



**Shriners Hospitals**  
for Children®

# Shriners Hospitals for Children — Shreveport 2018 Community Health Needs Assessment

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*Please note that all patients, staff and provider pictures used throughout this 2018 CHNA report for Shriners Hospitals for Children - Shreveport have given permission to use their photograph or likeness through the signing of either a Patient or Non-Patient General Marketing, Public Relations, or Fundraising form.*

## Shriners Hospitals for Children at a Glance

Shriners Hospitals for Children® 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 orthopaedic 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, family-centered environment. Our patients are our priority. We take the time to care, and to listen. At Shriners Hospitals for Children, every patient and family can expect respectful, compassionate, expert care.

**The Mission of Shriners Hospitals for Children 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.**

### *About Shriners Hospitals for Children — Shreveport*

Shriners Hospitals for Children — Shreveport is changing lives every day through innovative pediatric specialty care, research and outstanding medical education. The Shreveport Shriners Hospital focuses on a wide range of pediatric orthopaedic conditions, including rare diseases and syndromes. This means that when you visit Shriners Hospitals for Children — Shreveport for orthopaedic appointments, you might see your neighbors, but you might also meet families visiting from states such as Oklahoma, Texas, Arkansas, Mississippi, or Alabama. We also provide expert sports medicine and cleft lip and palate care. All services are provided in a family-centered environment, regardless of the families' ability to pay.

Shriners Hospitals for Children — Shreveport is affiliated with Louisiana State University Health Sciences Center-Shreveport. The partnership is a result of the Shreveport Shriners Hospital's efforts to collaborate with leading academic medical centers to help reach more children through leveraging the clinical expertise of each organization.

Shriners Hospital has been a training site for LSUHSC's orthopaedic residents and other trainees.

Shriners Hospitals for Children – Shreveport was founded in 1922 as the first hospital of the Shriners International Fraternity. After World War I, members of the fraternity sought to institute a program for the betterment of humanity. By 1921, planning was underway to establish a hospital dedicated to caring for children affected by polio, congenital orthopedic conditions and injuries such as those incurred on farms. As plans for a hospital dedicated to caring for children developed, the local El Karubah Shriners began campaigning to bring the hospital to Shreveport. Chartered in 1914, the fledgling El Karubah Shriners were led by Shreveport businessman James Horace Rowland who was a prominent Mason and Shriner and the first Potentate of El Karubah. Under Rowland's direction, the group purchased an option on land at the outskirts of town, arranged for an orthopedic surgeon through the Shreveport Medical Society and developed local fundraising efforts. Those efforts were successful. In September of 1921, Rowland and Shreveport Mayor L.E. Thomas traveled to Atlanta, Georgia to present their proposal to the official hospital committee. Following the meeting, Louisiana Shriners were given approval to proceed. On May 12, 1922 the cornerstone for Shriners Hospital for Crippled Children was laid.



Inside Shriners Hospitals for Children each day, patients and families say thank you to the Shriners – those men in the red fezzes. Our model for care was imagined and established by the Shriners, the fraternal organization for which the health care system is named. Determined to give all children access to specialized pediatric care, the Shriners opened their first hospital in 1922. Polio was reaching epidemic proportions and only families of means had ready access to doctors, leaving thousands of children at risk without health care.

Recognized as a leading philanthropy, Shriners Hospitals for Children has evolved into an international health care system recognized for its devotion to transforming the lives of children through care and research. It is a destination of choice for parents whose children have orthopaedic problems, burns, spinal cord injuries, cleft lip and palate, and other complex medical needs.

## 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 Hospitals for Children leadership.

### **Shriners Hospitals for Children's Commitment to the Community**

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

## Our Community

The Shreveport hospital was the first of what was to become a network of twenty Shrine hospitals across the United States and two hospitals in Montreal and Mexico City, respectively. Over the last 96 years Shriners Hospitals for Children in Shreveport has been providing orthopedic care to over 80,000 children. The orthopedic care has included, but is not limited to, treatment for: Amniotic Band Syndrome, Arthrogyrosis, Blount's disease, Brachial Plexus Palsy, Cerebral Palsy, Clubfoot, Charcot-Marie-Tooth Disease, Dwarfism, Flat Feet, Fracture Complications, Friedreich's Ataxia, Developmental Dysplasia of the Hip, In-Toeing, Juvenile Rheumatoid Arthritis, Kyphosis, Legg-Calve-Perthes Disease, Limb Deficiencies/Deformities/Length Discrepancies, Lordosis, Muscular Dystrophy, Neurofibromatosis, Osgood-Schlatter Disease, Osteogenesis Imperfecta, Osteomyelitis, Pectus Carinatum, Pectus Excavatum, Rickets, Scoliosis and Other Spine Conditions, Slipped Capital Femoral Epiphysis, Spina Bifida, Spinal Muscular Atrophy, Spondylolysis/Spondylolisthesis and Cleft Lip/Palate.

For the first eighty-eight years, the hospital provided care and treatment supported solely through the Shrine fraternity and donations from the public. No family was charged for services; no insurance payments were taken; and no government reimbursement was accepted. Our hospital was the only "free hospital" in the state of Louisiana. However, in 2009 the national Shrine organization realized in order for its hospitals to survive and to continue our commitment in providing world-class care to children, other sources of revenue must be pursued. In February of 2011, the Shriners hospital in Shreveport began its revenue cycle after 88 years of providing "free care" to the children of a six-state region (Louisiana, Texas, Oklahoma, Mississippi, Arkansas, and Alabama) and to children from Panama, Honduras, Mexico, et. al.) with the majority of patients being from Louisiana.



Our commitment to this community of children continues today as our mission is perfectly aligned to aid in this pediatric population's health care needs. The top ten diagnoses treated in 2018 included:

1. Other Orthopedic Aftercare
2. Adolescent idiopathic scoliosis, thoracolumbar region
3. Talipes Equinovarus, Congenital
4. Spastic diplegic cerebral palsy
5. Other abnormalities of gait and mobility
6. Other specified congenital deformities of hip
7. Spastic quadriplegic cerebral palsy
8. Spastic hemiplegic cerebral palsy
9. Encounter for orthopedic aftercare following scoliosis surgery
10. Flat foot [pes planus] (acquired)

Additionally, the top ten procedures performed in 2018 included:

1. Fusion of Thoracic Vertebral Joints with Autologous Tissue Substitute, Posterior Approach, Posterior Column, Open Approach
2. Removal of implant; deep (eg, buried wire, pin, screw, metal band, nail, rod or plate)
3. Chemodeneration of one extremity; 1-4 muscle(s)
4. Closed treatment of metacarpal fracture, single; without manipulation, each bone
5. Removal of sutures under anesthesia (other than local)
6. Palatoplasty for cleft palate, with closure of alveolar ridge; with bone graft to alveolar ridge (includes obtaining graft)
7. Insertion of Internal Fixation Device into Upper Femur, Percutaneous Approach
8. Insertion of Internal Fixation Device into Tibia, Open Approach
9. Reposition Left Upper Femur with Internal Fixation Device, Open Approach
10. Transfer Tongue, Palate, Pharynx Muscle with Subcutaneous Tissue, Open Approach



It is through our commitment to our pediatric community that we have the privilege of serving the specific health needs of this frequently underserved population.

