



**Shriners Hospitals**  
for Children®

Shriners Hospitals for Children —  
Greenville

2019 Community Health Needs  
Assessment DRAFT

Prepared by: CHNA Advisory Committee

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## Shriners Hospitals for Children at a Glance

Shriners Hospitals for Children® (SHC) 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 — Greenville*

Shriners Hospitals for Children® — Greenville (SHC – Greenville) is a pediatric orthopaedic hospital on the campus of Greenville Memorial Hospital, a member of Prisma Health. In 1927, the hospital opened its door with the mission of treating children's orthopedic conditions related to polio. More than 90 years later, SHC – Greenville continues to care for children and adolescents diagnosed with orthopaedic conditions.

The hospital's medical staff includes board certified pediatric orthopaedic surgeons. The medical team is supported by residents, physician assistants, nurse practitioners, prosthetists, orthotists, therapists, nurses and consulting physicians, each of whom play an essential role in our multi-disciplinary approach to care. The hospital has an in-house pediatric prosthetics and orthotics provider, a motion analysis laboratory, a radiology department and a physical and occupational therapy department. All of these services are located under one roof in an effort to provide seamless, coordinated care.

## 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 SHC leadership.

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

SHC – Greenville's 2019 CHNA is intended to aid and identify the unmet health needs affecting members of our community with the goal of establishing an action plan to address those needs.

This assessment has three main purposes:

1. Engage community members to gain an enhanced understanding of the top health issues affecting members of our community.
2. Prioritize the top community health needs (CHNs) identified from the surveys, focus group sessions, and supporting secondary data.
3. Develop an action plan to serve as a guide when addressing the high priority health needs.

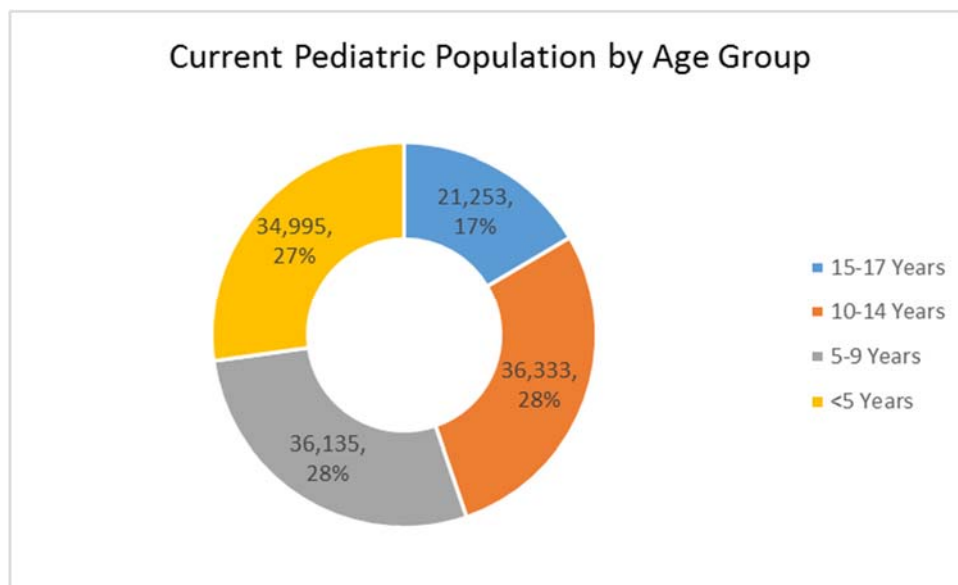
### Our Community

For the purposes of the 2019 Community Health Needs Assessment (CHNA), SHC – Greenville focused on Greenville County, South Carolina. The county has 13 zip codes, six cities and 16 census-designated places. It is the most populous county in South Carolina with an estimated population over just over 500,000 and represents the largest proportion of SHC – Greenville’s active patients. The county is home to the Greenville County School District, which is the largest school system in the state.

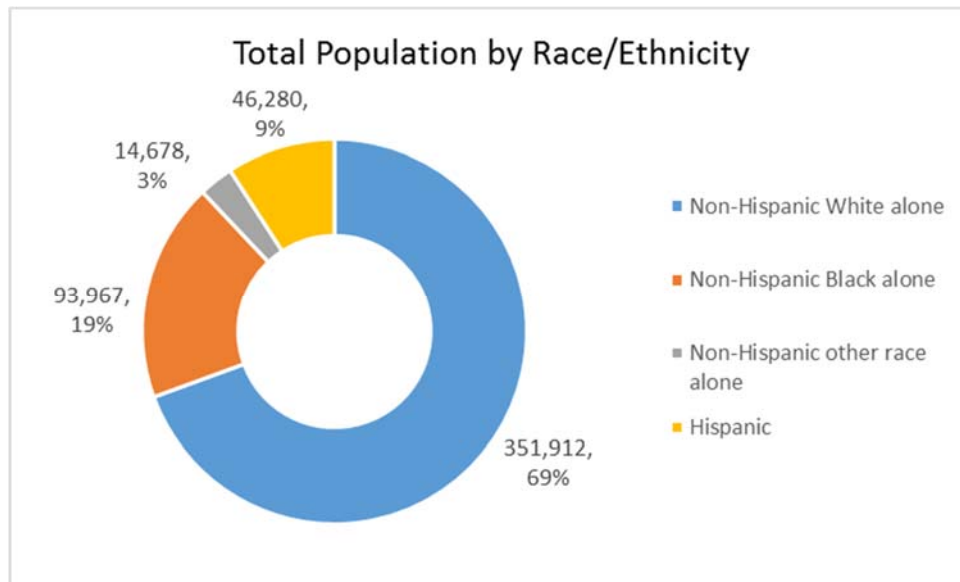


### Population and Demographics

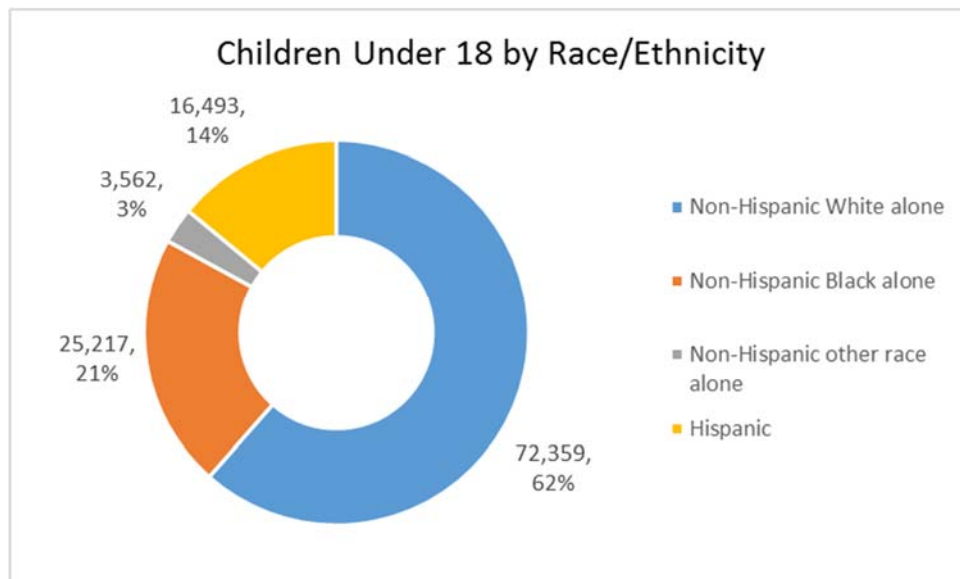
Information regarding the population and demographics for Greenville County are presented below. Current population demographics and changes in demographic composition over time play a defining role in the types of health and social services needed by communities.



