Mission

Provide 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.

This mission is carried out without regard to race, color, creed, sex or sect, disability, national origin, or ability of a patient or family to pay.

Vision

Become the best at transforming children’s lives by providing exceptional healthcare through innovative research, in a patient and family-centered environment.

Shriners Hospitals for Children — Portland is committed to providing excellent pediatric orthopaedic care for all kids and teenagers throughout Oregon, Washington, Idaho, Alaska, and Western Canada. Offering value-driven, patient-centered care as well as research and education, we are a destination for families seeking premiere pediatric orthopaedic care.

We are committed to advancing treatments that improve patient outcomes and provide value, even beyond our four walls. With the largest group of orthopaedic surgeons in the Pacific Northwest, we treat all types of bone and muscle conditions for kids and teens.

Our commitment to quality, patient safety and public reporting is demonstrated through:

- The Joint Commission Accreditation & National Patient Safety Goals
- Oregon Hospital Transformation Performance Program
- Survey of Patient Environment of Safety
- PROMIS Survey of Patient Reported Outcomes
- Clinical research and publications

It is an honor to share with you our inaugural 2019 Annual Outcomes Report. We hope that you will share this report with your family, friends, physicians, and even employer health plans. As always, we welcome your comments and feedback.

Sincerely,

Dereesa Reid, MBA
Administrator, Portland Chief Executive
For the last 96 years, Shriners Hospitals for Children — Portland has been serving the pediatric orthopaedic needs of patients in the Pacific Northwest. Our patient-centered model of care serves the needs of all children ranging from fractures to the most complicated bone and muscle conditions. Through this unique integrated model of care, we provide a complete spectrum of pediatric orthopaedic and rehabilitation services. As early pioneers of population health during the polio epidemic, our 96 years of research and advancements in pediatric orthopaedic and neuromuscular conditions is the foundation of our world-class care. Today, as families and our entire nation face the need to access affordable, high-quality healthcare, Shriners Hospitals for Children — Portland’s commitment to this cause is even stronger. We believe that healthcare should provide high value, meaning excellent outcomes at an affordable price.

The value-based healthcare framework developed by Professors Michael Porter, Elizabeth Teisberg and Robert S. Kaplan at Harvard Business School was a natural fit for our organization. Adopting a value-based approach to the delivery of care is central to continuously improving health outcomes of each patient and delivering value. Our patient-centered team approach is an Integrated Practice Unit (IPU). This focused approach allows our team to serve the needs of each patient over the full-cycle of care. Designed to produce better outcomes and efficiency, our Integrated Practice Unit (IPU) is comprised of several key elements:

- Care organized around pediatric orthopaedic and neuromuscular conditions
- Dedicated multidisciplinary team
- Comprehensive services available within our facility
- Telehealth services available directly to the patient’s home
- Care coordination across full-cycle of care
- Outcomes and quality measurement
- Interdisciplinary team approach to quality and cost improvements

Reference:

Robert M. Bernstein, M.D., Chief of Staff  
Robert Bernstein, M.D., joins Shriners Hospitals for Children – Portland after his time at Cedars-Sinai Medical Center where he served as medical director of their Orthopaedic Center and vice-chair of clinical affairs for the Department of Orthopaedics. Dr. Bernstein was introduced to the Shriners Hospitals for Children health care system after practicing at the Los Angeles Shriners Hospital from 1994-2001. Dr. Bernstein earned his medical degree at University of Southern California and completed his orthopaedic residency at Massachusetts General Hospital under the Harvard Combined Orthopaedic Residency Program. He also completed a fellowship in spine surgery at Beth Israel Hospital in Boston, Massachusetts, and a fellowship in pediatric orthopaedics at Boston Children’s Hospital. He specializes in all facets of pediatric orthopaedics, with a focus on pediatric spine disorders and dwarfism. Dr. Bernstein is a member of the American Academy of Orthopaedic Surgeons, American Orthopaedic Association, Pediatric Orthopaedic Society of North America, Scoliosis Research Society, Association of Children’s Prosthetic–Orthotic Clinics, Boston Children’s Hospital Alumni, The International Society of Orthopaedic Surgery and Traumatology and the California Orthopaedic Association.

Michael D. Aiona, M.D.  
After completing his orthopaedic surgery residency at the University of Utah Medical Center, followed by a year of fellowship training in pediatric orthopaedics at the Shriners Hospitals for Children – Greenville in South Carolina, Michael Aiona, M.D., worked at the Shriners Hospitals for Children – Lexington in Kentucky for two years. Since 1986, he has worked at Shriners Hospitals for Children – Portland, serving as chief of staff from 2008–2018. His clinical expertise is in managing children with cerebral palsy and myelodysplasia, limb length inequality, clubfoot, lower extremity deformities and gait abnormalities. Dr. Aiona serves on the editorial board of Gait and Posture, Developmental Medicine and Child Neurology (DMCN), and Journal of Bone and Joint Surgery (JBJS), and serves on several committees within the American Academy of Cerebral Palsy and Developmental Medicine (AACPDPM) and Pediatric Orthopaedic Society of North America (POSNA). He presented numerous lectures and abstracts nationally and internationally and is widely published.

