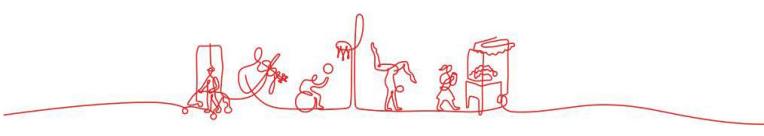


**2022 Community Health Needs Assessment** 



#### **ACKNOWLEDGEMENTS**

This Community Health Needs Assessment (CHNA) represents the culmination of work completed by multiple individuals and groups. The leadership team at Scottish Rite for Children have served an integral role in making this comprehensive assessment possible. Scottish Rite would like to extend its gratitude to all the patient focus group participants, key community health leaders and partners and organization personnel who provided information used in the development of this assessment. In addition, Scottish Rite would specifically like to thank the members of its Senior Leadership (Steering Committee) who provided their time and knowledge throughout the entirety of this process. The institution would also like to recognize Ascendient Healthcare Advisors for its efforts in facilitating this process and drafting the content of this Community Health Needs Assessment.

ACKNOWLEDGEMENTS 1

# **TABLE OF CONTENTS**

ACKNOWLEDGEMENTS	1
TABLE OF CONTENTS	2
INTRODUCTION	4
Background	4
Community Served	5
Geographic Area	5
Target Population	6
Principal Functions	6
Process Overview	10
Report Structure	11
Summary Findings: Priority Health Needs of Children in the Community Served by Scottish Rite	12
CHAPTER 1   EVALUATION OF PRIOR CHNA IMPLEMENTATION STRATEGIES	14
2019 Priority 1: Improve Access to Health Care Services	14
2019 Priority 2: Improve Child Health Status	16
2019 Priority 3: Improve Coordination of Care	21
CHAPTER 2   METHODOLOGY	22
Study Design	22
Primary Data	22
Secondary Data	23
Comparisons	23
Prioritization Process Overview and Results	24
Study Limitations	25
CHAPTER 3   COMMUNITY SERVED	26
Geographic Area	26
Target Population	27
Disparities	30
CHAPTER 4   PRIORITY NEED AREAS	33
Priority Need: Access to Care	33
Secondary Data Findings	34
Primary Data Findings - Patients	35

#### SCOTTISH RITE FOR CHILDREN 2022 COMMUNITY HEALTH NEEDS ASSESSMENT

Primary Data Findings - Community Leaders and Partners	35
Primary Data Findings – Scottish Rite Leadership	36
Priority Need: Obesity/Diabetes/Fitness/Nutrition	36
Secondary Data Findings	37
Primary Data Findings - Patients	40
Primary Data Findings - Community Leaders and Partners	40
Primary Data Findings – Scottish Rite Leadership	41
Priority Need: Social Determinants of Health	41
Secondary Data Findings	42
Primary Data Findings - Patients	45
Primary Data Findings - Community Leaders and Partners and Scottish Rite Leadership	45
CHAPTER 5   HEALTH RESOURCE INVENTORY	47
Health Resources	47
CHAPTER 6   NEXT STEPS	52
APPENDICES	53
APPENDIX 1   DETAILED SECONDARY DATA FINDINGS	53
Methodology	53
Data Sources	53
Complete Data by Focus Area	
APPENDIX 2   DETAILED PRIMARY DATA FINDINGS	
Methodologies	
Patient Focus Groups	
Patient Surveys	78
Community Leaders and Partners Interviews	79
Scottish Rite Leaders Surveys	81

Questions and/or comments regarding Scottish Rite for Children's Community Health Needs Assessment may be directed to:

Sharon Maples Chief of Business Development/Strategy Scottish Rite for Children Sharon.Maples@tsrh.org

TABLE OF CONTENTS 3

#### INTRODUCTION

#### **Background**

Scottish Rite for Children (Scottish Rite) is a world-renowned leader in the treatment of pediatric orthopedic conditions, sports injuries and fractures, as well as certain related neurodevelopmental and musculoskeletal anomalies and specific learning disorders, such as dyslexia. At Scottish Rite, we are dedicated to advancing treatment methods, conducting pioneering research and educating health care professionals locally and abroad to serve our commitment of giving children back their childhood. Every day the specialists in our six centers for excellence provide care, guidance and innovation to help kids run, jump and play.

As a leading pediatric orthopedic specialty center, Scottish Rite has treated nearly 350,000 children since its inception, with more than 68,200 outpatient clinic visits and 3,165 surgeries performed in Fiscal Year (FY) 2021 alone. All of our orthopedic surgeons are full-time physicians, and each physician holds a faculty appointment at The University of Texas Southwestern Medical Center. Further, each physician is renowned for extraordinary patient care, outstanding research and exceptional teaching of medical students, residents and fellows from around the world. Scottish Rite takes a multidisciplinary approach to care, tailoring treatment to the individual needs of each child and family.

We recognize the unique role our organization plays in maintaining and advancing the health of children in the community and are committed to understanding and addressing the factors that are most impacting the health needs of those we serve. To further illustrate our commitment to the health and well-being of the children in the community and in compliance with the IRS requirement that nonprofit hospitals assess the needs of their community every three years, Scottish Rite has conducted a Community Health Needs Assessment (CHNA) in 2013, 2016, 2019 and 2022 to better understand and document the greatest health needs currently faced by the children in the community we serve. As detailed further in Chapter 1, the findings in this new 2022 CHNA share some overlap with the priority health needs identified in the previous 2019 CHNA.

## **Community Served**

## Geographic Area

Scottish Rite for Children has state-of-the-art facilities in Dallas and Frisco, Texas, dedicated to providing care and resources to give children back their childhood. For the purposes of this CHNA, Scottish Rite has chosen to define the community served as an eight-county geographical area located in North Texas comprised of the following contiguous counties (see Exhibit A):

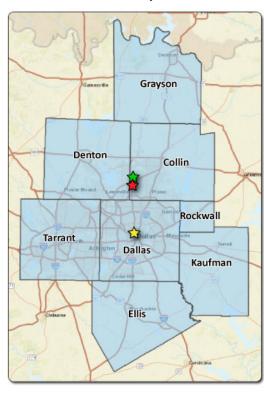


Exhibit A: Scottish Rite for Children CHNA Community Definition

The community we serve was defined utilizing inpatient and outpatient data regarding patient origin. Although Scottish Rite provides care and support to pediatric patients from around the world, the eight counties in the map above accounted for approximately 80 percent of the institution's inpatient discharges and 90 percent of the outpatient volume in fiscal year (FY) 2021, as detailed further in Chapter 3 (see page 28). With that in mind, Scottish Rite believes this definition will allow us to effectively allocate our resources to address the priority health needs identified in this CHNA with a strategic focus on areas of greatest need and health disparities.

Scottish Rite for Children Orthopedic and Sports Medicine Center

Scottish Rite Hospital for Children

Scottish Rite for Children at The Star

## **Target Population**

While we consider our community to include all residents of the eight-county region, including medically underserved, low-income and minority populations; our target population includes all children aged 18 and younger living in the community, irrespective of race, ethnicity, national origin, language, income, religion, gender, sexual orientation or disability. Scottish Rite expects the pediatric population of this designated primary service area to grow 1.6 percent annually from 2021 to 2026 (see page 29). Scottish Rite is committed to its employees and the diverse patient population that it serves and as such, no person will be discriminated against because of race, religion, color, sex, sexual orientation, gender identity or expression, marital status, citizenship, genetic information, disability or any other protected class ass outlined in applicable federal, state and/or local regulations.

Further, since the beginning in 1921, Scottish Rite for Children has remained devoted to its mission to provide the highest quality care available for children, within its scope of services, regardless of the family's ability to pay. Scottish Rite provides a financial assistance program known as Crayon Care for those families who are uninsured, underinsured and/or are unable to pay for their health care. Families that meet the eligibility criteria may qualify for free or discounted care.

## **Principal Functions**

We strive to help improve the lives of children by providing quality care for selected orthopedic and related neurodevelopmental and musculoskeletal conditions, as well as specific learning disorders, such as dyslexia (see Exhibit B).



In addition to general pediatric orthopedic services, as detailed on our website and described below, the services that patients are primarily referred to Scottish Rite for Children include<sup>1</sup>:

INTRODUCTION 6

\_

Please refer to Scottish Rite's website, <a href="https://scottishriteforchildren.org/care-and-treatment">https://scottishriteforchildren.org/care-and-treatment</a>, which provides detailed descriptions of each of the services available.

#### Scoliosis and Spine Disorders

The Sarah M. and Charles E. Seay/Martha and Pat Beard Center for Excellence in Spine Research at Scottish Rite provides a multidisciplinary, patient-centered approach to scoliosis treatment to thousands of patients, including the 9,251 scoliosis patients treated in 2021. Scoliosis is a progressive condition causing spine to curve or twist into a "C" or "S" shape. Signs and symptoms of scoliosis include uneven shoulders, a prominence of the shoulder blade and waistline discrepancies. In some instances, the cause is known, such as when a child is born



with a misshapen vertebra, one of the building blocks of the spine (congenital scoliosis) or when a curve develops from an underlying neurological disorder (neuromuscular scoliosis). Most often, however, the cause is unknown and there's no way to prevent it (idiopathic scoliosis). Our spine and scoliosis specialists analyze spinal maturity; the degree, extent and location of the curve; as well as the potential for progression. We then use this information to determine the best treatment option, which can include bracing, casting, physical therapy, observation or surgery — all depending on the child and the severity of their curve. Regardless of the treatment plan, we ensure that every child receives the highest quality care.

## Limb Lengthening and Reconstruction

The Center for Excellence in Limb Lengthening and Reconstruction employs a unique multidisciplinary team approach including collaboration between our orthopedic surgeons alongside nurses, psychologists, physical and occupational therapists and researchers of varying backgrounds and expertise. Limb lengthening is a surgical procedure used to lengthen bones or replace segments of missing bone in the upper and lower extremities. Certain congenital anomalies, severe bone infections, traumatic injuries and neurological disorders can result in limb length discrepancies, also known as limb length differences. The decision to treat a limb length discrepancy depends on the amount of difference there will be when the child stops growing. In 2021, 210 patients underwent limb lengthening and reconstruction treatment. Limb lengthening can be performed in two different ways: attaching a supportive external frame to the affected limb or inserting a rod into the bone



of the affected limb, both of which allow the bone to gradually lengthen through a fracture created during surgery, allowing new bone to form in the gap.

#### Hand and Upper Limb Disorders

The first pediatric orthopedic facility in the United States to employ full-time hand surgeons, Charles E. Seay Jr. Hand Center provides highly specialized care for children with hand and upper limb anomalies including, but not limited to, cleft hand, arthrogryposis, polydactyly and trigger thumb, as well as children in need of complex reconstruction following trauma.



Our approach involves individualized operative and nonoperative treatment plans that are dedicated to helping each child achieve maximum function, happiness and independence both physically and emotionally. Our hand surgeons are not only world-class providers, but they also are actively involved in innovative research and train doctors from around the globe how to treat a wide range of hand disorders.

## Clubfoot and Foot Disorders

Clubfoot is a congenital disorder in which one or both feet are severely turned inward and pointed downward. It is one of the most common pediatric musculoskeletal conditions requiring referral to a pediatric orthopedic surgeon, affecting 4,000 to 8,000 infants in the U.S. and 130,000 to 260,000 children worldwide annually. If left untreated, the foot deformity can make shoe wear problematic and walking painful over time, thus reducing overall quality of life. In 2021, we provided premier podiatric care to 1,116 children with clubfoot and/or other foot disorders, such as flat feet, extra toes, toe deformities, tarsal coalitions, high arched feet, congenital vertical talus and metatarsus adductus.



## **Hip Disorders**

Hip disorders can affect one or both hips and are sometimes apparent at birth or develop during childhood. Every year, our physicians in the Center for Excellence in Hip create patient-specific treatment plans to treat thousands of patients with developmental hip dysplasia, adolescent hip dysplasia, Perthes Disease, slipped capital femoral epiphysis (SCFE) and femoroacetabular impingement (FAI), as well as sports-related hip injuries and hip problems due to neurodevelopment anomalies such as Downs Syndrome, cerebral palsy and Charcot-Marie-Tooth disease (CMT).

#### Sports Medicine

Sports medicine is a medical and surgical specialty that considers the comprehensive needs of athletes and provides management for sport-related injuries and conditions. Our world-renowned sports medicine experts are ready to help injured youth athletes get back in the game. Scottish Rite has unparalleled experience providing non-operative and arthroscopic care to treat common sport-related injuries including concussions, ligament injuries and cartilage conditions in the knee, ankle, shoulder, elbow and hip in young and growing athletes. Our board-certified pediatricians, pediatric orthopedic surgeons, physical therapists, athletic trainers, psychologists and other sports medicine specialists work side by side with each athlete, their parents and coaches to develop the best game plan for treatment, rehabilitation and safe return to competing in the sport they love. We also provide sports nutrition services to help young athletes understand the importance of nutrition and fueling the body to stay healthy and in the game.



#### Dyslexia and Learning Disorders

The Luke Waites Center for Dyslexia and Learning Disorders, located at the Dallas campus, is internationally recognized in the field of learning disorders. We provide evaluation and diagnosis for children with academic learning disorders, as well as specialized treatment for those with dyslexia, which affects approximately 10 percent of children. Our interventions for dyslexia directly, explicitly and systematically teach an awareness of the sounds of language, letter-sound associations, vocabulary and strategies for understanding written language. The research program at the Center for Dyslexia aims to



maximize intervention efficacy, increase the accessibility of scientifically based reading intervention, improve student outcomes and facilitate the implementation of high quality instruction within various educational environments. In collaboration with public universities and school districts across the country, we continually strive to better understand variations in the learning profiles of children with dyslexia, apply innovative and scientifically based approaches to treatment and relate these to long-term outcomes. Our team also investigates disorders of attention, mathematics and language, as well as socioemotional factors related to learning disabilities.

## Other Services

Scottish Rite for Children also provides a number of other services to patients including fracture care, neurology and rehabilitation medicine, pediatric care for developmental disabilities orthotics and

prosthetics, rheumatology and psychology services. We take pride in treating the whole child — body, mind and spirit — with additional services that include our child life programs, individualized physical therapy and in-house specialists in anesthesiology, radiology, social work, psychology and pharmacy. We also have specialized sports and recreational programs that encourage socialization and bonding among peers and help kids lead healthy, confident lives both physically and mentally.

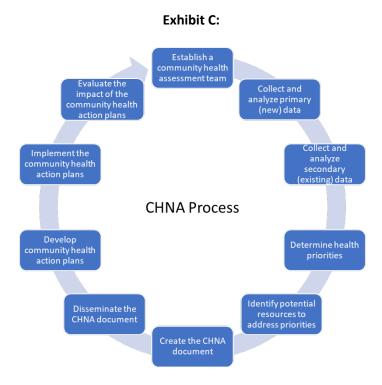
#### **Process Overview**

A significant amount of information has been reviewed during this planning process and the Steering Committee has been careful to ensure that a variety of sources were used to deliver a comprehensive report. Assessment methods included both secondary data as well as primary data that were collected directly from the community. Although unique to the community served by the organization, the sources and methodologies used to develop this report comply with the current standards and requirements for nonprofit hospital organizations delineated in IRS Section 501(r)(3).

The purpose of this study is to better understand, quantify and articulate the health needs of the children in the community served by Scottish Rite. Key objectives of this CHNA include:

- Identify the health needs of children in the community served.
- Understand racial and geographic health disparities that exist across the community served.
- Understand the significant health needs of medically underserved, low-income and minority populations in the community.
- Understand what is needed to help residents maintain and/or improve their health within Scottish Rite's scope of services.
- Prioritize the needs of the community and clarify/focus on the highest priorities that can be appropriately addressed by Scottish Rite.
- Describe resources potentially available to address the significant health needs identified through the CHNA.

There are 10 phases in the CHNA process (see Exhibit C). Results of the first seven phases are discussed throughout this assessment and the development of community health action plans and subsequent phases will occur upon completion of the assessment of priority needs.



#### **Report Structure**

The outline below provides detailed information about each section of the report.

- 1) Evaluation of Prior CHNA Implementation Strategies This chapter provides a reflective summary on the progress made towards addressing the priority health needs identified in Scottish Rite for Children's 2019 CHNA and Implementation Plan.
- 2) Methodology This chapter provides an overall summary of how the priority health need areas were selected as well as how information was collected and incorporated into the development of this CHNA, including study limitations.
- 3) Profile of Community Served by Scottish Rite for Children This chapter details the demographic data (such as age, gender and race) and socioeconomic data of residents within the community served by Scottish Rite. This chapter also describes the impact of health disparities among racial and geographic sub-groups throughout the community.
- 4) Priority Health Need Areas This chapter describes each identified priority health need area for the community served by Scottish Rite and summarizes the primary and secondary data that support these prioritizations.
- 5) Health Resource Inventory This chapter documents existing health resources currently available to the community in addition to Scottish Rite to address the priority health needs identified.
- 6) Next Steps This chapter briefly summarizes the next steps that will occur to address the priority health need areas discussed throughout this document.

In addition, the appendices discuss the data used during the development of this report in detail, including:

- 1) Detailed Summary of Secondary Data Measures and Findings Secondary data measures and findings used in the prioritization process are presented in Appendix 1.
- 2) Detailed Summary of Primary Findings Summaries of primary data findings from patient, community leader and Scottish Rite Leadership surveys as well as interviews and focus groups are presented in Appendix 2.

## Summary Findings: Priority Health Needs of Children in the Community Served by Scottish Rite

Scottish Rite for Children operates in Dallas and Frisco, Texas, serving children across the eight-county community identified above, which we have aggregated for the purposes of this assessment. To achieve the study objectives, both primary and secondary data were collected and reviewed. Primary data included information gathered from internet-based and paper surveys, focus groups and interviews with various patient families, local organizations and health service providers and leaders within Scottish Rite. Secondary data included information regarding the demographics, health and health care resources, behavioral health, disease trends and county rankings of the community served by Scottish Rite.<sup>2</sup> The data collection and analysis process began in May 2022 and continued through to the development of this document in August 2022.

Given the size of the community served by Scottish Rite for Children, both in geography and population, significant variations exist within the region's demographics and health needs, although consistent needs are present across the eight-county community. This document will discuss the priority health need areas for children throughout the community served by Scottish Rite, as well as how the severity of those needs might vary across racial and geographic sub-groups based on the information obtained and analyzed during this process.

Through the prioritization process discussed in this document, the Steering Committee identified priority health need areas from more than 100 potential health needs. Please note that the final priority need areas were not ranked in any hierarchical order of importance and all will be addressed within the scope of its services. The following three focus areas have been identified as priorities for the 2022 CHNA:

INTRODUCTION 12

٠

Please refer to Appendix 1 for a detailed summary of the secondary data sources and findings used to develop this assessment.



The process used to prioritize findings in this assessment are discussed later in the report. It is important to note that health, health care and associated community needs rarely exist in a vacuum. Instead, they are interrelated with each other, with improvements in one driving advancements within another. As such, although it was necessary for this process to separate the various areas for purposes of measuring need, the interrelationship should be acknowledged as improvement initiatives are considered going forward.

Further, many health needs are the result of underlying societal and socioeconomic factors. Many studies show that factors such as income, education and the physical environment affect the health status of individuals and communities. This CHNA acknowledges that linkage and focuses on identifying and documenting the greatest health needs as they present themselves today.

Lastly, Scottish Rite believes that some of the most effective strategies will be those that involve support and collaboration with community organizations and residents. Following the dissemination of this CHNA, Scottish Rite will use it to guide the development of an implementation plan that can be used to ensure the priority need areas are being addressed in the most efficient, effective and equitable way. As detailed further in Chapter 6, the implementation plan will be comprised of actionable objectives through which progress can be measured.

INTRODUCTION 13

\_

Source: Healthy People 2030, U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Retrieved September 8, 2022, from https://health.gov/healthypeople/objectives-and-data/social-determinants-health

## **CHAPTER 1 | EVALUATION OF PRIOR CHNA IMPLEMENTATION STRATEGIES**

A CHNA is an ongoing process that begins with the evaluation of the previous CHNA. In 2019, Scottish Rite completed its previous assessment and associated implementation strategies focused on three priority health needs: improve access to health care services, improve child health status and improve coordination of care. Below is a summary evaluation of Scottish Rite's implementation plan to address the priority needs identified in its 2019 CHNA.

#### 2019 Priority 1: Improve Access to Health Care Services

The strategies to improve access to health care services were developed to target two identified health needs — affordability of services/financial stress and access to care — which are described in turn below.