## Economic and Social Impact on the Community

According to the Louisiana Hospital Association’s 2018 Hospitals and the Louisiana Economy report, Louisiana hospitals are significant economic agents in local communities and statewide, generating more than \$31.6 billion annually in economic activity and directly employing more than 104,000 people with an annual payroll of almost \$5.6 billion. Shriners Hospitals for Children – Shreveport employs approximately 163 fulltime and part time staff with approximately 39% (64) being minorities. Employees represent the educational spectrum from no high school diploma in some facility support areas to highly educated physicians who hold board certifications in orthopedics and anesthesiology. It is estimated that Shriners Hospitals for Children – Shreveport contributed more than \$55 million of revenue into the area and state economy. Personnel cost is the main budget cost center with a payroll amount of more than \$11.2 million in 2018.

Approximately 18,000 patients were seen in outpatient clinics in 2018. These included clinics for general orthopedics, fractures, scoliosis, myelodysplasia, juvenile rheumatoid arthritis, cleft lip/palate, hand, genetics, and cerebral palsy. Telemedicine clinics are held monthly in Oklahoma and outreach clinics in Panama are held annually. From 2016-2018, these clinics evaluated/treated over 1,712 patients. Additionally, 589 operations were performed at our hospital in 2018 including 1823 surgical procedures. The hospital is an active teaching facility, hosting students from over fifteen educational institutions including LSU Health Sciences Center – Shreveport, Northwestern Louisiana University, Louisiana Tech University, Bossier Parish Community College, Centenary College, Grambling State University, University of Louisiana – Monroe, Southern University, Louisiana Technical College, University of Arkansas, Kilgore College - Texas, and Panola College – Carthage, Texas. The affiliation agreements with these institutions allow our hospital to contribute expertise and resources to the ongoing education and training of tomorrow’s physicians, nurses and allied health professionals, the majority of whom continue to work in Louisiana once they have graduated.

Economic Impact of Hospital Operations in Louisiana by DHH Region, 2015 and 2016 (\$ in Millions)

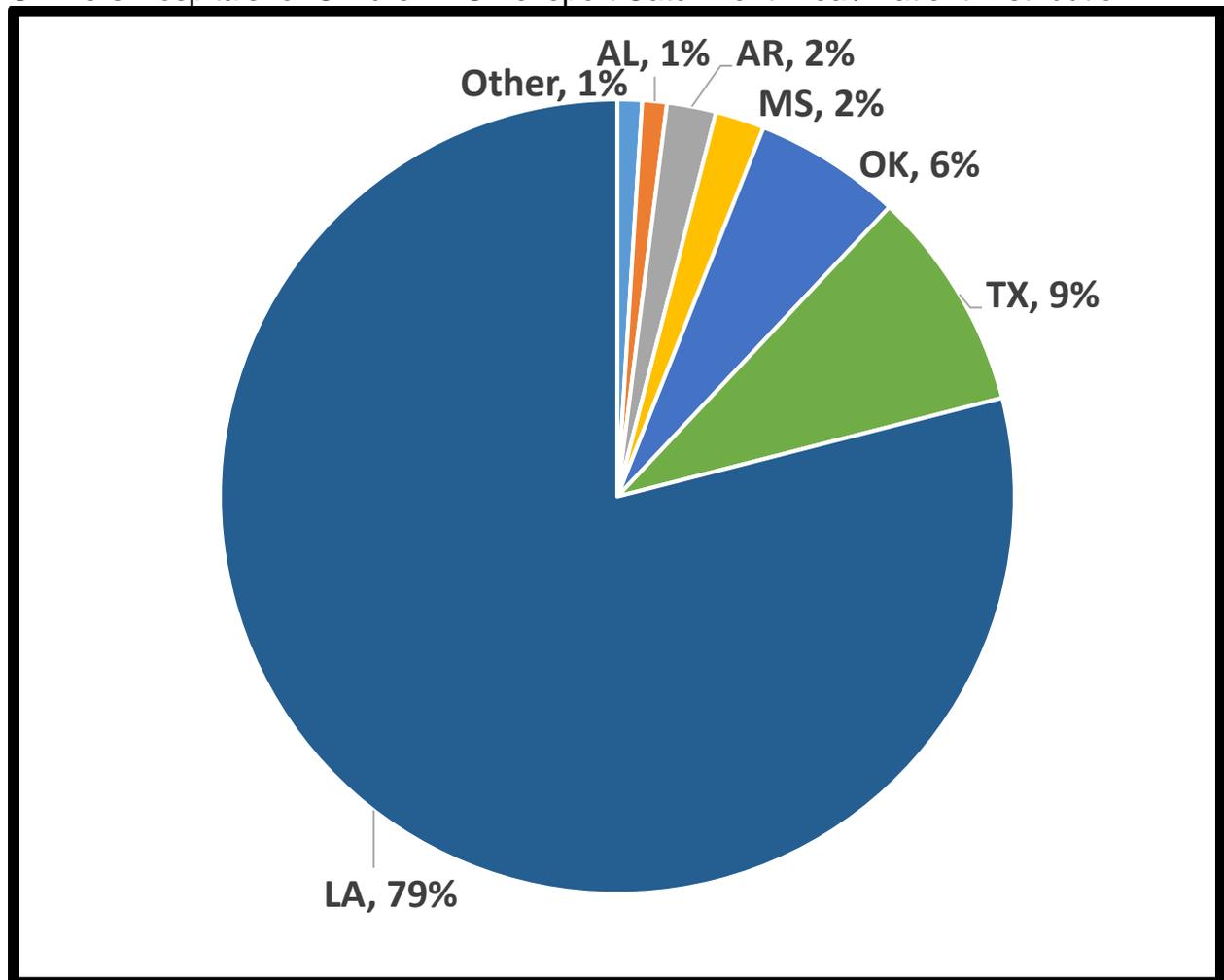
Region	Business Sales	Annual Payroll	Jobs Created and Supported	State and Local Tax Collections
New Orleans	\$8,500	\$3,161	68,447	\$458
Baton Rouge	\$3,589	\$1,335	28,904	\$193
Houma-Thibodaux	\$1,253	\$466	10,094	\$68
Lafayette	\$3,905	\$1,452	31,444	\$211
Lake Charles	\$1,554	\$578	12,510	\$84
Alexandria	\$2,651	\$986	21,351	\$143
Shreveport	\$3,423	\$1,273	27,568	\$185
Monroe	\$1,947	\$724	15,674	\$105
Northshore	\$3,739	\$1,391	30,109	\$201
<b>Statewide Total</b>	<b>\$30,561</b>	<b>\$11,366</b>	<b>246,101</b>	<b>\$1,648</b>

Source: LHA Report: Hospitals and the Louisiana Economy, 2018

### SHC-Shreveport’s Community Defined

In 2018, the Shreveport hospital had 18,014 patient visits which was an increase from 15,552 patient visits in 2015. New patient referrals are primarily from physicians (90%) with Shriners fraternity members being a secondary source (5%). Family, friend and other sources constitute the other 5% of new patient referrals. In 2018, 79% of active patients were residents of Louisiana. The remainder of the referrals came from Texas (9%), Oklahoma (6%), Mississippi (2%), Arkansas (2%), Alabama (1%), and all of other states are included in the final 1% of referrals. Thus, the primary community served is defined as the pediatric population residing in the state of Louisiana with the secondary community consisting of the pediatric population in Northeast Texas.