The above figure shows the pediatric population percentage for age groups under 18 years of age. Currently, age groups 5-9 years old and 10-14 years old represent the largest portion of the pediatric population. The 2018 total estimated pediatric population for ages 0-17 in Greenville County was 128,716. This represents 23% of the total population.

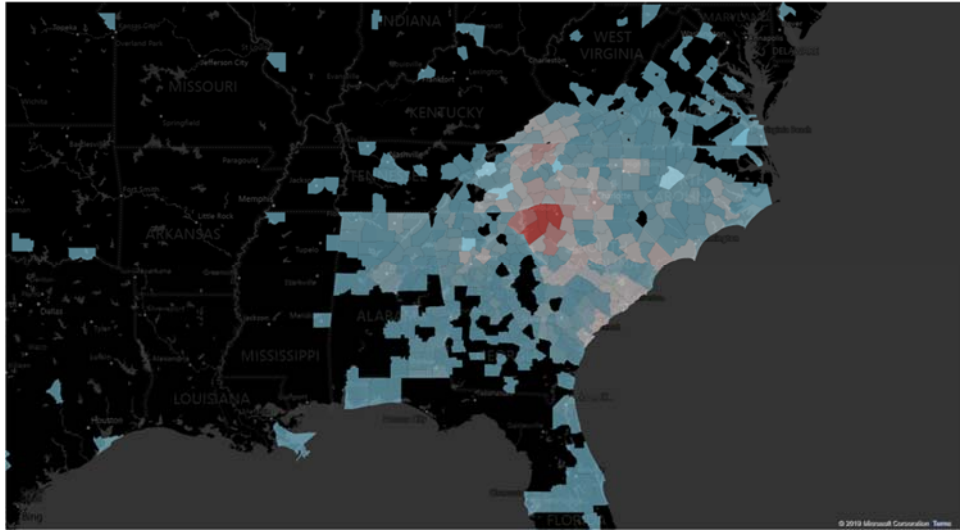


The 2017 total population for Greenville County is estimated at 506,837, and projected by race and ethnicity in the above figure. More than half of the population in Greenville County is reported as Non-Hispanic, white.

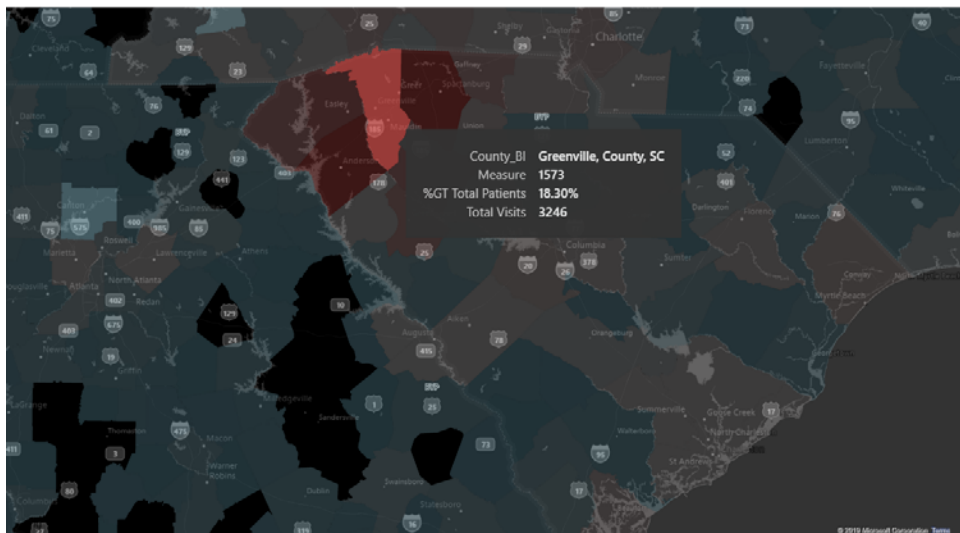


In 2017, the total children under the age of 18 Greenville County is estimated at 117,631. The majority of children under the age of 18 are reported as Non-Hispanic, white, which is consistent with the total population in the county.

