

CASE STUDY: HSHS ST. NICHOLAS HOSPITAL

TeleStroke Program Improves DTN and Other Metrics, Wins Award for St. Nicholas

HSHS St. Nicholas Hospital is a 185-bed nonprofit community hospital associated with the Eastern Wisconsin Division of Hospital Sisters Health System (HSHS). Located in Sheboygan, Wisconsin, the hospital treated its first patient in 1890.



THE CHALLENGE

St. Nicholas had one neurologist on staff who was on call 24x7x365. He would consult by phone or in person, providing advice to the ED clinical staff. It was a setup that worked for St. Nicholas, but to take some of the work load off the neurologist, the hospital began to look for options to provide him with much needed support.

Certified by the Joint Commission in 2014 as a Certified Primary Care Stroke Center, the hospital knew whatever changes it made had to keep its stroke program performing at top levels to meet the Joint Commission's requirements.

THE SOLUTION

St. Nicholas launched its TeleStroke program in early 2016, bringing in Eagle TeleNeurologists to share responsibilities with the local neurologist. The TeleNeurologists work with the clinical team in the ED via videoconferencing technology whenever a patient presents with stroke symptoms, and they provide follow-up treatment if the patient is admitted to the hospital.

THE BENEFITS

- Stroke consults increased: In the first month of the program, the TeleStroke team had three stroke consults. That number increased to an average of 12 per month.
- Alteplase treatments more than doubled: Patients treated with Alteplase to break up blood clots increased from seven in 2015 to 15 in 2016 after the TeleStroke program was implemented.
- **DTN time below Joint Commission maximum:** Average door-to-needle (DTN) time dropped from 90 minutes in 2015 to 52 minutes in 2017. As a Joint Commission stroke center, the TeleStroke program enables St. Nicholas to meet or exceed quality measures for stroke, including average door-to-stroke treatment time of less than 60 minutes.
- **Unprecedented response time:** The average response time for the program is 3-4 minutes. The team provides rapid access to care and individualized attention for patients. For eligible patients, treatment with tPA (the clot-busting medicine) to open the blockage is time-critical, and the TeleStroke team is always ready to act quickly.
- **Rave reviews:** Colleagues in the ED have expressed very positive feedback regarding the availability of the neurologists through the Telestroke program.
- In addition to the impressive new metrics, the Eagle TeleNeurologists has brought a new focus on both education and workflow improvements. The TeleStroke program was the impetus for a hospital collaboration with local EMS teams to accelerate pre-arrival notification so the TeleStroke and onsite team can be ready whenever they transport suspected stroke patients to the hospital.



The effort was recognized by the Wisconsin Paul Coverdell National Acute Stroke Program for achieving a 20-minute decrease in door-to-CT-scan time for one quarter—one of the highest reductions in the state.

Eagle Telemedicine's TeleStroke program provides hospitals with a sustainable solution for treatment of stroke and other acute neurological emergencies.

KEY BENEFITS & OUTCOMES

- Average door-to-needle (DTN) time down from 90 minutes in 2015 to 52 minutes in 2017.
- Patients treated with
 Alteplase increased from
 7 in 2015 to 15 in 2016.
- TeleStroke consults increased from 3 in the first month to an average of 12 per month.
- The average response time for the TeleStroke team is 3-4 minutes.

"The Eagle TeleNeurologists are very knowledgeable and dedicated to caring for stroke patients. The program made a significant difference even with the very first case. There was no waiting"

SARAH BADALAMENTI CLINICAL NURSE SPECIALIST ST. NICHOLAS STROKE PROGRAM