Jeremy P. Bauer, M.D.  
Jeremy Bauer, M.D., joined our medical staff following his pediatric orthopaedic surgery fellowship at Shriners Hospitals for Children – Portland. Dr. Bauer received his undergraduate education at the University of Washington. He earned his medical degree at Drexel University College of Medicine in Philadelphia, Pennsylvania. He completed his orthopaedic surgery residency at the University of Washington in Seattle, where he was the recipient of the Resident of the Year award. His focus is on pediatric sports medicine, lower extremity deformities, hip dysplasia and neuromuscular disorders. Dr. Bauer is a member of the Academy of Cerebral Palsy and Developmental Medicine (AACPDPM) and Pediatric Orthopaedic Society of North America (POSNA), and a candidate member of AAOS.

Daniel J. Bouton, M.D.  
Following the completion of his pediatric orthopaedics and scoliosis fellowship at Texas Scottish Rite Hospital for Children, Daniel Bouton, M.D., joined the medical staff of Shriners Hospitals for Children — Portland. Dr. Bouton attended Washington University in St. Louis and received a Bachelor of Arts in chemistry. He received his M.D. from Drexel University College of Medicine, and completed a residency at Cleveland Clinic Akron General in orthopaedic surgery. Dr. Bouton was chief resident during his final year and was awarded the Resident of the Year for the hospital. Dr. Bouton specializes in pediatric orthopaedics with a focus on pediatric spine disorders. His special interest is in the management of all forms of scoliosis, including early onset scoliosis, congenital scoliosis, idiopathic scoliosis and complex spinal deformity. Additionally, he has an interest in adolescent spondylosis and spondylolisthesis. Dr. Bouton is a member of the American Academy of Orthopaedic Surgeons, Pediatric Orthopaedic Society of North America, Pediatric Spine Study Group, and Scoliosis Research Society. At the 2017 International Congress on Early Onset Scoliosis, he received the Behrooz A. Akbarnia Award for best research paper.
Krister P. Freese, M.D.
Following the completion of his hand and upper extremity fellowship at the University of Colorado in 2015, Krister Freese, M.D., joined the medical staff of Shriners Hospitals for Children — Portland. Dr. Freese, a Pacific Northwest native from Puyallup, Washington, received his undergraduate degree from Pacific Lutheran University, and went on to obtain his medical doctorate at the University of Washington. Dr. Freese subsequently completed his orthopaedic residency at the University of Hawaii. Dr. Freese completed two fellowships, one in pediatric orthopaedic surgery and a second in hand and upper extremity surgery in 2016, at the University of Colorado.

Dr. Freese specializes in pediatric hand and upper extremity conditions, from traumatic injuries to congenital differences. He is a member of the Pediatric Orthopedic Society of North America, the American Society for Surgery of the Hand, and the Pediatric Hand Study Group.

Kathryn O. Fuchs, M.D.
Kathryn Fuchs, M.D., joined the Shriners Hospitals for Children — Portland team after completing her fellowship in pediatric orthopaedic surgery at Boston Children’s Hospital. Dr. Fuchs, a native of the Adirondacks in upstate New York, received her undergraduate degree at Middlebury College in Vermont. She earned her medical degree at Albany Medical College and completed her orthopaedic surgery residency at Dartmouth Hitchcock Medical Center in New Hampshire. During her training she received awards for her teaching, research and community service.

Her interests include general pediatric musculoskeletal care, neuromuscular disorders, hip dysplasia, lower extremity inequality/deformity, clubfoot, fracture care, musculoskeletal infections, community education, international health and improving care for under-served populations.

Heather M. Kong, M.D.
Heather Kong, M.D. received her undergraduate degree from the University of California, Berkeley. She then earned her medical degree from Washington University in St. Louis, followed by orthopaedic surgery residency at Rutgers University in Newark, NJ. She completed fellowship training in pediatric orthopaedics at St. Louis Children’s Hospital and the Shriners Hospitals for Children — St. Louis.

Dr. Kong continued
During her training, she received awards in research and teaching. Dr. Kong’s publications have focused on pediatric orthopaedic trauma and lower extremity deformity.

Dr. Kong is a member of the American Academy of Orthopaedic Surgeons and the Pediatric Orthopaedic Society of North America.

J. Ivan Krajbich, M.D., FRCS, BSc
Joseph I. Krajbich, M.D., received his undergraduate degree at the University of Waterloo, Canada. He earned his medical degree and completed his residency training in orthopaedic surgery at the University of Toronto. After completing fellowships in tumor surgery and pediatric orthopaedics, he joined the staff at Shriners Hospitals for Children – Portland in 1993.

His special interests are spine deformity surgery, malignant and benign bone tumors, and lower limb deficiencies.

Dr. Krajbich is a fellow of the Royal College of Physicians and Surgeons of Canada. He is a member of numerous professional organizations and associations, including the Musculoskeletal Tumor Society, Pediatric Orthopaedic Society of North America, Scoliosis Research Society, International Society and Association of Children’s Prosthetic-Orthotic clinics.

Dominique D. Laron, M.D.
Dominique Laron, M.D. joined the Portland Shriners Hospital team after completing his fellowship training at Cincinnati Children’s Medical Center. A native of Oakland, Dr. Laron returned to the West Coast where he earned his undergraduate degree at University of California in Los Angeles; he also earned his medical degree and completed his orthopaedic residency at the University of California San Francisco.

During his training, he was highly involved in a wide breadth of research and wrote multiple book chapters. He is passionate about the education of orthopaedic residents and medical students and will be involved in research focused on furthering the care of pediatric neuromuscular disorders.

