



**Shriners Hospitals
for Children®**
Love to the rescue.™

SHC Community Health Needs Assessment Report

Shriners Hospitals for Children® — Northern California

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Shriners Hospitals for Children — Northern California

Mission and Vision

Mission

- Shriners Hospitals for Children — Northern California is devoted to fulfilling the promise of every child’s life by providing the highest quality care to children with neuromusculoskeletal conditions, burn injuries and other special healthcare needs within a compassionate, family-centered and collaborative care environment.
- Provide for the education of physicians and other healthcare professionals.
- Conduct research to discover new knowledge that improves the quality of care and quality of life of children and families.

Vision

- Shriners Hospitals for Children — Northern California will be recognized as a leader in advancing the field of specialized pediatric surgery and noted as the destination of choice for children seeking to live life to their full potential.

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Our Commitment to the Community

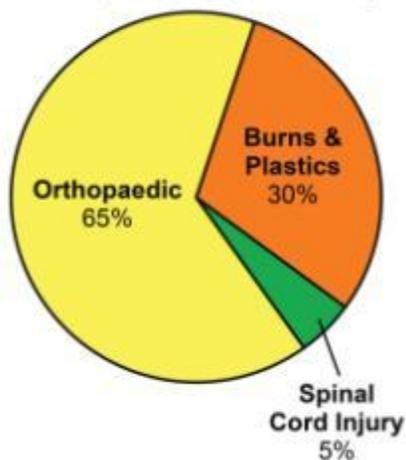
A Tradition of Caring

Located just minutes from downtown Sacramento, Shriners Hospitals for Children — Northern California stands firmly footed with a welcome to all children, who can benefit from its highly specialized pediatric care. Since opening its doors in 1997, more than 53,000 children have been accepted for care at the Shriners regional pediatric medical center, which serves families throughout Northern California, Western Nevada, Southern Oregon, and beyond. While patients come from communities near and far and from all walks of life, all seek expert care and rehabilitation in a state-of-the-art facility designed to address the unique needs of children and their families. Treatment specialties include orthopaedics, burns, specialized plastic surgery, spinal cord injuries, and cleft lip surgery. Since opening in 1997, Shriners Hospitals for Children — Northern California has become nationally recognized as a leader in pediatric burn care and has grown to become the busiest pediatric burn center in California, while maintaining its position as a leader in the care of children with complex orthopaedic needs. Sixty-five percent of the children seen are being treated for orthopaedic conditions, 30 percent of patients are seen for burn care and plastic surgery, and 5 percent of the patients are seen for spinal cord injury care. The hospital continues to receive more than 3,000 new applications annually and accommodates more than 21,000 patient visits each year.



Through its long-standing focus on access to care, Shriners Hospitals for Children — Northern California continues a tradition that dates back to the early 1920s. This is when the Shriners opened a network of orthopaedic hospitals to ensure that all children with club foot, polio, limb deficiencies, and other complex orthopaedic needs would have access to the finest medical care. Children in Northern California have benefited from the Shriners unique brand of medicine since 1923, first in San Francisco and now in Sacramento. Over the years, the Shriners have expanded treatment specialties to meet the unique needs of the pediatric patient population. In the 1980s, Shriners Hospitals for Children became a regional center of excellence for spinal cord injury care. In the early 1990s, the Shriners determined that the ability to provide life-saving burn care to children throughout the United States required the establishment of a regional pediatric burn center in the West.

Patient Activity Profile
Based on outpatient visits & patient discharges.



