



Members of the Shriners Hospitals for Children - Twin Cities team treat a patient.

# Shriners Hospitals for Children - Twin Cities: FOR PEDIATRIC SPORTS MEDICINE, Culture Makes a Difference

BY BRITAIN WHITESIDE-GALLOWAY

TO CREATE A FUN AND SAFE ENVIRONMENT THAT PATIENTS PERCEIVE MORE AS A HOME AWAY FROM HOME THAN A SPECIALTY HOSPITAL, SHRINERS HOSPITAL DEPLOYS A CREATIVE AND COLLABORATIVE APPROACH TO CARE.

**FOR MORE THAN** 90 years, Shriners Hospital has leveraged the combined efforts of dedicated pediatric orthopedic surgeons and a wide array of specialists to provide specialty care for children requiring treatment for orthopedic conditions of the bones, muscles and joints. Many of these children may otherwise not receive the care that they need, but at Shriners Hospital, all

children receive high-quality medical care regardless of their insurance plan or its limitations. If out-of-pocket expenses pose a financial hardship on a family, Shriners Hospital helps foot the bill.

Shriners Hospital is already well-known for its comprehensive approach to caring for children with complex congenital or acquired orthopedic and musculoskeletal conditions, and now,

Michael Priola, DO, pediatric orthopedic surgeon, has joined the team to expand upon current services and grow the pediatric sports medicine program.

“Although there are many orthopedic groups treating adult sports injuries, at Shriners Hospital, we were seeing a need to provide this service specifically to the pediatric and teenage population,” says Dr. Priola, who specializes in

pediatric sports medicine and spinal deficiencies. “Today, children and teens are competing at higher levels than ever before, sustaining serious sports injuries, and they want to get back on their feet as fast as possible to rejoin their team. As a result, there is a growing need for our pediatric sports injury service.”

Arthroscopic surgery is a common treatment for adult ACL or meniscus tears, as well as shoulder and ankle injuries, and now, Dr. Priola is offering this minimally invasive surgical approach to the pediatric population.

All Shriners Hospital surgeons are fellowship-trained in pediatric orthopedics and see patients with fractures and sports injuries; however, Dr. Priola is the only surgeon currently performing arthroscopic procedures.

The expansive surgical capabilities at Shriners Hospital underscore the most distinguishing characteristic of its treatment process: Each patient is seen by a pediatric orthopedic surgeon.

## COLLABORATIVE CARE

A full team of pediatric specialists — including pediatricians, occupational therapists, physical therapists, orthotists, prosthetists, radiologists, social workers, surgeons and nutritionists — shepherd each patient throughout his or her care and rehabilitation plan. Gleaning perspective from so many experts equips the team with a more holistic understanding of the patient and his or her condition.

“Children and teens who suffer sports-related injuries should be fully examined,” Dr. Priola says. “Sometimes, there are underlying problems that predispose children to injuries, so taking a step back and evaluating the whole patient before zeroing in on the acute injury can be important.”

The treatment process begins with an evaluation conducted by a pediatrician or a physician assistant who conducts a thorough physical and obtains a comprehensive history to identify underlying causes that might have resulted in the injury. After reviewing

## A Wealth of Experience

**MICHAEL PRIOLA, DO**, board-certified pediatric orthopedic surgeon who specializes in sports medicine for Shriners Hospitals for Children – Twin Cities, joined the pediatric orthopedic team in 2015 to enhance its pediatric sports medicine offerings.



Dr. Priola graduated with a bachelor's degree in genetics from the University of California, Davis and earned his medical degree from Kansas City University of Medicine and Biosciences College of Osteopathic Medicine. After completing a traditional osteopathic

rotating internship, Dr. Priola completed a residency in orthopedic surgery at Western University/College of Osteopathic Medicine of the Pacific and Riverside County Regional Medical Center in Moreno Valley, California.

As a child who was always active in sports, Dr. Priola's love for sports medicine led him to complete a fellowship in pediatric orthopedic surgery at Cincinnati Children's Hospital.

