

Faster Stroke Treatment

Improves Results and **Brain Recovery**

Matt Bellifemine was in his basement when he heard a loud noise upstairs. When he arrived upstairs, he found his wife, Kathryn, on the floor.

"I thought she just slipped on the rug, but then I noticed she wasn't speaking properly and her face looked deformed," he says.

Kathryn says she has no memory of falling. "I was standing in my dining room on this little rug. Some invisible monster ripped that rug out from under my feet, because one second I was standing and the next I was on the floor."

When someone suffers a stroke, time is of the essence. In a matter of minutes, a person can sustain irreversible brain damage. Ischemic stroke is one of the leading causes of long-term disability, according to the American Stroke Association (ASA).

Atlantic Health System ensures timely treatment for stroke patients with cutting-edge in-transit telestroke (ITTS) technology. Once Atlantic Health System paramedics load a stroke patient into an ambulance, medical personnel use an InTouch Xpress™ device for video communication with a stroke neurologist.



Another key to faster treatment: correctly identifying stroke symptoms. The ASA, along with the American Heart Association, suggest the F.A.S.T. approach. If individuals notice three symptoms – Face drooping, Arm weakness and Speech difficulty – it's Time to reach for the nearest phone.



LIFESAVING INNOVATION

The portable device is loaded with a high-definition camera, microphone and screen, all of which help the specialist perform a neurological evaluation while the patient is en route to the emergency department. Upon arrival, the neurologist assumes care in real time and can administer alteplase, a protein that can dissolve blood clots and restore flow to the brain.

"They got Kathryn into the ambulance and we went about a mile and a half and they pulled into a school parking lot," says Matt. "They had the neurologist on the screen, and when we got to the hospital she immediately went back to the CT scan where they verified she had a stroke."

Last year, a stroke study by researchers at Overlook Medical Center and Atlantic Health System found that the lifesaving tissue plasminogen activator (tPA) could be administered 13 minutes sooner if the patient was evaluated with ITTS.

"The more time that passes, the likelier a patient will sustain brain damage," says Gary Belt, MD, FAAN, vascular neurologist with Atlantic Neuroscience Institute. "Our in-transit telestroke capabilities minimize these complications."

Kathryn received the tPA at Chilton Medical Center and after being airlifted to Overlook Medical Center, went on to have two procedures,

angioplasty and stenting of the narrowed area in her carotid artery in her neck. This was then followed by a clot-removing procedure using the latest technology called a stent retriever, which restored blood flow in her brain within the critical time that it is needed. Kathryn is doing well today.

"I would not have had the outcome I did without this service. It was exactly four hours from the time I was on the floor until Dr. Ron Benitez [director of endovascular neurosurgery for Atlantic Health System] operated on me that night. How lucky am I to have been there and get, at midnight, one of the best surgeons in this field."

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"If you think you or someone you know is having a stroke, it's a medical emergency," says Dr. Belt. "Call 911 immediately." ▶

For more information about telestroke services, visit atlantichealth.org/strokecenters.

ATLANTIC MEDICAL GROUP

Dr. Gary Belt is a part of Atlantic Medical Group, a multispecialty network of health care providers. For more information, visit atlanticmedicalgroupnj.org.