## Active Patients

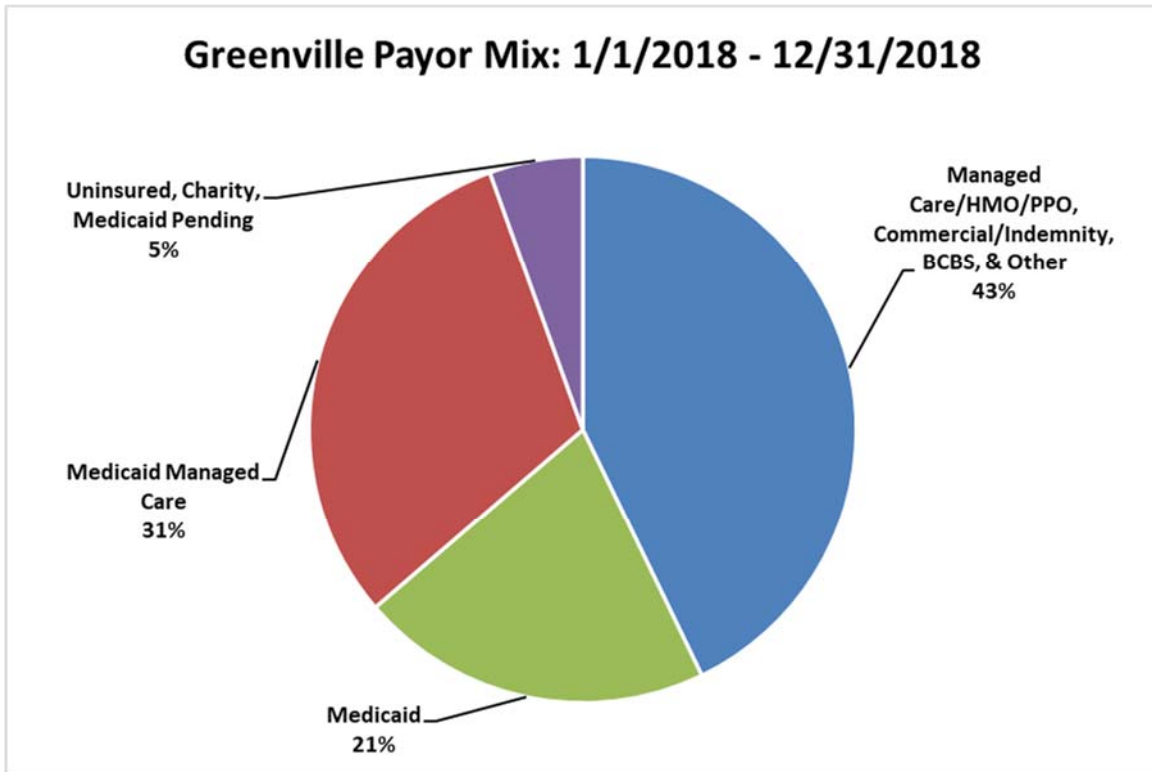


The above map represents the hospital’s 8,069 active patients by county in 2018. An active patient is defined as a patient that visited the hospital at least 1 time during the time period being measured. In addition to South Carolina, SHC – Greenville serves patients in the neighboring states of Virginia, North Carolina, Georgia, and Florida.



We had 1,573 active patients from Greenville County in 2018, which represents approximately 18% of all patients treated during that year. We receive nearly 50% of our patients from the 10 Upstate counties (Greenville, Spartanburg, Anderson, Oconee, Pickens, Laurens, Abbeville, Greenwood, Cherokee and Union).

### Payor Mix



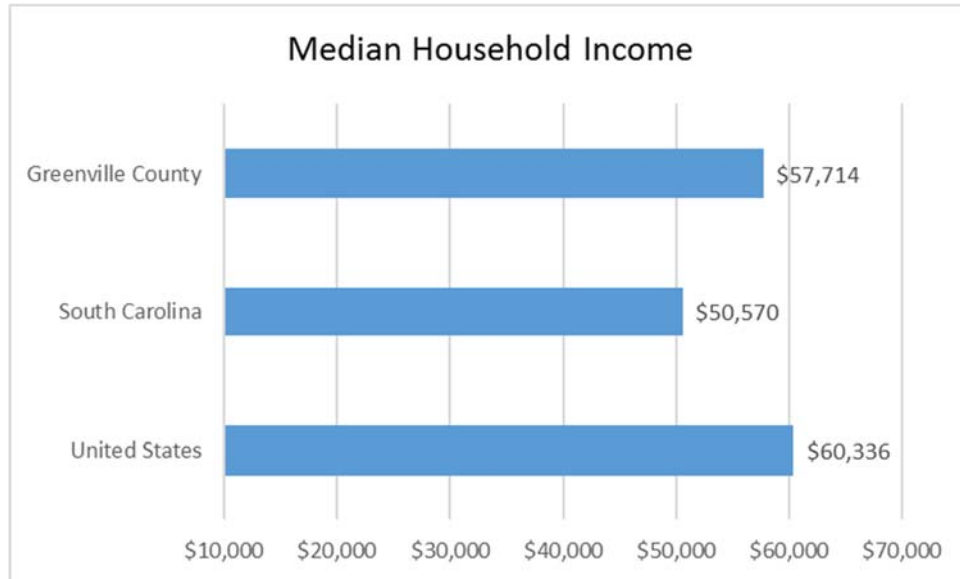
SHC - Greenville has seen minor shifting in their Payor mix over the past 3 years. SHC-Greenville has seen a slight increase in Commercial Health Plan members with a slight decline in Managed Medicaid patients while uninsured and state Medicaid patients remain flat. This is unlike the trend in the Shriners Hospitals for Children system, which has seen increases in Managed Medicaid patients, and decreases in state Medicaid members due to Medicaid reform throughout the country.

### Community Health Profile

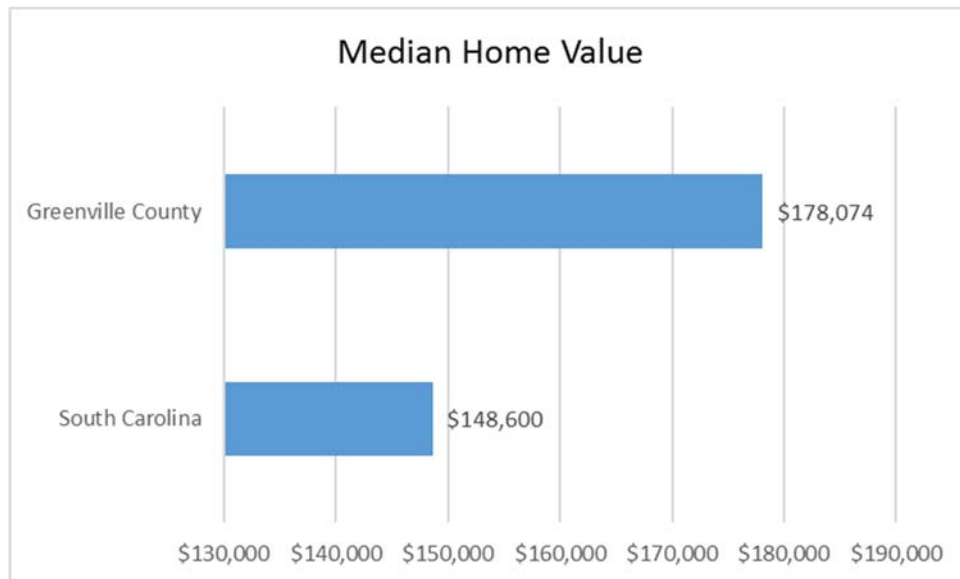
Social determinants of health are environmental conditions that impact access to health care. This section will cover some of the indicators that influence children’s access to healthcare in Greenville County.