### SERVING HIS COUNTRY'S CHILDREN

After concluding his medical studies and clinic requirements, Dr. Priola served in the United States Army for four years. Stationed at Winn Army Community Hospital at Fort Stewart, in Georgia, Dr. Priola was the sole provider of pediatric orthopedic care. As part of Operation Enduring Freedom, he was deployed to Afghanistan, where he and a small forward surgical team provided emergency orthopedic support to American, Italian, Spanish and Afghan army personnel, as well as Afghan civilian children from surrounding villages.

Following his seven-month deployment, Dr. Priola returned to Winn Army Community Hospital to serve as department chief of orthopedic surgery.

Dr. Priola was drawn to Shriners Hospital because of the comprehensive in-house services the hospital provides as well as its mission.

“The most important thing about Shriners Hospital is that we are treating kids regardless of the family's ability to pay,” Dr. Priola says. “We're going to provide the care children need whether or not their parents have insurance.”



“Shriners Hospital is here to treat children. We know children. It's our job to get them back to being kids, regardless of surgery type, diagnosis or any other environmental factor.”

— REBECCA ROUSE, DPT, PEDIATRIC PHYSICAL THERAPIST AT SHRINERS HOSPITALS FOR CHILDREN – TWIN CITIES



## Expeditious Care

**SHRINERS HOSPITALS FOR CHILDREN – TWIN CITIES** offers same- or next-day services by appointment for fractures, severe sprains and the following sports injuries:

- + Chondral injuries
- + Ligament injuries
- + Meniscus tears
- + Overuse injuries

Arthroscopic surgery is a viable treatment for injuries involving:

- + Ankles
- + Knees
- + Shoulders

Referrals should meet the following criteria:

- + Patients are 18 years old or younger.
- + An injury is suspected and/or documented by radiograph.
- + Injuries have been stabilized — no open fractures.
- + X-rays and medical notes are sent with patients.

all available information, orthopedic surgeons discuss which specialists should be part of the care team.

Because the roster of specialists is deep, multiple physicians are often available to consult or to deliver treatment in the same setting. Part of what drew Dr. Priola to the hospital is the fact that so many pediatric experts work in the same space.

“I like that the hospital encourages a holistic approach,” Dr. Priola says. “It’s a one-stop shop — we even fabricate orthotic and prosthetic devices on-site. Patients and their families enter the clinic, and we have just about everything they need. This is a far better way of caring for patients than writing them a prescription or making a referral and sending them somewhere else.”

Patients with complex needs, such as those with spina bifida, especially, benefit from the wealth of resources at Shriners Hospital. Such patients often require specialist care from a number of providers, such as urologists and neurosurgeons, in addition to neurologists and orthopedic surgeons. Not having to travel to multiple appointments reduces the stress on patients and their families.

Beyond the convenience of care, the team approach permits Dr. Priola and his fellow surgeons to perform challenging procedures to repair fractures and musculoskeletal injuries that may be proximal to growth plates.

## TAILORED THERAPY

Soon after a child undergoes surgery, the pediatric orthopedic surgeon collaborates with the team of occupational therapists, physical therapists, orthotists, prosthetists and the patient’s family to craft personalized therapy plans and establish rehabilitation goals, enhancing surgical outcomes and increasing patient satisfaction.

“Therapy begins on post-op day zero,” says Rebecca Rouse, DPT, pediatric physical therapist at Shriners Hospital. “As soon as the child is out of recovery and in the inpatient room, the team — our staff and the family — develops the rehabilitation plan. Because we serve a broad area, families who travel from out of state may choose to engage rehabilitation services closer to home. We can help facilitate that. For local families, we recommend patients stay with us because the presence of their surgical team coupled with our rehabilitation services will optimize their recovery.”

Working together with children and their families is just as important as interdisciplinary cooperation, and, while families are involved throughout the treatment process, their involvement is equally integral to the rehabilitation process.

