

Cookeville Regional Offering Video 'Teleneurology' for Stroke Patients

By Liz Engel Clark, February 14, 2011

COOKEVILLE -- A high definition video conferencing system is now being used to help diagnose stroke and other emergency neurological cases at Cookeville Regional Medical Center.

Teleneurology, a new service that was unveiled last week at the hospital, will allow CRMC to provide 365 24/7 bedside neurological coverage -- using physicians located all across the country. The technology, which uses a video link, will help fill the gap left by a shortage of neurologists here. The hospital is constantly looking to add more doctors of that specialty, but only a handful currently practice in the area, said Menachem Langer, CRMC chief operating officer.



Cookeville Regional Medical Center RN, Michele Young, standing left, and Mary Sholtz, RN, ER Manager, help connect a patient to a physician via teleneurology, a new service utilizing videoconferencing that is being offered at the hospital. Herald-Citizen Photo/Ty Kernea

"Smaller communities have a hard time recruiting neurologists, and we don't have enough neurologists in the Upper Cumberland to provide 24/7 coverage, so there's demand for this," Langer said. "What's currently happening is some patients are otherwise being sent out of the region. For example, if you come into the ER on a transfer day, because there's no neurologist, you just get sent out to Chattanooga or Nashville, which is delaying treatment time for patients."

To counter, CRMC has started to offer the teleneurology services. When a patient comes to the hospital and is thought to be suffering from stroke, seizure or other emergency neurological condition, a video work station is rolled into the room, and following a simple telephone call, a physician appears on-screen within minutes.

"The provider on the other end can zoom in, can do a full exam with the assistance of a nurse, just like if you were in their office," Langer said. "It's a high definition camera. They see the patient's imaging studies. They make recommendations for the patient's care, communicate back to the doctor and then co-manage the case remotely."

But most importantly, Langer said, the new service helps provide faster care when it comes to treating stroke and other neurological emergencies -- and time matters. Stroke, or "brain attack," when a blood clot interrupts blood flow to an area of the brain, is the leading cause of disability in the United States, and more than 780,000 Americans experience a stroke each year. If tPA, an FDA-approved clot dissolving drug, is administered within a three-hour window from the onset of symptoms, it may reduce long-term disability for the most common form of stroke.

"Minutes are brain cells," Langer said. "The sooner you get the patient the proper treatment, the better it is for them. Once the patient is stabilized, (care) would be followed up with our staff neurologist."

CRMC has purchased one video station for the teleneurology services. Langer said the equipment will be

used 90-plus percent of the time for emergency room type cases, but the cart will be available to other floors if needed. All involved nursing staff and physicians have gone through respective training.

Specialists On Call, the company providing the teleneurology consultation, is Joint Commission accredited and all its security measures and protocols are HIPAA compliant. Langer said their services are currently in place in 110 hospitals in 12 states and the company has conducted more than 20,000 consults -- their board-certified physicians also have 10 or more years of experience.

Telemedicine, meanwhile, is currently being used at other medical facilities around the country to provide other services, such as pediatric, psychiatric and GI emergency on-call support. As far as where this technology is ultimately going, "The sky's the limit," Langer said.

"I see a lot of opportunities in the future to do a lot of telemedical work," he said.

Stroke symptoms include:

- * Sudden numbness or weakness of face, arm or leg -- especially on one side of the body.
- * Sudden confusion, trouble speaking or understanding.
- * Sudden trouble seeing in one or both eyes.
- * Sudden trouble walking, dizziness, loss of balance or coordination.
- * Sudden severe headache with no known cause.

Learn as many stroke symptoms as possible so you can recognize stroke as FAST as possible:

Face: Ask the person to smile. Does one side of the face droop?

Arms: Ask the person to raise both arms. Does one arm drift downward?

Speech: Ask the person to repeat a simple phrase. Is their speech slurred or strange?

Time: If you observe any of these signs, call 9-1-1 immediately.

Source: National Stroke Association

Medical Monday is an ongoing series highlighting health care in the Upper Cumberland area. To submit ideas, e-mail liz.clark@herald-citizen.com or call 526-9715.

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