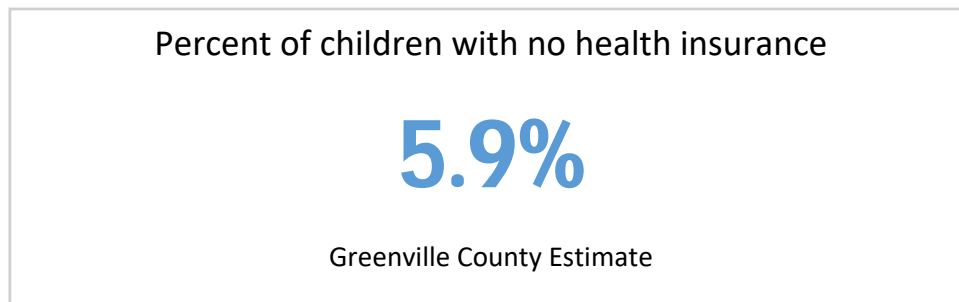
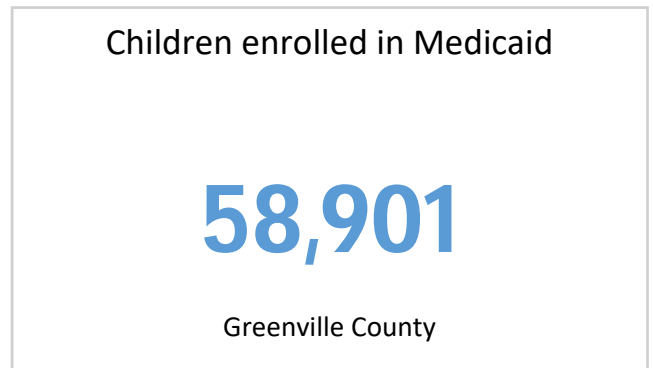
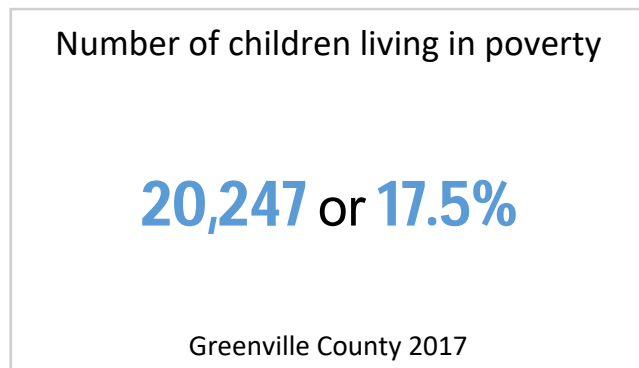
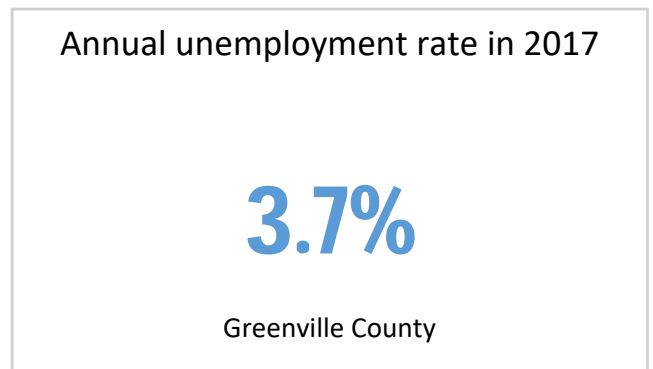
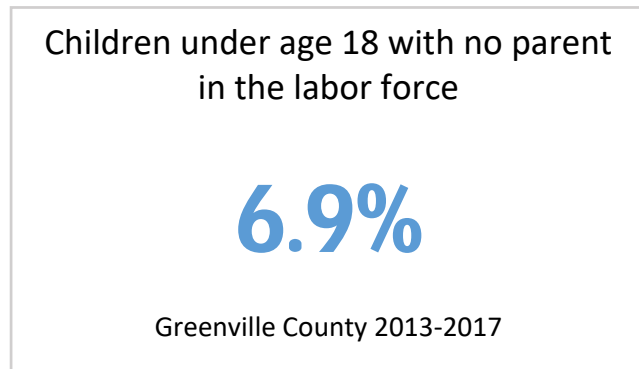
Economic Indicators



The median household income for Greenville County is \$57,714. This is higher than the state of South Carolina’s at \$50,570 but slightly lower than the national average of \$60,336.



Median home value is \$178,074 compared to \$148,600 for South Carolina.



In Greenville County, SC, 6.9% of children under the age of 18 have no parent in the labor force and approximately 17.5% of children are living in poverty. Acquiring health insurance could be difficult for these children and a lack of health insurance is a barrier to accessing healthcare. At SHC – Greenville, we accept all children who need healthcare regardless of ability to pay.

### Education Indicators

Cumulative percent of children failing grades 1, 2 or 3

**4.1%**

Greenville County 2016

Third graders testing below state standards in English

**49.5%**

Greenville County 2016

Eighth graders testing below state standards in math

**62.5%**

Greenville County 2016

Dropouts as a percentage of the total enrollment for grades 9-12

**2.8%**

Greenville County 2015-2016

The education indicators above are common milestones for children at different age levels reported by the Children’s Trust of South Carolina. When these milestones are not met..... (Source)

### Family and Community Indicators

Children living in single parent families

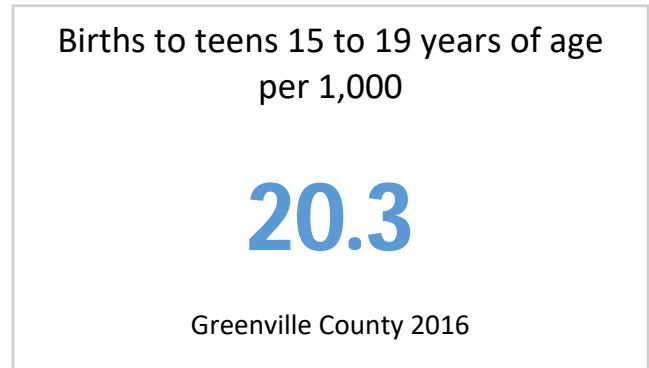
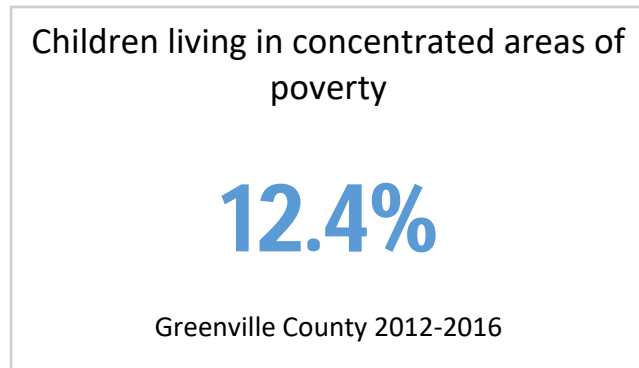
**32.8%**

Greenville County 2016

Families where householder lacks a high school diploma

**10.6%**

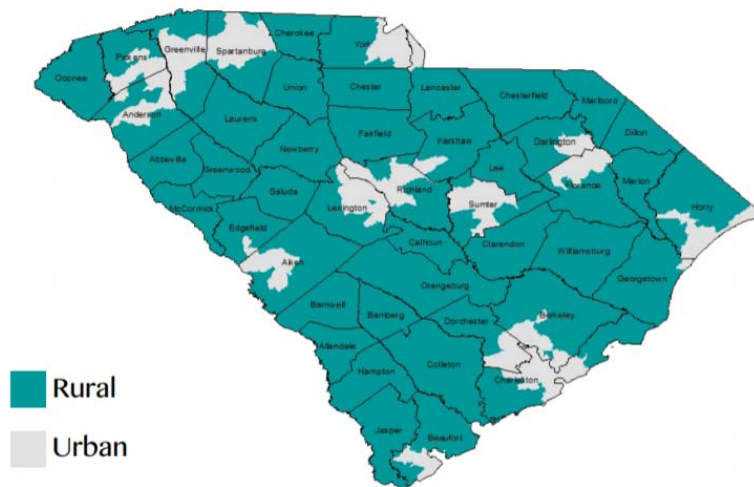
Greenville County 2012-2016



### Rural South Carolina

South Carolina is still largely a rural state. According to South Carolina’s Office of Rural Health, more than one million people call rural South Carolina home. That accounts for over 25% of the state’s population. To define a rural community, South Carolina used the United States Department of Agriculture’s 2010 Rural-Urban Commuting Area, or RUCA codes, utilized at both the Census tract and county level depending on the availability of the data.