During his fellowship year, he received extensive training in all aspects of pediatric orthopaedics but has a special interest and passion for pediatric sports medicine, gait abnormalities, neuromuscular disorders, and cerebral palsy.
Dr. Sussman continued
He has a special interest and expertise in cerebral palsy, muscular dystrophies, and foot deformities, including clubfoot.

Dr. Sussman has lectured worldwide and has been president of the American Academy of Cerebral Palsy. He has also received a lifetime service award from the Oregon branch of the Muscular Dystrophy Association.

Michelle C. Welborn, M.D.
Michelle Welborn M.D. joined our medical staff following her pediatric orthopaedic fellowship at the University of Utah. She received her undergraduate degrees from the University of California, Berkeley, and her medical degree at Pennsylvania State University College of Medicine. Dr. Welborn then completed her orthopaedic residency at the University of Illinois, Chicago.

Dr. Welborn's focus is on pediatric spinal deformity, with a special interest in the non-operative management of scoliosis, syndromic scoliosis, early onset scoliosis, congenital scoliosis, Mehta casting, spinal growth modulation and complex spinal deformity surgery. Dr. Welborn is a candidate member of the AAOS and POSNA. She is also a member of the Scoliosis Research Society and the Children's Spine Foundation Study Group. In 2019, she was received the Thomas E. Whitecloud award from Scoliosis Research Society, and she was also recognized as a Top Doc from Portland Monthly Magazine.

Ellen M. Raney, M.D.
Ellen M. Raney, M.D., FAAP, attended college, medical school and orthopaedic residency at Tulane University in New Orleans, Louisiana. She completed a fellowship in pediatric orthopaedics at Shriner’s Hospitals for Children – Tampa, in Florida. She has worked in the Shriner’s Hospitals for Children health care system in Tampa, Honolulu, and Portland.

She has spoken internationally and nationally and published articles on her subspecialty interests, including cerebral palsy, gait analysis, limb length inequality/deformity, clubfoot, and hip dysplasia.

Much of her work on national committees for organizations such as American Academy of Orthopedic Surgeons, Pediatric Orthopaedic Society of North America, and American Academy of Pediatrics has been dedicated towards reducing health care disparities and improving care in under-served areas.

Dennis S. Roy, M.D.
Dennis Roy, M.D., is a pediatric orthopaedic surgeon at Shriner’s Hospitals for Children – Portland. He completed fellowships in pediatric orthopaedics at the Scottish Rite Hospital in Atlanta, Georgia, and Alfred I DuPont Institute, Wilmington Delaware. Dr. Roy was an associate director of pediatric orthopaedics and director of the hip deformity service at Children’s Hospital Medical Center, Cincinnati, Ohio, and professor of orthopaedic surgery at University of Cincinnati. He has a number of publication in peer-review journals that span the breadth of pediatric orthopaedics.

As the director of the hip deformity service, he specializes in hip deformities, skeletal dysplasias, and deformities of the feet.

Dr. Roy is a member of Pediatric Orthopaedic Society of North America, European Pediatric Orthopaedic Society, American Academy of Orthopaedic Surgeons, and International Society for Hip Arthroscopy.

Michael D. Sussman, M.D.
Michael D. Sussman, M.D., received his orthopaedic training at Johns Hopkins University and the Children’s Hospital in Boston. From 1976 to 1992, he was in the division of pediatric orthopaedic surgery at the University of Virginia. He served as chief of staff at the Portland Shriners Hospital in 1992.
Portland Shriners Hospital Medical Team
Pediatric Anesthesiologists

Josie Davidson, MD, Chief of Anesthesiology
Josie Davidson, M.D. joined the team after completing her pediatric anesthesia fellowship at OHSU. She has received subspecialty board certification in pediatric anesthesiology.

Inca Chui, MD, Anesthesiologist
Inca Chui, M.D. completed her fellowship in pediatric anesthesiology at Columbia-Presbyterian Medical Center. She is board certified in anesthesiology and has received subspecialty board certification in pediatric anesthesiology.

David Kim, MD, Anesthesiologist
David Kim, M.D., board certified in anesthesiology, joined Shriners Hospitals for Children — Portland after completing his pediatric anesthesia fellowship at Seattle Children’s Hospital.

William Klein, MD, Anesthesiologist
William Klein, M.D., board certified in anesthesiology, joined Shriners Hospitals for Children — Portland following his pediatric anesthesia fellowship at the University of Pittsburgh Children’s Hospital.

Grace Hsieh, MD, Anesthesiologist
Grace Hsieh, M.D. joined Shriners Hospitals for Children — Portland following her pediatric anesthesia fellowship at Children’s National Medical Center in Washington, D.C. She is subspecialty certified in pediatric anesthesiology.

Lee Taylor, MD, Anesthesiologist
Lee Taylor, M.D. is a staff anesthesiologist at the Portland Shriners Hospital. Dr. Taylor has engineering expertise in signal processing, and is certified in anesthesiology by the American Board of Anesthesiology.

