

Advanced, connected treatments mean better outcomes for patients with neurological diseases and disorders.

The world has come a long way in our collective understanding of neurosciences in the past 50 years. Only a few decades after the first magnetic resonance imaging (MRI) was performed on a human patient in 1977, neurologists know more about the brain, spine, and nervous system than had ever been thought possible. Neurology, the branch of medicine that focuses on the nervous system, is divided into two categories: the central nervous system, which consists of the brain and spinal cord, and the peripheral nervous system, which consists of all other nerves in the body. McLaren Bay Region's dedicated neuroscience medical teams include experts in neurology, neurosurgery, and stroke treatment.

Physicians who specialize in neurology are called neurologists. They treat patients with spinal cord, brain, and nerve disorders that include stroke, headaches and migraines, Alzheimer's disease, Parkinson's disease, epilepsy, Bell's Palsy (facial paralysis), Lou Gehrig's disease (ALS), and Huntington's disease, among other conditions.

Patients in need of surgery–including skull-base surgeries to address tumors or blood vessel abnormalities, spinal decompressions or fusions, or craniotomies–are referred by their neurologists to neurosurgeons.

The neuroscience team at McLaren Bay Region is committed to providing the highest standards of neurological and neurosurgical patient care. Other conditions that may require neurosurgery include head and spine trauma; cerebrovascular disorders, such as aneurysms of the brain and clogged arteries in the neck that can lead to strokes; chronic low back pain; birth defects; and brain and spinal tumors.

McLaren's team of neurologists and neurosurgeons isn't just leading the way when it comes to providing patient care; they're also at the forefront of harnessing groundbreaking technologies and tools. The McLaren Stroke Network is the only program in Michigan–and one of only a handful in the nation–where every stroke patient is seen by a stroke-trained interventional neurologist in minutes–any time of the day or night.

Designated as a Primary Stroke Center by The Joint Commission, McLaren is among the best when it comes to stroke care.

Maintaining Primary Stroke Center status requires providing the most advanced treatments and highest expertise. For example, for appropriate patients, including

Crystal Wackerly, whose story you can read in this publication, McLaren administers tPA, the only FDA-approved drug to treat blood clots in the brain. Although the lifesaving drug is typically given in hospitals through an IV, McLaren has the capability of injecting the drug directly into the blood clot in the brain. This delicate procedure can be performed only by a specially trained neurointerventionalist.

When it comes to spinal surgeries, McLaren's boardcertified neurosurgeons have extensive experience treating pain and degenerative conditions of the spine. They use the latest technologies and minimally invasive techniques, when possible, for spinal surgery, minimizing risk and decreasing recovery time for patients.

A neurosurgeon may also provide non-surgical care, depending on the nature of the injury or illness. Neurologists and neurosurgeons at McLaren will also consult each other on challenging cases and work in tandem to provide care for patients. Each brings their own wealth of knowledge, experiences, and expertise to the diagnosis, treatment, and management plans for each individual patient.

McLaren's neurological treatment capabilities extend far outside of the hospital and operating rooms, too. With specialized neuro rehab and therapy services to treat neurological disorders and neurosurgery patients, care continues while patients work with McLaren providers on therapeutic exercises, muscle re-education, speech therapy, and other treatments to minimize potential deficits, enhance quality of life, and to regain independence.

Being diagnosed with a neurological disease can be scary, but it can be reassuring to know that McLaren's team of highly skilled, experienced neurologists and neurosurgeons are there to provide expert, patient-centered care at every step of the way.