Shriners Hospitals for Children – Shreveport Catchment Area / Patient Distribution





## Process and Methods

The Shriners Hospitals for Children - Shreveport Community Health Needs Assessment Steering Committee commissioned a health needs assessment study. The health assessment covers all parishes in the state representing the core service area for Shriners Hospitals for Children – Shreveport. The resulting report is based on information garnered from surveys of Shriners Hospitals for Children-Shreveport board members, state public health officials, and community health care providers. In addition, local government and health systems data was reviewed and utilized to prepare this report. The assessment included two distinct phases: review of published/secondary data and primary data collection that was intended to define behavioral, attitudinal and social determinants of health status of the community’s pediatric population from the perspective of the community’s primary care physicians, care managers, public health officials, board members and patients/families. Methods of data collection included both random sampling of health care providers and participants selected through community outreach targeting primary care physicians currently serving Shriners Hospitals for Children – Shreveport patients. Additionally, primary data collection included data mined from patient/family satisfaction surveys and responses from focus group members.

The Steering Committee identified four key indicators that became the focus of the assessment, based upon their prevalence and relevance to the pediatric health status in this region. They were:

- Availability of specialty care
- Quality and availability of satellite, screening, and/or telemedicine clinics
- Availability of and need for outpatient rehab services
- Availability of healthy lifestyle education for the pediatric communities we serve

The primary goals of the community outreach strategy were to:

- Reach underserved and under-represented pediatric populations with orthopedic needs;
- Reach a cross-section of primary care providers;
- Initiate and strengthen relationships with community leaders, primary care physicians and organizations;
- Set the stage for greater collaboration and collective action at all levels of the community in improving the health status of the pediatric communities we serve.

## Key Findings

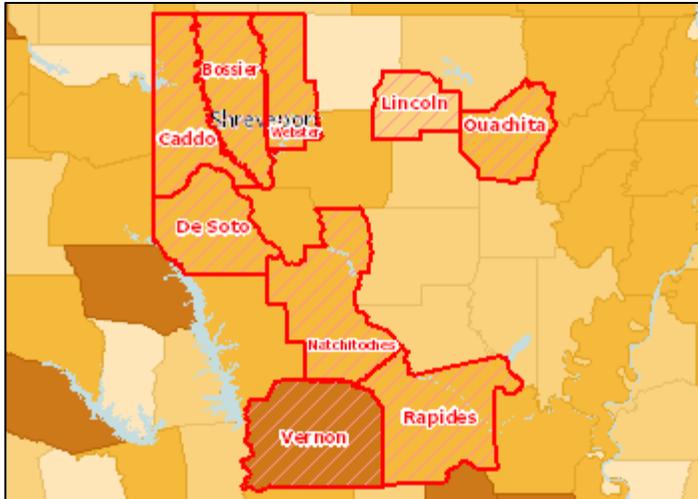
### Published/Secondary Data Findings

#### Regional Demographics and Economic Statistics

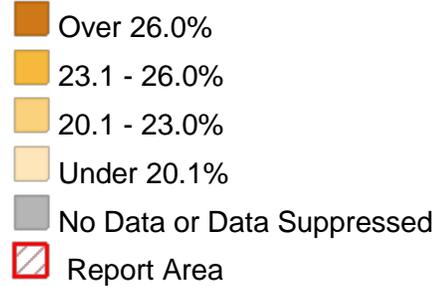
Residents of Shreveport, Bossier City and the entire state of Louisiana benefit both directly and indirectly from the medical expertise of Shriners Hospital for Children – Shreveport. The facility primarily serves a nine-parish region in the northwest corner of the state – Caddo, Bossier, DeSoto, Lincoln, Natchitoches, Ouachita, Rapides, Vernon, and Webster. The total population for this nine-parish region was estimated for the years 2010-2014 at approximately 872,235 according to the U.S. Census Bureau American Community Survey 2010-2014. The pediatric population (ages 0-17) was estimated for this same region to be about 216,923 (24.87% of the total population).

Report Area	Total Population	Population Age 0-17	% Population Age 0-17
Report Area	872,235	216,923	24.87%
Bossier Parish, LA	121,918	30,996	25.42%
Caddo Parish, LA	255,529	62,491	24.46%
De Soto Parish, LA	26,968	6,604	24.49%
Lincoln Parish, LA	47,243	9,589	20.3%
Natchitoches Parish, LA	39,359	9,464	24.05%
Ouachita Parish, LA	155,285	40,194	25.88%
Rapides Parish, LA	132,199	33,658	25.46%
Vernon Parish, LA	52,844	14,384	27.22%
Webster Parish, LA	40,890	9,543	23.34%
Louisiana	4,601,049	1,115,611	24.25%
United States	314,107,072	73,777,656	23.49%

Data Source: US Census Bureau, American Community Survey. 2010-2014. Source geography: Tract



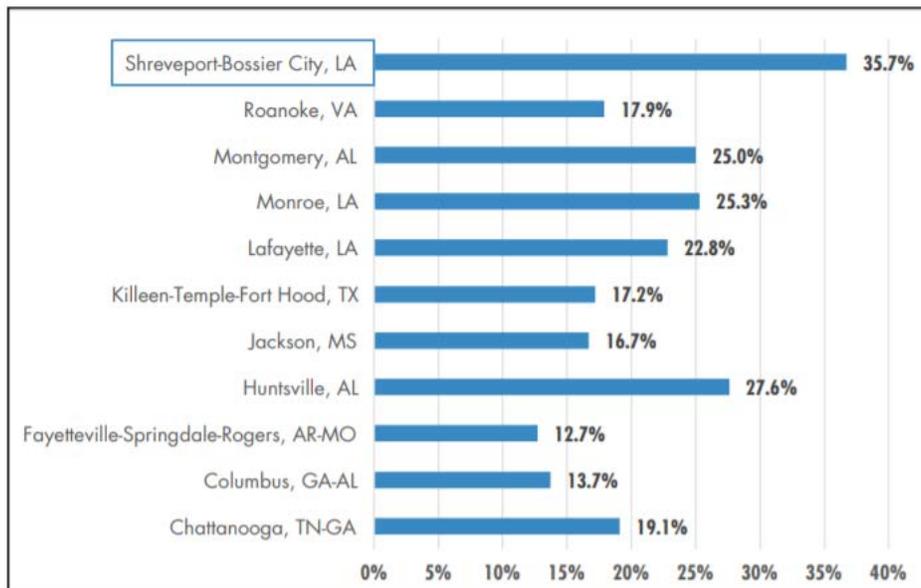
**Population Age 0-17, Percent by County, ACS 2010-2014**



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

The Shreveport-Bossier Metropolitan Statistical Area (MSA), which includes Bossier, Caddo, De Soto, and Webster parishes, has the highest rate of poverty (35.7%) for families with children under 5 years of age. Children living in poverty are at a greater risk of poor academic performance, dropping out of school, abuse and neglect, behavioral or physical problems, and developmental delays. Statistically, this can result in lower long-term prospects in terms of overall educational attainment, earnings, and health. These factors can lead to a continuing cycle of poverty. Poverty limits opportunities for quality housing, healthy food, living wage jobs, and valuable education.