Portland Shriners Hospital Medical Team
Advanced Practice Practitioners

Stephanie Cadman, FNP, MSN, RN Nurse Practitioner
Nancy Jacobs, CNS-PP Advanced Practice Nurse
Elizabeth Mandel, MSN, RN, CPNP Nurse Practitioner
Maria Grompe, PA-C Physician Assistant
Bing Sun, PA-C Physician Assistant

Division Heads

Cerebral Palsy: Michael D. Aiona, M.D.
Myelodysplasia: Michael D. Aiona, M.D.
Hip: Jeremy P. Bauer, M.D.
Sports: Jeremy P. Bauer, M.D.
Skeletal dysplasia: Robert M. Bernstein, M.D.
Outcomes: Daniel J. Bouton, M.D.
Anesthesia: Joselyn S. Davidson, M.D.
Upper extremity: Krisster P. Freese, M.D.
Neuromuscular: Kathryn O. Fuchs, M.D.
Fractures/trauma: Heather M. Kong, M.D.
Clinical research: Ellen M. Raney, M.D.
Arthrogryposis: Ellen M. Raney, M.D.
Spine: Michelle C. Welborn, M.D.
TREATING MORE KIDS IN MORE PLACES

Shriners Hospitals for Children — Portland is a regional pediatric orthopaedic hospital, serving children from across the Pacific Northwest. Our highly specialized medical team often draws patients from all over the United States and beyond. We continually focus on improving access to our trusted specialists and eliminating barriers to our specialized orthopaedic care. In doing so, our hope is to ensure all children in need of pediatric orthopaedic medical care receive it.

TREATMENT SPECIALTIES

- Burn scar revision
- Chest wall deformities including pectus excavatum
- Cleft lip & palate care
- Clubfoot & congenital deformities of the foot
- Developmental musculoskeletal deformities
- Gait abnormalities
- General pediatric orthopaedics
- Hand & upper extremity care
- Hip disorders – congenital and developmental
- Limb deficiencies / deformities
- Limb length discrepancies
- Metabolic bone disease
- Musculoskeletal injuries and diseases, subacute and chronic
- Musculoskeletal tumors
- Myelodysplasia
- Neuromuscular disorders (muscular dystrophy, SMA & CMT)
- Orthopaedic conditions secondarily related to:
  - Arthrogryposis
  - Cerebral palsy
  - Spina bifida
- Osteogenesis imperfecta
- Scoliosis, kyphosis, spinal deformity
- Skeletal dysplasia
- Skeletal growth abnormalities & deformities
- Sports injuries / fractures
Walk-in Fracture & Sports Injury Clinic
Shriners Hospitals for Children — Portland offers a daily walk-in fracture and sports injury clinic that provides total fracture care for kids. Families can access this specialized, convenient, and reliable care between 7:30am-4:00pm, Monday through Friday, excluding holidays – all without having an appointment scheduled!

Spinal Deformity
Shriners Hospitals for Children — Portland offers an extensive spinal deformity program for spinal conditions, including scoliosis. Staff help ensure that patients receive an optimal outcome by providing all aspects of inpatient and outpatient pediatric orthopaedic care, including surgery, on-site rehabilitation, and psychological support.

Arthrogryposis
Our medical team specializes in providing comprehensive and ongoing care and management for the rare orthopaedic condition arthrogryposis. Our team utilizes both non-operative and operative options to help patient’s improvement in range of motion and ultimately, their quality of life.

Cerebral Palsy
Our medical team, including pediatric orthopaedists, therapists and orthotists, work together with each patient and their family to prescribe a customized care plan for children with cerebral palsy. Treatment options may include referrals to our tone management clinic or Baclofen clinic, a visit to our motion analysis lab, and a customized plan involving surgery to correct contractures and bony alignment when necessary.

Chest Wall
Shriners Hospitals for Children — Portland treats chest wall abnormalities such as pectus carinatum and pectus excavatum. Our team of highly experienced orthopaedic specialists will evaluate your child to create a treatment plan, which may include bracing and/or surgery. The specialized medical team works collaboratively to ensure that children benefit from the finest, most advanced specialty care.

Cleft Lip & Palate
The specialists at Shriners Hospitals for Children — Portland provide a comprehensive approach to meeting each child’s individual needs through specialized evaluation and treatment. Due to the complex nature of cleft lip and palate, treatment consists of close cooperation with a multidisciplinary team of medical, dental, and nutrition specialists.

Club Foot
The Portland Shriners Hospital specializes in both surgical and non-surgical treatment options for children with clubfoot. Our pediatric trained orthopaedic physicians will determine the best treatment option based on the severity of the condition, the child’s age, and medical history. For cases where non-surgical interventions are indicated, our on-site team of orthotists and prosthetists will construct custom-fitted bracing for your child.
**Subspecialties Continued**

**Hip Program**
We take a team approach to the treatment of complex hip problems, which can include the use of hip arthroscopy, surgical hip dislocation, and Periacetabular Osteotomy (PAO) procedure. The specialized care in the hip specialty program at the Portland Shriners Hospital is available to children from infancy through adolescence.

**Limb Deficiency**
The Portland Shriners Hospital focuses on providing care for limb deficiencies and leg-length discrepancies through surgical methods, physical rehabilitation, and its in-house prosthetic services, which creates prosthetic devices that are fabricated specifically for fit and function of each child.

**Neuromuscular**
Medical staff at the Portland Shriners Hospital are specialized in providing care for pediatric neuromuscular conditions such as: cerebral palsy, spinal muscular atrophy (SMA), spina bifida, and muscular dystrophy. Treatment options include occupational and physical therapy, orthotic and assistive devices, and surgical intervention.

**Spasticity/Tone Management**
Shriners Hospitals for Children — Portland specializes in spasticity and tone management for patients with conditions, like cerebral palsy, that reduce spasticity. A multidisciplinary team works collaboratively to improve each patient’s range of motion, motor function, and comfort.

**Spina Bifida**
The Portland Shriners Hospital’s team of pediatric orthopaedic surgeons work together with physical and occupational therapists, orthotists, and its motion analysis team to ensure that each patient receives specialized and comprehensive care.