**Rural Definition by Census Tract**



### Social Determinants of Health for Rural South Carolina

11% of South Carolina residents lack health insurance (Kaiser, 2017). According to the USDA Economic Research Service, the average per capita income for South Carolina residents in 2016 was \$39,517, although rural per capita income lagged at \$32,656. The ERS reports, based on 2017 ACS data, that the poverty rate in rural South Carolina is 22.3%, compared with 14.2% in urban areas of the state. 19.4% of the rural population has not completed high school, while 12.9% of the urban population lacks a high school diploma according to 2012-2016 ACS data reported by ERS. The unemployment rate in rural South Carolina is 5.4%, while in urban South Carolina, it is 4.1% (USDA-ERS, 2017).

## Process and Methods

The 2019 CHNA was performed with oversight by the CHNA Assessment Advisory Committee, which has representation from administration, performance improvement & risk management, patient care services, and home office analysts. Data was compiled and secondary data was reviewed to gain a better understanding of the health disparities associated with our community. SHC-Greenville partnered with Prisma Health (formerly Greenville Health System) on the primary data collection to effectively and thoroughly survey our community.

Partnering with Prisma afforded access to resources and expertise that does not exist in our specialty hospital. For example, Care Coordination Institute (CCI) provides services and solutions to meet the evolving needs of clinically integrated networks and accountable care organizations who are fully engaged in population health management. They have been instrumental in the design and formation of instrument selection and the methodology of data collection.

James Hardin, Ph.D. with the University of South Carolina provided Prisma with power calculations and sample sizes for each county they intended to survey. Prisma collected 1,607 surveys from Greenville County over a three month period (SHC-Greenville's focused population.)

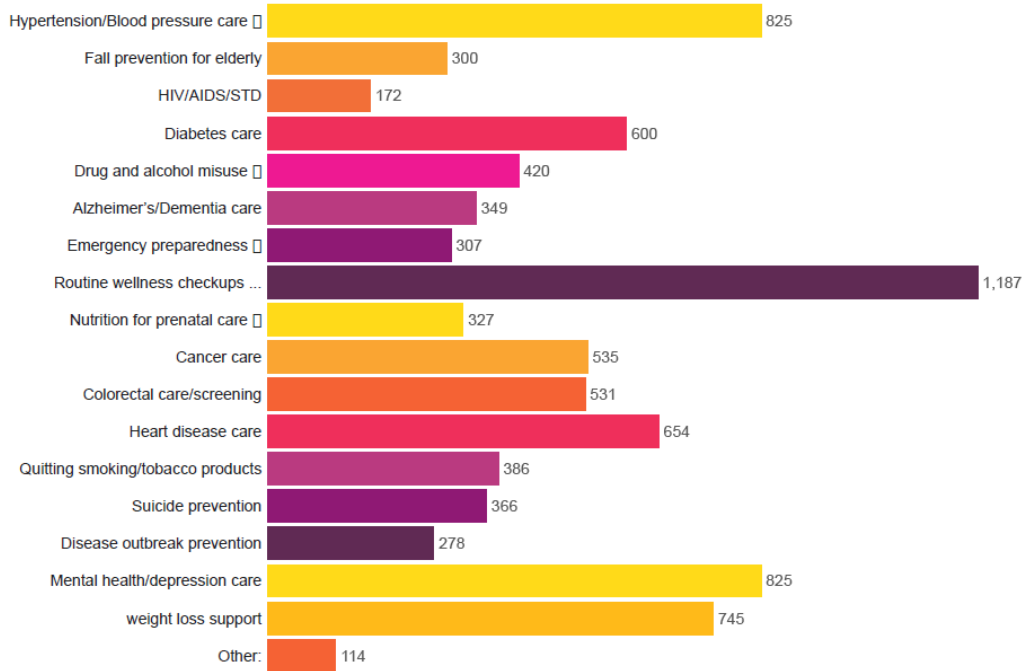
The survey provided to the community consisted of 34 questions that aimed to identify areas of need across the community as well as more detailed demographic information from survey respondents. Data was collected across eight counties in South Carolina. For purposes of this CHNA assessment, SHC- Greenville will only focus on the responses from Greenville. All primary data from the survey from all counties can be viewed in the Exhibits section at the end of this report. When this data is combined with secondary data, a comprehensive understanding of the unmet needs can be used to better understand the community SHC-Greenville serves.

## Key Findings

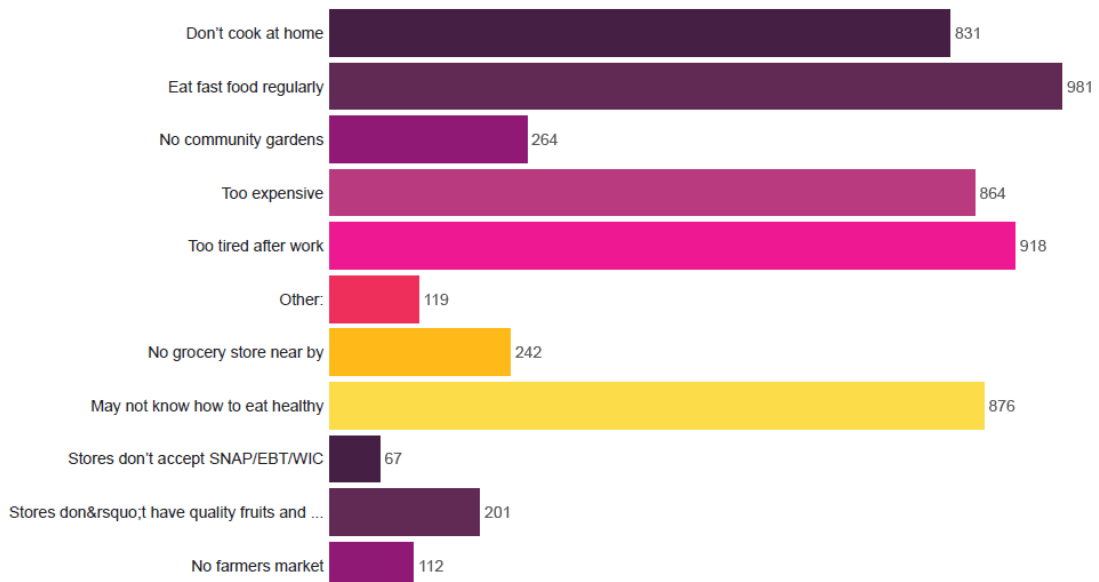
### *Primary Data*

Below you will find highlighted survey questions that enable SHC-Greenville to understand the unmet needs in our community so we can best address them as an organization. Not all questions from the survey are presented below. The complete survey results can be found within the Exhibits section.

