)	31.26	29.90	32.15
Access-Head Start	3.67	7.01	10.53				

Health Behaviors

	Region	Texas	U.S.
Physical Inactivity (%)	22.4	21.9	22.0
Low Food Access (%)	22.52	25.00	22.22
Availability of Rec. Fac. (Rate)	10.95	10.59	12.23
Tobacco Usage (%) Adults Age 18 & older	15.9	15.6	15.3
Excessive Drinking (%) Adults Self-Reporting, 2018	17.33	18.97	19.17

Health Outcomes - Mortality

	Region	Texas	U.S.
Unintentional Injuries (per 100,000)	3.90	38.5	47.5
Motor Vehicle Crash	12.0	13.2	11.3

Health Care Resources (Rates per 100,000)

	Region	Texas	U.S.
Primary Care Physicians	59.91	60.89	75.81
Nurse Practitioners	35.35	33.23	42.36
Mental Health Providers	106.5	121.2	261.6

Health Services & Resources		(Rates per 100,000)	Access & Quality Measures
# Facilities w/Shortage	Region	Texas	U.S.
HPSA Primary Care	61	247	3,979
HPSA Mental Health Care	58	217	3,617
HPSA Dental Care	51	213	3,432

References

Sparkmap - <https://sparkmap.org/>

Data Sources:

1) US Census Bureau, American Community Survey . 2015-19. Source geography: Tract
2) US Census Bureau, Decennial Census . 2020. Source geography: Tract
3) US Department of Labor, Bureau of Labor Statistics . 2021 - October. Source geography: County
4) US Census Bureau, American Community Survey . 2015-19. Source geography: Tract
5) US Department of Health & Human Services, HRSA - Administration for Children and Families . 2019. Source geography: Address
6) US Census Bureau, American Community Survey . 2015-2019. Source geography: County
7) US Department of Health & Human Services, Center for Medicare & Medicaid Services, Provider of Services File . September 2020. Source geography: Address
8) Health care Intelligence - Sg2 Analytics @ Claritas Pop-Facts ® 2022
9) US Department of Health & Human Services, Health Resources and Services Administration, HRSA - Area Health Resource File . Accessed via County Health Rankings . 2017. Source geography: County
10) Centers for Medicare and Medicaid Services, CMS - National Plan and Provider Enumeration System (NPPES) . Accessed via County Health Rankings . 2020. Source geography: County
11) Centers for Medicare and Medicaid Services, CMS - National Plan and Provider Enumeration System (NPPES) . 2021. Source geography: Address
12) Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion . 2019. Source geography: County
13) Data Source: US Department of Agriculture, Economic Research Service, USDA - Food Access Research Atlas . 2019. Source geography: Tract

14) US Census Bureau, <i>County Business Patterns</i> . Additional data analysis by CARES . 2019. Source geography: County
15) Centers for Disease Control and Prevention, <i>National Vital Statistics System</i> . Accessed via CDC WONDER . 2015-2019. Source geography: County
16) Texas Ports of Entry. (n.d.). <i>Economic Impact 2018</i> , Retrieved from https://comptroller.texas.gov/economy/economic-data/ports/
17) Texas Ports of Entry. (n.d.). <i>Economic Impact 2018</i> , Retrieved from https://comptroller.texas.gov/economy/economic-data/ports/
18) Texas' Thriving Regions. (n.d.) Retrieved from https://businessintexas.com/texas-regions/
19) Agrilife Research. (n.d.). Retrieved from https://agriliferesearch.tamu.edu/region/eastern/
20) Regional Economic Data. (n.d.). Retrieved from https://comptroller.texas.gov/economy/economic-data/regions/
21) Texas Park and Wildlife. (n.d.). Retrieved from https://tpwd.texas.gov/education/resources/texas-junior-naturalists/regions/gulf-coast