## Affordability of Services/Financial Stress

Scottish Rite implemented the following strategies with the objective of increasing community and patient family awareness of the financial assistance available within the institution and resources in the community.

1. Continue outreach and education to schools, physician offices, educational conferences and free/income-based clinics that are delivering services and working in underserved communities.

Scottish Rite recognizes the importance of ensuring that providers and educators throughout the community are not only aware of Scottish Rite, but that they are also aware of Crayon Care and other resources available to meet the needs of the patients we serve, including patients from underserved populations.

Over the last three years, Scottish Rite has continued to participate in annual pediatric conferences, such as the Texas Pediatric Society and Pediatric Orthopedic Educational Seminar, where information about Crayon Care is distributed. Additionally, Crayon Care information is shared with physicians' offices throughout the community. It is also integrated into the presentations given by hospital staff to provide information to school nurses and clinical staff from a number of independent school districts throughout north Texas.



2. Improve and expand communication of Scottish Rite's financial assistance program, Crayon Care.

Likewise, Scottish Rite continues to inform and educate patients and local organizations about Crayon Care, including physician offices and medical clinics as well as child-, family- and health-related community groups and clinics that address the needs of underserved populations, such as AGAPE, Los Barrios, MD Kids, MiDoctor and Healing Hands.

The Crayon Care program has also been mentioned in Scottish Rite's News for Medical Professionals (formerly known as Rite Connection), which is a newsletter distributed electronically to a medical and clinical audience on a monthly basis.

Further, the Crayon Care application is readily available on our "Becoming our Patient" webpage for financial assistance/Crayon Care. Scottish Rite also includes the web address in take-home materials to patient families. Additional links have also been added throughout the website to make access to the Crayon Care application more visible and readily available. This allows increased efficiency for providers and staff to provide financial assistance information and applications to their patients.

3. Continue to connect patients to organizations that provide resources for insurance coverage

Scottish Rite contracts with an insurance specialist dedicated to helping patient families enroll in insurance. Two financial counselors also were added in 2022 to that help patient families find programs, grants or organizations that may provide additional financial aid. Scottish Rite's Christi Carter Urschel Family Resource Center also provides patients, former patients and general community members with health literacy tools and guidance for finding health resources and insurance coverage to meet their or their child's needs.

#### Access to Care

Scottish Rite implemented the following strategies with the objective of increasing community access and reducing barriers to care at Scottish Rite facilities.

1. Continue to evaluate additional access points to increase patient access to Scottish Rite's services in underserved areas.

Scottish Rite has continued to evaluate additional access points in the community. Scottish Rite provides emergency department coverage to Children's Medical Center Dallas and will begin providing orthopedic emergency coverage at Cook's Children's Prosper Hospital in January 2023. In addition, kiosk registration is available in Spanish to increase the ease of access for our Spanish-speaking patient population and their families.

2. Further develop community partnership with not-for-profit entities to increase awareness and bring services out to the community.

Scottish Rite is committed to developing and maintaining partnerships with other not-for-profit entities in the community. Notably, Scottish Rite allows not-for-profit partners and health care entities to use its state-of-the-art conference spaces on the Dallas and Frisco campuses to plan events, host conferences, teach seminars and more. Not-for-profit organizations such as the Dallas Independent School District, North Dallas Chamber of Commerce, Camp John Marc, Rotary Club of Dallas, The Arc of DFW, Frisco Rotary, Tri-Delta Alumni Group, and Frisco YMCA, among others,



regularly collaborate with Scottish Rite to help spread awareness of Scottish Rite's service throughout the community.

3. Eliminate barriers to scheduling appointments and timely care

Scottish Rite now converts open follow-up visits into timeslots for new patient appointments, as appropriate, to reduce barriers to scheduling appointments and make it easier for children to get the specialized care they need as promptly as possible.

Scottish Rite also recently added five new providers at the Frisco campus – three physicians and two family nurse-practitioners. In addition, since 2019 Scottish Rite has added seven new providers at the Dallas campus – six physicians and one physician assistant. This has had a notable impact, as Scottish Rite projects to have 35,000 clinical visits by the end of FY 2022, an increase of more than 9,700 visits (35,000 - 25,213 = 9,787) compared to FY 2019.

Patients can access care quickly, efficiently and accurately in both English and Spanish with Scottish Rite's centralized-scheduling call center, which opened in late 2019. This more efficient, streamlined call center simplifies the appointment scheduling process and provides patients a more direct connection to Scottish Rite's clinical providers. Patients can also receive assistance scheduling appointments through the Family Resource Center.

4. Continue outreach efforts to bring awareness of Scottish Rite's services and expand reach.

Scottish Rite is committed to expanding awareness of its service through events and programs with community partners. For example, the organization hosts the Pre-Brandon Carrell Pediatric Orthopedic Symposium — a program geared toward advancing interdisciplinary knowledge of the field for nurses and allied health staff, so they are equipped with the knowledge to care for the communities they serve. There are also various events coordinated in tandem with our dedicated volunteers and partners to make it easier for families throughout the community to know of and access Scottish Rite's services.

Also of note, the Take Flight Dyslexia curriculum developed by our incredible team at the Luke Waites Center for Dyslexia and Learning Disorders is used in 44 states and eight different countries. In 2021, the Center for Dyslexia also hired a social worker that helps find resources for families that are referred for other conditions or factors that the Center does not screen for, such as autism, Asperger's and various socioeconomic health disparities.

## 2019 Priority 2: Improve Child Health Status

The strategies to improve child health status were developed to target three identified health needs – health education and family support, mental health and behavioral conditions and obesity/unhealthy eating/lack of physical activity – which are described in turn below.

## **Health Education and Family Support**

Scottish Rite implemented the following strategies with the objective of working with key local support groups and providing patient education materials to patient families regarding additional resources that are available at Scottish Rite and elsewhere.

1. Increase patient and community awareness about Scottish Rite's Family Resource Center.

We provide access to printed and digital information on the conditions we treat through our Christi Carter Urschel Family Resource Center. These resources bring comfort and insight to families who want to learn more about their child's medical diagnosis and health care needs. A medical librarian and a licensed social worker are available to help patients, their families and other individuals in the community to locate information and resources. The resource center staff can also answer questions about community support groups and assistance available from external agencies. Many resources are available in English and Spanish and the institution also provides translation services to assist in the process when needed.

2. Evaluate best ways to build connections with key local support groups.

Scottish Rite has a peer support program that connects patient families with similar diagnoses to one another. This program serves as a safe space for patients and their families to ask questions, share resources and feel like they are not alone.

Additionally, Scottish Rite connects patients to organizations that provide care, resources and assistance such as: Agape Clinic, Los Barrios Unidos, Metrocrest Community Clinic, Catholic Charities, Jewish Family Services of Greater Dallas, Spina Bifida



Association, Masonic Home and School of Texas, Parkland, Orthokids.org/POSNA, Texas 211 and ECI/PPCD/Head Start Programs.

3. Enhance our online presence for patient education materials by website engagement and other media platforms.

The organization has a Patient Education Committee focused on creating, updating and providing patients and families with information related to their care. Scottish Rite has more than 1,400 patient education documents in English and Spanish available online that provide vital education for patients and families including but not limited to prescription medication guidelines, healthy diet and lifestyle tips and protocols for their pre-/postoperative care.

Scottish Rite produces educational patient videos that align with our written patient education handouts and are accessible through various social media platforms including YouTube, Facebook, Twitter and Instagram. These informative videos include the institution's scoliosis series and cover a range of topics, such as injury prevention, physical therapy exercises and general patient education items. Facebook and Instagram posts also provide education about the conditions we treat, care

techniques, injury prevention and a wide variety of Scottish Rite resources available to the patients and families we serve. From August 2019 to August 2022, Scottish Rite's online presence grew considerably:

- Gained approximately 4,100 new YouTube subscribers
- Averaged 416 engagements per post on Facebook, up from 377.71 engagements per post in 2019
- Added more than 1,400 new followers on Twitter
- Reached an average of more than 20,000 accounts daily in 2022, up from 630 accounts daily in 2019.
- Increased subscriptions to the Medical Professionals email list from 630 subscribers in 2019 to 4,000 in 2022

Furthermore, approximately 4,000 providers have access to Scottish Rite's e-newsletter, Rite Connection, which features educational information that providers can share with their staff and patients. Scottish Rite launched a Medical Professionals website in 2020 and a Medical Professionals LinkedIn page for educational resources on diagnoses and treatments as well as medical education events hosted by Scottish Rite.

4. Increase education and awareness through community partnerships.

Scottish Rite has provided continuing education courses and conferences for school nurses within Plano, Frisco, McKinney and Dallas independent school districts and International Leadership of Texas. Topics for the conferences are chosen based on the nurses' learning needs and the medical needs of the population served, such as scoliosis screening, fracture, concussion, dyslexia and Crayon Care.

Scottish Rite also hosts Coffee, Kids and Sports Medicine – a monthly educational lecture series for health care professionals on a variety of pediatric orthopedic and sports-related conditions and treatments. This conference addresses new topics each month, including injury prevention, hip pain and other developments in the field. In addition to in person seminars, Scottish Rite also provides an online streaming of this conference for physicians to view the program remotely. We also provide training for athletic trainers in schools to ensure there are properly trained individuals at youth sporting events that can help treat/prevent injury.

## Mental Health and Behavioral Conditions

Scottish Rite implemented the following strategies with the objective of improving access to mental/behavioral health services for our patient population and supporting/providing additional resources and/or care that may be needed.

1. Pilot psychology telemedicine program.

Our pilot for psychology telemedicine could not be implemented as a result of the resources demanded at the onset of the COVID-19 pandemic. Due to the pandemic, Scottish Rite needed to deploy telemedicine resources to support its primary services (i.e. orthopedic and sports medicine) and could not extend them to this pilot. However, given the importance of addressing the need for

mental health services for children throughout our community, Scottish Rite has made extensive efforts to increase the trained mental health professionals at each of its sites.

Specifically, in 2022, Scottish Rite hired two social workers (one in Dallas and one in Frisco), known as Mental Health Navigators, that specialize in suicide prevention and mental health conditions. We have also hired a general psychologist and a sports psychologist that will provide mental health care services at the Frisco campus.

2. Provide additional psychology support in specialty areas to meet patient needs.

The Mental Health Navigators at each campus provide psychology support across all specialty areas as needed. For instance, a teenager with a physical disability may also be experiencing mental health issues that stem from difficulty participating in common social activities. Although the patient may be at Scottish Rite for an orthopedic condition, a provider can request the mental health navigator come and evaluate the patient's mental health so that if an issue is found, it can be discussed and cared for with an appropriate plan.

3. Continue to evaluate how we assess at-risk mental health behaviors.

Scottish Rite's Mental Health Navigators are dedicated to assessing, identifying and addressing at risk mental and behavioral health behaviors such as self-harm, suicidal ideation and chemical dependency. Scottish Rite will continue to evaluate how we assess at risk mental health behaviors to ensure we are up to date with best practices.

## Obesity/Unhealthy Eating/Lack of Physical Activity

Scottish Rite implemented the following strategies with the objective of improving overall health of the patient population and providing them the resources to make healthier choices.

1. Support and refer to weight management programs.

Scottish Rite has partnerships with the Dallas Mavericks Basketball Academy, FC Fast Soccer Academy, World Olympic Gymnastics Academy (WOGA) and Frisco YMCA that provide a forum for providers to educate student athletes on injury prevention tips, hydration and nutrition. Independent school districts and school athletic trainers, such as the Frisco ISD, have also partnered with our organization and rely on Scottish Rite for required bi-annual training of their athletes. Providers also contribute to sports medicine newsletters and blogs that are distributed to patient families and other clinical partners. Scottish Rite has also continued to support the COACH Clinic at Children's Health, which is detailed further in Chapter 5.

2. Explore tools within the electronic health record that would enhance weight management follow-up.

In 2021, Scottish Rite updated its electronic health record software to incorporate tools that enhance coordination of care across specialties and facilities, including weight management services. We will continue to explore additional ways to enhance weight management follow-up.

3. Create patient education materials that provide a list of food pantries, community gardens and food assistance to patient families.

Scottish Rite has a Patient Education Committee focused on creating, updating and providing patients and families with information related to their care, including resources for nutrition, local food resources and healthy lifestyles. The educational tools and programs at Scottish Rite serve to promote health literacy among patients and families to empower them to make their own informed decisions regarding their care.

4. Sponsor community related cooking classes.

Cooking classes did not come to fruition due to social distancing measures implemented during the COVID-19 pandemic, the lack of interest in a virtual cooking class option from patient families, and the need to ensure the safety of our patients and staff. However, Scottish Rite will continue to evaluate the possibility of sponsoring in-person community related cooking classes in the future.

5. Implement and develop a sports nutrition program at Scottish Rite.

Scottish Rite has expanded resources associated with sports nutrition. We employee a sports dietitian to work with athletes on pediatric and adolescent sports nutrition. Through our website, we have developed a compendium of downloadable nutrition resources, many in English and Spanish. In addition, the SAFE (Sports-Specific Assessment and Functional Evaluation) program is specifically dedicated to teaching young athletes how to manage their bodies from a physical activity and diet perspective. After their assessment is complete, participants are given a performance program with individualized exercise recommendations that directly address any deficiencies and a nutrition guide to meet their fitness/health goals. The program has tested more than 340 children over the past two years.

6. Continue to provide community leisure resources to increase physical activity and social engagement.

Scottish Rite is engaged in a number of programs that promote physical activity, facilitate weight management and provide leisure resources. Providers can refer patients to the Therapeutic Recreation department at Scottish Rite. Therapeutic Recreation services allow kids with orthopedic and related neurodevelopmental disabilities to participate in inclusive and adaptive activities that promote physical and emotional wellbeing. The Department has developed community partnerships with PGA, First Tee, Rise Adaptive Sports, the Dallas Fort Worth Adaptive Sports Coalition, AMBUCS (provides adapted cycles to Scottish Rite patients with a referral from a therapist without cost to the family) and Camp John Marc (a campground specifically designed for special needs



children). The Learn to Golf program is set up to fund scholarships for lessons and golf clubs so that cost is not prohibitive for these kids. The Department also runs the Tennis Allstars program in partnership with the Dallas Junior Tennis League.

In collaboration with the Rotary Club of Dallas, Scottish Rite hosts the annual Bike Rodeo and Child Safety Day on our Dallas campus. The event is free and open to the public. It is designed for children in the community to learn about bike safety, fire safety and more in a fun, family-friendly environment. Each participating child receives safety information, a bike helmet and healthy snacks. We have also continually created numerous new patient education pieces, such as Return to Sports, Sports Concussion, Spinal Screening for Scoliosis, Daily Calcium Guide for Strong Bones and other informative topics. Additionally, a theme has been developed around "The Rite Way" — Warm Up; Cool Down; Hydrate; Nutrition and Sun Safety.

## 2019 Priority 3: Improve Coordination of Care

The strategies to improve coordination of care, which are described below, were developed with the objective of increasing communication and coordination of care among providers and patient families.

1. Expand current transition of care program to additional complex diagnoses to improve the coordination from pediatric to adult care.

The Family Resource Center works closely with former patients and pediatric patients nearing adulthood to ensure an appropriate continuity of care, particularly for urological and neurosurgical services. The staff at the Family Resource Center always works towards empowering patients to make informed health care decisions. It is our nature to help as much as we can, whenever we can and the Family Resource Center exists to help families make the necessary connections to get them the care they need, whether that be through insurance enrollment assistance, connecting them directly with an adult provider in the area, finding certified prosthetists and orthotists and explaining health care costs clearly while also assisting them in finding financial assistance as needed.



2. Evaluate ways to improve care coordination.

Scottish Rite has upgraded our electronic medical record (EMR) system to Epic® Happy Together, a new program with a focus on communicating clinical information across different systems to help clinicians and patients experience a smooth continuity of care. For clinicians, it provides a complete view of patients' care across various organizations and enables external providers to reach out directly to experts at Scottish Rite to learn about best practices for specific conditions or refer patients for care. Many patients use Epic's patient portal MyChart at more than one Epic location, such as a primary care office from one organization and a specialist from another. Happy Together enables patients to see their clinical data from multiple locations in one MyChart session. Altogether, the new system has made it easier to coordinate care within Scottish Rite as well as with other providers.

## **CHAPTER 2 | METHODOLOGY**

#### **Study Design**

A multi-step process was used to assess the needs, challenges and opportunities for the children in the community served by Scottish Rite. Multiple sources, including primary and secondary sources, were incorporated throughout the study to paint a more complete picture of the community's health needs. While the Steering Committee viewed the primary and secondary data equally, there were instances where one provided more compelling evidence of community health needs than the other. In these instances, the health needs identified were discussed based on the applicable data gathered. Notably, the primary and secondary data analyzed as part of this CHNA generally identified similar health needs through the community served by Scottish Rite, as detailed in the Appendices. Multiple methodologies were utilized to identify key areas of need, including: (1) analysis of data; (2) content analysis of patient feedback; and (3) engagement with community leaders and partners.

Specifically, the following data types were collected and analyzed:

## **Primary Data**

Community engagement and feedback was obtained through several ways: a) patient internet-based and paper surveys, b) four patient family focus groups with representation from 12 patient families, c) internet-based surveys and interviews with leaders from community partners, d) as well as significant input and direction from Scottish Rite Leadership and the Steering Committee. All stakeholders were asked to provide their feedback about the health of children in the Scottish Rite community and factors influencing the health status of children in the community. The data were aggregated by source (i.e., patients, community leaders and partners and Scottish Rite Leadership) and then analyzed to understand the current perceived health needs in the community through the lens of those we serve, those we collaborate with and those who lead us internally. Thanks to the hard work of our dedicated staff, partners and volunteers, Scottish Rite was able to gather an abundance of primary data to gain a better understanding of the health needs in the community and the role we at Scottish Rite play in helping kids lead healthy, happy lives. Leveraging these sources, the Steering Committee was able to incorporate input from 1,680 Scottish Rite patients, 22 community leaders/partners and 31 Scottish Rite leaders.

Of note, to ensure that historically underserved populations including minorities, persons with low-income, uninsured or underinsured and those with limited English proficiency were represented in this assessment, Scottish Rite distributed internet-based and paper patient surveys in English and Spanish for patients that may not have internet access at home and/or prefer to respond in Spanish. Roughly 26 percent of patient respondents identified themselves as Hispanic/Latinx and 13 percent indicated that Spanish was the primary language spoken in their homes. Additionally, 27 percent of patient respondents have Medicaid or have no insurance at all and more than half of the patient focus group participants reported having Medicaid and/or using Crayon Care, which is Scottish Rite's financial assistance program.

Further, among the community leaders and partners that were interviewed as part of this CHNA process, representatives from various organizations provided input regarding the health needs of children in the community. For more information regarding the participating organizations as well as the surveys, focus groups, and interviews, please refer to Appendix 2.

#### Secondary Data

Key sources for secondary data on the community served by Scottish Rite included data made available by participating organizations and numerous public data sources related to demographics, social and economic determinants of health, health equity, health status and disease trends, mental/behavioral health trends and modifiable health risks. Key information sources leveraged during this process are detailed in Appendix 1.

In addition, Scottish Rite also analyzed data from the Texas State Health Plan, University of Michigan's Mott Children's National Poll on Children's Health, Healthy People 2030 and community health assessments completed recently by the following regional health care partnerships (RHP):

- RHP 9, which is comprised of Dallas, Denton and Kaufman counties (2017 CHNA).
- RHP 10, which includes Tarrant and Ellis counties, as well as seven additional counties in North Texas
  outside of the community served by Scottish Rite, as defined in this CHNA (2017 CHNA).
- RHP 18, which is comprised of Collin, Grayson and Rockwall counties (2019-2021 CHNA).

For more information regarding data sources and data time periods, please refer to Appendix 1.

#### Comparisons

The secondary data collected throughout the process are only relevant if compared to a benchmark, goal or comparative geography. Without the ability to compare the eight counties within Scottish Rite's community with an outside measure, we would be unable to determine how the community is performing. For the 2022 CHNA, performance relative to national and state averages was used to benchmark the community relative to peers. Performance that was unfavorable relative to the national and state benchmarks was identified as a potential health need. Each data measure was compared to outside data as available, including the following:

- County Health Rankings Top Performers: This is a collaboration between the Robert Wood Johnson
  Foundation and the University of Wisconsin Population Health Institute that ranks counties across the
  nation by various health factors.
- State of Texas: As part of the process, the Steering Committee determined that comparisons with nation and state-level benchmarks would be appropriate. While certain differences exist, the geographic overlap creates similarities that increase the meaningfulness of comparisons.

