URMC’s Comprehensive Stroke Center: What This Means for Our Community

How does a medical center achieve the Joint Commission Certification as a Comprehensive Stroke Center?

The standards for this level of care go well beyond a hospital’s ability to provide acute stroke care. This certification, the highest awarded to stroke centers, means that a medical center is ready twenty-four hours a day, seven days a week, to treat any kind of stroke—even the most complex cases. Following rigorous on-site reviews, the University of Rochester Medical Center received Joint Commission designation in 2014 and re-approval in 2016. To date, URMC is the only Comprehensive Stroke Center in the Greater Rochester/Finger Lakes region.

How a Comprehensive Stroke Center Works

To earn this designation, URMC has demonstrated that it provides a comprehensive level of care for every patient with stroke. Before the patient arrives at our Emergency Department, the Emergency Medical System (EMS) routinely informs us that a stroke patient is on the way to the hospital. A triage nurse will immediately evaluate this patient upon arrival and move the patient on to imaging or additional physician evaluation. If stroke is suspected, a “Code Stroke” is initiated.

Once a Code Stroke is called, physicians from Neurology and Neurosurgery combine efforts with providers in Emergency Medicine, Imaging Sciences, and Nursing to rapidly evaluate and treat each patient. These evaluations include a focused neurological examination, brain imaging, lab work, and determination of eligibility for thrombolytic treatment with intravenous tissue plasminogen activator (tPA), a medication intended to dissolve blood clots causing the stroke. Our goal is to treat patients quickly and safely, with the majority of our tPA-treated patients receiving medication within 45 minutes of arrival.

Some patients may have more severe strokes with evidence of blockage of one of the major arteries in the brain. These patients will likely be treated with IV tPA, but may also be eligible for catheter-based removal of the clot by our skilled endovascular neurosurgeons. These patients undergo additional brain imaging, and then may be transferred to the Operating Room for an angiogram and possible removal of the clot. All patients who receive IV tPA or undergo clot removal by a catheter (mechanical embolectomy) are then transferred to our Neurointensive Care Unit, a highly specialized unit for the care of patients with critical neurological illness. Our Neurointensive ICU is managed by fellowship-trained physicians in neuromonitoring and staffed by an outstanding group of advanced practice providers, nurses and technicians dedicated to the care of patients with all types of cerebrovascular disease. All other patients with stroke are admitted to our inpatient Stroke Unit for dedicated care by our experienced team of nurses and therapists.

The URMC Comprehensive Stroke Center also specializes in caring for other types of cerebrovascular disease, such as aneurysms, intracranial hemorrhages, vascular malformations and carotid artery disease. We offer multidisciplinary treatment for these conditions, including surgical clipping or endovascular coiling of aneurysms, surgical clot evacuation, embolization procedures, and endarterectomy and stenting for narrowed arteries.

Our stroke team includes five vascular neurologists, two cerebrovascular/endovascular neurosurgeons, three neurohospitalists, two vascular neurology fellows, five NPs/PAs, and a team of nurses, therapists, and house staff, with support from EMS, Emergency Medicine, Laboratory Medicine and Physical Medicine and Rehabilitation. Our goal is to provide rapid, seamless care to all patients with stroke in order to reduce morbidity and mortality, promote optimal recovery, and prevent future strokes.
Benefits for Public Health

The role of a Comprehensive Stroke Center goes beyond the care our patients receive when they arrive at URMC. It is incumbent on us to provide stroke education as well as clinical care, and to serve as a resource to the region. We all take this responsibility very seriously.

This year, our new regional tele-stroke program gets underway, with the goal of becoming active in several hospitals by July 1. We will provide tele-stroke coverage for regional hospitals that would enable 24/7 availability of a consultation with a member of our stroke team. We hope to assist Emergency Medicine physicians in the region by providing recommendations involving thrombolytic treatment or endovascular intervention for patients who present with an acute stroke. In parallel, we are developing a regional quality improvement program based on our experience with the Stroke Treatment Alliance of Rochester (STAR). Through the STAR model over the course of four years, local hospitals shared data, practice patterns, and outcomes from an institutional perspective, and compared their own results to the data collected throughout the region. We used each other’s experiences to improve overall care, and have identified some issues that have since been corrected. For example, we identified factors that were limiting IV tPA use across our institutions, and implemented new approaches that then increased our overall use of IV tPA.

We hope to expand this model to our entire region, with the goal of examining data in aggregate, providing feedback, and offering educational and resource support to participating hospitals. This will help us meet the common goal of improving all aspects of stroke care throughout the region.

Finally, we are once again hosting our annual regional Stroke Management Symposium on Stroke Care, STAR-NY, on March 30, 2017, at the Hyatt Regency in Rochester, NY. This year marks the sixth consecutive year we have provided this full-day course in stroke education to physicians, nurses, students, therapists and administrators. This conference has been extremely well-received, with nearly 400 attendees last year. We look forward to another successful conference, with a focus this year on pre-hospital and Emergency Department care.

Serving as the region’s only Joint Commission Certified Comprehensive Stroke Center is both an honor and a responsibility. We view this role in the community as part of our responsibility as a Comprehensive Stroke Center, as we work to improve stroke care for every patient in every hospital in the region.

6th Annual Regional Stroke Management Symposium
Register Now!
cel.urmc.edu/star-2017
Early registration ends March 16

Hyatt Regency, Rochester, NY
Thursday, March 30, 2017
7:30 a.m. - 4:30 p.m.

Agenda will highlight challenges in prehospital care and management of acute stroke in the Emergency Department

STAR- NY
STAR-NY Newsletter, Feb 2017 issue 2