



Jeffrey Bodle, MD

Groundbreaking stroke pilot aims to reduce door-to-needle time by 30 minutes

As a neurohospitalist and stroke medical director at Carolinas HealthCare System NorthEast, Jeffrey Bodle, MD, and his colleagues regularly think about innovative ways to improve stroke treatment – often focusing on how to decrease door-to-needle time.

“As far as getting patients to treatment faster once someone hits the door, we’ve gotten our process really nailed down – in a very efficient manner,” says Dr. Bodle. “So, we started to think about what we could do before they reach the door.”

They theorized that a good deal of time spent gathering information once a stroke patient arrives at the ER could in fact take place in the ambulance ride over – if a neurohospitalist could somehow be present.

Virtual technology saves vital time

Enter MEDRIS, a two-way audio/video technology that provides a direct, real-time feed into the back of an ambulance, allowing a neurohospitalist (in the ER) to virtually interact with the EMS team and patient (experiencing stroke-like symptoms) on the way to the hospital.

“As EMS is stabilizing the patient, the neurohospitalist can examine the patient, gather their medical history, review consent, identify any contraindications to therapy, determine the onset-of-symptoms time and discuss drug treatment options,” says Dr. Bodle. “So, by the time the patient arrives at the ER, the neurohospitalist will be waiting to meet them at the door, have the CT scan cleared and ready, and have most of the workup already done.”

Dr. Bodle and his colleagues are optimistic that they can cut 20 to 30 minutes off the door-to-needle time by utilizing the MEDRIS technology in this way.

“This would be extremely significant given that millions of neurons are lost each minute in which a stroke goes untreated.”

Pilot expected to set new standards

One of the first of its kind in the nation, this pilot program is a partnership between Cabarrus County EMS and Atrium Health’s Carolinas HealthCare System NorthEast, supported by a generous grant from the NorthEast Foundation.

If the pilot goes as well as expected – reducing door-to-needle times by 20 to 30 minutes – this technology will almost certainly be integrated into the stroke treatment process across Atrium Health.

“I think focusing on the pre-hospital setting is a real change in paradigm and a great way to merge advancements in technology with current stroke care to speed up the time it takes for acute stroke treatment,” Dr. Bodle says. “The faster we can get people to treatment, the more brain cells we can save and the better the outcomes.”

To learn more about the MEDRIS pilot, contact Jeffrey Bodle, MD, at jeffrey.bodle@atriumhealth.org.