### Poverty Rate for Families with Children Under 5 Years Old, 2016



Source: U.S. Census Bureau, 2016 American Community Survey 1-Year Estimates at <http://factfinder2.census.gov>

Secondary Data Demographics

According to IBM Market Expert 2018, the total population of the nine-parish region was approximately 867,646 with a pediatric population (ages 0-17) of 211,927 (24.4%). Of the total population, 56.1% were white Non-Hispanic; 36.2% were black Non-Hispanic; 3.9% were Hispanic; 1.4% were Asian and Pacific Island Non-Hispanic, and 2.4% includes others. The household income for the majority of the population, 24.5% is \$25-50K, and the household income for 17.5% of the population in the nine-parish region are below \$15K. Only 34.0% of the total population has a high school diploma, while another 29.0% have some college education or an associate degree.

The data presented in the tables below includes 2018 demographic data for the nine-parish region in Louisiana for which this Community Health Needs Assessment focuses: Bossier, Caddo, De Soto, Lincoln, Natchitoches, Ouachita, Rapides, Vernon and Webster.

Table 1: Population Distribution by Age

POPULATION DISTRIBUTION					
Age Distribution					
Age Group	2018	% of Total	2023	% of Total	USA 2018 % of Total
0-14	177,095	20.4%	177,135	20.3%	18.7%
15-17	34,832	4.0%	35,833	4.1%	3.9%
18-24	91,921	10.6%	91,024	10.4%	9.7%
25-34	119,508	13.8%	114,210	13.1%	13.4%
35-54	205,190	23.6%	206,133	23.6%	25.5%
55-64	105,269	12.1%	99,782	11.4%	12.9%
65+	133,831	15.4%	150,087	17.2%	15.9%
<b>Total</b>	<b>867,646</b>	<b>100.0%</b>	<b>874,204</b>	<b>100.0%</b>	<b>100.0%</b>

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Table 2: Race/Ethnicity Distribution

RACE/ETHNICITY			
Race/Ethnicity Distribution			
Race/Ethnicity	2018 Pop	% of Total	USA % of Total
White Non-Hispanic	487,126	56.1%	60.4%
Black Non-Hispanic	313,910	36.2%	12.4%
Hispanic	33,966	3.9%	18.2%
Asian & Pacific Is. Non-Hispanic	11,843	1.4%	5.8%
All Others	20,801	2.4%	3.2%
<b>Total</b>	<b>867,646</b>	<b>100.0%</b>	<b>100.0%</b>

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Table 3: Household Income Distribution

HOUSEHOLD INCOME DISTRIBUTION				
Income Distribution				
2018 Household Income	HH Count	% of Total	USA	
			% of Total	
<\$15K	59,801	17.5%	10.9%	
\$15-25K	42,713	12.5%	9.5%	
\$25-50K	83,731	24.5%	22.1%	
\$50-75K	54,824	16.0%	17.1%	
\$75-100K	36,204	10.6%	12.3%	
Over \$100K	64,541	18.9%	28.2%	
<b>Total</b>	<b>341,814</b>	<b>100.0%</b>	<b>100.0%</b>	

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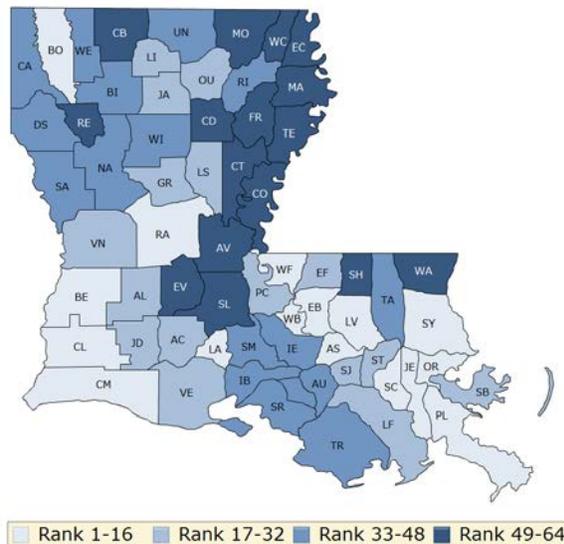
Table 4: Education Level Distribution

EDUCATION LEVEL				
Education Level Distribution				
2018 Adult Education Level	Pop Age 25+	% of Total	USA	
			% of Total	
Less than High School	22,267	3.9%	5.6%	
Some High School	57,565	10.2%	7.4%	
High School Degree	191,584	34.0%	27.6%	
Some College/Assoc. Degree	163,683	29.0%	29.1%	
Bachelor's Degree or Greater	128,699	22.8%	30.3%	
<b>Total</b>	<b>563,798</b>	<b>100.0%</b>	<b>100.0%</b>	

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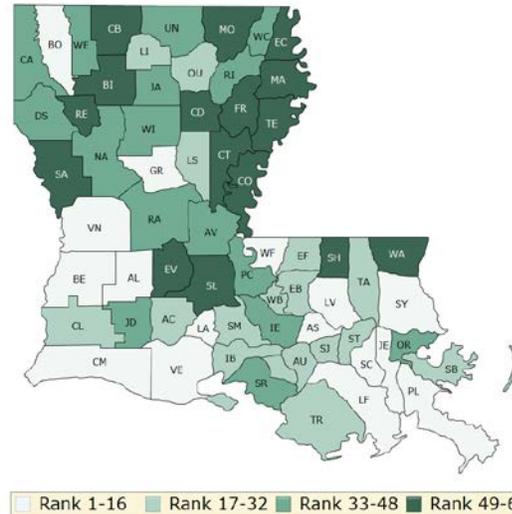
According to the 2018 Louisiana County Health Rankings summary report of parish health factors that are based on weighted scores measures for health behaviors, clinical care, social and economic factors, and the physical environment, the northwest Louisiana parishes ranked as follows out of 64 parishes:

- Caddo – 33<sup>rd</sup>
- Bossier – 6<sup>th</sup>
- De Soto – 44<sup>th</sup>
- Lincoln – 24<sup>th</sup>
- Natchitoches – 39<sup>th</sup>
- Ouachita – 32<sup>nd</sup>
- Rapides – 14<sup>th</sup>
- Vernon – 18<sup>th</sup>
- Webster – 47<sup>th</sup>



According to the 2018 Louisiana County Health Rankings summary report of parish health outcomes, which are based on an equal weighting of length and quality of life, the northwest Louisiana parishes ranked as follows out of 64 parishes:

- Caddo – 48<sup>th</sup>
- Bossier – 5<sup>th</sup>
- De Soto – 34<sup>th</sup>
- Lincoln – 17<sup>th</sup>
- Natchitoches – 41<sup>st</sup>
- Ouachita – 29<sup>th</sup>
- Rapides – 36<sup>th</sup>
- Vernon – 10<sup>th</sup>
- Webster – 45<sup>th</sup>