To facilitate comparative evaluations of the secondary data, Scottish Rite compared the performance of the eight counties in the community on each data measure to state and national benchmarks, as available. If a county's performance was more than five percent worse than the comparative benchmark, it was concluded that improvements are needed. Conversely, if a county performed more than five percent better than the benchmark, it was concluded that the need for improvement is less acute.

Following that analysis, each of the eight counties were then ranked from 1 (best performance compared to benchmark) to 8 (worst performance compared to benchmark) to gauge how each county performed relative to the benchmark compared to the other counties in our community (see Exhibit D).

#### **Exhibit D:**

		Dallas County Rank	Collin County Rank	Denton County Rank	Ellis County Rank	Grayson County Rank	Kaufman County Rank	Rockwall County Rank	Tarrant County Rank
Length of life	Length of life	6	1	2	4	8	6	3	5
	Maternal and Infant Health	8	1	1	4	6	5	3	6
Quality of Life	Mental Health	1	5	6	8	3	7	2	3
	Physical Health	7	1	3	5	3	6	2	8
Clinical Care	Access to Care	7	1	3	5	5	8	2	4
Health	Sexual health	7	1	3	4	8	6	2	5
Behaviors	Tobacco Use	4	1	2	6	8	7	3	4
	Built Environment	4	1	2	6	8	6	3	4
Physical	Environmental Quality	3	4	8	5	7	1	1	6
Environment	Housing and homelessness	8	4	6	2	5	3	1	7
	Transportation options and transit	8	5	5	3	2	1	4	7
	Education	8	1	3	5	4	7	2	6
Casialand	Employment	8	4	5	2	1	5	2	7
Social and Economic Environment	Family, community, and social support	8	1	4	2	4	6	3	7
	Food security	7	1	3	4	7	4	2	6
	Income	7	2	3	4	8	5	1	6
	Safety	7	1	2	4	8	6	3	5

It is important to note that, as shown above, significant disparities exist between Collin and Dallas counties, the two counties within which Scottish Rite has facilities. Scottish Rite has two locations in Frisco, the county seat of Collin County; the Scottish Rite for Children Orthopedic and Sports Medicine Center, which opened in 2018 and a new pediatric sports medicine and orthopedics clinic, which opened in December 2019, located at The Star, the Dallas Cowboys World Headquarters. Although Scottish Rite's main campus is located in the heart of the city of Dallas, Dallas County overall performed worse than Collin County compared to benchmarks in all but two of the measures shown above.

## **Prioritization Process Overview and Results**

The process of determining the priority health needs for the 2022 CHNA began with the collection and analysis of hundreds of data points. All individual data measures from both primary and secondary sources were gathered, analyzed and interpreted. To combine data points into more easily discussable categories, all individual data measures were grouped into six categories and twenty corresponding focus areas based on "common themes," as detailed in Appendix 1.

Given the large number of individual data measures that were collected, analyzed and interpreted throughout this process to develop the 20 categories (see Exhibit D), it was not feasible to make each of them a priority. The Steering Committee took into consideration need variation by geography, priorities from secondary data, priorities from primary data, Scottish Rite Leadership rankings and Scottish Rite's ability to impact the need to help determine which health needs should be priorities. Following the aggregation of the primary and secondary data into the focus areas listed above, members of the Committee were then polled to evaluate and prioritize the health needs of children in Scottish Rite's community using the following prioritization criteria identified by the IRS in Section 501(r)(3):

- Burden, scope, severity or urgency of the health need;
- Estimated feasibility and effectiveness of possible interventions;
- Health disparities associated with the health need; and
- Importance the community places on addressing the health need.

## **Study Limitations**

The development of a CHNA is a lengthy and time-consuming process. As such, more recent data may have been made available after the collection and analysis period of this process. Secondary data are typically available at a lag time of one to three years from the data occurrence. One limitation in the data analyses process is the staleness of the data which may not depict the most recent occurrences experienced within the community. The Steering Committee attempted to compensate for these potential limitations through the collection of primary data, including patient focus groups, internet-based and paper community surveys and internet-based surveys of key health leaders and partners within the community. Secondary data are also limited regarding availability by demographic cohorts such as gender, age, race and ethnicity.

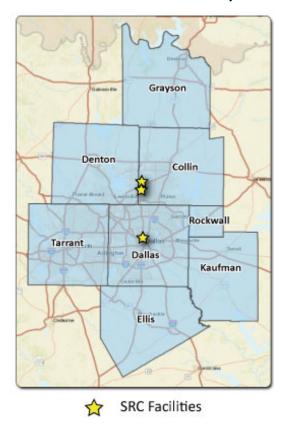
Given limitations to available data and the size of Scottish Rite's eight county community in both population and geography, this study was limited in its capacity to fully capture all health disparities and health needs across racial and ethnic lines. Additionally, gaps in information for particular sub-segments of the population exist. Many of the available data sets do not necessarily isolate historically underserved populations including the uninsured, low-income persons and/or certain minority groups. In order to facilitate representation of medically underserved, low-income and minority populations, surveys were distributed in English and Spanish, with hard copies provided onsite at Scottish Rite's two campuses to gather feedback from individuals with limited English proficiency or lack of internet access. With the help of our incredible staff and volunteers, Scottish Rite was able to capture input from 1,680 patient families that completed the paper and internet-based surveys. Among all survey respondents, more than a quarter identified themselves as Hispanic/Latinx and one in 10 reported that they primarily speak Spanish at home. Interviews conducted with independent school districts, the Region 10 Education Services Center, nonprofit organizations and government officials also solicited input on the underserved.

Finally, components of this assessment have relied on input from patient families and key community health leaders through the internet-based surveys and focus groups. Since it would be unrealistic to gather input from every single member of the community, the participants have offered their best expertise and understanding on behalf of the entire community. While the qualitative data collected for this study provide valuable insights, it is important to note that data were collected at one point in time and among a limited number of individuals. Therefore findings, while directional and descriptive, should not be interpreted as definitive.

# **CHAPTER 3 | COMMUNITY SERVED**

## **Geographic Area**

The community served by Scottish Rite is comprised of eight counties in North Texas that, in total, span 6,537 square miles.



**Exhibit E: Scottish Rite CHNA Community Definition** 

Children from these eight counties comprise approximately 80 percent of all Scottish Rite's inpatient discharges (see Exhibit F). Similarly, although Scottish Rite has a broad reach relative to outpatient services, in FY 2021, approximately 90 percent of all outpatient visits at Scottish Rite locations originated from the eight-county service area. As such, for the purposes of this assessment, they were chosen to define the community served by Scottish Rite.

Exhibit F: FY2021 Scottish Rite Inpatient Volumes by County					
	Percent of FY2021 Inpatient Discharges	Cumulative Percent			
Dallas County	29%	29%			
Collin County	18%	47%			
Denton County	17%	64%			
Tarrant County	6%	70%			
Rockwall County	3%	73%			
Kaufman County	3%	76%			
Ellis County	2%	78%			
Grayson County	2%	80%			

Source: Scottish Rite internal data FY2021

# **Target Population**

Population figures discussed throughout this chapter were obtained from Esri, a leading GIS provider that utilizes U.S. Census data projected forward using proprietary methodologies.

The total pediatric population in the community served by Scottish Rite is projected to grow 1.6 percent annually over the next five years (see Exhibit G). However, it is important to note that the rate of growth varies from county to county, with the pediatric populations of five of the eight counties growing faster than the community overall.

Exhibit G: 2021-2026 Child Population Growth (Age <18)							
Texas County	2021 Population	2026 Population	'21-26 Total Growth (#)	'21-26 Compound Annual Growth (%)			
Dallas County	671,916	701,928	30,012	0.9%			
Collin County	291,923	330,239	38,316	2.5%			
Denton County	238,963	271,001	32,038	2.5%			
Tarrant County	539,328	578,452	39,124	1.4%			
Rockwall County	28,707	32,658	3,951	2.6%			
Kaufman County	37,093	45,529	8,436	4.2%			
Ellis County	49,589	55,417	5,828	2.2%			
Grayson County	30,278	32,280	2,002	1.3%			
Community	1,887,797	2,047,504	159,707	1.6%			

Source: Esri.

Children aged 18 and younger make up a similar proportion of the population across all counties. This is also true of the proportion of those over the age of 65, excluding Grayson County, which has a significantly higher percentage of their population over that age (see Exhibit H).

Exhibit H: 2021 Population – Age Distribution						
Texas County	Percentage below 18	Percentage between 18 and 65	Percentage 65 and older			
Dallas County	25.6%	63.0%	11.4%			
Collin County	25.3%	63.3%	11.4%			
Denton County	23.9%	65.1%	11.0%			
Tarrant County	25.8%	62.2%	12.0%			
Rockwall County	26.6%	60.5%	12.9%			
Kaufman County	28.1%	60.1%	11.8%			
Ellis County	26.4%	60.3%	13.3%			
Grayson County	23.6%	58.0%	18.4%			
Community	25.4%	62.8%	11.7%			

Source: 2020 Census Population Estimates.

Overall, the eight-county community is very diverse, with substantial variation among counties. In general, the major metropolitan areas of the more populous counties (Dallas, Tarrant) have larger Hispanic and Black populations than less populated counties (see Exhibit I). It is important to note that the data below do not exclusively represent the pediatric population within the eight counties, but rather the total population of all ages due to data limitations regarding racial and ethnic population distributions by age.

Exhibit I: 2021 Total Population by Race and Ethnicity						
Texas County	White Non- Hispanic	Black Non- Hispanic	Asian Non- Hispanic	Hispanic	Other Races	Total Population
Dallas County	27.3%	22.7%	6.8%	41.2%	2.1%	2,680,115
Collin County	53.2%	10.7%	17.0%	15.7%	3.3%	1,117,623
Denton County	56.0%	10.9%	10.0%	19.8%	3.2%	948,666
Tarrant County	43.9%	17.4%	5.8%	30.1%	2.9%	2,126,201
Rockwall County	61.7%	8.7%	3.8%	22.7%	3.1%	112,169
Kaufman County	57.4%	14.0%	1.4%	24.6%	2.5%	142,616
Ellis County	57.3%	12.2%	0.8%	27.6%	2.2%	197,274
Grayson County	73.6%	5.8%	1.6%	14.9%	4.1%	142,442
Community	42.3%	16.9%	8.0%	30.1%	2.7%	7,467,106

Source: Esri.

In addition to demographic data, socioeconomic factors in the community such as income and poverty play a significant role in identifying health care needs. The median household income varies greatly across the counties in the community, with a variance of more than \$45,000 between the highest median income (Rockwell) and lowest median income (Grayson) counties. The median household income across the community, however, is significantly higher than the median household income in Texas (see Exhibit J).

Exhibit J: 2021 Median Household Income				
Texas County	Median Household Income			
Dallas County	\$65,770			
Collin County	\$101,560			
Denton County	\$90,880			
Tarrant County	\$72,064			
Rockwall County	\$106,225			
Kaufman County	\$76,352			
Ellis County	\$79,849			
Grayson County	\$59,554			
Community	\$77,035			
Texas	\$66,048			

Source: Esri.

However, although the median income across the entirety of Scottish Rite's community is higher than Texas as a whole, it's important to note that this does not indicate that there are not low-income and/or impoverished families throughout the region that are historically medically underserved. In 2020, the most recent data year publicly available, there were over a quarter of a million households under the federal poverty level (FPL) in Scottish Rite's community (see Exhibit K).

Exhibit K: 2020 Households Below the Federal Poverty Level							
Texas County	Total Households	Households Below the FPL	Percentage of Total Households Below the FPL				
Dallas County	967,690	122,178	12.9%				
Collin County	384,335	22,012	6.2%				
Denton County	331,574	20,719	6.9%				
Tarrant County	763,298	74,774	10.4%				
Rockwall County	36,648	1,280	3.7%				
Kaufman County	48,404	4,148	10.6%				
Ellis County	65,449	4,784	8.1%				
Grayson County	52,467	5,784	11.7%				
Community	2,649,865	255,679	10.2%				
Texas	10,532,758	1,326,621	13.4%				

Source: Esri

Based on this data, of the 255,679 households in the community under the FPL in 2020, approximately 48 percent were in Dallas County (122,178 / 255,679 = 0.48) and another 29 percent were located in Tarrant County (74,774 / 255,679 = 0.29), which combined account for roughly 77 percent of the total number of households under the FPL in Scottish Rite's community. Not only that, of the 254 counties in Texas, Scottish Rite's eight-county community accounts for nearly one out of every five households below the

FPL in the state (255,679 / 1,326,621 = 0.19), with Dallas County responsible for nearly 10 percent of all impoverished households in all of Texas (122,178 / 1,326,621 = 0.09). As a result, among other constraints, some of the poorest families depend on social support programs such as Food Stamps and SNAP benefits for nourishment (see Exhibit L).

Exhibit L: 2020 Households Receiving Food Stamps/SNAP							
Texas County	Total Households	Households Receiving Food Stamps/SNAP	Percentage of Total Households Receiving Food Stamps/SNAP				
Dallas County	967,690	100,635	10.6%				
Collin County	384,335	9,692	2.7%				
Denton County	331,574	13,426	4.5%				
Tarrant County	763,298	73,584	10.2%				
Rockwall County	36,648	1,238	3.6%				
Kaufman County	48,404	3,904	10.0%				
Ellis County	65,449	4,491	7.6%				
Grayson County	52,467	5,323	10.8%				
Community	2,649,865	212,293	8.5%				
Texas	10,532,758	1,137,919	11.5%				

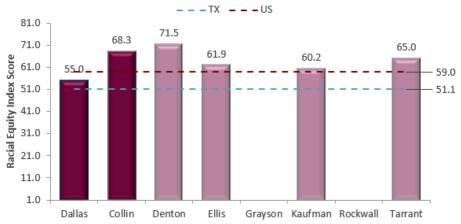
However, given the low cost of processed foods with little nutritional value compared to the costs of fresh produce and healthier foods, these benefits are often spent on unhealthy dietary options that are more affordable and readily available, particularly in low-income communities.

#### **Disparities**

Recognizing that the eight-county region includes substantial diversity across and within its counties, Scottish Rite evaluated factors that may cause health disparities in the community it serves. These included racial equity, racial segregation, financial barriers, nutrition, social, behavioral and environmental factors that influence health and English proficiency. In each of the following charts, the dark red columns represent counties with Scottish Rite facilities (i.e., Dallas and Collin counties) and the light red columns represent the other counties within the eight-county community.

The Racial Equity Index measures racial disparities in indicators of inclusion and prosperity. In general, counties in the eight-county region perform better than Texas and the United States (see Exhibit M). Higher scores indicated smaller racial gaps and better results.

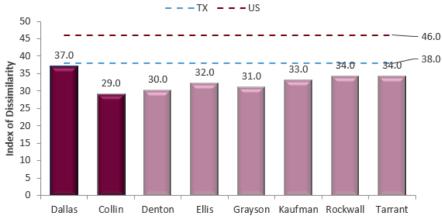




\*The Racial Equity Index measures racial disparities in indicators of inclusion and prosperity. A higher score indicates smaller racial gaps and better results

As measured by the 2022 County Health Rankings Index of Dissimilarity, the eight-county market demonstrates less segregation than Texas and the United States overall. In fact, all counties in the region perform better than the state and national averages on measures of residential segregation between non-white and white individuals and black and white individuals (see Exhibits N.1 and N.2):

Exhibit N.1:
Residential Segregation\* – Non-White/White



\*For residential segregation, a score of 0 represents complete integration and a score of 100 represents complete segregation.

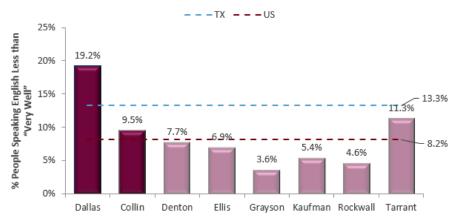
Exhibit N.2:
Residential Segregation\* – Black/White



\*For residential segregation, a score of 0 represents complete integration and a score of 100 represents complete segregation.

Within the eight-county region, Dallas County residents were most likely to report speaking English less than "very well". Based on the American Community Survey 5-Year Estimates (2016-2020), nearly one-fifth of Dallas County residents (19.2 percent) reported speaking English less than "very well". Rates were higher than national averages in Collin and Tarrant County as well (see Exhibit O):

Exhibit O:
% Speaking English Less than "Very Well"



Please note that additional findings not described here are further reported in Chapter 4 and the appendix.

## **CHAPTER 4 | PRIORITY NEED AREAS**

This chapter looks at each of the three priority areas in more detail and discusses the data that supports each priority. As mentioned previously, these priority needs areas are not listed in any hierarchical order of importance and all will be addressed by Scottish Rite in a health improvement plan guided by this CHNA. As noted above in Chapter 2, the Committee considered the following factors when determining the priority needs reported in this assessment:

- Burden, scope, severity or urgency of the health need
- Estimated feasibility and effectiveness of possible interventions
- Health disparities associated with the health need
- Importance the community places on addressing the health need

Through the prioritization process discussed in this document, the Steering Committee identified Scottish Rite's priority health need areas from a list of over 100 potential health needs. Each of these three priority health need areas are discussed below, including relevant primary and secondary data considered by the Committee.

#### **Priority Need: Access to Care**

Access to care represents the presence of several components, including coverage (i.e., insurance), a physical location where care is provided, the ability to receive timely health care when needed and an adequate workforce of providers. Taken together, these components enable individuals to obtain timely health care services that achieve the best possible health outcomes.

It is widely acknowledged that under-represented populations, such as low income, minority and less educated populations, experience greater disparities in obtaining health care services. The inability to access health care services contributes to poor health status. Thus, health disparities are well-known to be associated with access to care.<sup>4</sup>

As described in further detail below, access to care was identified as a significant health need for the community in primary and secondary data analysis. These data findings emphasized the burden, scope and severity of access to care among our community, as well as the importance that our community places on addressing the need.

Scottish Rite recognizes access to care as a health need for which the organization can feasibly make effective interventions. While Scottish Rite has remained committed to our mission to provide the highest quality care available for children, within our scope of services, regardless of the family's ability to pay, we also recognize there are children in need of care whose families may be unaware of financial assistance programs or the health care resources available to help their child, particularly in circumstances involving rare orthopedic and related neurodevelopmental conditions that require highly specialized care. In addition, Scottish Rite serves thousands of patients annually with finite resources and time. In our role as a health care provider, we believe we can make continued strides in improving access to care.

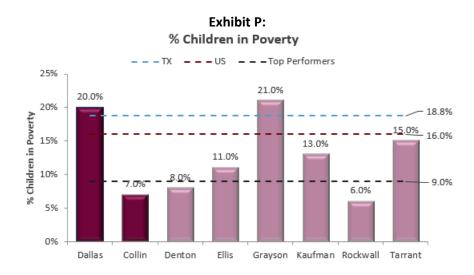
-

Source: Chartbook on Access to Health Care. (n.d.) Retrieved from <a href="https://www.ahrq.gov/research/findings/nhqrdr/chartbooks/access/index.html">https://www.ahrq.gov/research/findings/nhqrdr/chartbooks/access/index.html</a>. Last updated June 2018.

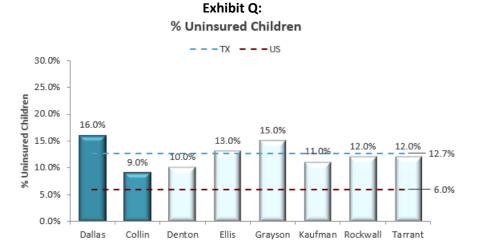
In summary, an evaluation of these factors led Scottish Rite to prioritize access to care as a significant health need for the community.

#### **Secondary Data Findings**

As noted previously, of the 254 counties in Texas, Scottish Rite's eight-county community accounts for nearly one out of every five households below the FPL in the state, with Dallas County responsible for nearly 10 percent of all impoverished households in all of Texas. According to the 2022 County Health Rankings, in Dallas County, the most populous county of the community and home to Scottish Rite, one child out of every five is living in poverty (see Exhibit P).



In addition to the children experiencing poverty in Scottish Rite's community, many others live in households that earn more than the federal poverty level, but less than the basic cost of living. When faced with these hardships, families may be forced to choose between the necessities of day-to-day life, including electricity and food and medical care and medications. For some families in the community, the choice to seek care may be delayed in favor of spending their limited financial resources on other necessities deemed more immediate until the health condition becomes of critical concern. Furthermore, it can be difficult for families that are living below or near the FPL to acquire and maintain health coverage. In fact, the percentage of uninsured children across the state of Texas as a whole (12.7 percent) is more than twice as high relative to the national benchmark (6.0 percent) (see Exhibit Q). Notably, the percentage of uninsured children living in five of the eight counties within Scottish Rite's community are also at least twice as high as the national average, including three counties that with a higher percentage of uninsured children than the Texas overall. The out-of-pocket costs of care for these children are high and their families may not be aware of the existing programs or services available to help their child regardless of their ability to pay, such as Scottish Rite.