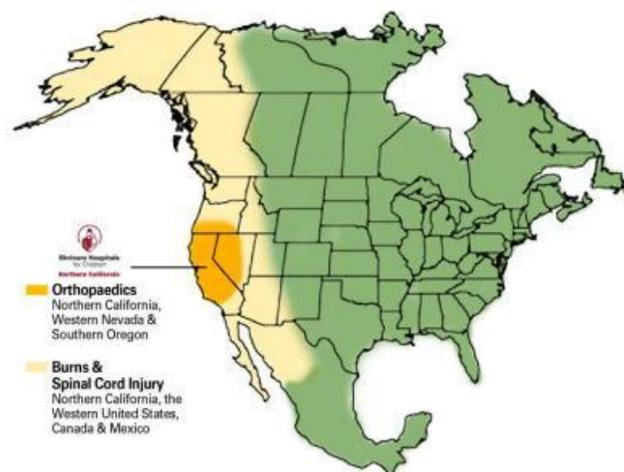
Community Vision

With that decision came new vision Shriners Hospitals for Children — Northern California was built to become a multidisciplinary, regional pediatric medical center. This would be the only hospital in the Shriners health care network that provides care in all Shriners specialties and houses a scientific research center in a single facility. While the programs are housed in a magnificent, stand-alone children’s hospital, the Shriners knew their vision to grow required the ability to reach far beyond hospital walls and work in partnership with the broader community.

The decision to locate the hospital in the center of the University of California Davis Medical Center was a strategic one. Affiliation agreements with the university; that continue to this day, allow for professional care and collaboration. The exemplary partnership with UC Davis is the cornerstone of a strategy that seeks to advance the care of children through access, education, and outreach. Shriners Hospitals for Children — Northern California works in partnership with many individuals and organizations to ensure that children and families benefit from the services it provides. While the number of patients served by the Northern California Shriners Hospital continues to grow, population data suggests there are many more children who can benefit from the services provided. Shriners Hospitals for Children — Northern California is devoted to working in partnership with professionals and the community to ensure that children throughout the region have the opportunity to benefit from highly specialized pediatric care and live life to their fullest potential. It is our belief that healthy involvement leads to healthy outcomes.

Regional Reach

Shriners Hospitals for Children — Northern California serves children and families throughout a wide region. Orthopaedic care extends to children in Northern California, Western Nevada, and Southern Oregon. Children throughout California, the Western United States, Northwestern Mexico, and parts of Canada benefit from expert burn and spinal cord injury care



and rehabilitation. While most of the patients served live within a 100-mile radius of the hospital, families living in communities represented by the broader region benefit from the expert pediatric care.

Growing Population

The region served by the Northern California Shriners Hospital is expansive in scope and population. The data paints a picture of need and opportunity. According to 2012 data provided by Truven Health Analytics Inc., 2,202,768 people live in the Sacramento area. That number represents a 22.1% increase in population since 2000. Further data suggests that approximately one-fourth of the people living in the Sacramento area are under 18 years old. Data reported by the U.S. Census Bureau and other organizations shows that more people live in Northern California than Alaska, Hawaii, Idaho, Montana, Nevada, and Utah combined. More than 3 million people live to the west of Sacramento in Contra Costa, Alameda, and San Francisco counties. The growing Central Valley of California, as well as Redding, Red Bluff, and other communities north of Sacramento are served by Shriners Hospitals for Children — Northern California. The cities and towns that line the Central Valley (from Bakersfield to Stockton) account for roughly 2 million people, with a significant portion of the population under 18. According to U.S. Census Data, 31% of the people in Fresno and 32 % of the people in Bakersfield are under 18. Data provided by Truven Health Analytics, Inc., shows continued growth in California over the next five years.



Source: Truven Health Analytics 2012

While the numbers and distances are staggering, they helped shape a strategy for community engagement that is effective and efficient. Determined to serve the needs of all children who can benefit for its expert care, Shriners Hospitals for Children — Northern California employs a multifaceted approach to fulfilling community needs through partnerships, networking, and education.