**Skeletal Dysplasia**
At Shriners Hospitals for Children — Portland, we are uniquely equipped to provide specialized care for patients who have any form of skeletal dysplasia. Our multidisciplinary clinic includes pediatric specialists in the areas of orthopaedics, genetics, endocrinology, physical therapy, and more. Robert Bernstein, M.D., chief of staff at the Portland Shriners Hospital, is nationally and internationally recognized for the care and treatment of children with skeletal dysplasia. He is on the medical advisory board for Little People of America.

**Upper Extremity & Hand**
Under the direction of Krister Freese, M.D., Shriners Hospitals for Children — Portland offers a comprehensive service line focused on pediatric hand and upper extremity conditions. Examples of conditions treated include traumatic injuries, congenital or birth related deformities in hands, fingers, or arms, and birth brachial plexus palsy.
On-site Support Services

Pediatric Orthotics & Prosthetics Services – Northwest (POPS) located in Shriners Hospitals for Children – Portland

Providing the finest care, service, and innovation in orthotics and prosthetics has always been the philosophy of the Pediatric Orthotics & Prosthetics Services - Northwest located in Shriners Hospitals for Children — Portland. Recognized for their achievement, orthotists and prosthetists are experts in the design, fitting, and fabrication of devices that improve function and mobility or help to reduce pain. Our American Board of Certification accredited facility offers skilled and compassionate care for pediatric patients, while working closely with physicians, physical and occupational therapists to produce the optimal function and comfort for patients.

Rehabilitation Services

Physical Therapy
Physical therapy is an important component of care. Each patient’s program is tailored to his or her individual needs and developmental abilities. On-site physical therapy services may include teaching safe methods of transporting/transferring patients after surgery; instruction about appropriate exercises to increase strength and mobility, including walking and adaptive activities; and training to use an assistive device, brace or prosthesis.

Occupational Therapy
Occupational therapy helps children establish physical and emotional health with regards to their environment, by encouraging participation in meaningful activities, especially related to upper extremity function. Occupational therapists help patients maximize independence in daily activities and optimize upper extremity function through splinting, strengthening, adaptations and therapeutic activities.

Speech-Language Pathology Services:
Speech-language pathology services are available for evaluation and treatment of patients for speech, language, and cognitive-communication. Our speech language pathologists provide the highest quality care for children with assistive technology needs. They aim to help patients meet their goals through utilizing assistive technology tools, such as augmentative and alternative communication (AAC), assistive mobility, or electronic aids to assist in daily activities.
Radiology
The Portland Shriners Hospital strives to keep radiation doses as low as possible during X-ray procedures by tailoring technical factors to the appropriate age and size of our patients. We also utilize EOS 2D/3D imaging technology, which captures whole-body images using only one-ninth of the radiation of a traditional X-ray, while providing detailed images for our physicians. Images are then interpreted by our board certified pediatric radiologists.

EOS
EOS is used for all patients with spine and lower extremity disorders except for infants and patients who are physically unable to utilize this machine.

O-arm
The O-arm is an intraoperative imaging system that, when used in a surgery setting, will provide surgeons a 3-dimensional view of the spine on an accompanying monitor to increase the accuracy of hardware insertion. The O-arm also provides high image quality, is easy to handle and can help decrease the time the patient needs to spend in surgery because of its efficiencies.

Motion Analysis Center
- The motion analysis center is directed by Jing Feng, Ph.D., who received her doctorate in biomedical engineering and has 22 years of experience in motion analysis.
- Each full motion study is reviewed in a weekly case review meeting. Motion analysis staff present the cases to the attending physicians, fellows, and residents. Sometimes physical therapists, orthotists and prosthetists also attend the meeting. The multidisciplinary team reviews the patient's video, physical exam measurements, kinematic and kinetic data, foot pressure data and electromyography data. After a group discussion, a physician who leads the case review meeting dictates the treatment recommendations, which will be shared with the family by the attending physician.

Recreation Therapy
Recreational therapy aims to promote an active and healthy lifestyle for our patients, while increasing their quality of life through outdoor adventure, sports, creative movement, art and social engagement. Participation in recreational activities can improve physical, emotional and mental health and well-being. Our programs provide opportunities for families to recreate together and provide supportive environments for kids to foster friendships. We provide year-round programs and individual consultation regarding recreation opportunities, and adaptive equipment is provided to ensure that activities are accessible for all.
The Portland Shriners Hospital prides itself on delivering the safest and highest-quality patient care within a family-centered and collaborative environment. Our commitment to achieving and surpassing the highest standards is evident not only through our accreditation by The Joint Commission, but also through our performance on numerous patient quality and safety indicators. Our adoption of patient-reported outcome assessment tools and use of innovative care models to address the comprehensive needs of our patients further illustrate our focus on offering superb and value-driven pediatric orthopaedic care.

**Patient Reported Outcomes**

Ample evidence affirms that patients who are more involved in their care experience better outcomes and choose less costly yet effective interventions. In December of 2017, the Portland Shriners Hospital implemented PROMIS, a pediatric non-disease specific health-related quality of life patient-reported outcome assessment tool developed by the National Institutes of Health. Since that time, over 3,600 pediatric patients have been administered the assessment at the Portland Shriners Hospital. Among the adolescent idiopathic scoliosis population, 80% of patients saw improvement in pain interference and upper extremity function as quickly as eleven months post-operatively.