#### **Primary Data Findings - Patients**

As previously described in Chapter 2, Scottish Rite received input from 1,680 patients and their families via internet-based and paper surveys that were made available in both English and Spanish, as well as 12 additional patient families that participated in four patient focus groups. Over 275 patients indicated that access to care was one of the top three areas that impact the health of children in the community the most. With respect to accessing health care services in the community, over two-thirds of respondents believe that the primary reason children in Scottish Rite's community do not get health care due to high costs of care and/or a lack of insurance, indicating a strong financial barrier to care in the community. Additionally, over 600 patient respondents stated that a lack of knowledge of where to go for care was another hindrance to accessing care in the region. Further, according to the responses provided in the patient surveys, 100 patients indicated that they experienced difficulties or delays to getting care, with many indicating that they dealt with long wait times for appointments, scheduled surgery or during clinic appointments. Some participants mentioned that they have to travel long distances to receive care at one of Scottish Rite's locations in Dallas or Frisco. However, due to fiscal hardship or transportation issues, this may not be a feasible alternative.

#### Primary Data Findings - Community Leaders and Partners

Access to care arose thematically throughout a range of community leader interviews. One area of particular importance that was repeatedly discussed throughout the process of gathering primary data was the limited financial resources available to residents of Scottish Rite's community, particularly in Dallas and Grayson counties. The surveyed and interviewed community leaders and partners all voiced that high costs of care, lack of health insurance or other financial resources as a primary reason that children in the community do not get medical attention. One non-profit leader mentioned that "fear of cost" is a major factor in preventing children from receiving needed care. With respect to Scottish Rite specifically, those surveyed and interviewed conveyed that the care Scottish Rite provides to low-income and uninsured children is an enormous asset to the community because those kids otherwise may not be able to afford such specialized care.

In addition, long wait times for appointments to the highly specialized services at Scottish Rite was also identified by these leaders and partners as major drivers impacting the health of children in Scottish Rite's community. School district administrators consistently described the need for a "medical home" for

children – a mechanism to receive routine care and oversight of chronic health conditions and ongoing disease management. Additionally, non-profit leaders described several access challenges faced by children in the community, including the ability of parents to leave work to get care for a child, navigation of the medical system and knowing where to go for the type of care needed by the child.

#### <u>Primary Data Findings – Scottish Rite Leadership</u>

Scottish Rite leaders also indicated that the aforementioned financial barriers related to cost and lack of insurance are the top reasons that children in the community may not receive care. In fact, high costs, lack of insurance or insurance being denied were the three most frequently selected reasons for why children in our community do not get health care. When asked what barriers existing to serving patients within Scottish Rite, our leaders cited access issues most often, including financial and geographical access.

#### Priority Need: Obesity/Diabetes/Fitness/Nutrition

A healthy diet, access to nutritious foods and regular physical activity help promote health by reducing the risk of heart disease, stroke and certain forms of cancer, strengthening muscles, bones and joints, improving mood and energy levels and maintaining a healthy weight. In contrast, diabetes and obesity – potential consequences of unhealthy diet and inadequate physical activity – are risk factors for many serious health conditions and chronic diseases. According to the CDC, obesity prevalence increased from 14 percent to 20 percent for children and adolescents between 1999 and March 2020. Similarly, between 2001 and 2017, the incidence of youth ages 10-19 with type 2 diabetes increased from 34 per 100,000 children to 67 per 100,000 children.

Obesity occurs more frequently among under-represented populations. Among children and adolescents in the United States between 2017 and 2020, obesity prevalence was 26.2 percent among Hispanic children, 24.8 percent among non-Hispanic Black children, 16.6 percent among non-Hispanic White children and 9.0 percent among non-Hispanic Asian children. Obesity prevalence in children and adolescents increases as the head of household's level of education decreases. In a study of obesity in children by household income, obesity prevalence was 18.9 percent in the lowest income group, 19.9 percent in the middle-income group and 10.9 percent in the highest income group.<sup>7</sup> Type 2 diabetes, which is preventable, is more common in youth in racial or ethnic minority groups than among white youth. Between 2001 and 2017, type 2 diabetes prevalence increased most rapidly among non-Hispanic Black and Hispanic children.<sup>8</sup>

In this assessment, primary and secondary data affirmed that diet, exercise, access to healthy food, diabetes and obesity represent a notable health need among children in the community. These findings,

\_

Source: *Nutrition, Physical Activity and Obesity*. (2019). Retrieved from https://www.cdc.gov/chronicdisease/resources/publications/aag/dnpao.htm

Source: Lawrence JM, Divers J, Isom S, et al. Trends in Prevalence of Type 1 and Type 2 Diabetes in Children and Adolescents in the US, 2001-2017. *JAMA*. 2021;326(8):717–727. doi:10.1001/jama.2021.11165

Source: Ogden, C. L., Carroll, M. D., Fakhouri, T. H., Hales, C. M., Fryar, C. D., Li, X., & Freedman, D. S. (2018). Prevalence of Obesity Among Youths by Household Income and Education Level of Head of Household — United States 2011–2014. MMWR. Morbidity and Mortality Weekly Report, 67(6), 186–189. Retrieved from https://doi.org/10.15585/mmwr.mm6706a3

<sup>8</sup> Source: Ibid, Lawrence et al. (footnote 3)

described in greater detail below, indicate that nutrition, fitness, diabetes and obesity are a significant and far-reaching burden that the community considers important to address.

In addition to the disparities associated with this need, the burden of the need and the perceived importance that the community places on addressing the need, Scottish Rite identified this as a priority need area based on the relevance of this concern to the work of Scottish Rite and the feasibility of interventions that Scottish Rite can implement. As a pediatric orthopedic surgery provider, Scottish Rite recognizes that obese and diabetic children are at increased risk of fractures and are more likely to experience adverse perioperative events and outcomes.<sup>9, 10, 11</sup> Additionally, improved physical activity is an important goal of many Scottish Rite services. Subsequently, obesity, diabetes, nutrition and fitness were recognized as particularly relevant health needs in our community for which Scottish Rite can feasibly and effectively offer interventions.

#### **Secondary Data Findings**

The need for nutritious, healthy foods varies across the eight-county community, as shown in the County Health Rankings data below. However, three of the eight counties in the community have a higher percentage of their respective populations that have limited access to healthy food compared to the national average (see Exhibit R).

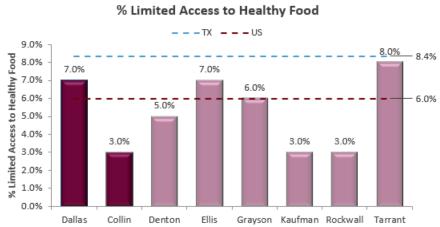


Exhibit R: % Limited Access to Healthy Food

\_

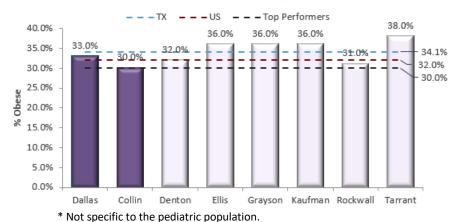
Source World Health Organization. (2014, August). *Obesity and overweight*. World Health Organization. Retrieved August 25, 2022, from http://www.who.int/mediacentre/factsheets/fs311/en/

Source: The impact of obesity on bone and joint health - American Association of Orthopaedic Surgeons. (2015, March). Retrieved August 25, 2022, from https://aaos.org/contentassets/1cd7f41417ec4dd4b5c4c48532183b96/1184-the-impact-of-obesity-on-bone-and-joint-health1.pdf

Source: Farahani, F., Ahn, J., Nakonezny, P. A., Wukich, D. K., Wimberly, R. L., & Riccio, A. I. (2021). Postoperative Outcomes in Diabetic Pediatric Orthopaedic Surgery Patients: A National Database Study. *Journal of pediatric orthopedics*, *41*(8), e664–e670. https://doi.org/10.1097/BPO.0000000000001879

Moreover, the relationship between parental obesity and pediatric obesity is well-documented. According to research conducted by Stanford professor emeritus Stewart Agras, parental obesity represented the most potent risk factor for pediatric obesity. Dr. Agras and his team found that 48 percent of children with overweight parents in the study became overweight, compared with 13 percent of those with normal-weight parents. Although not specific to the pediatric population served by Scottish Rite given data limitations, a minimum of 30 percent of each county's total population are obese adults (see Exhibit S). Obesity can result in worse health outcomes and recovery times, as well as other chronic obesity related conditions such as joint problems, difficulty exercising, type-2 diabetes, asthma and hypertension. <sup>13</sup>

# Exhibit S: % Adults with Obesity\*



Rates of obesity and to a lesser extent diabetes, are significant within the community as a whole, but particularly within Tarrant and Ellis counties (see Exhibit T).<sup>14</sup> Notably, type-2 diabetes in children not only increases the risk of poor health outcomes later in life, but it can also negatively impact the development of confidence and independence. Scottish Rite believes that the best treatment for diabetes is prevention through a healthy diet and an active lifestyle.

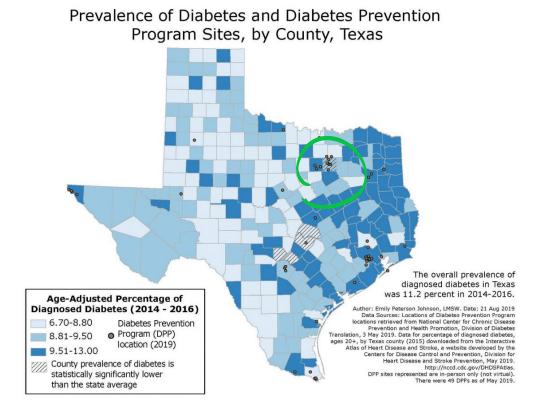
-

Source: Obese parents increase kids' risk of being overweight. (2004, July 21). Stanford University. https://news.stanford.edu/news/2004/july21/med-obesity-721.html

Source: CDC. (2021, April 5). *Childhood obesity facts*. CDC. https://www.cdc.gov/obesity/data/childhood.html

Source for Map: Emily Johnson, LMSW, Chronic Disease Epidemiology Branch Texas Department of State Health Services. Accessed from the Centers for Disease Control and Prevention's Chronic Disease GIS Exchange https://www.cdc.gov/dhdsp/maps/gisx/mapgallery/tx-diabetes.html

**Exhibit T:** 

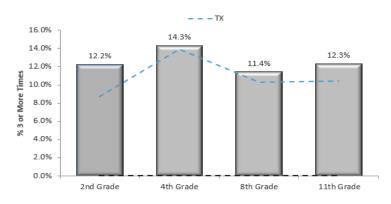


According to the State of Texas School Physical Activity and Nutrition Project (SPAN), a higher percentage of students in Texas's Health Service Regions 2 and 3 – which combined include the eight counties within Scottish Rite's community – consume sugar sweetened beverages three or more times in one day than the percentage of students statewide exhibiting the same behavior. This is true of students in each of the four grade years (see Exhibit U).

**Exhibit U:** 

% of Students Who Consumed Sugar Sweetened Beverages 3 or More Times Yesterday –



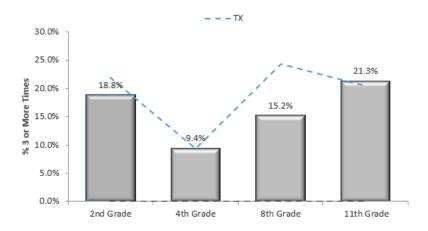


Furthermore, the students within Health Service Regions 2 and 3 were also less likely to meet physical activity guidelines than their statewide counterparts, particularly for children in eighth grade between 12 and 14 years of age (see Exhibit X).

Exhibit V:

% of Students Who Meet Recommended Physical
Activity Guidelines –





As shown by the myriad of data above, health behaviors and environmental factors play a role in pediatric obesity. While these factors may often be outside of a child's control, Scottish Rite believes it has the resources and experience necessary to help address the need for nutrition education and fitness opportunities that can change health behaviors and help patients recover and prevent obesity later in adulthood.

#### **Primary Data Findings - Patients**

As previously described in Chapter 2, Scottish Rite received input from 1,680 patients and their families via internet-based and paper surveys that were made available in both English and Spanish, as well as 12 additional patient families that participated in four patient focus groups. Over 50 percent of respondents selected diet and exercise as one of the three areas that most impact the health of children in the community, nearly twice as much as any other area selected. Some patients cited a need for more methods of securing affordable healthy foods, particularly for lower-income children that may live in food deserts within the region.

#### <u>Primary Data Findings - Community Leaders and Partners</u>

According to some of the community leaders and partners that were surveyed and interviewed, while there are many athletes and active children throughout the community, leaders continued to emphasize pockets of need throughout the community. For example, childhood obesity, nutrition and diabetes were consistently noted as a significant health concern by school district administrators and non-profit leaders during interviews. Further, inactivity and unhealthy dietary habits associated with the restrictions at the start of the COVID-19 pandemic were also noted by participants as a reason that there was an increased

prevalence of obesity and a slight rise in Type 2 diabetes after the pandemic restrictions lifted. Leaders noted that fresh produce and other healthy foods are more expensive than the myriad of unhealthy, lower-cost options like fast-food.

#### <u>Primary Data Findings – Scottish Rite Leadership</u>

Scottish Rite leaders also indicated diet and exercise among the three most impactful areas on the health of children in the community. This includes issues pertaining to limited access to healthy foods for children in Scottish Rite's community, particularly for those in low-income households. In an interview with a physician leader at Scottish Rite, the leader emphasized that basic nutrition, obesity and proper diet were collectively the number one health need that is seen among Scottish Rite patients. In addition, given Scottish Rite's primary areas of expertise, Scottish Rite believes that it can have a meaningful impact on helping children in the community lead healthy, active lives through a variety of programs and partnerships targeted at athletes and recovering patients.

#### **Priority Need: Social Determinants of Health**

Many conditions in the environment, referred to as social determinants of health (SDOH), affect health, functioning and quality-of-life outcomes and risks. The American Hospital Association (AHA) categorizes these factors into the following domains:



Source: American Hospital Association; <a href="https://www.aha.org/social-determinants-health/populationcommunity-health/community-partnerships">https://www.aha.org/social-determinants-health/populationcommunity-health/community-partnerships</a>; Accessed June, 2022.

While many of the factors that contribute to health are either not controllable or are societal in nature, health care providers need to holistically evaluate the underlying factors that may impact an individual's health in addition to their current health conditions.

SDOH contribute to wide health disparities and inequities. For example, lower educational attainment is associated with low literacy skills and limited literacy is a known barrier to accessing health information, proper medication use and utilization of preventative services.

As described in further detail below, SDOH were identified as significant health needs for the community in primary and secondary data analysis. Survey results and conversations with stakeholders highlighted the burden, scope and severity of social determinants among our community, as well as the importance our community places on addressing the need.

While Scottish Rite recognizes that broad range of social determinants cannot be entirely within the purview of the organization, the organization can feasibly implement interventions to effectively address some key components of SDOH. Notably, given the pediatric population served by Scottish Rite, the organization considers partnership with educators an important opportunity to reduce disparities.

#### **Secondary Data Findings**

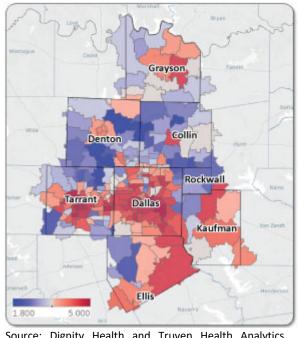
As discussed throughout this document, health needs can vary based on many factors. One resource that is helpful in demonstrating need variation among geographies is the Community Need Index (CNI) developed by Dignity Health and Truven Health Analytics. The CNI identifies the severity of health disparity at the ZIP code level and demonstrates the link among community need, access to care and health care utilization. Rather than relying solely on public health data, the CNI accounts for the underlying economic and structural barriers that affect overall health including SDOH. The CNI identifies five prominent barriers that make it possible to quantify health care access in communities across the nation. These barriers include those related to income, culture/language, education, insurance and housing.

Using data related to these barriers, a score is assigned to each barrier condition (with one (1) representing less community need and five (5) representing more community need). The scores are then aggregated and averaged for a final CNI score (each barrier receives equal weight in the average). A score of 1.0 indicates a ZIP code with the lowest socioeconomic barriers, while a score of 5.0 represents a ZIP code with the most socioeconomic barriers. There is significant variability within the CNI scores of Scottish Rite's eight-county community, indicating the presence of socioeconomic barriers to health and health care for the population. As shown in Exhibits W and X, the areas of greatest need are located in Dallas and Tarrant counties.

Exhibit W: 2021 Weighted Average CNI by County				
Texas County Weighted Average CNI				
Dallas County	4.1			
Collin County	2.9			
Denton County	2.9			
Tarrant County	3.6			
Rockwall County	2.5			
Kaufman County	3.5			
Ellis County	3.5			
Grayson County	3.7			
CHNA Community 3.6				

Note: CNI scores presented above are based on the average of ZIP code sources

Source: Dignity and Truven Health Community Need Index



**Exhibit X: Community Need Index** 

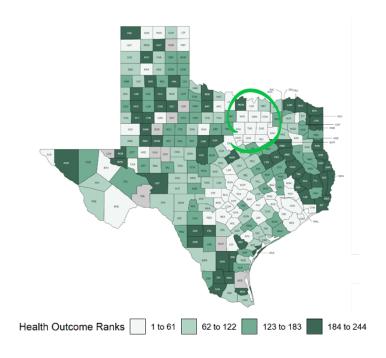
Source: Dignity Health and Truven Health Analytics, Community Need Index. Data accessed June 2022.

Scores for the counties that make up the community served by Scottish Rite varied, with Dallas County having the highest weighted average CNI across ZIP codes (4.1) and Rockwall County having the lowest (2.5). In addition, it is important to note that even within individual counties, a significant amount of variation exists.

As noted previously, Scottish Rite also reviewed and analyzed data from the Robert Wood Johnson Foundation/University of Wisconsin County Health Rankings for the year 2022. Out of 244 reported counties in Texas for health outcomes, the counties in Scottish Rite's community generally rank very well, with all but one county (Grayson) falling in the top quartile (see Exhibits Y and Z).

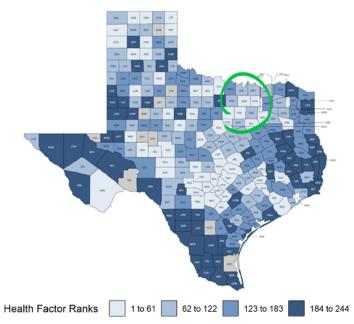
Exhibit Y: 2021 Health Outcome Ranks across All Texas Counties			
Texas County Overall Health Outcome Rank			
Dallas County	#43		
Collin County	#1		
Denton County #2			
Tarrant County #26			
Rockwall County	#5		
Kaufman County #61			
Ellis County #18			
Grayson County #102			

Source: Robert Wood Johnson Foundation, County Health Rankings



**Exhibit Z: Health Outcome Rankings** 

Lastly, out of the 244 reported counties in Texas for health factors, the counties in Scottish Rite's community also rank very well, with a majority falling in the top quartile and two falling in the 50<sup>th</sup> percentile (see Exhibits AA and BB).



**Exhibit AA: Health Factor Rankings** 

Exhibit BB: 2021 Health Factor Ranks across All Texas Counties			
Texas County Overall Health Factor Rank			
Dallas County	#72		
Collin County	#1		
Denton County #7			
Tarrant County	#35		
Rockwall County #4			
Kaufman County #47			
Ellis County #27			
Grayson County #81			

Source: Robert Wood Johnson Foundation, County Health Rankings

Given the size of the community served by Scottish Rite, both in population and geography, it can be expected that health needs will not be uniform for all residents. The CNI and County Health Rankings data demonstrate that there are significant geographic disparities in the community, particularly regarding socioeconomic factors and the perceived needs of the community.

Please refer to Appendix 1 for a detailed breakdown of the measures used in the County Health Rankings.