“Collaborating with patients and their families enables us to set patient-specific goals for rehabilitation,” Rouse says. “We don’t use cookie-cutter exercise plans or therapy regimens. The surgeon’s protocol provides an overarching guide, but we won’t approach therapy for patients who want to return to playing soccer the same way we would for those who want to return to everyday activities.”

Once specific rehab goals are identified, several basic milestones must be reached. The rehabilitation team must first mobilize the patient and begin motion and strengthening exercises aimed to get the patient out of bed and walking. Only once the therapist is confident that the patient’s strength and balance have been regained will he or she begin to implement the customized exercise and conditioning program developed with that specific patient’s athletic goals and aspirations in mind.

Dr. Priola visits with a patient.



Physical and occupational therapy services are also available to address the full spectrum of pediatric rehabilitation needs.

Physical therapists improve patients' functional abilities, and therapeutic regimens include exercises and strength training. At Shriners Hospital, regardless of whether or not insurance covers it, both exercise and adaptive equipment will be sent home with the family to ensure that patients have the tools needed to continue their therapy plan at home.

Occupational therapy services ensure children have the skills necessary to encourage independence in their everyday lives. Therapists evaluate cognitive skills to identify patients' abilities to thrive in the school environment and determine the level of upper-body control to ascertain patient capabilities for performing routine tasks such as bathing, dressing and eating.

Occupational therapists also help families obtain equipment for children who require prosthetic devices or wheelchairs, hand splints, and assistive technology that will further enhance the patient's abilities.

## CREATIVE PROCESSES

When providing pediatric rehabilitation services, implementing therapy in ways that encourage patient buy-in is just as important as the specific therapies being applied.

"With children, I use the experience I've gained throughout my training, but I get to be creative with how I apply it," Rouse says. "It's not the same as working with adults. With adults, you're kind of going by the book, using specific exercises and numbers of repetitions. But when working with kids, you have to make it fun and make it work on their level.

"It's about finding games and activities to motivate them to get better," Rouse continues. "Then, we teach parents how to continue the exercises at home."

Modifying exercises and activities to reach patient goals requires therapists to account for children's lifestyles and responsibilities.

"Depending on where the child lives, he or she may need to do chores on a farm

## Specialized Care for Patients Using Assistive Devices

**IN ADDITION TO** delivering care for routine sports injuries, providers at Shriners Hospitals for Children – Twin Cities are uniquely positioned to treat extraordinary athletes as well as those with complex neuromusculoskeletal conditions such as cerebral palsy or spina bifida who may need assistive devices, orthotics or wheelchairs.

"Our occupational therapists work with patients who require upper-extremity therapy to improve function of the fingers, hands and arms," says Rebecca Rouse, DPT, pediatric physical therapist at Shriners Hospital. "They also provide therapy for patients adapting to a new prosthesis. Physical therapists work with patients who require lower-extremity therapy or prosthetics. Anytime a patient receives a new prosthesis, we work with them and teach them how to use it. We collaborate with our in-house prosthetist to adjust the device to meet the needs of the patient."

Obtaining wheelchairs through insurance can pose a variety of financial challenges to families due to limits, requirements, and out-of-pocket expenses, but at Shriners Hospital, if a therapist recommends a new or rehabbed wheelchair for a patient, it is provided, regardless of ability to pay. After taking measurements for the wheelchair, therapists talk with the family about concerns — such as their child's level of function — before having the wheelchair fabricated by a local rehabilitation technology company and then fitted on-site.



Dr. Priola evaluates a patient.

or walk long distances to school," Rouse says. "A child's jobs are to go to school and to play, and we craft therapeutic regimens that work for each child."

## A POSITIVE POPULATION

Pediatric orthopedics and sports medicine are nuanced disciplines, but the challenges inherent to treatment and therapy are balanced by the rewards of returning children to the activities that enrich their lives.

"I enjoy the kids' attitudes," Dr. Priola says. "Their desire to get better and have a normal life is something you often don't see with many adults."

"Children truly want to work hard when they come see us, and it's so great to see them be able to achieve their goals," Rouse adds.

*To find out more about the services Shriners Hospital provides or to speak with a practitioner, call 612-596-6100. ■*