Process and Methods

A Multifaceted Approach

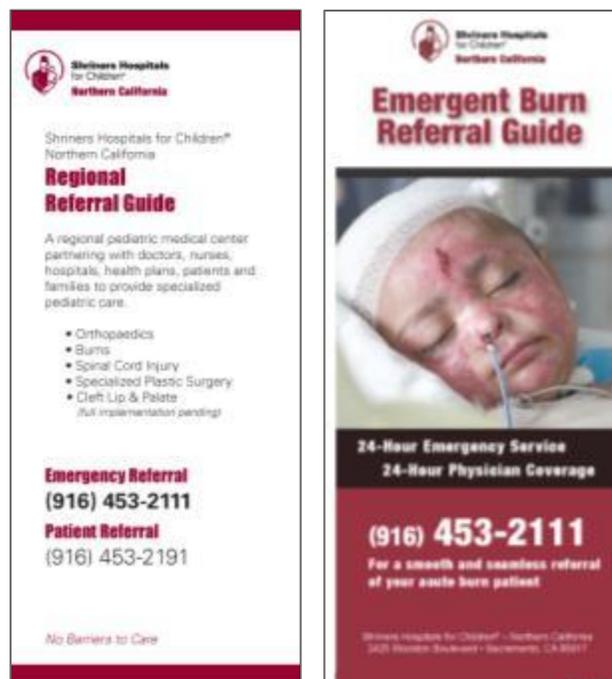
Shriners Hospitals for Children — Northern California is both responsive and proactive in its efforts to engage the community on many levels. It is an approach that requires identifying regional opportunity and key constituents (e.g., doctors, nurses, teachers, and students) that are vital to helping the hospital fulfill its mission to advance the lives of children through treatment, teaching, and research.

Communication, education, and partnerships are essential to the implementation of the methods outlined in this report.

Access to Care Campaign

The ability to provide care to children in need begins with awareness. Access to Care is the name of the communication campaign to educate health care professions about services offered and the referral process. A *Regional Referral Guide* is available to health care professionals throughout the region, and it is distributed through direct mailings and in-person presentations. The *Emergent Burn Referral Guide* is distributed to doctors and nurses working in emergency rooms and urgent care centers throughout the region, clearly communicating that the hospital provides around-

the-clock coverage for emergent care needs. While the referral information is the foundation for Access to Care, the campaign also includes targeted mailings about new programs, new appointments, and continuing education opportunities of interest to doctors, nurses, and others who seek the finest care for their patients. A recent mailing announcing the appointment of pediatric hand surgeon, Andrea Bauer, M.D., reminded pediatricians and orthopaedic surgeons throughout our referral region that children in their communities can benefit from expert orthopaedic care. SHCNC has formed relationships with various medical societies within its referral region and works with them to get news and event information posted in society publications so that physicians in communities near and far have access to information about what's happening at the Shriners Hospital in their region.



Professional Presentations & Medical Leadership

Meeting community health care needs through access requires expertise and professional reputation. Shriners Hospitals for Children — Northern California is committed to serving as a destination of choice. At the same time, it would be unrealistic to expect that every eligible child will seek care at our hospital. The medical team at the Shriners Hospitals for Children in Sacramento is devoted to ensuring that doctors working in different communities are aware of medical considerations and best practices. The medical team communicates this information through Grand Rounds and presentations at professional meetings regionally, nationally, and internationally. Collectively, the medical team gives over 100 presentations each year, with topics ranging from the “Treatment of Brachial Plexus Birth Palsy in the Newborn” to “Burns – What a Pediatrician Should Know.” The topics, of course, highlight the care and expertise provided by SHCNC. In 2012 and 2013, SHCNC doctors presented at Stanford Hospital Orthopaedic Grand Rounds, UC San Francisco, Sacramento County CCS Therapists meeting, Oakland Children’s Hospital, San Joaquin General Hospital, Tahoe Forest Hospital, and North Bay Hospital in Fairfield, to name a few. The SHCNC medical team has been prominently represented at many national conferences including the American Burn Association (ABA), the Pediatric Orthopaedic Society of North America (POSNA), the American Academy of Orthopaedic Surgeons, Society for Surgery of the Hand, the Pediatric Orthopaedic Society of North America and Gait, and the Clinical Movement Analysis Society. International presentations include those given at the American Academy of Cerebral Palsy and Developmental Medicine, Israeli Pediatric Orthopaedic Society, and the Korean Orthopaedic Association.

Members of the SHCNC medical team have been invited to lecture at several of its sister Shriners Hospitals, supporting the idea of sharing best practices and the philosophy of a collaborative approach to care.