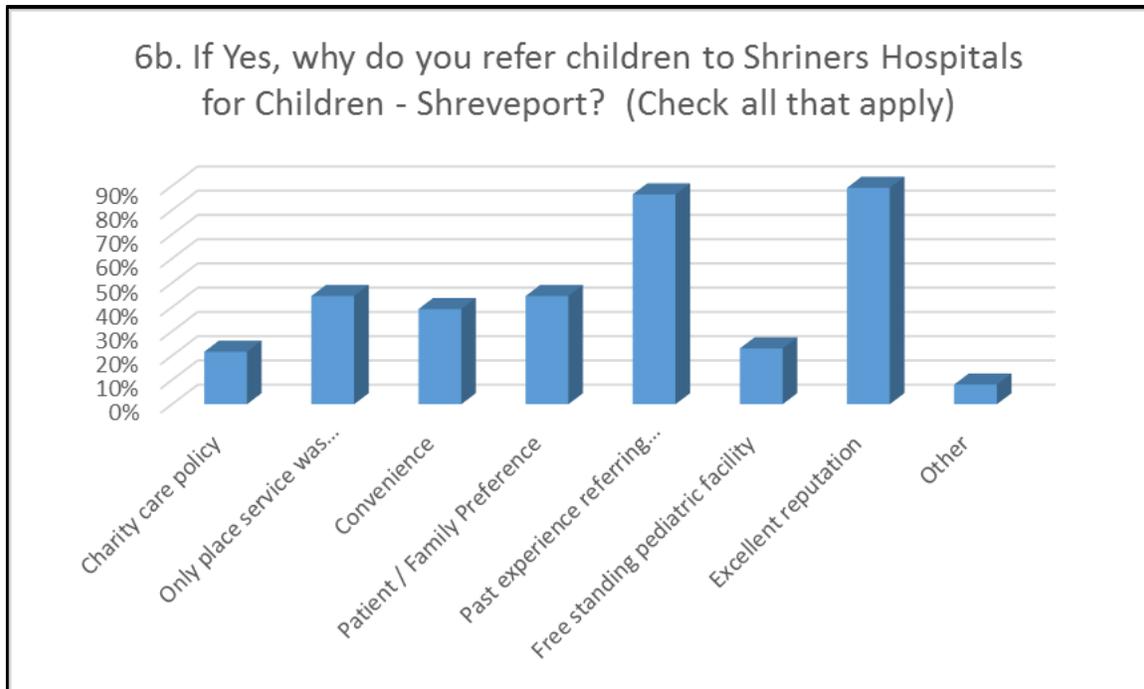
Considering these rankings, our hospital has the opportunity to positively impact the health outcomes of not only this 9-parish region but also the entire pediatric population of Louisiana through the expertise and resources our local hospital offers as well as through screening clinics, satellite clinics, and telemedicine technology reaching urban, suburban and rural areas in Louisiana and throughout our six state catchment area.

## Primary Data Findings

### Top 5 Key Survey Findings

1. Primary care physician (PCP) survey respondents indicated that 97% had referred patients to Shriners Hospitals for Children – Shreveport (SHC-S). Of that number, 89% did so because of the hospital’s excellent reputation and 86% because of their past experiences with the hospital. In addition, 45% reported they referred to SHC-S because it was the only place where services were available, 45% cited patient / family preference, and 39% reported convenience as a determinant.





2. Seventy-one percent of the physician survey respondents and 100 percent of the care manager survey respondents provided input regarding availability of pediatric services and made specific recommendations of what services should be added to existing services. The physician group identified adding Satellite Clinics (56%) and expanding Outpatient Rehab Services (33%) as priority considerations. The care manager group identified adding Satellite Clinics (75%) and expanding Outpatient Rehab Services (25%) and as priority considerations. Press Ganey Satisfaction Surveys and Board Member Surveys have also indicated growth in these areas as a need for our community.
  
3. When asked, “what concerns you most about pediatric health care in Louisiana”, 39% of the physicians surveyed identified proximity to pediatric healthcare services and providers as a concern. As identified above, only 39% of the physicians surveyed cited convenience as a determinant in referral to SHC-S, possibly indicating that distance from the hospital is a concern. This concern was also voiced above in the recommendations for the addition of satellite clinics, screening clinics, and increased use of telemedicine technology to increase numbers of patients seen and to decrease travel time and expense for temples providing transportation and lodging costs. Additionally, the burden on patients and families would be lessened. As one physician respondent reported when asked, what our hospital can do to improve the health and quality of life in your community: “It would be great to have a pediatric clinic here at least one day a month for the children who can’t travel or parents have no transportation.” Erin

White RN from the Claiborne Parish Health Unit identified that our hospital needs to “offer some of the services locally.”

What concerns you most about pediatric health care in Louisiana?	Response Count	Response Percent
Cost	11	15%
No Insurance	13	18%
Lack of specialist	47	65%
Proximity to pediatric healthcare services and providers	28	39%
Unhealthy lifestyle habits	28	39%
Other	9	13%

- As seen above, 65% of the physician survey respondents cited “lack of specialist” as what concerns them most about pediatric health care in Louisiana. Physician recruitment has been a major concern for this group since the community of pediatric orthopedic specialists is limited nationwide. Other specialists identified as a concern in the community included endocrinologists, pediatric general surgeons, and neurologists, which are employed by other hospitals and medical centers in the community. When asked what concerned him most about pediatric health care in Louisiana, Dr. David Holcombe, Louisiana Department of Health and Hospitals Region 6 Medical Director and Regional Administrator, responded “doctors (especially specialists) who accept Medicaid.”

Although we do not offer general pediatric services, our hospital offers orthopaedic and cleft lip palate services to pediatric patients with Medicaid. Analysis of Shriners Hospitals for Children – Shreveport utilization data for 2018 revealed a payer mix of 63% Medicaid Managed Care / Medicaid, 18%

Which specialists did your patients have difficulties or delays getting services? (Check all that apply)	Response Count	Response Percent
Endocrinologist	29	51%
Gastroenterologist	3	5%
Geneticist	2	4%
Pediatric orthopedic surgeon	10	18%
Otolaryngologist	1	2%
Neurologist	6	11%
Physiatrist	2	5%
Plastic Surgeon	3	5%
Rheumatologist	4	7%
Dermatologist	2	4%
Urologist	1	2%
Pediatric Spine Surgeon	5	9%
Pediatric Oral Surgeon	2	4%
Hand Surgeon	3	5%
Pediatric General Surgeon	7	12%
Other	4	7%

Private Insurance / Other, and 19% Uninsured/Charity. Here again, accepting

and acting upon the opportunity to reach this underserved pediatric population is a priority goal and our mission.

5. Board Member, Physician, and Public Health Official survey respondents expressed the importance of community education and research in providing the needed specialty services for our pediatric patient population. When asked, “what can our hospital do to improve the health and quality of life in your community,” some of the responses included education on childhood obesity, proper posture, and healthy lifestyles & habits.

## Action Plan

### 2016 Action Plan

Goal 1 –Continue to improve access to care by providing treatment for acute orthopedic conditions and by offering orthopedic day camps.

Goal 2 –Improve access to care by adding specialists and services to existing personnel and services.