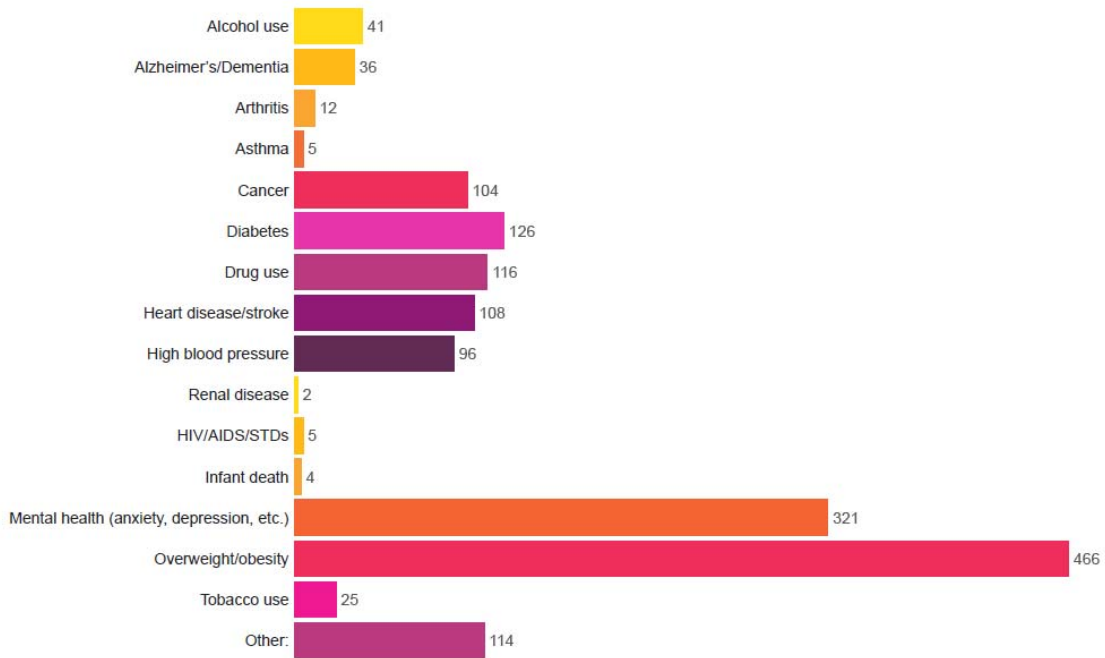
Q6 - What types of health services are most important to keep you healthy? Check all that apply



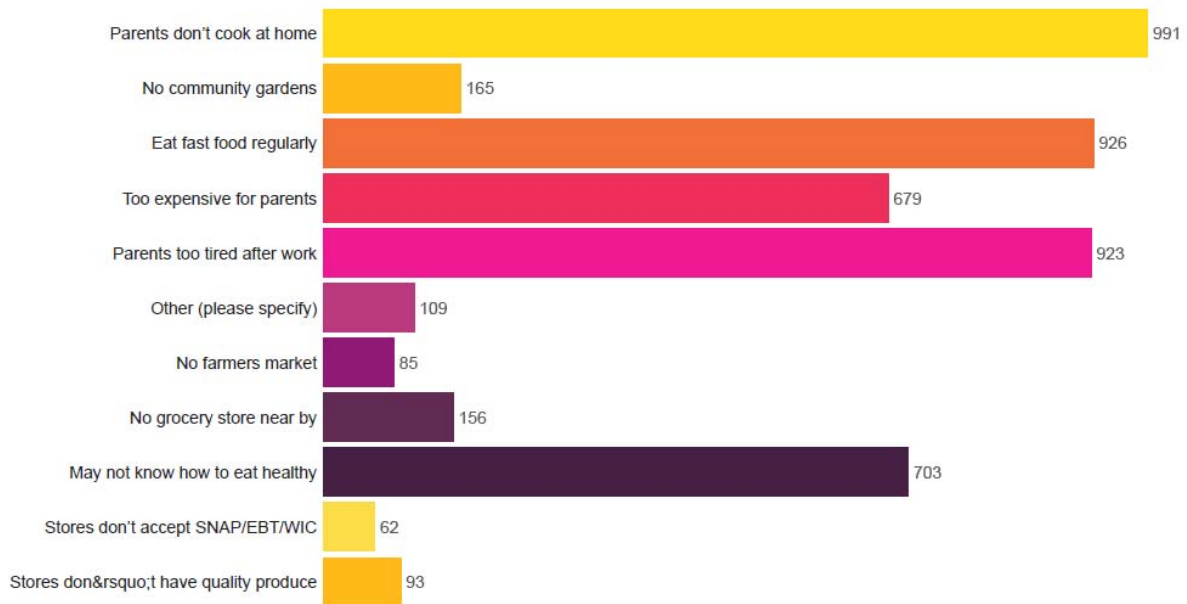
Q7 - Which of the following are reasons that prevent people in my community from eating healthy foods? Check all that apply



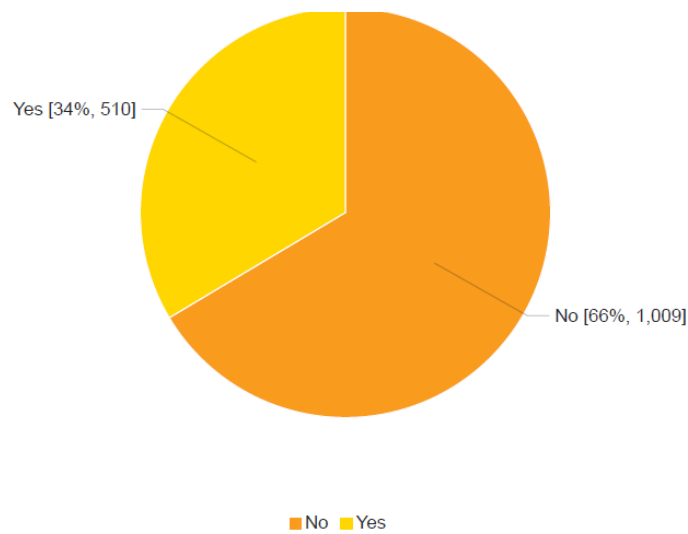
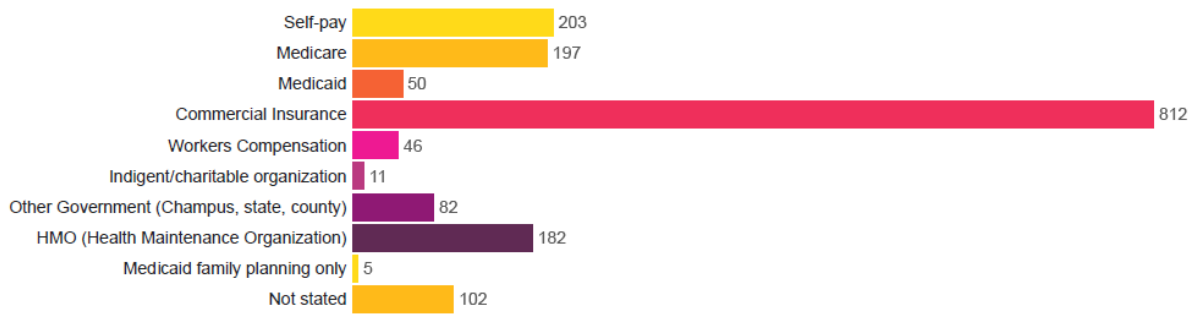
Q8 - What is the most important health concern in your community? Choose only one