Hospital Continuing Education Programs

The commitment to care extends to doctors, nurses, therapists, and others devoted to community health care needs, and SHCNC is proud to offer a robust continuing education program that includes seminars, lunchtime lectures, and Signature Series dinner lectures for physicians. SHCNC has hosted an average of 12 continuing education programs for the community annually over the past three years. The programs are topical and designed to address questions that give attendees the tools and information they need to become better practitioners. Participation is regional and represents the broad referral region. Noteworthy programs include *Perspectives in Pediatric Orthopaedics*, *Conference for School Nurses: Empowering Nurses to Empower Children*, *Disaster Management & Emergency*

Preparedness, Regional Burn Conference, Managing Spasticity, Women in Global Health, Surgery to Improve Gait in Children with Cerebral Palsy, and Comprehensive Management of Spasticity, and Dystonia in Children. In addition, the Department of Orthopaedics hosts the *Ashley Lectureship* each year to provide continuing education in orthopaedics.

Lunchtime lectures often focus on issues of interest to the broader community. Topics have included *Stress Management in Medically Ill Children, Burn Prevention: Safety Begins at Home with Ben & Ali, Vaccine Safety Concerns, Animal-Assisted Therapy* and even a workshop on how to protect oneself from an active shooter that drew an overflow crowd.

Information about continuing education programs is distributed through direct mail, email, notifications on the web, and announcements in various medical society publications.

Burn Fellowship for Mexican Physicians

In June 2009, SHCNC responded to the emergent needs of children burned in a day care fire in Hermosillo, Mexico. The incident prompted visits from the first lady of Mexico, Margarita Zavala, the Mexican Health Minister, and the Mexican Consul General. Conversations that ensued led to the development of the Shriners Hospitals for Children and UC Davis Burn Fellowship for Mexican Physicians, which was instituted on July 1, 2010. Dr. David Greenhalgh, Chief of Burns, spoke at a press conference to announce the fellowship. The fellowship for Mexican physicians is funded by the Mexican government and allows Shriners Hospitals for Children to provide fellowship education to doctors who can return to Mexico to provide burn care for children there. One or two physicians from Mexico come to SHCNC for fellowship training each year.

The Fellowship for Mexican Physicians is just one example of how Shriners Hospitals for Children — Northern California is devoted to educating professionals, including those in the communities it serves, about best practices. The program is in addition to the ongoing residency and fellowship training SHCNC provides young doctors interested in burn care, plastic surgery, and pediatric orthopaedic surgery.

Pediatric Orthotic & Prosthetic Services, LLC

From toddlers to teenagers, kids of all ages seek the care and expertise of the Pediatric Orthotic and Prosthetics Services (POPS) at Shriners Hospitals for Children — Northern California. With more than 175 years of combined experience, the POPS team is devoted to designing braces, artificial arms and legs, as well as adaptive devices that give children the ability to pursue their dreams. The specially trained orthotic and prosthetic specialists take the time to get to know each child. A visit to POPS is

about more than measurements and mechanics. It's about sharing hopes and dreams, and providing information that allows the technicians to return to the lab and design the perfect fit. For the teen attending her first prom, it may be a prosthetic leg that slips into high heels. For the aspiring violinist, it is the adaptive device that allows him to grip the bow. In all instances, it is a case of building ability for children throughout Northern California. POPS is responsible for the custom design and fabrication of more than 300 orthotics and prosthetics each month. All devices are custom designed and fabricated inside Shriners Hospitals for Children, making for efficient delivery. In this case, having the lab on-site allows the technicians to make necessary adjustments to fit the patient's needs in the most efficient manner. Because care at SHCNC continues from birth through adulthood, all clinicians – from doctors to prosthetists – can evaluate all phases of a child's growth and development. The long-term relationships between patients, parents, and health care providers results in more personal, higher-quality care. The POPS team is actively involved in research that directly impacts pediatric orthotic and prosthetic care. Studies underway are investigating ways to improve outcomes for children with scoliosis, pectus, and club foot. The POPS team is a regional leader in scoliosis and club foot bracing. The team designs and fabricates more than 350 scoliosis braces and 200 club foot braces each year.