**National Surgical Quality Improvement Program**

The Portland Shriners Hospital recently joined the American College of Surgeons National Surgical Quality Improvement Program (ACS NSQIP). ACS NSQIP has enabled hundreds of hospitals across the country to gauge the quality of their surgical programs with unrivaled precision and measurably improved surgical outcomes. Data collection begins preoperatively and continues through 30-days postoperatively on randomly assigned patients. Patient data is risk-adjusted and surgical case-mix adjusted, allowing surgical outcomes and complications rates to be nationally benchmarked.

**Infection Prevention**

Surgical site infections (SSIs) are associated with increased morbidity and mortality, poorer patient quality of life, and higher cost of medical care. Shriners Hospitals for Children — Portland is committed to delivering care that meets and outperforms industry benchmarks around SSIs.


In all wound clean-class 1 (non-contaminated) cases, the hospital performs well-below the literature benchmark of 1.8%.

Note: These rates include spinal fusion cases (both idiopathic and non-idiopathic).
Adolescent idiopathic scoliosis is the most common type of structural spinal deformity of unknown cause, with literature benchmark rates ranging from 0.7% - 2.6%. The Portland Shriners Hospital reports a 0.0% rate of SSIs in idiopathic scoliosis cases.

Our adolescent non-idiopathic spine population includes congenital scoliosis, syndromic scoliosis, early onset idiopathic and neuromuscular scoliosis. Traditionally, this expanded group of spinal fusion patients report higher infection rates than adolescent idiopathic scoliosis patients. Portland Shriners Hospital infection rates for this patient population consistently fall at or below the literature benchmark, which ranges from 10% - 40%.

In addition to low rates of surgical site infections, since 2014 the Portland Shriners Hospital reports a zero Catheter-Associated Urinary Tract Infection (CAUTI) rate, zero Central-line Catheter Associated Bloodstream Infection (CLABSI) rate, and zero cases of hospital associated MRSA bloodstream infections.

**Antimicrobial Stewardship**

Antimicrobial stewardship is a coordinated program that promotes the appropriate use of antimicrobials (including antibiotics), improves patient outcomes, reduces microbial resistance, and decreases the spread of infections caused by multidrug-resistant organisms. At the Portland Shriners Hospital, a multidisciplinary team reviews 100% of all antibiotic orders for appropriateness, including those used for surgical prophylaxis.

**Healthcare Professional Influenza Vaccination Rate**

The healthcare professionals at Portland Shriners Hospital are dedicated to patient safety. Staff have met and exceeded the Centers for Disease Control and Prevention (CDC) Healthy People 2020 goal with an influenza vaccination rate of over 90% for the past three consecutive years.

**Patient Experience**

Shriners Hospitals for Children — Portland utilizes Press Ganey Associates to capture and measure patient perspectives around their care experiences. Questions cover topics such as communication with nurses, physicians and hospital staff, facility comfort and cleanliness, pain management, admission and discharge processes, patient and family education, and many more. Collected data is aggregated and benchmarked against peer hospitals, and scores are regularly shared with hospital staff to encourage and promote the very best in customer service. Across the Portland Shriners Hospital’s three service lines (Inpatient, Outpatient Services, and Ambulatory/Outpatient Surgery), Press Ganey patient satisfaction scores are consistently at or above peer hospital mean scores. Due in part to these high ratings, Shriners Hospitals for Children — Portland was the proud recipient of the 2018 NDNQI® Award for Outstanding Nursing Quality by Press Ganey.
For patients who have experienced adverse childhood events such as abuse, foster care, or the loss of a parent, being in a hospital setting can be overwhelming. To help combat such prior negative experiences, the TEDI Team was established at the Portland Shriners Hospital in 2018. TEDI stands for:

- Trauma Informed
- Evidence-Based
- Driven by Research
- Inspired

The goal of the TEDI team is to ensure that children with prior developmental trauma receive the extra attention to safety, transparency, and compassion that they need to decrease stress while receiving care at Shriners Hospitals for Children — Portland. The team, which began with ten registered nurses and one certified nurse assistant, has since expanded to include members from multiple departments, thus allowing for a more comprehensive trauma-informed model of care. These individuals are trained to recognize the signs and symptoms of trauma (e.g., anger, social issues, withdrawing, fear of adults, defiant behavior, etc.), and then determine how best to care for the patient using a trauma-informed approach. The TEDI Team’s ultimate goal is to help the child build resilience and develop healthy coping skills.
Awards & Accolades

NDNQI Award for Outstanding Nursing Quality
Shriners Hospitals for Children — Portland was nationally recognized as the only pediatric hospital to win the Press Ganey 2018 NDNQI® Award for Outstanding Nursing Quality! The award recognizes the top performing pediatric hospital that has achieved excellence in overall performance in 17 nursing quality indicators, which is determined through a quality assessment test.

Oregon Ethics in Business Award
Shriners Hospitals for Children — Portland was honored to receive an Oregon Ethics in Business Award in the non-profit business category. Organizations and individuals who receive this award are chosen based on how they’ve demonstrated ethical business decisions in the workplace, marketplace, environment, and community.

Thomas E. Whitecloud Award
The Portland Shriners Hospital research team, led by William Horton, M.D. made an innovative discovery that impacts how physicians are able to track a child’s rate of growth. Through a simple finger-prick blood test, the research team discovered a protein (called biomarker CXM) which mirrors the child’s rate of bone growth, which will allow physicians to instantaneously predict the rate of a child’s growth. Since the discovery of the biomarker CXM, Michelle Welborn, M.D. has analyzed how this finger-prick blood test could help her provide the best care for patients who have scoliosis and other spine conditions. She was awarded the Thomas E. Whitecloud Award for her work with the biomarker CXM from the Scoliosis Research Society in the category of Best Basic Science Paper.