#### Primary Data Findings - Patients

As noted in Chapter 2, Scottish Rite received input from 1,680 patients and their families via internet-based and paper surveys that were made available in both English and Spanish, as well as 12 additional patient families that participated in four patient focus groups. According to the respondents, patients believe that SDOH, including income, insurance status, language barriers and a lack of services close to home are among the primary reasons why children in the community do not get health care. Further, when asked which three areas most impact the health of the children in the community, patients indicated that SDOH such as poverty, familial and community support, environmental quality and housing and homelessness were among the most impactful areas.

#### Primary Data Findings - Community Leaders and Partners and Scottish Rite Leadership

As noted previously, the community partners and Scottish Rite leaders that were interviewed and surveyed believe that income and poverty have the most impact on the health of children in the community. Based on the survey and interview findings, it is clear that community partners and Scottish Rite leaders alike are aware of the impact of SDOH on the health of children in the community, as both groups highlighted poverty, homelessness, transportation, access to healthy foods and language constraints as barriers that hinder access to care for children throughout the community. The SDOH through the community are all in some way shape or form connected to one another. Children with lower incomes, are more likely to experience a variety of health issues and lack the resources necessary to properly address them.<sup>15</sup> Further, although Scottish Rite serves eight counties, its services are currently

\_

Source: Poverty | Healthy People 2020. (2020). Healthy People 2020. https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-health/interventions-resources/poverty

located in Dallas and Collin counties. As such, families may often have to travel long distances for the specialized care they need, which can be costly and time-consuming, especially if it is on a recurring basis. In addition, cultural and language barriers can be a major hindrance for many in Texas and may make some reluctant to seek care out of fear of not understanding what is being done or what is required.

Finally, in interviewing the Director and Health Authority for the Dallas County Health and Human Services Department for this assessment, disparities in the community that are driven by social determinants arose as a key theme. The Director noted that within specific census tracts in Dallas County, life expectancy can vary by more than twenty years. He described the importance of education, access to care, access to food, physical activity and built environment, housing and transportation and internet access to reducing disparities like this. The Director also indicated that certain regions, such as south/southeast Dallas, are medically underserved. He noted that Scottish Rite could tie into other social service needs to impact children's health needs. In some cases, this could include awareness of the relationship between determinants and health, while some determinants can be more specifically addressed through Scottish Rite services.

#### **CHAPTER 5 | HEALTH RESOURCE INVENTORY**

The following section details existing resources, facilities and programs that are available throughout the community served by Scottish Rite to potentially address the significant health needs identified in Chapter 4 of this CHNA.

#### **Health Resources**

The list of resources below is representative of the services available to children in the community served by Scottish Rite; however, this list is not exhaustive. Additionally, while the resources, facilities and programs listed in this section have been categorized into common groups, these organizations and programs may offer additional services as well. Please note that while the community overall may be adequately served by existing capacity in some areas, not every area is equally served and the need for additional resources may be greater in one geography as compared to another.

As shown, this health resource inventory was compiled based on input and information from Scottish Rite and its partners and have been categorized based on the identified priority health need that is most impacted by each resource, respectively.

#### Resources to Address Access to Care

#### Affordability of Health Services

Scottish Rite is committed to its mission to provide the highest quality care available for children, within our scope of services, regardless of the family's ability to pay. Scottish Rite's financial assistance program, known as Crayon Care, offers care at no cost or significantly discounted cost to eligible families. Our financial counselors strive to ensure that all families are informed and familiar with this program. Eligibility for Crayon Care is based on household income and medical expenses and no applications submitted by eligible families are denied. Information about Crayon Care is provided in several ways, including a plain language summary that is posted at the registration desks and provided to new patients in registration packets that are given to all patient families at least annually. Scottish Rite continues to inform and educate local organizations and school districts out in the community about Crayon Care.

More detailed information regarding our Crayon Care policy, application, financial assistance summary and other frequently asked questions are also available at the organization's website<sup>16</sup>. All families are encouraged to apply. Of note, from October 2021 through July 2022, Scottish Rite has received and approved the Crayon Care applications for 4,200 eligible patient families out of the 5,155 applicant patient families that were given Crayon Care applications directly by Scottish Rite staff. Furthermore, through our dedicated team in Family Services, we also provide insurance enrollment assistance to underinsured/uninsured patients. In addition, Scottish Rite participates in a Community Resource Coordination Group (CRCG) made up of local partners and community members that work with parents, caregivers, youth and adults to identify and coordinate services and support, including financial assistance, insurance coverage, primary care and specialty services, mental and behavioral health care and more.

Please refer to https://scottishriteforchildren.org/becoming-our-patient/financial-assistance-crayon-care.

#### Access to Care

When a patient's needs fall outside of Scottish Rite's scope of services, our team identifies external resources that are available for care, funding and/or education. As detailed in Chapter 1, Scottish Rite's Family Resource Center exists to help connect current and former patients, as well as other community members, with providers and organizations that are well-equipped to serve them. Scottish Rite's Family Resource Center also connects families with grants for care outside of Scottish Rite and works with external providers to fund offsite care for low-income Scottish Rite patients. Examples of existing health care programs within the community available to access care include but are not limited to:

- Children's Health
- University of Texas Southwestern Medical Center
- Cook Children's Medical Center
- Cook Children's Pediatric Specialties Prosper
- Medical City Children's Hospital
- Baylor Institute for Immunology Research
- Texas Child Neurology
- Athena Diagnostics
- Community Resource Coordination Group

In addition, Scottish Rite coordinates with outside vendors to deliver durable medical equipment to patients such as wheelchairs, walkers, canes, crutches, bathroom equipment, hospital beds and pressure relief cushions. Medical supplies used for feeding, wound care, respiratory care and/or incontinence are also ordered for families using outside vendors. Examples of these organizations include but are not limited to:

- Angels of Care
- Travis medical Supply
- J&R Medical
- Universal Med Supply
- Allumed
- C&R Medical
- Apria
- Healthline Medical, Medco
- Medical Plus Supply
- Patient Support Services

Scottish Rite provides limited psychology services and regularly screens patients for mental and behavioral health concerns. However, we recognize that there are organizations within the community that are highly specialized and dedicated to working with the mental and behavioral health of children and families. When needed, Scottish Rite's social workers and/or psychologists help coordinate with these specialized facilities to assist patients with the scheduling process. Examples include but are not limited to the following organizations:

- Child and Family Guidance Center
- Jewish Family and Children's Services

- Richland Oaks Counseling Center
- The Family Study Center at the University of Texas Southwestern Medical Center

### Resources to Address Obesity/Diabetes/Fitness/Nutrition

Given the unique conditions treated by Scottish Rite, the Scottish Rite Therapeutic Recreation department helps children with chronic medical conditions or disabilities develop the skills and knowledge needed to enable them to participate in recreation and leisure activities. As described in Chapter 1, physicians can refer patients to Therapeutic Recreation for inpatient and outpatient services, such as:



- Adaptive sports, including tennis, dance and golf
- Adapted cycle evaluations
- Support for camps

In addition, the Therapeutic Recreation department works with community organizations to support patients and families, including:

- RISE (Recovery, Inspiration, Success, Empowerment): A nonprofit charitable organization based in the Dallas-Fort Worth metroplex that offers inclusive adaptive recreational sports programs free of charge to participants.
- AMBUCS: A national non-profit organization that encourages mobility and independence through provision of adaptive trykes, scholarships for therapists and a range of community service efforts.

Scottish Rite has numerous other programs and partnerships that promote fitness, as described in Chapter 1. These include partnerships with the Dallas Mavericks Basketball Academy, FC Fast Soccer Academy, World Olympic Gymnastics Academy (WOGA) and the Frisco YMCA. Scottish Rite has developed a Bridge Program, to help young athletes who have completed their physical therapy perform focused training to safely return to their sport.

Further, social workers and Medical Consult Coordinators at Scottish Rite help families arrange to receive follow-up care as ordered by the medical staff associated with obesity, fitness, nutrition and diabetes. A range of resources throughout the community support these areas, including (but not limited to) those listed below:

Weight Management, Fitness, Nutrition and Obesity

Scottish Rite participates in coalition-led community awareness campaigns and programs that we make patient referrals to, including:

• The COACH Clinic at Children's Health—Scottish Rite supports this program, which was established for children with obesity and weight-related complications. Get Up & Go (formerly LEAN Program) works in conjunction with the COACH clinic and nutrition clinics at Children's Health to offer a free 10-week weight management program. As Scottish Rite continues to identify children who would benefit from these programs, the appropriate referrals are made to Children's Health.

Medicaid and Children with Special Health Care Needs ("CSHCN") programs – These programs
also provide support to the Scottish Rite patients and families and will pay for several visits related
to certain weight management issues with a clinical dietician. As children who would benefit from
these services are identified, referrals are made.

Other community resources for pediatric fitness, obesity and weight management include:

• The YMCA of Metropolitan Dallas offers a number of programs designed to improve the health of families, including "FIT for Health" (free healthy lifestyle programs for parents and their children), "Get Up and Go" (a weight management program for families offered in partnership with Children's Health) and "Kamp K'aana" (a health and wellness summer camp program for children above their healthy weight). Additionally, the YMCA offers afterschool programs that provide healthy lunches to kids and includes at least 30 minutes of outdoor or indoor physical activity and movement a day.

#### **Diabetes**

- The Northern Texas and Oklahoma Chapter of the Juvenile Diabetes Research Foundation (JDRF)
  offers resources for children living with type 1 diabetes, including community forums,
  informational guides and support groups.
- Pediatric diabetes programs at Cook Children's and Children's Health provide health and education services for patients with type 1 and type 2 diabetes.

#### Resources to Address Social Determinants of Health

Scottish Rite recognizes that social determinants of health represent broad range of conditions in the environment, including economic, educational, health care, environmental and social/community factors. While an exhaustive list of resources available to address social determinants is not feasible, we have identified several key resources that are most relevant to our patient population.

As noted previously, Scottish Rite is a world-renowned pediatric specialty center that cares for children from all over the world. Although the target population for the purposes of this CHNA resides within the eight-county community, many families travel from outside the area to come to Scottish Rite for care. In circumstances where families may be staying for long periods of time or lack the funds for accommodations while their child receives care, our team of social workers refer families to the Ronald McDonald House, which provides lodging, meals and transportation at very little to no cost. When the Ronald McDonald House does not have a vacancy, social workers provide a list of other hotels in the vicinity where families may choose to stay. Families with Medicaid are able to be reimbursed by Medicaid for lodging in many situations.

Additionally, the cost and time associated with travel to and from appointments can also be considerable, particularly for families traveling from outside of Dallas and Frisco counties. Families with Medicaid are able to be reimbursed by Medicaid for transportation in most situations. Social workers in the Scottish Rite Family Services Department are available to help families understand and navigate the processes for Medicaid transportation. Scottish Rite social workers work to facilitate airline tickets from Southwest Airlines for families living outside the community that do not have other resources to help with travel to Scottish Rite for appointments. Southwest Airlines donates ticket vouchers to be used by families with no

other means of transportation. If such families can get to a Southwest Airlines hub, social workers will coordinate the trip with the family using the vouchers.

Educational access and quality are factors with significant implications for our patients. The Luke Waites Center for Dyslexia & Learning Disorders at Scottish Rite fulfills a key need within our community for addressing learning disabilities, such as dyslexia, by providing interventions to improve reading skills and developmental readiness. School districts throughout our community are a critical resource with which Scottish Rite regularly partners to provide training and support. Other notable educational resources include:



- Texas Education Agency, which offers resources to parents, families and educators through the "Supporting English Learners in Texas" program
- Early Matters Dallas, a coalition on early education
- Public libraries, such as the Fort Worth Public Library Early Childhood Literacy programs
- Local YMCAs- for instance, the YMCA of Metropolitan Fort Worth offers the Ella McFadden Early Childhood Learning Center for children up to age 5, with financial assistance available

Numerous Texas state agencies provide essential resources that address other social determinants of health, as well. A non-exhaustive list of those agencies include:

- Texas Department of State Health Services: Offers consumer protection, environmental health oversight and health promotion and chronic disease prevention services
- Texas Department of Housing and Community Affairs: Supports housing stability, rental assistance, homeless assistance and housing inspections
- Texas Workforce Commission: Oversees the state job posting site, job fairs, unemployment benefits and early childhood services.

#### **CHAPTER 6 | NEXT STEPS**

The CHNA findings are used to develop effective community health improvement strategies to address the priority needs identified throughout the process. The next and final step in the CHNA process is to develop community-based health improvement strategies and action plans to address the priorities identified in this assessment. Scottish Rite will leverage information from this CHNA to develop an implementation and action plan, while also working together with other partners in the community to ensure the priority need areas are being addressed in the most efficient and effective way. Scottish Rite believes that some of the most effective strategies will be those that have the collaborative support of community organizations and residents. The strategies developed will include measurable objectives through which progress can be measured.

#### **APPENDICES**

#### APPENDIX 1 | DETAILED SECONDARY DATA FINDINGS

Many individual secondary data measures were analyzed as part of the CHNA process. These data provide detailed insight into the health status and health-related behavior of residents in the community. These secondary data are based on statistics of actual occurrences, such as the incidence of certain diseases, as well as statistics related to SDOH.

#### Methodology

All individual secondary data measures were grouped into six categories and 20 corresponding focus areas based on "common themes." In order to draw conclusions about the secondary data for each of the counties in the community served by Scottish Rite, their performance on each data measure were compared to targets/benchmarks. If the community's performance was more than five percent worse than the comparative benchmark, it was identified as a "high need" area. Conversely, if the community performed more than five percent better than the benchmark, it was concluded that the need for improvement is less acute. The most recently available data were compared to these targets/benchmarks in the following order (as applicable):









































The following methodology was used to assign a priority level to each individual secondary data measure:

- If the data were more than five percent worse = High need
- If the data were within or equal to five percent (better or worse) = Medium need
- If the data were more than five percent better = Low need

#### **Data Sources**

The following tables are organized by each of the 20 focus areas and contain information related to the secondary data measures analyzed including a description of each measure, the data source and most recent data time periods.

APPENDICES 53

### **Access to Care**

Measure	Description	Data Source	Most Recent Data Year(s)
% Uninsured	Percentage of the population under age 65 without health insurance coverage.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed June 2022.	2022
Primary Care Physicians Ratio	Ratio of the population to primary care physicians. Primary care physicians include practicing nonfederal physicians (M.D.'s and D.O.'s) under age 75 specializing in general practice medicine, family medicine, internal medicine and pediatrics. The ratio represents the number of individuals served by one physician in a county, if the population was equally distributed across physicians. Prior to the 2013 County Health Rankings, primary care physicians were defined only as M.D.s. In 2013, D.O.s were incorporated into the definition of primary care physicians and obstetrics/gynecology was removed as a primary care physician type.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed June 2022.	2022
Dentist Ratio	Ratio of the population to dentists. The ratio represents the population served by one dentist if the entire population of a county was distributed equally across all practicing dentists.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed June 2022.	2022
% Uninsured Children	Percentage of the population under age 19 without health insurance coverage.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed June 2022.	2022
Pediatricians per 10,000 Children	The number of providers per 10,000 children aged 0-17 years by county	CDC Children's Mental Health Data and Statistics. Data accessed July 2022.	2015
Family Medicine Physicians per 10,000 Children	The number of providers per 10,000 children aged 0-17 years by county	CDC Children's Mental Health Data and Statistics. Data accessed July 2022.	2015

Measure	Description	Data Source	Most Recent Data Year(s)
Medicaid Enrollment	Medicaid Enrollment	The Annie E. Casey Foundation Kids Count Data Center	2019
CHIP Enrollment	CHIP Enrollment	The Annie E. Casey Foundation Kids Count Data Center	2019

### **Built Environment**

Measure	Description	Data Source	Most Recent Data Year(s)
Food Environment Index	The Food Environment Index measures the quality of the food environment in a county on a scale from 0 to 10. The Food Environment Index is comprised of two variables: Limited access to healthy foods from the USDA's Food Environment Atlas estimates the percentage of the population who are low income and do not live close to a grocery store. Living close to a grocery store is defined differently in rural and nonrural areas: in rural areas, it means living less than 10 miles from a grocery store whereas in nonrural areas, it means less than 1 mile. Low income is defined as having an annual family income of less than or equal to 200 percent of the federal poverty threshold for the family size. Food insecurity from Feeding America estimates the percentage of the population who did not have access to a reliable source of food during the past year. The two variables are scaled from 0 to 10 (zero being the worst value in the nation and 10 being the best) and averaged to produce the Food Environment Index. In 2016, the average value for counties was 7.0 and most counties fell between about 5.4 and 8.3.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed June 2022.	2022
% with Access to Exercise Opportunities	Percentage of individuals in a county who live reasonably close to a location for physical activity.  Locations for physical activity are defined as parks or recreational	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County	2022