Goal 3 – Improve access to care by adding satellite clinics and increasing the number of screening clinics and telemedicine locations.

Goal 4 – Continue to seek education and research opportunities to improve the health status of our pediatric orthopedic population by actively pursuing alternative funding sources.

### 2016 Action Plan Results

Goal 1 –Continue to improve access to care by providing treatment for acute orthopedic conditions and by offering orthopedic day camps.

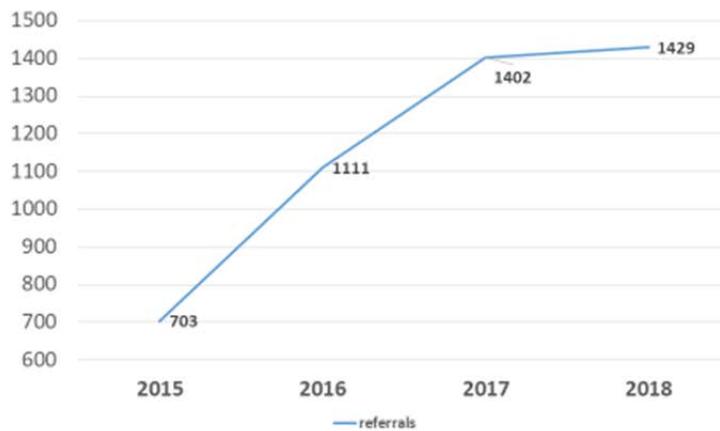
Research of pediatric population needs revealed a significant need in the treatment of acute fractures. It was noted from a national survey conducted in 2006 that “92% of orthopedic offices agreed to see children with private insurance, but only 38% would take a child on Medicaid”. The survey went on to say that those numbers have dropped to 82% and 24% respectively which means that a staggering number of children on Medicaid will not be seen by orthopedic offices. So access to care for these children is a huge issue. SHC – Shreveport initiated a fracture management program in 2015. The addition of fracture care further demonstrates the commitment of our hospital to the pediatric community of Louisiana. Within the first two months of the program in the spring of 2015, SHC-S realized an increase in fracture referrals from 17 to 64 (276% increase). Analysis of the Payer Mix for the patients with fractures from March 2015 – December 2015 revealed that 69% had Medicaid and 24% commercial insurance. Less than one year into the program, SHC-S saw 110 patients with fractures in one month demonstrating a 547% increase from the baseline of 17. The drastic growth of the program in such a short amount of time confirms that acute fracture management was

an unmet need in our community. Continued growth was noted in 2017 with 1,402 fracture referrals and in 2018 with 1,429 referrals. Analysis of the Payer Mix for the patients with fractures in 2018 revealed that 63% had Medicaid, 28% commercial insurance, 8% had Tricare, and 1% were uninsured.

### Fracture Referral Trend

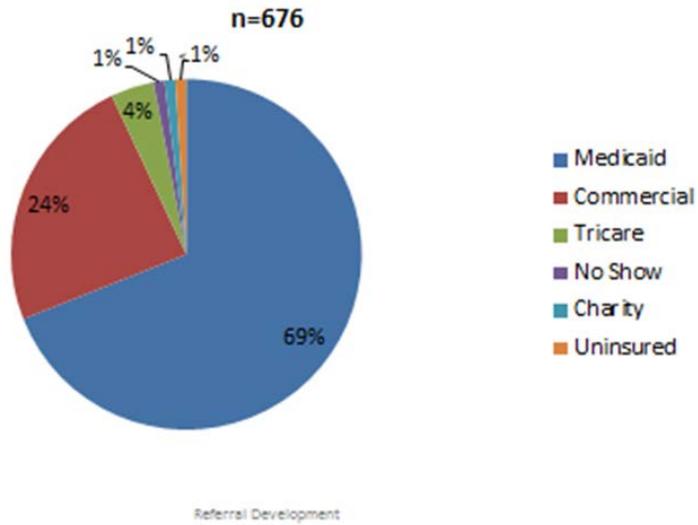


### Fracture/Injury Referral Trend, 2015-2018



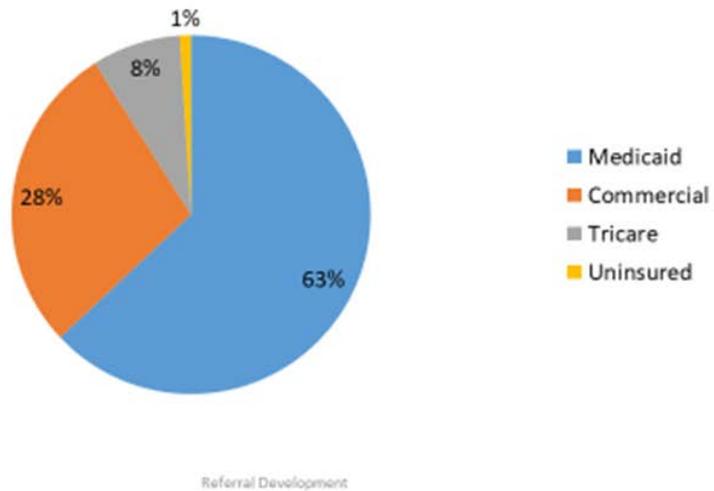
### Fracture Payer Mix

March-December 2015



### Fracture/Injury Payer Mix 2018

n= 1429



Shriners Hospitals for Children-Shreveport developed and hosted a Spinability Camp each June from 2015-2017. The Spinability Camps lasted for five days and were a retreat specifically for children with spina bifida or lower extremity paraplegia. The camps included educational, recreational and sporting opportunities offering a challenging and rewarding experience for kids.