The Perry Initiative, Decision Medicine, and More

Shriners Hospitals for Children — Northern California works in partnership with the University of California San Francisco, the San Joaquin Medical Society, the National Youth Leadership Forum on Medicine, and others to develop medical leaders for tomorrow. The Perry Initiative is an educational outreach program organized for young women in honor Dr. Jacquelin Perry for her contributions to patients in the field of orthopaedic surgery during her 50-year career. Dr. Perry is considered the world authority on gait analysis and serves on the advisory board for the program that is headquartered at UC San Francisco. Dr. Perry is the first woman orthopaedic surgeon to graduate from the residency program at the University of California, San Francisco. Hands-on workshops covering everything from scoliosis to knee ligaments will be complemented by lectures from Michelle James, MD, Chief of Orthopaedics, and Anita Bagley, Co-Director of the Motion Analysis Lab at the Sacramento Shriners Hospital. Fewer than 10 % of the practicing orthopaedic surgeons in the United States are women, notes Dr. Michelle James, Chief of Orthopaedic Surgery at the Shriners Hospital in Sacramento and a member of the Perry Initiative's Board of Directors. Most of the aspiring scientists who attend the Perry Initiative come from a local high school. The Perry Initiative was co-founded by Dr. Jenni Buckley, a Mechanical Engineer, and Dr. Lisa Lattanza, and orthopaedic hand and upper extremity surgeon. Both practice in San Francisco. Dr. Buckley will be speaking on orthopaedic implant design and testing as part of the program on July 21.

Decision Medicine is a project of the San Joaquin Medical Society in which “scholarships” are provided to outstanding students to attend a two-week immersion in medicine. SHCNC is one of the sites for the program that exposes aspiring doctors to the world of medicine.

Outstanding high school seniors from throughout the United States come to SHCNC each summer as part of the National Youth Leadership Forum on Medicine. SHCNC hosts two sessions for the students each summer to meet interest and program demand.

Careers in Healthcare

The high school years are a time when many students begin to imagine having a career. The Careers in Healthcare program introduces high school students to different hospital career opportunities and the Shriners unique hospital mission. The program includes a short history of Shriners Hospitals for Children, a career presentation, and hospital tour. Each program highlights a different career. Nursing, orthotics and prosthetics, diagnostic imaging, nutritional services, child life, and occupational and physical therapy are among the many career presentations. The program was established shortly after the Northern California hospital opened in 1997 in response to teachers and high school health academy counselors wanting to have someone speak to their students. Between 300 and 400 students attend the programs each year, coming from schools in Sacramento, as well as Stockton, Manteca, Sonora, and other Northern California communities. Students attending the programs are given a hospital volunteer application in their information packet. Some students have become hospital volunteers after attending the program.

Prevention Education

Burn injuries happen in an instant — and right at home. Operating on the belief that prevention is the best medicine, SHCNC provides prevention education to Kindergarten through 3rd grade school children through a special interactive program called *Safety Begins at Home with Ben & Ali*. Prevention mascots Ben and Ali join trained presenters in teaching children burn safety. Local firefighters partner in the education and bring a truck to the hospital to show the children. The West Sacramento fire department brings a traveling “smoke house” display used to teach children how to exit a house in case of fire. The programs are scheduled regularly in the hospital auditorium, and the team will make special arrangements to travel to schools to present the program for school assemblies. The portability of the program creates an opportunity to extend



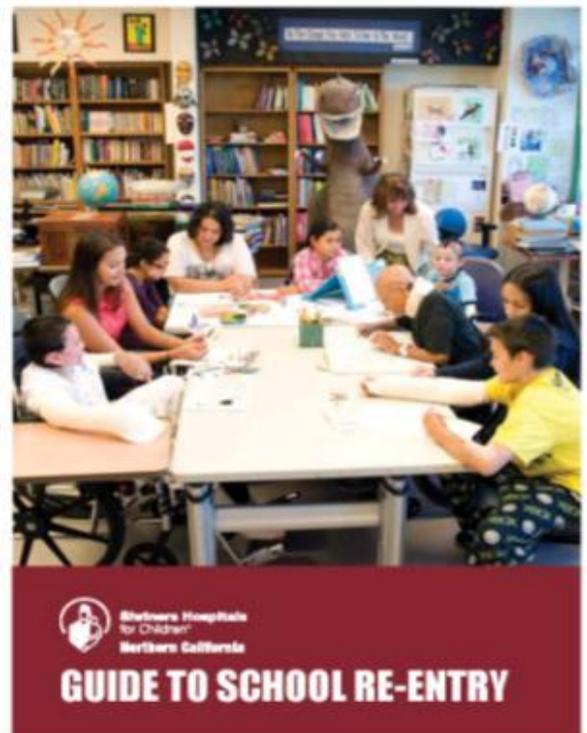
education to communities beyond the greater Sacramento area that are part of the SHCNC referral region.