facilities. Individuals are considered to have access to exercise opportunities if they: reside in a cansus block that is within a half mile of a park or reside in an urban census block that is within one mile of a recreational facility or reside in a nurban census block that is within three miles of a recreational facility. The numerator is the number of individuals who live in census blocks meeting at least one of the above criteria. The denominator is the total county population. Locations for physical activity are defined as parks or recreational facilities. Parks include local, state and national parks. Recreational facilities include YMCAs as well as businesses identified by the following Standard Industry Classification (SIC) codes and include a wide variety of facilities including gyms, community centers, dance studios and pools: 799107, 799108, 799109, 799110, 799107, 799108, 799109, 799110, 799701, 799702, 799703, 799704, 799701, 799702, 799703, 799704, 799707, 799911, 799701, 799702, 799703, 799704, 799707, 799908, 799958, 799958, 799958, 799958, 799958, 799996, 799971, 799908, 799998. The way this measure is calculated has changed over time. In 2018, County Health Rankings switched from using North American Information Classification System (NAICS) codes due to lack of availability of a nationally	Measure	Description	Data Source	Most Recent Data Year(s)
opportunities if they: reside in a census block that is within a half mile of a park or reside in an urban census block that is within one mile of a recreational facility or reside in a rural census block that is within three miles of a recreational facility. The numerator is the number of individuals who live in census blocks meeting at least one of the above criteria. The denominator is the total county population. Locations for physical activity are defined as parks or recreational facilities. Parks include local, state and national parks. Recreational facilities include YMCAs as well as businesses identified by the following Standard Industry Classification (SIC) codes and include a wide variety of facilities including gyms, community centers, dance studios and pools: 799101, 799102, 799103, 799106, 799107, 799108, 799109, 799111, 799102, 799103, 799701, 799702, 799703, 799704, 799707, 799711, 799712, 799901, 799970, 799911, 799711, 799717, 799723, 799901, 799908, 799958, 799968, 799971, 799984 or 799998. The way this measure is calculated has changed over time. In 2018, County Health Rankings switched from using North American Information Classification (SIC) codes due to lack of availability of a nationally		facilities. Individuals are considered	Health Rankings. Data	
census block that is within a half mile of a park or reside in an urban census block that is within one mile of a recreational facility or reside in a rural census block that is within three miles of a recreational facility. The numerator is the number of individuals who live in census blocks meeting at least one of the above criteria. The denominator is the total county population. Locations for physical activity are defined as parks or recreational facilities. Parks include local, state and national parks. Recreational facilities include YMCAs as well as businesses identified by the following Standard Industry Classification (SIC) codes and include a wide variety of facilities including gyms, community centers, dance studios and pools: 799101, 799102, 799103, 799106, 799107, 799108, 799109, 799110, 799111, 799112, 799201, 799701, 799702, 799703, 799704, 799707, 799711, 799717, 799723, 799901, 799908, 799958, 799969, 799971, 799984 or 799998. The way this measure is calculated has changed over time. In 2018, County Health Rankings switched from using North American Information Classification (SIC) codes due to lack of availability of a nationally		to have access to exercise	accessed June 2022.	
of a park or reside in an urban census block that is within one mile of a recreational facility or reside in a rural census block that is within three miles of a recreational facility. The numerator is the number of individuals who live in census blocks meeting at least one of the above criteria. The denominator is the total county population. Locations for physical activity are defined as parks or recreational facilities. Parks include local, state and national parks. Recreational facilities include YMCAs as well as businesses identified by the following Standard Industry Classification (SIC) codes and include a wide variety of facilities including gyms, community centers, dance studios and pools: 799101, 799102, 799103, 799106, 799107, 799108, 799109, 799107, 799108, 799109, 799107, 799702, 799703, 799704, 799707, 799711, 799712, 799201, 799701, 799908, 799998, 799998, 7999971, 799908, 799998. The way this measure is calculated has changed over time. In 2018, County Health Rankings switched from using North American Information Classification System (NAICS) codes to using Standard Industry Classification (SIC) codes due to lack of availability of a nationally		opportunities if they: reside in a		
block that is within one mile of a recreational facility or reside in a rural census block that is within three miles of a recreational facility. The numerator is the number of individuals who live in census blocks meeting at least one of the above criteria. The denominator is the total county population. Locations for physical activity are defined as parks or recreational facilities. Parks include local, state and national parks. Recreational facilities include YMCAs as well as businesses identified by the following Standard Industry Classification (SIC) codes and include a wide variety of facilities including gyms, community centers, dance studios and pools: 799101, 799102, 799103, 799106, 799107, 799108, 799109, 799110, 799111, 799112, 799201, 799701, 799701, 799702, 799703, 799704, 799707, 799701, 799908, 799958, 799969, 799971, 799908, 799958, 799969, 799971, 799908, 799958, 799969, 799971, 799908, 799998. The way this measure is calculated has changed over time. In 2018, County Health Rankings switched from using North American Information Classification System (NAICS) codes to using Standard Industry Classification (SIC) codes due to lack of availability of a nationally		census block that is within a half mile		
recreational facility or reside in a rural census block that is within three miles of a recreational facility. The numerator is the number of individuals who live in census blocks meeting at least one of the above criteria. The denominator is the total county population. Locations for physical activity are defined as parks or recreational facilities. Parks include local, state and national parks. Recreational facilities include YMCAs as well as businesses identified by the following Standard Industry Classification (SIC) codes and include a wide variety of facilities including gyms, community centers, dance studios and pools: 799101, 799102, 799103, 799106, 799107, 799108, 799109, 799111, 799112, 799201, 799701, 799702, 799703, 799704, 799707, 799711, 799717, 799723, 799901, 799908, 799958, 799969, 799971, 799984 or 799998. The way this measure is calculated has changed over time. In 2018, County Health Rankings switched from using North American Information Classification System (NAICS) codes to using Standard Industry Classification (SIC)codes due to lack of availability of a nationally		of a park or reside in an urban census		
rural census block that is within three miles of a recreational facility. The numerator is the number of individuals who live in census blocks meeting at least one of the above criteria. The denominator is the total county population. Locations for physical activity are defined as parks or recreational facilities. Parks include local, state and national parks. Recreational facilities include YMCAs as well as businesses identified by the following Standard Industry Classification (SIC) codes and include a wide variety of facilities including gyms, community centers, dance studios and pools: 799101, 799102, 799103, 799106, 799107, 799108, 799109, 799111, 799112, 799201, 799701, 799702, 799703, 799704, 799701, 799702, 799703, 799704, 799701, 79908, 799958, 799969, 799971, 799908, 799958. The way this measure is calculated has changed over time. In 2018, County Health Rankings switched from using North American Information Classification System (NAICS) codes to using Standard Industry Classification (SIC) codes due to lack of availability of a nationally				
miles of a recreational facility. The numerator is the number of individuals who live in census blocks meeting at least one of the above criteria. The denominator is the total county population. Locations for physical activity are defined as parks or recreational facilities. Parks include local, state and national parks. Recreational facilities include YMCAs as well as businesses identified by the following Standard Industry Classification (SIC) codes and include a wide variety of facilities including gyms, community centers, dance studios and pools: 799101, 799102, 799103, 799106, 799101, 799102, 799103, 799106, 799101, 799108, 799109, 799110, 799111, 799112, 799201, 799701, 799702, 799703, 799704, 799707, 799711, 799717, 799723, 799901, 799908, 799998, 799998, 799999, 799971, 799984 or 799998. The way this measure is calculated has changed over time. In 2018, County Health Rankings switched from using North American Information Classification System (NAICS) codes to using Standard Industry Classification (SIC) codes due to lack of availability of a nationally		recreational facility or reside in a		
numerator is the number of individuals who live in census blocks meeting at least one of the above criteria. The denominator is the total county population. Locations for physical activity are defined as parks or recreational facilities. Parks include local, state and national parks. Recreational facilities include YMCAs as well as businesses identified by the following Standard Industry Classification (SIC) codes and include a wide variety of facilities including gyms, community centers, dance studios and pools: 799101, 799102, 799103, 799106, 799107, 799108, 799107, 799108, 799107, 799108, 799107, 799108, 799107, 799703, 799704, 799701, 799701, 799704, 799707, 799711, 799703, 799704, 799707, 799711, 799718, 799988, 799989, 7999971, 799908, 799988, 799989, 7999971, 799908, 799988. The way this measure is calculated has changed over time. In 2018, County Health Rankings switched from using North American Information Classification System (NAICS) codes to using Standard Industry Classification (SIC) codes due to lack of availability of a nationally				
individuals who live in census blocks meeting at least one of the above criteria. The denominator is the total county population. Locations for physical activity are defined as parks or recreational facilities. Parks include local, state and national parks. Recreational facilities include YMCAs as well as businesses identified by the following Standard Industry Classification (SIC) codes and include a wide variety of facilities including gyms, community centers, dance studios and pools: 799101, 799102, 799103, 799106, 799107, 799108, 799109, 799110, 799111, 799112, 799201, 799701, 799702, 799703, 799704, 799701, 799702, 799703, 799704, 799707, 799711, 799717, 799723, 799901, 799908, 799958, 799969, 799971, 799984 or 799998. The way this measure is calculated has changed over time. In 2018, County Health Rankings switched from using North American Information Classification System (NAICS) codes to using Standard Industry Classification (SIC)codes due to lack of availability of a nationally		-		
meeting at least one of the above criteria. The denominator is the total county population. Locations for physical activity are defined as parks or recreational facilities. Parks include local, state and national parks. Recreational facilities include YMCAs as well as businesses identified by the following Standard Industry Classification (SIC) codes and include a wide variety of facilities including gyms, community centers, dance studios and pools: 799101, 799102, 799103, 799106, 799107, 799108, 799109, 799107, 799108, 799109, 799111, 799112, 799201, 799701, 799702, 799703, 799704, 799707, 799711, 799717, 799723, 799901, 799908, 799958, 799969, 799971, 799984 or 799998. The way this measure is calculated has changed over time. In 2018, County Health Rankings switched from using North American Information Classification System (NAICS) codes to using Standard Industry Classification (SIC)codes due to lack of availability of a nationally				
criteria. The denominator is the total county population. Locations for physical activity are defined as parks or recreational facilities. Parks include local, state and national parks. Recreational facilities include YMCAs as well as businesses identified by the following Standard Industry Classification (SIC) codes and include a wide variety of facilities including gyms, community centers, dance studios and pools: 799101, 799102, 799103, 799106, 799107, 799108, 799109, 799110, 799111, 799112, 799201, 799701, 799702, 799703, 799704, 799707, 799711, 799717, 799723, 799904, 799707, 799908, 799958, 799969, 799971, 799984 or 799998. The way this measure is calculated has changed over time. In 2018, County Health Rankings switched from using North American Information Classification System (NAICS) codes to using Standard Industry Classification (SIC)codes due to lack of availability of a nationally				
county population. Locations for physical activity are defined as parks or recreational facilities. Parks include local, state and national parks. Recreational facilities include YMCAs as well as businesses identified by the following Standard Industry Classification (SIC) codes and include a wide variety of facilities including gyms, community centers, dance studios and pools: 799101, 799102, 799103, 799106, 799107, 799108, 799109, 799110, 799111, 799112, 799201, 799701, 799702, 799703, 799704, 799701, 799702, 799703, 799704, 799707, 799711, 799717, 799723, 799901, 799908, 799958, 799969, 7999971, 799984 or 799998. The way this measure is calculated has changed over time. In 2018, County Health Rankings switched from using North American Information Classification System (NAICS) codes to using Standard Industry Classification (SIC)codes due to lack of availability of a nationally				
physical activity are defined as parks or recreational facilities. Parks include local, state and national parks. Recreational facilities include YMCAs as well as businesses identified by the following Standard Industry Classification (SIC) codes and include a wide variety of facilities including gyms, community centers, dance studios and pools: 799101, 799102, 799103, 799106, 799110, 799108, 799109, 799111, 799112, 799201, 799701, 799702, 799703, 799704, 799701, 799701, 799703, 799704, 799707, 799711, 799717, 799723, 799901, 799908, 799958, 799969, 799971, 799984 or 799998. The way this measure is calculated has changed over time. In 2018, County Health Rankings switched from using North American Information Classification System (NAICS) codes to using Standard Industry Classification (SIC)codes due to lack of availability of a nationally				
or recreational facilities. Parks include local, state and national parks. Recreational facilities include YMCAs as well as businesses identified by the following Standard Industry Classification (SIC) codes and include a wide variety of facilities including gyms, community centers, dance studios and pools: 799101, 799102, 799103, 799106, 799107, 799108, 799109, 799110, 799111, 799112, 799201, 799701, 799702, 799703, 799704, 799707, 799711, 799717, 799723, 799901, 799908, 799958, 799969, 799971, 799984 or 799998. The way this measure is calculated has changed over time. In 2018, County Health Rankings switched from using North American Information Classification System (NAICS) codes to using Standard Industry Classification (SIC)codes due to lack of availability of a nationally				
include local, state and national parks. Recreational facilities include YMCAs as well as businesses identified by the following Standard Industry Classification (SIC) codes and include a wide variety of facilities including gyms, community centers, dance studios and pools: 799101, 799102, 799103, 799106, 799107, 799108, 799109, 799111, 799112, 799201, 799701, 799111, 799112, 799201, 799701, 799702, 799703, 799704, 799707, 799711, 799717, 799723, 799901, 799908, 799958, 799969, 799971, 799984 or 799998. The way this measure is calculated has changed over time. In 2018, County Health Rankings switched from using North American Information Classification System (NAICS) codes to using Standard Industry Classification (SIC)codes due to lack of availability of a nationally		1		
parks. Recreational facilities include YMCAs as well as businesses identified by the following Standard Industry Classification (SIC) codes and include a wide variety of facilities including gyms, community centers, dance studios and pools: 799101, 799102, 799103, 799106, 799107, 799108, 799109, 799110, 799111, 799112, 799201, 799701, 799702, 799703, 799704, 799707, 799711, 799717, 799723, 799901, 799908, 799958, 799969, 799971, 799984 or 799998. The way this measure is calculated has changed over time. In 2018, County Health Rankings switched from using North American Information Classification System (NAICS) codes to using Standard Industry Classification (SIC)codes due to lack of availability of a nationally				
YMCAs as well as businesses identified by the following Standard Industry Classification (SIC) codes and include a wide variety of facilities including gyms, community centers, dance studios and pools: 799101, 799102, 799103, 799106, 799107, 799108, 799109, 799110, 799111, 799112, 799201, 799701, 799702, 799703, 799704, 799707, 799711, 799717, 799723, 799901, 799908, 799958, 799958, 799969, 799971, 799984 or 799998. The way this measure is calculated has changed over time. In 2018, County Health Rankings switched from using North American Information Classification System (NAICS) codes to using Standard Industry Classification (SIC)codes due to lack of availability of a nationally		· ·		
identified by the following Standard Industry Classification (SIC) codes and include a wide variety of facilities including gyms, community centers, dance studios and pools: 799101, 799102, 799103, 799106, 799107, 799108, 799109, 799110, 799111, 799112, 799201, 799701, 799702, 799703, 799704, 799707, 799711, 799717, 799723, 799901, 799908, 799958, 799969, 799971, 799984 or 799998. The way this measure is calculated has changed over time. In 2018, County Health Rankings switched from using North American Information Classification System (NAICS) codes to using Standard Industry Classification (SIC)codes due to lack of availability of a nationally		· ·		
Industry Classification (SIC) codes and include a wide variety of facilities including gyms, community centers, dance studios and pools: 799101, 799102, 799103, 799106, 799107, 799108, 799109, 799110, 799111, 799112, 799201, 799701, 799702, 799703, 799704, 799707, 799711, 799717, 799723, 799901, 799908, 799958, 799969, 799971, 799984 or 799998. The way this measure is calculated has changed over time. In 2018, County Health Rankings switched from using North American Information Classification System (NAICS) codes to using Standard Industry Classification (SIC)codes due to lack of availability of a nationally				
and include a wide variety of facilities including gyms, community centers, dance studios and pools: 799101, 799102, 799103, 799106, 799107, 799108, 799109, 799110, 799111, 799112, 799201, 799701, 799702, 799703, 799704, 799707, 799711, 799717, 799723, 799901, 799908, 799958, 799969, 799971, 799984 or 799998. The way this measure is calculated has changed over time. In 2018, County Health Rankings switched from using North American Information Classification System (NAICS) codes to using Standard Industry Classification (SIC)codes due to lack of availability of a nationally		_		
including gyms, community centers, dance studios and pools: 799101, 799102, 799103, 799106, 799107, 799108, 799109, 799110, 799111, 799112, 799201, 799701, 799702, 799703, 799704, 799707, 799711, 799717, 799723, 799901, 799908, 799958, 799969, 799971, 799984 or 799998. The way this measure is calculated has changed over time. In 2018, County Health Rankings switched from using North American Information Classification System (NAICS) codes to using Standard Industry Classification (SIC)codes due to lack of availability of a nationally				
dance studios and pools: 799101, 799102, 799103, 799106, 799107, 799108, 799109, 799110, 799111, 799112, 799201, 799701, 799702, 799703, 799704, 799707, 799711, 799717, 799723, 799901, 799908, 799958, 799969, 799971, 799984 or 799998. The way this measure is calculated has changed over time. In 2018, County Health Rankings switched from using North American Information Classification System (NAICS) codes to using Standard Industry Classification (SIC)codes due to lack of availability of a nationally		•		
799102, 799103, 799106, 799107, 799108, 799109, 799110, 799111, 799112, 799201, 799701, 799702, 799703, 799704, 799707, 799711, 799717, 799723, 799901, 799908, 799958, 799969, 799971, 799984 or 799998. The way this measure is calculated has changed over time. In 2018, County Health Rankings switched from using North American Information Classification System (NAICS) codes to using Standard Industry Classification (SIC)codes due to lack of availability of a nationally		= = :		
799108, 799109, 799110, 799111, 799112, 799201, 799701, 799702, 799703, 799704, 799707, 799711, 799717, 799723, 799901, 799908, 799958, 799969, 799971, 799984 or 799998. The way this measure is calculated has changed over time. In 2018, County Health Rankings switched from using North American Information Classification System (NAICS) codes to using Standard Industry Classification (SIC)codes due to lack of availability of a nationally				
799112, 799201, 799701, 799702, 799703, 799704, 799707, 799711, 799717, 799723, 799901, 799908, 799958, 799969, 799971, 799984 or 799998. The way this measure is calculated has changed over time. In 2018, County Health Rankings switched from using North American Information Classification System (NAICS) codes to using Standard Industry Classification (SIC)codes due to lack of availability of a nationally				
799703, 799704, 799707, 799711, 799717, 799723, 799901, 799908, 799958, 799969, 799971, 799984 or 799998. The way this measure is calculated has changed over time. In 2018, County Health Rankings switched from using North American Information Classification System (NAICS) codes to using Standard Industry Classification (SIC)codes due to lack of availability of a nationally				
799717, 799723, 799901, 799908, 799958, 799969, 799971, 799984 or 799998. The way this measure is calculated has changed over time. In 2018, County Health Rankings switched from using North American Information Classification System (NAICS) codes to using Standard Industry Classification (SIC)codes due to lack of availability of a nationally				
799958, 799969, 799971, 799984 or 799998. The way this measure is calculated has changed over time. In 2018, County Health Rankings switched from using North American Information Classification System (NAICS) codes to using Standard Industry Classification (SIC)codes due to lack of availability of a nationally				
799998. The way this measure is calculated has changed over time. In 2018, County Health Rankings switched from using North American Information Classification System (NAICS) codes to using Standard Industry Classification (SIC)codes due to lack of availability of a nationally				
calculated has changed over time. In 2018, County Health Rankings switched from using North American Information Classification System (NAICS) codes to using Standard Industry Classification (SIC)codes due to lack of availability of a nationally				
2018, County Health Rankings switched from using North American Information Classification System (NAICS) codes to using Standard Industry Classification (SIC)codes due to lack of availability of a nationally				
switched from using North American Information Classification System (NAICS) codes to using Standard Industry Classification (SIC)codes due to lack of availability of a nationally		_		
Information Classification System (NAICS) codes to using Standard Industry Classification (SIC)codes due to lack of availability of a nationally				
(NAICS) codes to using Standard Industry Classification (SIC)codes due to lack of availability of a nationally		=		
Industry Classification (SIC)codes due to lack of availability of a nationally		· · · · · · · · · · · · · · · · · · ·		
to lack of availability of a nationally				
reliable and undated data source		reliable and updated data source.		

# **Diet and Exercise**

Measure	Description	Data Source	Most Recent Data Year(s)
% of Students Who Consumed Sugar Sweetened Beverages 3 or More Times Yesterday	Percentage of students in grades 2, 4, 8 and 11 reporting consumption of sugar-sweetened beverages 3 or more times the prior day, based on	State of Texas 2015-2016 School Physical Activity and Nutrition (SPAN) Project, Michael & Susan Dell Center for Healthy	2015-2016

Measure	Description	Data Source	Most Recent Data Year(s)
– Health Service Region 2/3	probability sampling of students participating in a surveillance system	Living at the University of Texas Health Science Center at Houston School of Public Health. Data accessed July 2022.	
% of Students Who Consumed Vegetables 3 or More Times Yesterday – Health Service Region 2/3	Percentage of students in grades 2, 4, 8 and 11 reporting consumption of vegetables 3 or more times the prior day, based on probability sampling of students participating in a surveillance system	State of Texas 2015-2016 School Physical Activity and Nutrition (SPAN) Project, Michael & Susan Dell Center for Healthy Living at the University of Texas Health Science Center at Houston School of Public Health. Data accessed July 2022.	2015-2016
% of Students Who Meet Recommended Physical Activity Guidelines – Health Service Region 2/3	Percentage of students in grades 2, 4, 8 and 11 reporting meeting physical activity guidelines based on report of days per week of physical activity/outdoor play, based on probability sampling of students participating in a surveillance system	State of Texas 2015-2016 School Physical Activity and Nutrition (SPAN) Project, Michael & Susan Dell Center for Healthy Living at the University of Texas Health Science Center at Houston School of Public Health. Data accessed July 2022.	2015-2016

# **Education**

Measure	Description	Data Source	Most Recent Data Year(s)
% Completed High School	Percentage of the ninth-grade cohort in public schools that graduates from high school in four years. Please note this measure was modified in the 2011, 2012 and 2014 Rankings.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed June 2022.	2022
% Some College	Percentage of the population ages 25-44 with some post-secondary education, such as enrollment in vocational/technical schools, junior colleges or four-year colleges. It includes individuals who pursued education following high school but did not receive a degree as well as those who attain degrees. The numerator is the number of adults ages 25-44 who have obtained some level of post-secondary education.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed June 2022.	2022

Measure	Description	Data Source	Most Recent Data Year(s)
	The denominator is the population ages 25-44 in a county.		
Average Grade Performance - Reading	Average grade level performance for 3rd graders on English Language Arts standardized tests.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed June 2022.	2022
Average Grade Performance - Math	Average grade level performance for 3rd graders on math standardized tests.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed December 2020.	2022

# **Employment**

Measure	Description	Data Source	Most Recent Data Year(s)
% Unemployed	Percentage of a county's workforce that is not employed. The numerator is the number of individuals over age 16 in a county who are seeking work but do not have a job. The denominator is the total labor force, which includes all individuals over age 16 who are actively searching for work and unemployed plus those who are employed. Unemployment estimates are modeled.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed June 2022.	2022

# **Environmental Quality**

Measure	Description	Data Source	Most Recent Data Year(s)
Average Daily PM2.5	Average daily density of fine particulate matter in micrograms per cubic meter. Fine particulate matter is defined as particles of air pollutants with an aerodynamic diameter less than 2.5 micrometers (PM2.5).  Air Pollution is modeled. For 2017, County Health Rankings is using data provided by the EPHT Network. From 2013-2016 the County Health Rankings used data provided by the NASA Applied Sciences Program, which used a similar methodology	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed June 2022.	2022