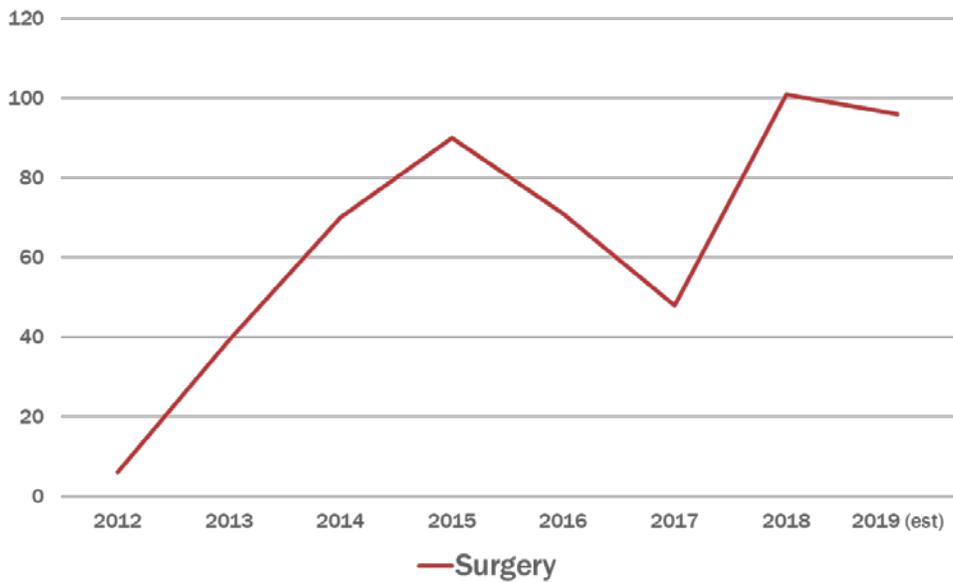


**Goal 2 –Improve access to care by adding specialists and services to existing personnel and services.**

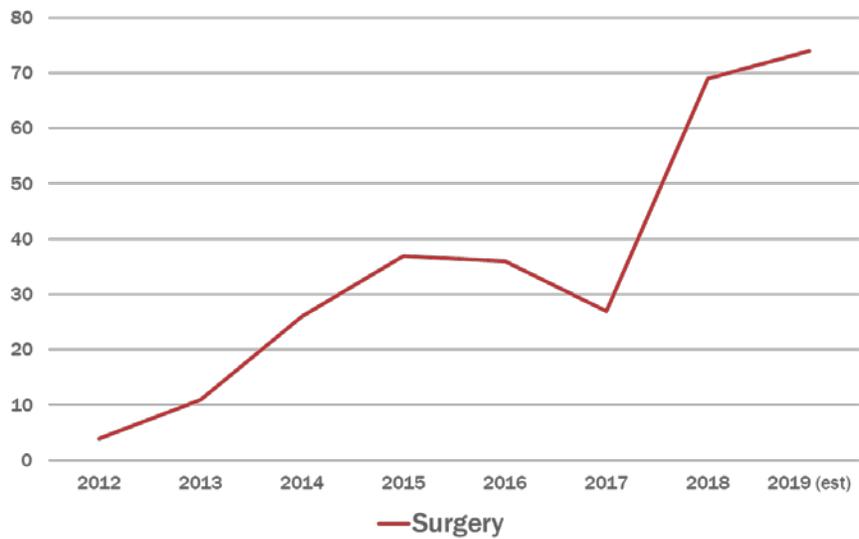
One of the recommendations related to access to care is the addition of specialists through physician recruitment and the addition of other service lines. In 2012, we had two full time surgeons and one part time surgeon on staff. Currently, we have two full-time surgeons and six part-time surgeons on staff. In addition, we are currently conducting a search and interviewing for a third full-time pediatric orthopaedic surgeon. We recently hired an additional anesthesiologist to meet the current demands in Surgery and allow for continued expansion of services. In 2014, we expanded our Sports Medicine program which filled a need within our pediatric community in light of the fact that sports injuries are on the rise. The American Academy of Pediatrics estimates that more than 3.5 million children ages fourteen and under get hurt annually playing sports or participating in recreational activities. Additionally, sports and recreational activities contribute to approximately 21 percent of all traumatic brain injuries among American children with some of those injuries resulting in cerebral palsy, one of the primary conditions treated by SHC – Shreveport. Specialists in the fields of neurology, rheumatology, genetics, urology, cerebral palsy, scoliosis, hand abnormalities and cleft lip/palate will continue to provide needed specialty care. The

cleft lip/palate service line was initiated at Shriners Hospitals for Children- Shreveport in late 2012. Sixty-seven cleft lip/palate surgeries were performed in 2014 and eighty-nine were performed in 2015, demonstrating growth of 33% in one year. In 2018, ninety-nine cleft lip/palate surgeries were performed demonstrating continued growth.

### Cleft Lip and Palate Productivity 2012-Current



### Sports Medicine Productivity 2012-Current



### Goal 3 – Improve access to care by adding satellite clinics and increasing the number of screening clinics and telemedicine locations.

We have performed several scoliosis screening clinics over the past two years in the community including First Baptist Church School, Southfield School, and the YMCA-Shreveport. In addition, we performed a general orthopaedic screening clinic in Tyler, Texas. Our hospital has been contracted by the State of Louisiana to provide pediatric orthopaedic examinations for children in Northeast Louisiana secondary to a lack of specialists in that region. We currently perform telemedicine services for patients in Oklahoma. In addition, we are currently performing telemedicine with other Shriner Hospitals.

### Goal 4 – Continue to seek education and research opportunities to improve the health status of our pediatric orthopedic population by actively pursuing alternative funding sources.

We have demonstrated a commitment to educating members of our community. In 2017 and 2018, we presented the following educational presentations:

<b>Month / Year</b>	<b>Presenter</b>	<b>Topic</b>	<b>Audience</b>
January 2017	Jamie Shaw, RD	Pediatric Orthopaedic Conditions	Melanie Massey PT Staff
March 2017	Holley Furrow, PT	Pediatric Orthopaedic Conditions	Bossier Parish Community College PTA Program
May 2017	Dr. Claire Beimesch	Pediatric Fractures	Vivian Emergency Dept.
August 2017	Dr. Janay McKie	Pediatric Fractures	East TX Pediatric Clinic
October 2017	Holley Furrow, PT	Basics of Pediatric Orthotics	LSU Health Sciences Center-School of Allied Health, Physical Therapy
October 2017	Dr. Janay McKie	Orthopaedic Newborn Exam	Willis Knighton Health System Pediatric Conference
November 2017	Tommie Hazen, CCLS, CIMT	Children Need More Than Medicine	SHC Pediatric Nursing Conference
January 2018	Jamie Shaw, RD	Pediatric Orthopaedic Conditions	Bossier School Nurses

March 2018	Holley Furrow, PT	Pediatric Orthopaedic Conditions	Bossier Parish Community College PTA program
October 2018	Dr. Janay McKie	Pediatric Orthopaedic Review	LSUHSC Orthopaedic Residents
October 2018	Holley Furrow, PT	Basics of Pediatric Orthotics	LSU Health Sciences Center-School of Allied Health, Physical Therapy
November 2018	Jennifer Woerner DMD, MD, FACS	Improving Facial Aesthetics with Jaw Surgery	SHC Pediatric Nursing Conference
November 2018	Joseph Gomez, CO	Pediatric Orthotics and Prosthetics	SHC Pediatric Nursing Conference
December 2018	Dr. Cary Mielke	Advanced Technology at Shriners Hospitals for Children-Shreveport	NWLA Pediatric Society

Shriners Hospitals for Children-Shreveport was committed to multiple research studies in 2017 and 2018. Research protocols focused on outcomes involving upper extremity cerebral palsy, limb deficiency, fractures and spinal conditions. Studies included:

1. The Role of Overweight and Obesity as an Independent Risk Factor for Decreased Orthotic Effectiveness in Patients with Adolescent Idiopathic Scoliosis (AIS)
2. Temperature Effect on Pediatric Distal Radius Fractures
3. Long Term Follow Up of Surgical Intervention for Upper Extremity Cerebral Palsy (UECP)
4. Multi-site Assessment of the Effectiveness of the Early Knee Prosthetic Prescription Protocol for Young Children

