

Teamwork Leads to Positive Patient Outcomes at Ascension All Saints

A coordinated stroke response requires timely action from every team member, ranging from Emergency Medical Services (EMS) to the Intensive Care Unit (ICU) charge nurse, from the neurologist to the pharmacy technician. Throughout a patient's care, each health care provider is integral to a successful response and seamless transition to the next step in the process. Ascension All Saints Hospital's (All Saints') coordinated response is an example of how effective communication, teamwork, and education can lead to successful patient outcomes.

When EMS from Racine Med 1 responded to one particular case, Officer Jake King immediately notified the hospital of a stroke alert after his squad performed a stroke assessment. The pre-arrival notification gave the emergency room (ER) charge nurse an opportunity to talk with the multidisciplinary stroke team to alert them to the incoming acute stroke patient. Consequently, they were all prepared when the patient arrived. The receiving ER physician at All Saints, Dr. Humphrey, noted that EMS provided a strong report of the patient's condition prior to the patient's arrival. The direct communication between EMS responders and ER providers ensured a seamless transition of care for this critical stroke patient.

Dr. Humphrey collaborated with neurologist Dr. Pagano and radiologist Dr. Sane on this stroke response. Once it was clear the patient would require more extensive care only a tertiary center could provide, Dr. Humphrey activated Flight for Life. Lab tests were completed quickly and the patient received Alteplase (tPA) 44 minutes after arrival. The patient's primary nurse and the ICU charge nurse worked alongside the security staff in preparing the patient for flight and transport to Froedtert Hospital, a Comprehensive Stroke Center in Milwaukee. When the team landed, the patient was already starting to move her right arm and verbalize. Dr. Lazzaro, a neurointerventionalist, was the receiving physician at Froedtert who continued the care and stroke intervention. He performed a mechanical thrombectomy procedure and from there the patient's neurological status greatly improved.

This successful patient outcome was made possible by the seamless transition of care between EMS and both hospitals. The teamwork exhibited by responders shows how impactful training and communication can be in stroke care. All Saints has made great improvements in all of their metrics the past three years. They look closely at the percent of stroke patients who arrive by two hours of last known well time and are treated with Alteplase by three hours. In 2015, they were at 75%; in 2016, 95%; and thus far in 2017, they're at 100%. Additionally, All Saints' time to thrombolytic care, or blood clot interception, in 60 minutes or less has greatly improved.

ICU Unit Leader Hollie Landreman says these improvements come from loop closure. All caregivers on the multidisciplinary stroke team—EMS, nurses, neurologists, pharmacists—receive feedback on patients' outcomes as a measure for providers to see the positive effects of their hard work. Monthly EMS quality meetings also foster collaboration and recognition across departments. EMS Coordinator Steven Bisher emphasizes the importance of recognizing quality work, in particular with EMS responders: "The more we recognize their efforts in the field, the more of a partner they feel like with what happens after they drop the patient off in the hospital. The better job we do all around makes everybody work that much harder together."

What They Did

Establish a stroke alert checklist.

Dr. Steven Andrews, Medical Director for Racine Area EMS, provided protocols for EMS and paramedics to practice under. The stroke alert checklist not only empowers firefighters and paramedics to feel confident calling in a stroke alert, but it also gives the hospital a lot of important information about the patient's condition before arrival. Reinforcement of good patient assessment skills helps EMS distinguish between different types of medical problems. In this specific case, EMS was called because of a suspected low blood sugar level with a diabetic patient. Low blood sugar was quickly ruled out, then, the team rapidly assessed and recognized it was a stroke.

Coordinate EMS education.

As the only hospital in Racine, All Saints receives patients from roughly 45 different EMS units. Therefore, proper education and continued communication is vital. EMS Coordinator Steven Bisher works hard to ensure that EMS assessment skills and judgment are consistent across all units.

Activate Flight for Life early.

Once Dr. Humphrey recognized the patient would need specialized care at a tertiary Comprehensive Stroke Center, he activated Flight for Life. This early activation decreased waiting time as the flight crew was able to go through their preflight checks and assessments.

Utilize a loop closure system.

Loop closure at All Saints' is a way of giving care providers from all ends of the spectrum feedback on the outcomes of patients they treat. This method allows EMS, nurses, physicians, and others to see the direct results of their work.



“Don’t minimize the value that every team member contributes.” – Steven Bisher, EMS Coordinator

Success Factors

Early activation. The key to coordinated EMS and hospital response is early activation of a stroke alert. The alert notifies hospital staff in specialized areas like computed tomography (CT) x-ray, and laboratory to prepare for a stroke patient. Additionally, the ICU charge nurse comes from the floor so they’re all waiting when the patient arrives.

Increase specificity of last known well time. ICU Unit Leader Hollie Landreman shared that All Saints is working towards improving reporting on last known well time by specifying a clock time (i.e., 1 p.m.) rather than minutes prior to arrival (i.e., two hours before arrival).

Recognize the importance of collaboration. Collaboration on patient care occurs at each stage of the care continuum. Hollie Landreman spoke about the unique system of care when there is a stroke alert; the ICU charge nurse responds in addition to the ER primary nurse. “They both drive the care; keeping the time clock going and watching to make sure we meet our metrics, whether that is making sure labs are done or the patient is getting to CT rapidly.”

Community outreach. It is vital that people recognize the signs and symptoms of stroke. Proper response is dependent on community members knowing to act F.A.S.T and call 911. All Saints has engaged the community in many different ways, especially during Stroke Awareness Month in May. F.A.S.T stickers were placed on almost 900 pharmacy bags, risk factor cards were placed on all inpatient dietary trays for several days, and work was done with a local high school on stroke education.

Recognition of Excellent Patient Care

Stroke champions. “We have two stroke units and stroke champions in each unit that meet monthly to review and discuss how we can improve stroke care,” Hollie Landreman said. “These meetings are very impactful.”

EMS Week. EMS units in the Racine area are celebrated during National EMS Week each year in an event that includes education and progress presentations. EMS Coordinator Steven Bisher says, “What I’d like to see going forward is a recognition for our EMS units out in the field for these wonderful, life changing calls they go on.”

Accomplishments in Stroke Care

All Saints is a Joint Commission Certified Primary Stroke Center. They have been recognized for exemplary stroke care by the American Heart/American Stroke Association:

- Get with the Guidelines Stroke Silver Plus Award
- Target Stroke Elite Honor Roll Award

Wisconsin Coverdell Stroke Program

EMS and All Saints Hospital both identify the Wisconsin Coverdell Stroke Program for their continued encouragement and education on stroke recognition. The program has given stroke presentations at All Saints Hospital to emphasize their successes through positive patient outcomes, and recognize staff for their impact in educating the community on stroke signs and symptoms.