International Consortium for Health Outcomes Measurement (ICHOM) Poster
After one year of PROMIS (patient-reported outcome) data collection, in-depth analysis was conducted and statistically significant patient-reported outcome variables identified. Specifically, peer relationships were found to be a significant variable in predicting pain interference and mobility outcomes in both surgical and non-surgical populations. A poster presentation on the findings, PROMISing: Process Improvement in Psychosocial Health, was internationally recognized and published at the 2019 ICHOM Conference in Rotterdam, Netherlands.
**Education**

In following the mission of Shriners Hospitals for Children — Portland, we provide education for physicians and other health care professionals. This includes, but is not limited to, hosting residents, fellows, students, and trainees to perform orthopaedic and spine clinical rotations. In addition, physical therapy, occupational therapy, orthotics and prosthetics, nursing and advance practice nurse students (CRNAs and NP students) complete their pediatric clinical rotation under the guidance of the professional health care staff.

**Citywide Grand Rounds**
Citywide Grand Rounds was established in early 2019 to bring all pediatric orthopaedic surgeons within the State together for discussion of difficult pediatric orthopaedic cases, create a state-wide collegial environment, and establish collaboration between the various institutions, physicians, and practices. The meeting occurs approximately every 4 months, usually off-site, where physicians, advanced practice providers, and residents gather in a relaxed atmosphere to talk and help each other. This has been a wonderful opportunity to get to know each other and to create a cohesive, synergistic environment in Portland and the State.

**Australian Resident Program**
Shriners Hospitals for Children — Portland has had a unique opportunity to train residents from Australia for the last 22 years. The Australian Orthopedic Association (AOA) has accredited the hospital as a designated training site for their residents. We are the only site outside of Australia that has this opportunity. The program is quite popular with the residents who have to apply to get this position as it allows them a unique opportunity to see a high volume of complex pediatric disorders as well as work within an entirely different health system.

**Annual Conferences**

**Dillehunt Memorial Lecturship**
This annual lecture series is named after Richard Dillehunt, M.D. who was instrumental in the establishment of Shriners Hospitals for Children — Portland and served as the first chief of staff. This series recognizes his legacy which inspired many orthopaedists with his devotion to helping children. Each fall, the Dillehunt Lecture features an international pediatric orthopaedic surgeon. Attendees typically include Portland Shriners Hospital staff and faculty as well as orthopaedic surgeons from the Pacific Northwest.

**Beattie Lecture Series**
Each fall, the Beattie Lecture takes place at the Portland Shriners Hospital. The speaker each year presents on topics of interest in pediatric orthopaedics, and current trainees present interesting surgical cases for discussion. The audience typically includes Portland Shriners Hospital staff and orthopaedic surgeons from the Pacific Northwest.

**Primary Care Providers Conference**
Shriners Hospitals for Children — Portland staff provide an annual educational opportunity for primary care providers on the topic of pediatric orthopaedics. This event takes place during the fall of each year.
Shriners Hospitals for Children’s model of care was imagined and established by Shriners International, the fraternal organization for which the hospital is named. Determined to give all children access to specialized care, the Shriners opened their first hospital in 1922. Shriners Hospitals for Children opened as a place where children experiencing the effects of polio, clubfoot and other orthopaedic conditions could receive life-changing medical care. Today, the Shriners fraternity consists of over 200 temples across the world, who help support the Shriners Hospitals for Children health care system.

The Portland Shriners Hospital’s Board of Governors is comprised of 18 members who represent the nine Shrine Centers that directly support the hospital, which includes; Afifi, Al Aska, Al Kader, Al Shamal, El Korah, Gizeh, Hillah, Masada, and Nile. Shriners Hospitals for Children — Portland is also supported by the Daughters of the Nile, and Ladies Oriental Shrine of North America, which are both fraternal organizations affiliated with the Shriners. Involvement from the Shriners include monetary donations, volunteer support, and helping promote the medical services available at Shriners Hospitals for Children.

The Portland Shriners Hospital is in-network for all major plans including:
- Regence BlueCross BlueShield
- Providence Health Plan
- Cigna
- Moda
- Care Oregon
- HealthShare
- Medicaid

Main Hospital Phone: 503-241-5090
Provider to Provider Line: 503-221-3483
Today’s research is tomorrow’s patient care. At Shriners Hospitals for Children — Portland, we conduct both clinical research and basic research. The clinical research team works to determine the effectiveness of existing treatments, while our basic research team studies genetic causes of orthopaedic conditions & develop ways to diagnose and treat these conditions.

Advancements in 2020

Telehealth
At Shriners Hospitals for Children — Portland, we want to ensure that our specialized care is as accessible as possible. Fast Track Video Visits (FTVV) is a telehealth program that launched in March of 2020, and it was developed as a convenient option for patients and families to help eliminate barriers to care. Through the use of Fast Track Video Visits, providers at the Portland Shriners Hospital can continue to provide specialized orthopaedic care to new and established patients from the comfort of the patient’s home via video software.

Visits are personalized to each patient and conducted through Skype with a Portland Shriners Hospital provider licensed in the state in which the patient lives. The FTVV program is an extension of the care currently provided at the Portland Shriners Hospital, and our pediatric orthopaedic specialists can conduct a number of patient visits using these video appointments.