SHCNC works in partnership with other organizations to carry the burn prevention message to parents and other community groups. In 2013, the California Safe Kids Coalition held its statewide conference at SHCNC and the State Fire Marshal was one of the presenters. The meeting aligned SHCNC and the prevention community in a meaningful way. SHCNC also is actively involved in the National Scald Prevention Campaign and has provided prevention education to organizations throughout the community. First 5 Sacramento, Sacramento Food Bank & Family Services, Sacramento Children's Home, Safe Kids California, Associated Plumbing & Mechanical Contractors, and the Phoenix School are among the organizations and agencies that have requested and benefited from presentations.

School Re-Entry Program

When a child suffers a devastating burn or spinal cord injury, Shriners Hospitals for Children — Northern California is there to provide expert care and rehabilitation. When it is time for the children to return to their home communities, SHCNC is there to ease the transition. SHCNC offers a School Re-entry Program to provide explanation and education to staff and classmates. One or more staff members visit the student's school to answer questions and provide information that will help teachers, staff, and classmates welcome their friend back to school. Feedback from teachers and families consistently shows that the re-entry presentation eases the transition process. The goals of the re-entry program are to:

- Assist with the transition back to school;
- Explain “what happened” and where the child has been to prevent uncomfortable, unwanted questions;
- Educate staff and classmates about student's injury, medical diagnosis & subsequent conditions;
- Provide resources and tools to patient, family, friends, and school staff;
- Demonstrate appropriate & positive methods of interaction;
- Identify adaptive equipment, special needs, and safety precautions;
- Encourage tolerance to differences;



- Suggest ways to teach, interact, and play.

The SHCNC School Re-entry Program is coordinated by the Shriners Hospital School and Transitions Coordinator. The transition team coordinates several school re-entries each year, traveling to the patient's home community to provide a meaningful program that engages schools and community. SHCNC published a Guide to School Re-entry that is available to teachers and schools throughout the referral region.

The main message of the re-entry presentation is "This is the same person/friend/student that you knew before the injury."

Patient & Family Education

The Patient Care Services team is committed to having children and families be active partners in their care and provide information that helps them fully understand their condition, medical treatment, and care. The Patient Care Services team has developed a host of educational handouts that cover everything from cast care to changing a burn dressing. The educational handouts are available in English and Spanish.

Care Is a Community Affair

Built on the belief that people can make a positive difference in the lives of others, SHCNC responds to the community's desire to support the hospital's mission by inviting individuals and organizations to participate in a number of volunteer programs that include the:

- Atrium Series, a program in which performers of all ages, including school bands and choirs, volunteer to perform in the hospital lobby to create a family friendly environment;
- Pet Therapy Program, allows dogs, cats, rabbits – and even a pig – carefully screened for acceptance by a certified community agency, to come to the hospital as volunteers with their handler.
- Summer Youth Volunteer program gives high school students 16 to 18 years of age to volunteer at the hospital during the summer. The program consistently receives far more applicants than it can accommodate.
- Patient Entertainment is the term used to describe program that allows community groups to volunteer in the Central Activity Area on a one-time basis. The program attracts participants throughout Northern California. Some of the noteworthy participants include the San Francisco Giants, Sacramento Kings, Cat in the Hat, the Rockettes, and PBS Super Why. Other guests have

included Rachel Barton Pine, an acclaimed concert violinist from Chicago, who was performing with the Sacramento Philharmonic, The Sacramento Ballet, Sacramento Debutantes, UC Davis Football Team, and so many more.

