

## Motion Analysis at Shriners Hospitals for Children

Where Hope and Healing Meet, Compassion and Expertise Come Together, and Lives are Changed.



Shriners Hospitals for Children® is an internationally recognized leader in clinical motion analysis. The motion analysis centers at Shriners Hospitals for Children complement our health care system's commitment to provide excellent care to children with orthopaedic conditions, including those caused by neuromuscular problems, such as cerebral palsy.

The information provided by motion analysis can be used to improve both patient outcomes and treatment protocols.

When we understand how a child with a mobility impairment moves, we can help them move more efficiently, more effortlessly and more confidently.



## The Understanding Often Begins in Our Motion Analysis Centers, Where:

- High-speed cameras, reflective markers, force platforms and muscle sensors combine to record and measure how a child with a mobility impairment is moving.
- The technology of the motion analysis centers provides a way to collect detailed data that provides a complete picture of how and why a patient's muscles, joints and bones are interacting. This picture gives us the understanding often needed to provide the best treatment recommendations for our patients.
- The availability of pre- and post-operative data helps to refine and adjust surgical procedures to achieve even better outcomes in the future.
- Motion analysis can also be used to provide better understanding of some upper extremity abnormalities such as brachial plexus palsy, and to analyze how individuals with spinal cord injury use assistive devices, such as a manual wheelchair, to help them save energy and move more effectively and efficiently, with less stress on specific muscles.

## Motion Analysis is Offered at the Shriners Hospitals for Children in These Locations:

Chicago Philadelphia
Erie, Pa. Portland, Ore.
Greenville, S.C. Sacramento, Calif.
Houston Salt Lake City
Lexington, Ky. Shreveport, La.
Mexico City Spokane, Wash.
Montreal Springfield, Mass.

Shriners Hospitals for Children is changing lives every day by providing innovative pediatric specialty care, conducting world-class research and offering outstanding educational opportunities for medical professionals. Our health care system provides advanced care for children with orthopaedic conditions, burns, spinal cord injuries, and cleft lip and palate.

To learn more about Shriners Hospitals for Children, please visit shrinershospitalsforchildren.org, or call: 800-237-5055 in the U.S., or 800-361-7256 in Canada.