### Written Comments on 2016 Community Health Needs Assessment

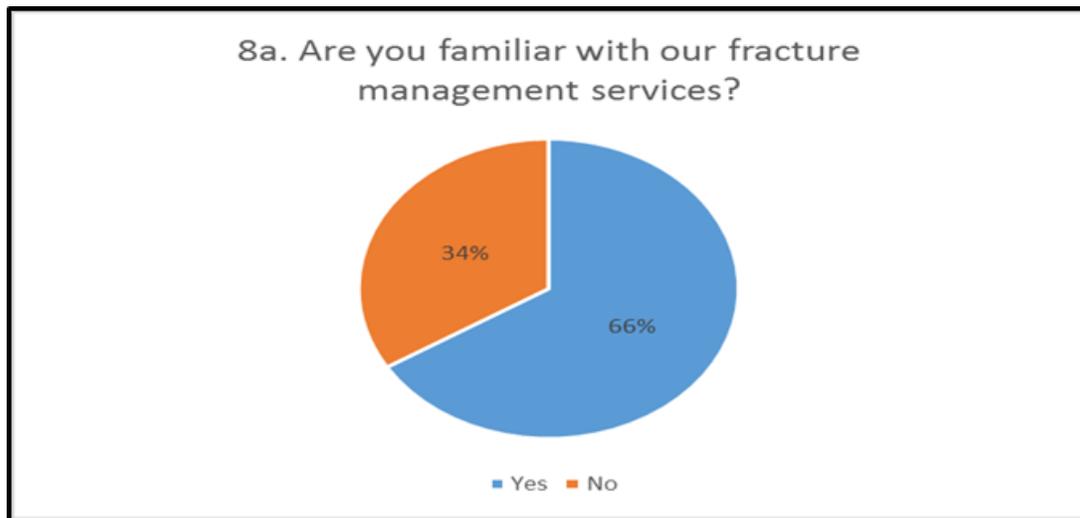
Shriners Hospitals for Children Community Health Needs Assessment and implementation was made widely available to the public on Shriners Hospitals for Children website at <https://www.shrinershospitalsforchildren.org/shc/chna>

In addition to posting the Community Health Needs Assessment, contact information including email were listed. One email was received on 10/21/2018 requesting an appointment for their child to see a dermatologist at our hospital. Parent was contacted and informed we did not have dermatology services at our hospital.

## 2018 Action Plan and Performance Measures

Goal 1 – Continue to improve access to care by providing treatment for acute orthopedic conditions.

Although great progress was made with meeting this need of our community, we feel there is still room for improvement. Our CHNA Physician Survey revealed that only 66% of the respondents were aware of our fracture management services; therefore, SHC-S plans to continue this as a goal for the next five years. In addition, we plan to expand our sports medicine services.



Goal 2 – Improve access to care by adding specialists and services to existing personnel and services.

In order to truly have an impact on the pediatric population of our community, we must continue to grow our services and thus increase the number of specialists and surgeons who will be able to address the health needs of our children. We are currently conducting a search and interviewing for a third full-time pediatric orthopaedic surgeon. We recently hired an additional anesthesiologist to start in August 2019 to meet the current demands in Surgery and allow for continued expansion of services.

For the next five years, we also plan to investigate the feasibility of expanding our outpatient therapy services secondary to expressed concerns on patient satisfaction surveys and physician and care manager surveys regarding long wait times, inability to get appointments with therapists, and facilities not accepting child's insurance.

<b>Are there pediatric health care services you would like Shriners Hospitals for Children – Shreveport to offer or expand?</b>	<b>Response Count</b>	<b>Response Percent</b>
Outpatient rehab services	18	33%
Inpatient rehab services	11	20%
Telemedicine	2	4%
Satellite Clinics	30	56%
Screening Clinics	3	6%
Scoliosis Clinic	9	17%
Other	9	17%

### Goal 3 – Improve access to care by adding satellite clinics and increasing the number of screening clinics and telemedicine locations.

The goal is to increase access points by adding new satellite clinics and increasing the number of screening clinics and telemedicine locations throughout Louisiana and the other five states from which we currently draw patients. We currently perform telemedicine services for patients in Oklahoma . We are in the final contracting stage for a satellite clinic in Texarkana, Texas, and are working on securing satellite and telemedicine clinic sites in Oklahoma, Mississippi, and Alabama.

A strategic planning group was commissioned to address this recommendation and to plan for opening other strategically-located telemedicine locations, screening clinics, and satellite clinics in Louisiana and in the other five states from which we currently draw patients. This group assesses resources needed, costs, timeline for implementation, and is tasked with contacting and determining the feasibility of such an undertaking.

### Goal 4 – Continue to seek education and research opportunities to improve the health status of our pediatric orthopedic population by actively pursuing alternative funding sources.

Our goal is to increase our community education activities over the next five years. Our community partners identified the need in the surveys we conducted for education in the areas of childhood obesity, proper posture, and healthy lifestyles & habits.

As stated in the introduction to this assessment, our mission includes “conducting research to discover new knowledge that improves the quality of care and quality of life of children and families”. It is through this commitment to education and research that we have been able to positively impact the lives of so many children with orthopedic conditions. Since it is our mission we will continue our pursuit of research opportunities

as we have done for the past 90 years. Evidence of this commitment is demonstrated by the following current studies:

1. The Role of Overweight and Obesity as an Independent Risk Factor for Decreased Orthotic Effectiveness in Patients with Adolescent Idiopathic Scoliosis (AIS)
2. Temperature Effect on Pediatric Distal Radius Fractures
3. Long Term Follow Up of Surgical Intervention for Upper Extremity Cerebral Palsy (UECP)

In addition, we are currently pursuing six additional research studies.

### Action Plan Summary

Achievement of Goals 1-4 will take place over a 5-year time line. The Community Health Needs Assessment Steering Committee will oversee the progress of the strategic planning group in the implementation of improvement strategies and measurement of progress towards the efforts taken. Periodic updates of progress will be provided to the Joint Conference Committee and the Board of Governors. Allocation of resources and funding of special projects within the course of implementation will be the responsibility of the Board of Governors.

## Conclusion

This community health needs assessment provides a framework to help our hospital better serve the pediatric patients of our community. It is a significant step towards mobilizing our hospital and our stakeholders to address barriers to improving the health and well-being of the children of our community. It also serves as a tool to collect data and measure progress in efforts taken to improve health outcomes over time. As a result of the outreach process during the primary data collection phase of the project, a group of primary care physicians and community leaders are now a part of a collaborative group whose primary purpose is to improve the health of this special pediatric population.

*2018 Community Health Needs Assessment Report Available Online or in Print*

The 2018 Community Health Needs Assessment is available at:

<https://www.shrinershospitalsforchildren.org/shc/chna>

5/10/19

Date adopted by authorized body of hospital

## References

Louisiana Hospital Association: Hospitals and the Louisiana Economy, 2018. Retrieved from: <https://cdn.ymaws.com/www.lhaonline.org/resource/resmgr/Reports/LHAEconImpactFinalReport2018.pdf>

U.S. Census Bureau, 2016 American Community Survey 1-Year Estimates at <http://factfinder2.census.gov>

US Census Bureau, American Community Survey. 2010-2014. Source geography: Tract

2018 Demographic Snapshot: SHC Shreveport Market Area. IBM Market Expert

University of Wisconsin Population Health Institute. *County Health Rankings 2018: Louisiana*

lobst C, et al. "National access to care for children with fractures" AAOS 2013; Abstract 411

*National Safe Kids Campaign*, American Academy of Pediatrics

*Cerebral Palsy Occurrence in the US*, Centers for Disease Control and Prevention