Appointment types appropriate for FTVV:
• New patient consultations
• Annual check-ups
• Follow-up visits
• Rehabilitation appointments

Fast Track Video Visits does not completely replace the need for in-person visits. Circumstances that will continue to require an in-person visit include new injuries, the need for X-rays, patients that need adjustments to their orthotic or prosthetic devices, and patients that need casts removed. However, by utilizing telehealth, our providers are able to reduce the number of patients who need to come to the hospital while also providing the same level of specialized care that our patients and families have come to expect.
Helping Kids Be Kids

New Prosthetic Legs Bring Rilynn More Confidence, Just in Time for Kindergarten!

Rilynn was born with a condition called tibial hemimelia, which means that her tibia bone (lower leg) in both legs was shortened or absent. Immediately after she was born, Rilynn’s parents began researching where she would receive the absolute best care for this rare condition. Just six months later, Rilynn officially became a patient at Shriners Hospitals for Children — Portland.

“When we started learning more about the Portland Shriners Hospital, we realized that they’re the specialists in treating Rilynn’s condition, and we knew right away that we had to come here,” said Janell, Rilynn’s mom.

Together, they made the trek from Port Orchard, Washington to Shriners Hospitals for Children — Portland and met with Michael Aiona, M.D. “He’s brilliant,” said Janell. “Right away, he had a plan for us, which was just incredible. We’re so grateful to have him.”

When Rilynn was old enough to walk, she received her first pair of “stubbies”, which are hard sockets that level her legs and allow her to walk, but which don’t have a knee or foot. Children who are just beginning to walk on prosthetic legs start the learning process in stubbies because they’re closer to the ground, and it shortens the distance from falling and is less intimidating to small kids. Her stubbies had a design reflecting her favorite Disney character – The Little Mermaid!

Now Rilynn is 5 years old, and she decided that she wanted to have “tall legs” in order to be the same height as her peers. Rilynn and her family worked with orthotist/prosthetist Sabrina on getting Rilynn conventional prosthetic legs that have articulated knees and distinguished feet. Once again, Rilynn chose The Little Mermaid as the design on her prosthetic legs.

“I’m going shoe shopping!” said Rilynn, after we asked her what activity she’s most excited to do in her new prosthetic legs. “She’s asking everyone she knows to take her shoe shopping,” said Nicholas, Rilynn’s dad. “She’s going to end up with the most shoes of anyone I know!”

High-Flying Cheerleader Doesn’t Let Scoliosis Keep Her Down

Savannah, a 17-year-old patient at Shriners Hospitals for Children — Portland, was at cheerleading practice when she first suspected that something was wrong with her back. After a “flying” stunt in the air, her teammates said that her back didn’t feel normal when they caught her. Her coach, who was familiar with scoliosis, took a look at Savannah’s back and immediately noticed a curve.

“During this time, I was in a severe amount of pain, experienced numbing in my legs, and was having trouble breathing,” said Savannah. “I would take frequent breaks during cheer practice and I would have to do everything differently. I remember going home and crying almost every day after practice because it hurt so much and I felt like my body was giving up on me.”

Right away, Savannah and her parents visited her primary care provider in Grants Pass, Oregon. During her appointments, she interacted with a few medical staff who didn’t believe Savannah, 15 years old at the time, that she was in pain. Despite that, she was referred to Shriners Hospitals for Children — Portland and had a consultation with Daniel Bouton, M.D. in December of 2018, who recommended immediate surgery. He explained that the surgery was both corrective and preventative – the surgery would straighten the curve of her spine and also prevent the curve and twist of her spine from further altering her ribcage and restricting her lungs and heart, which was causing the difficulty in her breathing. Savannah underwent surgery in April of 2019.

“My surgery wasn’t scary at all, I was super excited,” said Savannah. “I even brought in my panda pillow pet. All of the nurses were so kind when I was recovering and always had a smile on their face or a joke to tell – even when it was 3am! I felt so welcomed and they helped me with everything I had to do.”

“Savannah is a shining example for all patients who receive the diagnosis of scoliosis,” said Dr. Bouton. “She was incredibly self-motivated to heal and get back to cheerleading. Savannah doesn’t let her scoliosis define her, and she doesn’t let it slow her down. Whenever Savannah comes in for an appointment, I always know it’s going to be a good day because her positive energy is infectious!”
Photo Gallery
About the Portland Shriners Hospital
Shriners Hospitals for Children — Portland is changing lives every day by providing state-of-the-art pediatric orthopaedic care for a wide range of diseases and disorders of the bones, muscles and joints. Services include inpatient and outpatient surgery; physical, occupational and speech therapy; orthotics and prosthetics and outpatient clinics. The hospital uses state-of-the art technology as part of its commitment to excellent care, including EOS Imaging System, which provides high-quality X-rays using far less radiation, and a motion analysis center. All care is provided regardless of a family’s ability to pay. The Portland Shriners Hospital is part of the Shriners Hospitals for Children® health care system. Learn more at portlandshrinershospital.org.

3101 SW Sam Jackson Park Rd.
Portland, OR 97239-3009

INITIAL APPOINTMENTS & REFERRALS
503-221-3422

GENERAL INFORMATION
503-241-5090

portlandshrinershospital.org

FOR MORE INFORMATION:
portlandshrinershospital.org
facebook.com/shrinershospital.portland
twitter.com/shcportland
instagram.com/shcportland