Q15 - Which of the following are reasons that prevent children in your community from eating healthy foods? Check all that apply.

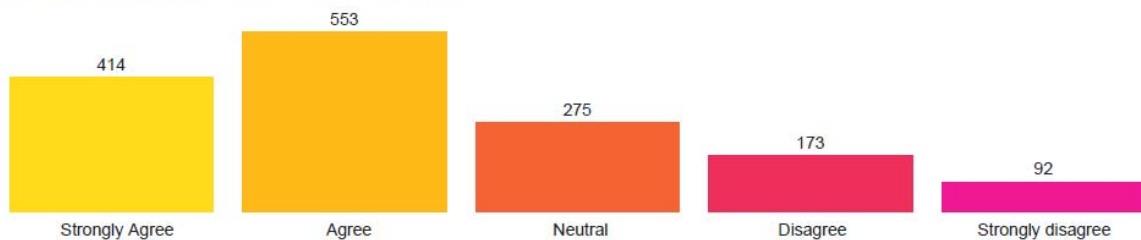


Q28 - I have the following types of health insurance. Check all that apply.



Q31 - Technology has made it easier to use computers, mobile phones, and tablets to safely talk face-to-face with your doctor without a visit to the office.

Please indicate if you would be OK talking face-to-face with your doctor using the internet. (video visits, online chat, other online options.)



Question 31 of the survey addresses the use of internet to interact with a physician. The majority of the respondents in Greenville County agree with talking to a physician using the internet. Shriners Hospital for Children has implemented a telehealth program system-wide with the goal to increase telehealth utilization in order to help meet the needs of our patients.



## Secondary Data

Regardless of the circumstances, all children should have equal access to healthcare. However, healthcare needs are often left unmet due to the social determinates of health such as poverty, food and housing insecurity, and language and geographic barriers. As a result, children's health outcomes suffer. In order to face these needs, it is necessary to look beyond the doctor's office and work collectively to identify areas of unmet need and proactively implement strategies to address them.

Over the last 15 years, the U.S. has seen unmet healthcare needs shift from acute care issues to chronic health conditions. It is estimated that 25% of children and adolescents in the United States are affected by chronic health conditions. Additionally, 7.5% of children have unmet healthcare needs. Among the top conditions includes Digestive Health (including diabetes and obesity), Autism and Developmental Disabilities, and Mental Health issues. Orthopedic care is no exception. Healthcare coverage can greatly determine a child's access to the orthopedic care they need.

Research shows that children insured by Medicaid have limited access to orthopedic care. In a nationwide sample, 88 of 230 offices that treat children would not see a child with Medicaid under any circumstances.<sup>10</sup>

One study in particular, performed in Cincinnati, OH concludes that children insured by Medicaid continue to have a problem accessing the orthopedic care they need. The results of this study highlight how 38 of 42 orthopedic surgery practices offered an appointment to a privately insured 14-year old ACL patient within 2 weeks while only six of 42 offered a Medicaid patient the same appointment.<sup>11</sup>

Another population of orthopedic patients who have limited access to orthopedic care are those living in rural areas. Access to care is often limited due to the scarcity of local practitioners. Only 30 percent of rural hospitals have a full-time orthopedic surgeon on staff. Often, patients must travel long distances for care, which can delay treatment and result in poorer outcomes and higher costs.

According to a new study from the University of Iowa, visiting consultant clinics (VCCs) staffed by orthopedic surgeons can improve patient outcomes by increasing access to orthopedic care. These outreach clinics give patients an opportunity to meet with doctors in-person and receive diagnostic services along with some outpatient procedures. Complex procedures however are typically referred back to the larger hospital where they have the appropriate resources to support them.

The lead study author and professor of marketing in the UI Tippie College of Business, Thomas Gruca said, "Orthopedic surgeons in Iowa have been involved in rural outreach for more than 25 years." He went on to say, "By traveling to 80 different sites every month, these physicians from Iowa and surrounding states reduced patient travel times and improved access to orthopedic care."<sup>12</sup>

## Prioritization of Identified Needs

Based on results from our literature review and the community survey, the CHNA Advisory Committee concluded that the best course of action was to focus on access to orthopedic care for children and adolescents.

# Action Plan

## 2016 ACTION PLAN

2016 Objective: Obesity Reduction			
Action Step	Accountability	Timeline	Desired Outcome
<b>Working Well Initiative</b> Provide daily “Working Well” healthy lunch option, as well as healthy food education booth on periodic basis to provide recipe ideas. Patient menu revision to offer healthier options.	SHC — <a href="https://medicine.uiowa.edu/content/study-finds-outreach-clinics-significantly-increase-access-orthopedic-care-greenville">https://medicine.uiowa.edu/content/study-finds-outreach-clinics-significantly-increase-access-orthopedic-care-greenville</a>	Ongoing, with annual evaluation	Promote healthy living by underscoring the importance of healthier food choices for patients, families, employees and visitors.
<b>Physical Fitness Promotion</b> Karate class, Walk for Love, First Cycle, Child Fit, Healthy Behavior Challenge	SHC — Greenville	Ongoing, with annual evaluation	Promote healthy living by underscoring the importance of physical activity.
<b>Community Education</b> Internal and external educational outreach regarding importance of weight control for orthopaedic health,	SHC — Greenville	Ongoing, with annual evaluation	Increase awareness of healthier living by providing education to the general public

including earned media and corporate publication outreach and in/outpatient nutritional counseling.			
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## 2016 ACTION PLAN RESULTS

### Working Well

Working Well meals were provided Monday through Friday for employees, patients and families. These meals are less than 500 calories and based on My Plate parameters. These are healthy, flavorful recipes that offer more plant based options. The hospital also had a Working Well Information Board that was updated regularly with lifestyle management tips.