Measure	Description	Data Source	Most Recent Data Year(s)
	but also incorporates satellite data.  For 2012 and prior years of the County Health Rankings, data were obtained from the EPHT Network, but the measures of air quality differed from the current measure: County Health Rankings reported the average number of days annually		
	that both PM2.5 and ozone pollution were reported to be over the accepted limit.		
High Ozone Days	The 2018, 2019 and 2020 AQS hourly ozone data were used to calculate the daily 8-hour maximum concentration for each ozonemonitoring site. Scores represent the number of days each county, with at least one ozone monitor, experienced air quality designated as orange (Unhealthy for Sensitive Groups), red (Unhealthy) or purple (Very Unhealthy).	American Lung Association: State of the Air Report Card	2022
Particle Pollution	The 2018, 2019 and 2020 maximum daily 24-hour AQS PM2.5 concentration for each county was summarized. Scores represent the number of days each county, with at least one PM2.5 monitor, experienced air quality designated as orange (Unhealthy for Sensitive Groups), red (Unhealthy), purple (Very Unhealthy) or maroon (Hazardous).	American Lung Association: State of the Air Report Card	2022
Presence of Water Violation	Indicator of the presence of health- related drinking water violations. 'Yes' indicates the presence of a violation, 'No' indicates no violation.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed June 2022.	2022

# **Family, Community and Social Support**

Measure	Description	Data Source	Most Recent Data Year(s)
% Children in Single- Parent Households	Percentage of children (less than 18 years of age) in family households that live in a household headed by a single parent. The single parent could be a male or female and is without	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County	2022

Measure	Description	Data Source	Most Recent Data Year(s)
	the presence of a spouse. Foster children and children living in nonfamily households or group quarters are not included in either the numerator or denominator.	Health Rankings. Data accessed June 2022.	
Social Association Rate	Number of organizations per 10,000 population in a county. The numerator is the number of organizations or associations in a county. Associations include membership organizations such as civic organizations, bowling centers, golf clubs, fitness centers, sports organizations, political organizations, labor organizations, business organizations and professional organizations. The denominator is the population of a county. Social Associations does not measure all of the social support available within a county. Data and business codes are self-reported by businesses in a county. We use the primary business code of organizations, which in some cases may not match up with our notion of what should be labeled as a civic organization. This measure does not take into account other important social connections offered via family support structures, informal networks or community service organizations, all of which are important to consider when understanding the amount of social support available within a county.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed June 2022.	2022
% Disconnected youth	Percentage of teens and young adults ages 16-19 who are neither working nor in school.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed June 2022.	2022
Segregation Index – Black/White	Degree to which two or more groups live separately from one another in a geographic area. The index of dissimilarity is a demographic measure of the evenness with which two groups (black and white residents, in this case) are distributed across the component geographic	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed June 2022.	2022

Measure	Description	Data Source	Most Recent Data Year(s)
	areas (census tracts, in this case) that make up a larger area (counties, in this case). The index score can be interpreted as the percentage of either black or white residents that would have to move to different geographic areas to produce a distribution that matches that of the larger area.		
Segregation Index – Non- White/White	Degree to which two or more groups live separately from one another in a geographic area. The index of dissimilarity is a demographic measure of the evenness with which two groups (non-white and white residents) are distributed across the component geographic areas (census tracts, in this case) that make up a larger area (counties, in this case). The index score can be interpreted as the percentage of white or non-white that would have to move to different geographic areas to produce a distribution that matches that of the larger area.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed June 2022.	2022
% Speak English Less than "Very Well"	Percentage of population ages 5 and older that report speaking English less than "very well."	U.S. Census Bureau American Community Survey 5-Year Data (2016- 2020). Data accessed July 2022.	2020

# **Food Security**

Measure	Description	Data Source	Most Recent Data Year(s)
% Food Insecure	Percentage of the population who did not have access to a reliable source of food during the past year. This measure was modeled using information from the Community Population Survey, Bureau of Labor Statistics and American Community Survey. More detailed information can be found here. This is one of two measures that are used to construct the Food Environment Index.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed June 2022.	2022
% Limited access to healthy foods	Percentage of population who are low-income and do not live close to a grocery store.	Robert Wood Johnson Foundation & University of Wisconsin Population	2022

Measure	Description	Data Source	Most Recent Data Year(s)
		Health Institute, County Health Rankings. Data accessed June 2022.	
% Enrolled in Free or Reduced Lunch	Percentage of children enrolled in public schools, grades PK - 12, eligible for free (family income less than 130 percent of federal poverty level) or reduced price (family income less than 185 percent of federal poverty level) lunch.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed June 2022.	2022
% of Population in Low Income, Low Access Census Tracts	Low-income census tracts in which at least 500 people or at least 33 percent of the tract's population live more than 1 mile from the nearest food store (supermarket, supercenter or large grocery store) if residing in an urban area or more than 10 miles from such a store if residing in a rural area.	Food Access Research Atlas (USDA). Data accessed June 2022.	2022

# **Housing and Homelessness**

Measure	Description	Data Source	Most Recent Data Year(s)
% Severe Housing Problems	Percentage of households with one or more of the following housing problems: Housing unit lacks complete kitchen facilities; Housing unit lacks complete plumbing facilities; Household is severely overcrowded; or Household is severely cost burdened. Incomplete kitchen facilities is defined as a unit which lacks a sink with running water, a range or a refrigerator. Incomplete plumbing facilities is defined as lacking hot and cold piped water, a flush toilet or a bathtub/shower. Severe overcrowding is defined as more than 1.5 persons per room. Severe cost burden is defined as monthly housing costs (including utilities) that exceed 50 percent of monthly income. The numerator is the number of households in a county with at least one of the above housing problems and the	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed June 2022.	2022

Measure	Description	Data Source	Most Recent Data Year(s)
	denominator is the number of total households in a county.		
% Homeowners	Percentage of occupied housing units that are owned.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed June 2022.	2022
% Severe Housing Cost Burden	Number of renter-occupied housing units spending 50 or more percent of household income on rent as a percentage of total renter-occupied housing units.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed June 2022.	2022

#### Income

Measure	Description	Data Source	Most Recent Data Year(s)
% Children in Poverty	Percentage of children under age 18 living in poverty. Poverty status is defined by family size and income and is measured at the household level. If a household's income is lower than the poverty threshold for a household of their size, they are considered to be in poverty. Poverty thresholds differ by household size and geography. For more information on how poverty thresholds are calculated please see the Census poverty page. Children in Poverty estimates are modeled.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed June 2022.	2022
Median household income	Income where half of households in a county earn more and half of households earn less. Income, defined as "Total income", is the sum of the amounts reported separately for: wage or salary income; net selfemployment income; interest, dividends or net rental or royalty income or income from estates and trusts; Social Security or Railroad Retirement income; Supplemental Security Income (SSI); public assistance or welfare payments; retirement, survivor or disability pensions; and all other income. Receipts from the following sources	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed June 2022.	2022

Measure	Description	Data Source	Most Recent Data Year(s)
	are not included as income: capital gains; money received from the sale of property (unless the recipient was engaged in the business of selling such property); the value of income "in kind" from food stamps, public housing subsidies, medical care, employer contributions for individuals, etc.; withdrawal of bank deposits; money borrowed; tax refunds; exchange of money between relatives living in the same household; gifts and lump-sum inheritances, insurance payments and other types of lump-sum receipts.		
Income Ratio	Ratio of household income at the 80th percentile to that at the 20th percentile, i.e., when the incomes of all households in a county are listed from highest to lowest, the 80th percentile is the level of income at which only 20 percent of households have higher incomes and the 20th percentile is the level of income at which only 20 percent of households have lower incomes. A higher inequality ratio indicates greater division between the top and bottom ends of the income spectrum.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed June 2022.	2022
Average Hourly Living Wage	Data represents the county-level hourly rate that an individual in a household must earn to support his or herself and their family	MIT Living Wage Calculator. Data accessed July 2022.	2022
ALICE (Asset Limited, Income Constrained, Employed) Households	Measure of the percent of households within a county that exceed the federal poverty level but less than the basic cost of living	United Way United for ALICE Report. Data accessed July 2022.	2018
Racial Equity Index Ranking	County-level score measuring racial disparity in nine indicators of inclusion and prosperity	National Equity Atlas. Data accessed July 2022.	2019

# Length of Life

Measure	Description	Data Source	Most Recent Data Year(s)
Years of Potential Life Lost Rate	Number of events (i.e., deaths, births, etc.) in a given time period (three-year period) divided by the average number of people at risk during that period. Years of potential life lost measures mortality by giving more weight to deaths at earlier ages than deaths at later ages. Premature deaths are deaths before age 75. All of the years of potential life lost in a county during a three-year period are summed and divided by the total population of the county during that same time period-this value is then multiplied by 100,000 to calculate the years of potential life lost under age 75 per 100,000 people. These are age-adjusted.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed June 2022.	2022
Life Expectancy	Average number of additional years that someone at a given age would be expected to live if current mortality conditions remained constant throughout their lifetime. Based on life expectancy at birth. State data are a single year while county data are a three-year aggregate. Data were not reported in the County Health Book prior to 2013.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed June 2022.	2022
Child Mortality Rate	Number of deaths among children under age 18 per 100,000 population	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed June 2022.	2022

# **Maternal and Infant Health**

Measure	Description	Data Source	Most Recent Data Year(s)
% Low Birthweight	Percentage of live births where the infant weighed less than 2,500 grams (approximately 5 lbs., 8 oz.). The numerator is the number of low birthweight infants born over a 7-year time span, while the denominator is the total number of	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed June 2022.	2022

Measure	Description	Data Source	Most Recent Data Year(s)
	births in a county during the same time.		
Infant Mortality Rate	Number of all infant deaths (within 1 year), per 1,000 live births.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed June 2022.	2022
Maternity Care Desert	Classification of maternity care (desert, low access, moderate access or full access) by county, based on number of hospitals offering OB services, proportion of women ages 18-64 without health insurance or number of OB providers per 10,000 births	March of Dimes. Nowhere to Go: Maternity Care Deserts Across the U.S. Data accessed July 2022.	2018

# **Mental Health**

Measure	Description	Data Source	Most Recent Data Year(s)
Mental Health Provider Ratio	Ratio of the population to mental health providers. Mental health providers are defined as psychiatrists, psychologists, licensed clinical social workers, counselors, marriage and family therapists and mental health providers that treat alcohol and other drug abuse, as well as advanced practice nurses specializing in mental health care. The ratio represents the number of individuals served by one mental health provider in a county, if the population were equally distributed across providers. In 2015, marriage and family therapists and mental health providers that treat alcohol and other drug abuse were added to this measure.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed June 2022.	2022
Psychiatrists per 10,000 Children	The number of providers per 10,000 children aged 0-17 years by county	CDC Children's Mental Health Data and Statistics. Data accessed July 2022.	2015
Licensed Social Workers per 10,000 Children	The number of providers per 10,000 children aged 0-17 years by county	CDC Children's Mental Health Data and Statistics. Data accessed July 2022.	2015

Measure	Description	Data Source	Most Recent Data Year(s)
Psychologists per 10,000 Children	The number of providers per 10,000 children aged 0-17 years by county	CDC Children's Mental Health Data and Statistics. Data accessed July 2022.	2015

# **Physical Health**

Measure	Description	Data Source	Most Recent Data Year(s)
% Adults with Obesity	Based on responses to the Behavioral Risk Factor Surveillance Survey (BRFSS) and is the percentage of the adult population (age 20 and older) that reports a body mass index (BMI) greater than or equal to 30 kg/m2. Participants are asked to self-report their height and weight. From these reported values, BMIs for the participants are calculated. The method for calculating Adult Obesity changed. Data for Adult Obesity are provided by the CDC Interactive Diabetes Atlas which combines 3 years of survey data to provide county-level estimates. In 2011, BRFSS changed their methodology to include cell phone and landline participants. Previously only landlines were used to collect data. Adult Obesity is created using statistical modeling.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed June 2022.	2022
% Adults with Diabetes	Percentage of adults aged 20 and above with diagnosed diabetes.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed June 2022.	2022
Prevalence of Birth Defects per 10,000 Live Births - All Birth Defects	Infants and fetuses with birth defects born to women residing in Texas - All birth defects	Texas Department of State Health Services	2014
Prevalence of Birth Defects per 10,000 Live Births - Musculoskeletal	infants and fetuses with birth defects born to women residing in Texas - Musculoskeletal	Texas Department of State Health Services	2014
Clubfoot by Race/Ethnicity: Texas, 2014-2017 Average	Prevalence of cases per 10,000 live births	March of Dimes Peristats: National Birth Defects Prevention Network	2017
Limb Deficiencies (Reduction Defects) by	Prevalence of cases per 10,000 live births	March of Dimes Peristats: National Birth Defects Prevention Network	2017

Measure	Description	Data Source	Most Recent Data Year(s)
Race/Ethnicity: Texas,			
2014-2017 Average			
Spina Bifida without		March of Dimes Peristats:	
Anencephalus by	Prevalence of cases per 10,000 live	National Birth Defects	2017
Race/Ethnicity: Texas,	births	Prevention Network	2017
2014-2017 Average		Prevention Network	

# Safety

Measure	Description	Data Source	Most Recent Data Year(s)
Violent Crime Rate	Number of violent crimes reported per 100,000 population. Violent crimes are defined as offenses that involve face-to-face confrontation between a victim and a perpetrator, including homicide, rape, robbery and aggravated assault. Information for this measure comes from the FBI's Uniform Crime Reporting (UCR) Program. Crimes are counted where they are committed rather than based on the residence of people involved.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed June 2022.	2022
Injury Death Rate	Number of deaths from planned (e.g., homicide or suicide) and unplanned (e.g., motor vehicle deaths) injuries per 100,000 population. This measure includes injuries from all causes and intents over a 5-year period. Deaths are counted in the county of residence for the person who died, rather than the county where the death occurred.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed June 2022.	2022
Motor Vehicle Mortality Rate	Number of deaths due to traffic accidents involving a motor vehicle per 100,000 population. Motor vehicle crash deaths include traffic accidents involving motorcycles; 3-wheel motor vehicles; cars; vans; trucks; buses; street cars; ATVs; industrial, agricultural and construction vehicles; and bicyclists or pedestrians when colliding with any of the previously listed motor vehicles. Deaths due to boating accidents and airline crashes are not included in this measure. In prior	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed June 2022.	2022

Measure	Description	Data Source	Most Recent Data Year(s)
	years, non-traffic motor vehicle accidents were included in this definition. ICD10 codes included are V02-V04 (.1, .9), V09.2, V12-V14 (.39), V19 (.46), V20-V28 (.39), V29-V79 (.49), V80 (.35), V81.1, V82.1, V83-V86 (.03), V87 (.08) and V89.2.		
Homicide Rate	Number of deaths from assaults, defined as ICD-10 codes X85-Y09, per 100,000 population	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed June 2022.	2022
Firearm Fatalities Rate	Number of deaths due to firearms, defined as ICD-10 codes W32-W34, X72-X74, X93-X95, Y22-Y24 and Y35.0, per 100,000 population.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed June 2022.	2022
Juvenile Arrest Rate	Rate of delinquency cases per 1,000 juveniles.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed June 2022.	2022
Incarceration Rate (%) - All	Percentage of children who grew up in this area who were in prison or jail on April 1, 2010, by county	The Opportunity Atlas, Opportunity Insights, Harvard University. Data accessed July 2022	2010

# **Sexual Health**

Measure	Description	Data Source	Most Recent Data Year(s)
Teen Birth Rate	Number of births per 1,000 female population ages 15-19	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed June 2022.	2022

# **Substance Use Disorders**

Measure	Description	Data Source	Most Recent Data Year(s)
Opioid dispensing rate	Number of retail opioid prescriptions dispensed per 100 persons	Centers for Disease Control and Prevention, National Center for Injury	2020

Measure	Description	Data Source	Most Recent Data Year(s)
		Prevention and Control.	
		Data accessed July 2022.	

# **Tobacco Use**

Measure	Description	Data Source	Most Recent Data Year(s)
% Smokers	Percentage of the adult population that currently smokes every day or most days and has smoked at least 100 cigarettes in their lifetime.  Please note that the methods for calculating this measure changed in the 2016 Rankings. Adult Smoking estimates are created using statistical modeling.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed June 2022.	2022

# **Transportation Options and Transit**

Measure	Description	Data Source	Most Recent Data Year(s)
Traffic volume	Average traffic volume per meter of major roadways in the county.	Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute, County Health Rankings. Data accessed June 2022.	2022

#### **Complete Data by Focus Area**

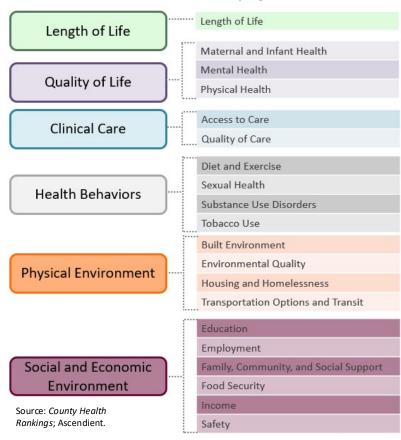
When viewing the secondary data summary tables, please note that the following color shadings have been included to identify how the counties within the community served by Scottish Rite compare to Texas/the national benchmark.

#### **Secondary Data Summary Table Color Comparisons**

Color Shading	Scottish Rite Community Description
	Represents measures in which Scottish Rite Community scores are more than five percent better than the most applicable target/benchmark and for which a low priority level was assigned.
	Represents measures in which Scottish Rite Community scores are comparable to the most applicable target/benchmark scoring within or equal to five percent and for which a medium priority level was assigned.
	Represents measures in which Scottish Rite Community scores are more than five percent worse than the most applicable target/benchmark and for which a high priority level was assigned.

Note: Please see methodology section of this Appendix for more information on assigning need levels to the secondary data.

### **Focus Area Groupings**



### **Access to Care**

Measure	National Bench- mark	Texas Bench- mark	Dallas County Data	Collin County Data	Denton County Data	Ellis County Data	Grayson County Data	Kaufman County Data	Rockwall County Data	Tarrant County Data	Most Recent Data Year
% Uninsured	11.0%	20.7%	25.0%	12.0%	13.0%	19.0%	22.0%	17.0%	15.0%	19.0%	2022
Primary Care Physicians Ratio	1,310:1	1,629:1	1,415:1	991:1	1,852:1	2,432:1	2,197:1	3,890:1	1,345:1	1,689:1	2022
Dentist Ratio	1,400:1	1,660:1	1,136:1	1,471:1	1,725:1	2,950:1	1,687:1	2,557:1	1,357:1	1,633:1	2022
% Uninsured Children	6.0%	12.7%	16.0%	9.0%	10.0%	13.0%	15.0%	11.0%	12.0%	12.0%	2022
Medicaid Enrollment		38.21%	41.12%	15.41%	18.43%	30.04%	36.42%	37.36%	18.20%	35.13%	2019
CHIP Enrollment		4.65%	5.92%	2.74%	3.44%	4.54%	4.60%	5.36%	2.64%	5.24%	2019

### **Built Environment**

Measure	National Bench- mark	Texas Bench- mark	Dallas County Data	Collin County Data	Denton County Data	Ellis County Data	Grayson County Data	Kaufman County Data	Rockwall County Data	Tarrant County Data	Most Recent Data Year
Food Environment Index	7.8	6.1	7.40	8.40	8.20	7.90	7.10	8.00	8.70	7.50	2022
% with Access to Exercise Opportunities	80.0%	80.1%	96.0%	94.0%	94.0%	67.0%	69.0%	59.0%	91.0%	94.0%	2022

### **Education**

Measure	National Bench- mark	Texas Bench- mark	Dallas County Data	Collin County Data	Denton County Data	Ellis County Data	Grayson County Data	Kaufman County Data	Rockwall County Data	Tarrant County Data	Most Recent Data Year
% Completed High School	89.0%	84.4%	80.0%	94.0%	93.0%	87.0%	90.0%	86.0%	93.0%	86.0%	2022
% Some College	67.0%	63.1%	60.0%	81.0%	78.0%	63.0%	60.0%	58.0%	79.0%	64.0%	2022
Average Grade Performance - Reading	3.10	2.89	2.80	3.30	3.10	2.90	3.00	2.90	3.20	2.90	2022
Average Grade Performance – Math	3.00	3.09	3.00	3.60	3.20	3.10	3.10	3.10	3.50	3.00	2022

# **Employment**

Measure	National Bench- mark	Texas Bench- mark	Dallas County Data	Collin County Data	Denton County Data	Ellis County Data	Grayson County Data	Kaufman County Data	Rockwall County Data	Tarrant County Data	Most Recent Data Year
% Unemployed	8.1%	7.6%	7.7%	6.3%	6.5%	6.0%	5.9%	6.5%	6.0%	7.3%	2022

# **Environmental Quality**

Measure	National Bench- mark	Texas Bench- mark	Dallas County Data	Collin County Data	Denton County Data	Ellis County Data	Grayson County Data	Kaufman County Data	Rockwall County Data	Tarrant County Data	Most Recent Data Year
Average Daily PM2.5	7.5	9.0	10.3	10.4	10.5	8.3	9.9	9.8	9.8	8.5	2022
Presence of Water Violation			No	No	Yes	Yes	Yes	No	No	Yes	2022