Key Findings

A Recognized Leader

Professionals at Shriners Hospitals for Children — Northern California work with one goal in mind: to provide care to all children who can benefit from its expert care in burns, orthopaedics, spinal cord injury, specialized plastic surgery, and cleft lip surgery. While tactics are constantly evaluated and refined, the strategy is to implement a multifaceted communication and outreach campaign to educate the community about the services available and create programs that support the hospital in its mission to advance the lives of children through complex, comprehensive, and compassionate care. Identifying referrers, supporters and community partners is key to success. The targeting of audiences allows SHCNC to connect with the community in a way that allows for two-way conversation and meaningful interaction. Ultimately, SHCNC's ability to assess community needs has resulted in distinction as a clinical leader and expert provider of specialized pediatric care.

According to discharge data provided by the California Office of Statewide Health Planning & Development (OSHPD), Shriners Hospitals for Children — Northern California ranks as a leading provider in nine of its signature programs. Consider the following:

- SHCNC is the number one provider of burn care to children in California, treating the most children with burn injuries out of 69 hospitals.
- SHCNC is the number one provider of upper extremity care in California, treating more children with hand problems, brachial plexus birth palsy, limb deficiencies, and other upper-extremity than any of the 209 hospitals included in the report.
- SHCNC is the number one provider of inpatient spinal cord injury rehabilitation in Northern California.
- SHCNC ranks as the number two provider of scoliosis, club foot, and spinal cord injury care in Northern California.
- SHCNC ranks as the number 5 provider of care for children with cerebral palsy in Northern California out of 42 hospitals.

- SHCNC ranks as the number 8 provider of care for children with cleft palate and spina bifida in Northern California.

SHCNC is keenly aware of the fact that its ability and effectiveness in serving the needs of the community depend on a good understanding of the hospital and the services it provides. Comments written on evaluations collected at Continuing Education Programs and Lunchtime Lectures speak to the appreciation and import of the care provided by professionals at the Shriners Hospitals for Children — Northern California. Please consider the examples listed below:

- “I have a much broader scope of knowledge post symposium – so many gems and eye opening facts. I won’t hesitate to call Shriners.”
- “I know Shriners is available to take our trauma patients with burns. “
- “I will definitely be contacting Shriners for help with burns.”
- “What wonderful, enthusiastic speakers! I can just tell that you all are wonderful caring physicians. Everyone was so welcoming and pleasant. The tour was fantastic! Now I will be completely at ease knowing that my burn patient is being transferred to Shriners.”
- “I will continue to use your organization as a referral source and also will push for continued scoliosis screening despite CA legislative funding cuts.”
- “Amazing service you provide.”
- “The re-entry will help me with my school nurse practice.”
- “Good work on reaching kids in the community and promoting safe practices.”
- “I will incorporate SHUEE evaluation as an added tool for my assessment.”
- “One always believes that such lofty goals would be impossible but really they are within reach.”
- “This presentation helped expand my knowledge on growth/bones/and controversial issues with injuries.”

Action Plan

Healthy Involvement – Healthy Outcomes

Shriners Hospitals for Children — Northern California will continue to demonstrate that healthy involvement with the community leads to healthy outcomes. SHCNC is committed to a multifaceted program that involves communication, education, and partnerships that allows the hospital to effectively reach key audiences with limited use of resources. SHCNC is using the information and strategies outlined in this report to reach more patients and more families in Northern California and beyond so

that all eligible children can benefit from the Shriners gift of specialized pediatric care. Once more, SHCNC will continue to promote healthy communities through prevention, education, and continuing education.

Acknowledgements

A Community at Work

The information in this report is made possible by the many devoted staff and professionals who work at Shriners Hospitals for Children — Northern California. Clearly, it is a reflection of a hospital community at work. Information about the number of patients served come from hospital information systems. The Staff Development Office provided the evaluations from continuing education programs, some of which are quoted in the report. Demographic data was obtained from Truven Health Analytics Inc. and reports from the Census Bureau gleaned from the internet.