### Physical Fitness Promotion

**Karate class:** SHC-Greenville hosted a free weekly karate class that was available to patients. The class was conducted by Sensei Kevin Ballenger of Hurricane Martial Arts and was held on Fridays at 4pm during the school year and Thursdays at 11pm during summer. Average attendance was 10 students per class.

**Walk for Love:** SHC-Greenville hosted a community walkathon that raised money for the hospital.

**OPAF and The First Clinics:** The hospital worked with OPAF, The Orthotics and Prosthetics Activities Foundation, to conduct an adaptive cycling course in 2016 and an adaptive swimming course in 2017. SHC-Greenville was a co-sponsor for both events, assisted in the planning and provided volunteers; this event was free and open to the public. Hospital patients attended both events.

**American Ninja Warrior Event:** The hospital hosted two community events (September 2016 and June 2017) themed after the popular TV show that promoted physical activity for all abilities. Several contestants from the show attended the event, interacted with participants and signed autographs.

**NFL Play 60 Shrine Bowl Event:** The hospital hosted an event in December 2017 that supported the message of NFL Play 60, which emphasizes the importance of kids being physically active for 60 minutes per day.

### Community Education

**Inpatient and Outpatient Nutrition Consults:** Nutrition Consults for weight management were initiated by the medical staff. Nutrition assessments were completed by the registered dietitian (RDN). Consults and follow-ups were accomplished either in person or via the telephone. To individualize and provide patient centered care, during the initial assessment, the RDN took into account the patient/client's needs and developed a nutrition plan. Referrals were also made to comprehensive weight management programs as needed. Nutrition education classes were conducted and they focused on nutritious versus non-nutritious foods, portion distortion, reducing refined sugars, and well-balanced meals.

**Lectures:** In December 2017 Jalak Patel, Registered Dietician lectured on "Pediatric Obesity and its Effects on Orthopedic Health" at the Annual NC Association of School Nurses Annual Conference

#### **Earned Media:**

##### *American Ninja Warrior Community Event – September 12, 2016*

August 25: Interviews - My 102.5, WSSL 100.5, WESC 92.5 and Real Roc 104.9

September 8: WSPA Your Carolina

September 12: WYFF, WORD 106.3 and FOX Carolina

##### *Walk for Love – September 24, 2017*

September 17: WYFF Weekend In-Studio

September 22: WSPA Your Carolina

September 23: Interviews - My 102.5, WSSL 100.5, WESC 92.5 and Real Roc 104.9

September 24: FOX, WYFF, WSPA

##### *NFL Play 60 Shrine Bowl Event – December 16, 2017*

December 10: WYFF Weekend In-Studio

December 16: FOX Carolina

#### *Written Comments on 2016 CHNA*

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 CHNA, contact information including email where listed. No comments or questions were received.

## 2019 ACTION PLAN AND PERFORMANCE MEASURES

<b>2019 Objective: Access to Orthopedic Care</b>			
<b>Action Step</b>	<b>Accountability</b>	<b>Timeline</b>	<b>Desired Outcome</b>
<b>Conduct monthly outreach clinics</b>	SHC — Greenville	Ongoing, with annual evaluation	Provide better access to new and established patients in outer lying areas.
<b>Advance our telehealth capabilities</b>	SHC — Greenville	Ongoing, with annual evaluation	Provide better access to care for certain appointment types. Reduce travel time and expenses.
<b>Keep our new-patient appointment wait times to a minimum</b>	SHC — Greenville	Ongoing, with annual evaluation	Offer competitive and timely appointment options
<b>Continue to work with healthcare providers and referral sources</b>	SHC — Greenville	Ongoing, with annual evaluation	Ensure that healthcare providers and referral sources know how to provide their patients seamless access to our services. Ensure they understand the services we provide and mission.
<b>Keep the community aware and educated about the services we provide</b>	SHC — Greenville	Ongoing, with annual evaluation	Ensure the general public is aware of our mission, services and how to access them.
<b>Continue to develop our injury care services</b>	SHC — Greenville	Ongoing, with annual evaluation	Provide the community with another option for injury care regardless of a family's insurance or ability to pay
<b>Continue to work with the Fraternity on transportation</b>	SHC — Greenville	Ongoing, with annual evaluation	Ensure transportation is not the reason a child goes without the orthopedic care they need.
<b>Continue to accept self referrals</b>	SHC — Greenville	Ongoing, with annual evaluation	Provide access to our care no matter how they are referred to our hospital.

<p><b>Provide access to wrap around care through effective care management</b></p>	<p>SHC — Greenville</p>	<p>Ongoing, with annual evaluation</p>	<p>Ensure families are connected to the wrap around care they need as it relates to the orthopedic condition we are treating.</p>
<p><b>Deliver our care regardless of insurance and a family’s ability to pay</b></p>	<p>SHC — Greenville</p>	<p>Ongoing, with annual evaluation</p>	<p>Ensure that a family’s resources do not determine whether or not their child receives the orthopedic care they need.</p>

## Conclusion

*2019 Community Health Needs Assessment Report Available Online or in Print*

The 2019 Community Health Needs Assessment is available at:

<https://www.shrinershospitalsforchildren.org/tampa/about-us>

The 2019 CHNA will be adopted by the authorized body of hospital at a future date.

## References

1. The Annie E. Casey Foundation. (2019). Children Under 18 years of Age by race and Ethnicity. Kids Count Data Center. Retrieved from <https://datacenter.kidscount.org/data/tables/6132-children-under-18-years-of-age-by-race-ethnicity?loc=42&loct=5#detailed/5/6308-6353/false/871,870,573,869,36,868,867,133,38,35/66,67,4262,3,4267/12804,15653> [Page 5]
2. The Annie E. Casey Foundation. (2019). Total Population by Race and Ethnicity. Kids Count Data Center. Retrieved from <https://datacenter.kidscount.org/data/tables/6129-total-population-by-race-ethnicity?loc=42&loct=5#detailed/5/6308-6353/false/871,870,573,869,36,868,867,133,38,35/66,67,4262,3,2700/12801,15648> [Page 6]
3. The Annie E. Casey Foundation. (2019). Children Under Age 18 with No Parent in the Labor Force. Kids Count Data Center. Retrieved from <https://datacenter.kidscount.org/data/tables/7363-children-under-age-18-with-no-parent-in-the-labor-force?loc=42&loct=5#detailed/5/6308-6353/false/1691,1607,1572,1485,1376,1201,1074,880/any/14444> [Page 6]
- 4.
5. The Annie E. Casey Foundation. (2019). Annual Unemployment Rates in SC by County. Kids Count Data Center. Retrieved from <https://datacenter.kidscount.org/data/tables/6517-annual-unemployment-rates-in-sc-by-county?loc=42&loct=5#detailed/5/6308-6353/false/871,870,573,869,36,868,867,133,38,35/any/16977> [Page 7 ]
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# Exhibits