# **Family, Community and Social Support**

Measure	National Bench- mark	Texas Bench- mark	Dallas County Data	Collin County Data	Denton County Data	Ellis County Data	Grayson County Data	Kaufman County Data	Rockwall County Data	Tarrant County Data	Most Recent Data Year
% Children in Single-Parent Households	25.0%	26.1%	31.0%	16.0%	17.0%	18.0%	24.0%	23.0%	14.0%	26.0%	2022
Social Association Rate	9.2	7.5	7.50	6.60	5.80	8.50	10.70	7.10	7.80	6.90	2022
% Disconnected Youth	7.0%	7.9%	8.0%	4.0%	5.0%	6.0%	9.0%	7.0%	6.0%	7.0%	2022
Segregation Index – Black/White	63.00	55.67	51.00	31.00	40.00	36.00	43.00	39.00	49.00	49.00	2022
Segregation Index – Non- White/White	46.00	37.98	37.00	29.00	30.00	32.00	31.00	33.00	34.00	34.00	2022
% Speak English Less Than "Very Well"	8.2%	13.3%	19.2%	9.5%	7.7%	6.9%	3.6%	5.4%	4.6%	11.3%	2022

# **Food Security**

Measure	National Bench- mark	Texas Bench- mark	Dallas County Data	Collin County Data	Denton County Data	Ellis County Data	Grayson County Data	Kaufman County Data	Rockwall County Data	Tarrant County Data	Most Recent Data Year
% Food Insecure	11.0%	14.1%	14.0%	11.0%	11.0%	12.0%	16.0%	13.0%	10.0%	13.0%	2022
% Limited Access to Healthy Foods	6.0%	8.3%	7.0%	3.0%	5.0%	7.0%	6.0%	3.0%	3.0%	8.0%	2022
% Enrolled in Free or Reduced Lunch	52.0%	60.2%	73.0%	26.0%	33.0%	48.0%	55.0%	53.0%	27.0%	59.0%	2022
% of Population in Low Income, Low Access Census Tracts	12.8%	20.1%	18.6%	3.7%	5.6%	12.7%	21.1%	20.3%	N/A	17.5%	2022

# **Housing and Homelessness**

Measure	National Bench- mark	Texas Bench- mark	Dallas County Data	Collin County Data	Denton County Data	Ellis County Data	Grayson County Data	Kaufman County Data	Rockwall County Data	Tarrant County Data	Most Recent Data Year
% Severe Housing Problems	17.0%	17.3%	21.0%	13.0%	14.0%	13.0%	14.0%	14.0%	12.0%	17.0%	2022
% Homeowners	64.0%	62.3%	50.0%	65.0%	65.0%	75.0%	68.0%	77.0%	83.0%	60.0%	2022
% Severe Housing Cost Burden	14.0%	13.3%	15.0%	11.0%	11.0%	10.0%	11.0%	10.0%	9.0%	13.0%	2022

### Income

Measure	National Bench- mark	Texas Bench- mark	Dallas County Data	Collin County Data	Denton County Data	Ellis County Data	Grayson County Data	Kaufman County Data	Rockwall County Data	Tarrant County Data	Most Recent Data Year
% Children in Poverty	16.0%	18.8%	20.0%	7.0%	8.0%	11.0%	21.0%	13.0%	6.0%	15.0%	2022
Median Household Income	67,300 .00	66,048 .00	65,770 .00	101,56 0.00	90,880	79,849 .00	59,554 .00	76,352 .00	106,22 5.00	72,064 .00	2022

Measure	National Bench- mark	Texas Bench- mark	Dallas County Data	Collin County Data	Denton County Data	Ellis County Data	Grayson County Data	Kaufman County Data	Rockwall County Data	Tarrant County Data	Most Recent Data Year
Income Ratio	4.9	4.8	4.4	3.9	4.1	3.8	4.2	4.1	3.3	4.2	2022
Racial Equity Index Ranking	59.00	51.10	55.00	68.30	71.50	61.90	N/A	60.20	N/A	65.00	2019

# **Length of Life**

Measure	National Bench- mark	Texas Bench- mark	Dallas County Data	Collin County Data	Denton County Data	Ellis County Data	Grayson County Data	Kaufman County Data	Rockwall County Data	Tarrant County Data	Most Recent Data Year
Years of Potential Life Lost Rate	7,300. 0	7,020. 9	7,276. 0	4,167. 0	4,389. 0	6,559. 0	8,940. 0	8,004. 0	4,833. 0	6,684. 0	2022
Life Expectancy	78.50	78.39	78.30	82.20	81.70	78.20	75.80	75.90	80.40	78.60	2022
Child Mortality Rate	50.00	48.57	54.00	33.00	32.00	47.00	57.00	47.00	30.00	49.00	2022

# **Maternal and Infant Health**

Measure	National Bench- mark	Texas Bench- mark	Dallas County Data	Collin County Data	Denton County Data	Ellis County Data	Grayson County Data	Kaufman County Data	Rockwall County Data	Tarrant County Data	Most Recent Data Year
% Low Birthweight	8.0%	8.3%	9.0%	7.0%	7.0%	7.0%	8.0%	8.0%	8.0%	8.0%	2022
Infant Mortality Rate	6.00	5.58	6.00	4.00	4.00	6.00	6.00	5.00	3.00	6.00	2022

# **Mental Health**

Measure	National Bench- mark	Texas Bench- mark	Dallas County Data	Collin County Data	Denton County Data	Ellis County Data	Grayson County Data	Kaufman County Data	Rockwall County Data	Tarrant County Data	Most Recent Data Year
Mental Health Provider Ratio	250:1	759:1	585:1	727:1	754:1	1304:1	706:1	1023:1	753:1	696:1	2022

# **Physical Health**

Measure	National Bench- mark	Texas Bench- mark	Dallas County Data	Collin County Data	Denton County Data	Ellis County Data	Grayson County Data	Kaufman County Data	Rockwall County Data	Tarrant County Data	Most Recent Data Year
% Adults with Obesity	32.0%	34.1%	33.0%	30.0%	32.0%	36.0%	36.0%	36.0%	31.0%	38.0%	2022
% Adults with Diabetes	9.0%	11.8%	14.0%	9.0%	10.0%	11.0%	11.0%	11.0%	9.0%	12.0%	2022
Prevalence of Birth Defects per 10,000 Live Births — All Birth Defects		455.60	545.49	538.76	513.84	549.20	437.48	538.59	556.41	642.84	2014
Prevalence of Birth Defects per 10,000 Live Births - Musculoskeletal		41.66	45.70	42.27	44.84	44.74	44.31	46.67	26.17	44.91	2014

# Safety

Measure	National Bench- mark	Texas Bench- mark	Dallas County Data	Collin County Data	Denton County Data	Ellis County Data	Grayson County Data	Kaufman County Data	Rockwall County Data	Tarrant County Data	Most Recent Data Year
Violent Crime Rate	386.0	420.4	480.0	157.0	170.0	142.0	273.0	234.0	97.0	403.0	2022
Injury Death Rate	76.0	59.8	61.0	40.0	39.0	54.0	69.0	68.0	41.0	53.0	2022
Motor Vehicle Mortality Rate	12.00	13.23	12.00	6.00	7.00	15.00	17.00	20.00	8.00	10.00	2022
Homicide Rate	6.00	5.84	8.00	2.00	2.00	4.00	5.00	5.00	2.00	6.00	2022
Firearm Fatalities Rate	12.00	12.72	14.00	8.00	8.00	11.00	16.00	16.00	10.00	12.00	2022
Juvenile Arrest Rate	19.00	17.09	13.00	10.00	10.00	10.00	19.00	12.00	8.00	16.00	2022
Incarceration Rate (%) - All	1.2%	1.8%	2.4%	1.0%	1.2%	1.9%	3.0%	2.2%	1.3%	1.8%	2010

### **Sexual Health**

Measure	National Bench- mark	Texas Bench- mark	Dallas County Data	Collin County Data	Denton County Data	Ellis County Data	Grayson County Data	Kaufman County Data	Rockwall County Data	Tarrant County Data	Most Recent Data Year
Teen Birth Rate	19.0	28.8	33.0	9.0	12.0	23.0	34.0	25.0	10.0	24.0	2022

### **Tobacco Use**

Measure	National Bench- mark	Texas Bench- mark	Dallas County Data	Collin County Data	Denton County Data	Ellis County Data	Grayson County Data	Kaufman County Data	Rockwall County Data	Tarrant County Data	Most Recent Data Year
% Smokers	16.0%	14.7%	15.0%	12.0%	13.0%	16.0%	19.0%	18.0%	14.0%	15.0%	2022

# **Transportation Options and Transit**

Measure	National Bench- mark	Texas Bench- mark	Dallas County Data	Collin County Data	Denton County Data	Ellis County Data	Grayson County Data	Kaufman County Data	Rockwall County Data	Tarrant County Data	Most Recent Data Year
Traffic Volume	395.00	471.59	892.00	394.00	394.00	164.00	147.00	104.00	203.00	598.00	2022

Secondary data findings are summarized in full by the table below.

Priority Area	RHP 9	RHP 10	RHP 18	Texas State Health Plan	Mott Children's Poll	Healthy People 2030	SPAN Survey	RWJ
Mental Health and Behavioral Health/ Wellness	✓	✓		✓	✓			
Access to Health Care	✓	✓		✓				✓
Social Determinants of Health		✓			✓	✓		✓
Chronic Disease Care & Prevention	✓	✓	✓					✓
Infant and Maternal Mortality	✓	✓	✓					
Care Coordination	✓	✓						
Obesity/Diabetes/Fitness/Nutrition					✓		✓	
Safety/Bullying/Cyberbullying					✓			✓
Health Equity					✓	✓		
Provider Availability			✓	✓				
Quality of Health				✓				✓
Primary Care			✓	✓				
Specialty Care			✓					
Health Communication/Literacy						✓		
Substance Use/Abuse (inc. Alcohol & Tobacco)					✓			
Overuse of Social Media					✓			

#### **APPENDIX 2 | DETAILED PRIMARY DATA FINDINGS**

Primary data were collected through focus groups, internet-based community surveys and internet-based key community health leader surveys.

### Methodologies

The methodologies varied based on the type of primary data being analyzed. The following section describes the various methodologies used to analyze the primary data.

### **Patient Focus Groups**

Four patient focus groups were conducted virtually with representation from 12 patient families to gather input on the following topics.

- Quality of care at Scottish Rite
- Access to care at Scottish Rite
- The services and programs offered at Scottish Rite
- Communication and coordination with patients

Key findings from the focus groups are summarized by topic below.

#### Quality of Care at Scottish Rite

- Patient families described the care for children in the community as "superb."
- The participating families consider the Scottish Rite care model to be "the best around."
- Patients lauded the many doctors and nurses at Scottish Rite who are attentive and compassionate while providing care to the children in the community.

#### Access to Care

- Respondents noted that it can be challenging to schedule an appointment at Scottish Rite, particularly for orthopedic services.
- Patient families noted that parents have to know to call in advance to schedule services. Additionally, if visits are cancelled via text message, rescheduling the appointment doesn't happen automatically.
- Focus group participants indicated that the facilities in Frisco and Dallas are wonderful, but traveling to either site can be long and challenging for patients living in Tarrant County.
- Patients reported that even when doctors are unavailable, Scottish Rite is very helpful and always tries to find a solution to meet their needs.

#### The Services and Programs Offered at Scottish Rite

- Participants described Crayon Care as "amazing," particularly for single income and low-income families.
- Additionally, patient families reported that Scottish Rite's staff goes above and beyond to try and
  ensure that cost is not prohibitive to care for any family.
- Some patients also indicated a desire that Scottish Rite have more diagnostic equipment (i.e., bone
  density scanner, audiology equipment, etc.), so that patients don't have to be referred elsewhere,
  particularly when the other hospital/provider does not offer the same financial assistance as Scottish
  Rite.

#### Communication and Coordination

- The participating patient families indicated that Scottish Rite is very proactive about communicating
  costs and helping patients navigate the process of getting financial assistance.
- Focus group members also stated that Scottish Rite staff are attentive listeners and go out of their
  way to make patients and parents feel comfortable and valued.
- Respondents also noted that Scottish Rite would benefit greatly from marketing themselves more broadly on social media, billboards, fliers, etc.

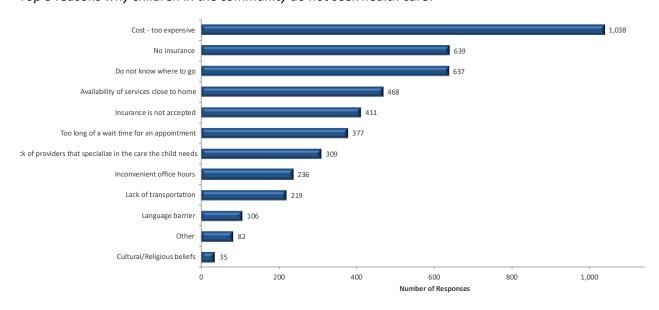
#### **Patient Surveys**

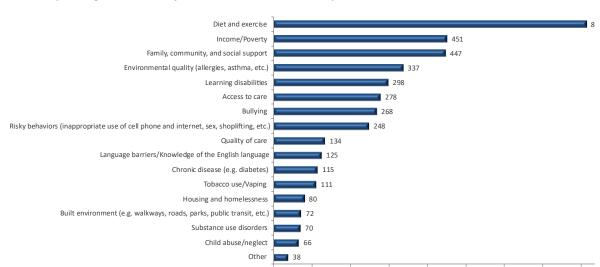
A total of 1,680 internet-based and paper patient surveys were completed by individuals who have received or are currently receiving care at one of Scottish Rite's facilities in Dallas and Frisco, Texas. Patient surveys were available in both English and Spanish and included 15 questions that ranged from demographic information to the perceived health needs of children in the community.

The key findings from the patient surveys are detailed below:

- Survey respondents represented a mix of geographies across Scottish Rite's community, with 57 percent of respondents residing in Dallas and Collin counties combined.
- 26 percent of patient survey respondents identified themselves as Hispanic/Latinx, slightly below the 30 percent of the population within the community overall
- In general, patients are extremely satisfied with their experience at Scottish Rite and the services that Scottish Rite provides
- When asked why children in their community might not seek health care, financial barriers related to cost and lack of insurance were identified as the top two reasons
- While diet and exercise are clearly viewed by patients as the top areas impacting child health, income/poverty and family, community and social support tied for 2<sup>nd</sup> among survey respondents

Top 3 reasons why children in the community do not seek health care:





### Top 3 areas impacting the health of children in the community:

#### **Community Leaders and Partners Interviews**

Fifteen key community leaders and partners representing the following organizations were interviewed virtually:







Number of Responses





















Community leaders and partners from the organizations listed above were interviewed virtually to gather input on the following topics:

- Health needs of children in Scottish Rite's community
- Scottish Rite's commitment to its mission
- The services and programs at Scottish Rite
- Communication and coordination with partners and other organizations

Key findings from the community leader and partner interviews and surveys are summarized by topic below.

#### Health Needs of Children in Scottish Rite's Community

- Interviewees believe that mental health issues, such as anxiety and depression, are extremely prevalent, particularly after COVID-19 pandemic.
- Community leaders and partners stated that Scottish Rite is a huge asset to the community because
  it is there to help the homeless students and kids without insurance that otherwise may not be able
  to afford the specialized care they need.
- Financial factors, such as cost and lack of insurance, were cited by survey respondents as primary reasons children in the community do not receive needed care.
- Access to care and long wait times for appointments were also identified as major drivers impacting health of children.
- Those interviewed reported that there are a lot of kids that need nutritious, healthy foods throughout the community.

#### Scottish Rite's Commitment to its Mission

- Consensus among the interviewed and surveyed community leaders and partners that Scottish Rite
  does an exceptional job living up to its mission "to provide the highest quality care available for
  children, within its scope of services, regardless of the family's ability to pay."
- Scottish Rite has a well-established reputation throughout its service area for ensuring access to and
  providing the utmost in quality care, particularly for underserved families that benefit from its
  financial aid programs, such as Crayon Care.

#### Services and Programs at Scottish Rite

- In addition to all the orthopedic services Scottish Rite provides, it also does a fantastic job with
  patients with dyslexia. Scottish Rite could benefit from additional bilingual education for students
  with dyslexia, including training professionals on how to assess children who speak more than one
  language.
- Respondents stated that Scottish Rite could add nutrition services to help address and prevent obesity and diabetes.
- Some interviewees believe that it would be great if Scottish Rite could establish a low-cost program to give out durable medical supplies like catheters, etc.

#### Communication and Coordination

- Community leaders believe that Frisco, which is recognized as "Sports City USA," is not only the best place to raise an athlete, but it is also now the safest place to raise an athlete because Scottish Rite is here.
- Partners indicated that Scottish Rite has stepped in and gone above and beyond numerous times and is an extremely strong partner that is great to collaborate with.
- Respondents noted that Scottish Rite has much to offer, but it can improve its outreach and education to the public through social media, posters, etc.
- Scottish Rite could establish joint symposiums to better spread the word and make better use of the health systems throughout Texas. A cross collaborative effort would be mutually beneficial.

In addition, Scottish Rite distributed a web-based survey to 21 community organizations, of which six completed the survey. Of the six community organizations that responded to the survey, one respondent represented an unspecified faith based organization and the remaining five were unspecified non-profit organizations. Given the small sample of survey respondents, key themes and findings for the community

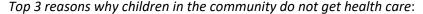
leader and partner surveys have been aggregated with the key findings for community leader and partner interviews described above.

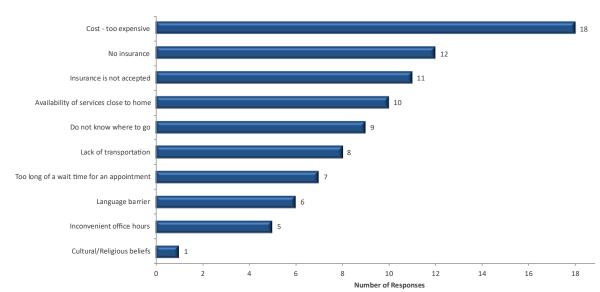
#### Scottish Rite Leaders Surveys

Twenty-nine Scottish Rite leaders completed web-based surveys and two more Scottish Rite leaders provided feedback through virtual interviews. Given the small sample of Scottish Rite leader interviews, key themes and findings for the interviews have been aggregated with the key findings for the Scottish Rite leader web-survey.

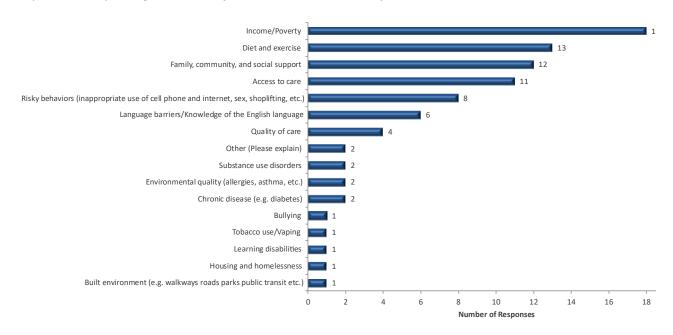
Key findings from the Scottish Rite Leader interviews and surveys are summarized below.

- When asked if Scottish Rite should be offering new or expanded services, more than half of respondents said yes, citing the potential for new locations, as well as therapy and other services.
- Mental health was the most common selection by respondents related to a health behavior for which children need more information.
- Similar to the patient surveys, Scottish Rite leaders felt that financial barriers related to cost and insurance are the top reasons children might not get care.
- Also consistent with the patient survey, Scottish Rite leaders felt that the top three areas impacting child health related to income/poverty, diet and exercise as well as family, community and social support.





Top 3 areas impacting the health of children in the community:



# Primary data findings are summarized in full by the table below.

Priority Area	Patients	Community Leaders and Partners	SRC Leadership	
Mental Health and Behavioral Health/ Wellness	✓	✓	✓	
Access to Health Care	✓	✓	✓	
Economic Environment/Income/Poverty	✓	✓	✓	
Obesity/Diabetes/Fitness/Nutrition	✓	✓	✓	
Social Determinants of Health	✓		✓	þ
Family, Community, and Social Support	✓		✓	
Environmental Quality	✓			
Risky Behaviors			✓	
Health Equity		✓		
Primary Care		✓		
Health Communication/Literacy	0	✓		

 $\bigstar$  Top priority area from secondary data