

BAPTIST HEALTH - NORTH LITTLE ROCK

Arkansas Hospital Reduces Average Door-In-Door-Out Time by 42%



Baptist Health Medical Center - North Little Rock in Little Rock, Arkansas, is a 225-bed medical center that sees a large stroke volume every month. It is a sister facility to Baptist Health Medical Center, also located in Little Rock. Baptist Health North Little Rock is a certified primary stroke center (PSC), meeting the requirements for necessary staffing, infrastructure, and capability to treat most emergent stroke patients. Additional functions of a PSC may be to act as a resource center for other facilities in their region, including being a main transfer site for stabilized patients from an ASR. This can include offering guidance for triage of patients, providing expertise about managing particular cases, making diagnostic tests or treatments available to patients treated initially at an ASR, and being an educational resource for other hospitals and health care professionals in a city or region. Baptist Health North Little Rock aims to become thrombectomy-capable by the end of 2024.

THE CHALLENGE

When Baptist Health Medical Center - North Little Rock needed to communicate about incoming stroke patients or transfer an LVO patient to their sister facility, the team was using a call system. "In the past, they'd give the thrombolytic and then have to make a lot of phone calls to get everyone the information. You may or may not know EMS was bringing the patient, depending on whether or not they called in before they came," said Sharon Aureli, RN, BSN, MSN, SCRN, CNOR, RNFA, CNL, Neuro Program Line Manager for the Baptist Health System. "When it came to transferring stroke patients, we previously didn't even have our Access Center, so it was a matter of making phone calls to try to get patients where they needed to be. Things were delayed."



THE SOLUTION

In 2020, the State of Arkansas launched an initiative to improve treatment times for time-sensitive emergencies. Many organizations adopted Pulsara, a mobile healthcare

communication platform that unites care teams on one secure communication channel.

When Aureli returned to Baptist Health as the Neuro Program Line Manager and found out about the initiative to use Pulsara for STEMI, she became one of the first in Arkansas to implement it for stroke at Baptist Health Medical Center in Little Rock, and then Baptist Health - North Little Rock.

Pulsara allows EMS and hospital staff to communicate about patients in an accessible patient channel that's visible to all care team members. Everyone can communicate instantly with a centralized view of the patient's demographics, secure team

KEY RESULTS

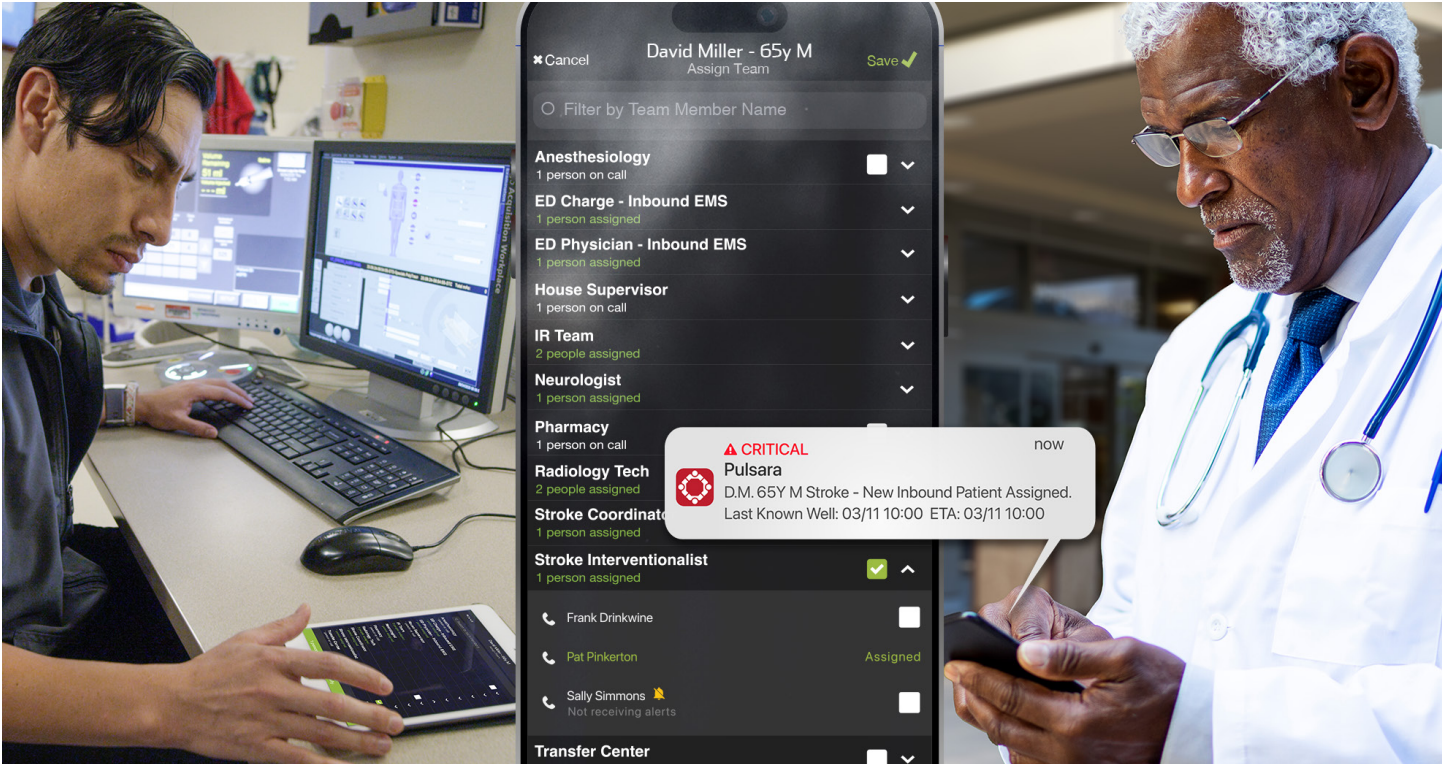
- ▶ 42% decrease in average door-in-door-out time for stroke transfers
- ▶ EMS pre-alerting with Pulsara saves time for hospital staff
- ▶ Receiving patient's name, DOB, and meds list helps staff prepare
- ▶ Integration with RAPID AI allows fast review of patient scans
- ▶ Access Center uses Pulsara for smoother transfer process



messaging, photos, and live audio and video calling. “One of my favorite pieces of Pulsara is when EMS pre-alerts us using Pulsara,” said Sarah Launius, BSN, RN, CCRN, ASC-BC, stroke coordinator at Baptist Health North Little Rock. “I feel like treatment times are way better when they pre-alert. It’s nice that it’s all right there.”

When EMS sends the patient’s information ahead of arrival, it gives the hospital access to helpful information they can use to be prepared when the patient arrives. “If EMS can initiate the Pulsara alert, then we already have the patient’s name and DOB. In today’s world, we can pull up records that might be very pertinent to making decisions,” said Aureli. “For instance: Are they on a drug that’s a contraindication? You can get that information before the patient gets here, which helps make that decision when they do arrive. Before, it was a lot of scattering, a lot of gathering, and a lot of phone calls. Now, everybody gets the same information.”

Launius also appreciates that their associated EMS agencies have been adding photos in Pulsara. “When they’re on site, they’re taking pictures of the home meds, so we’re able to look for any contraindications for thrombolytic therapy before they get there. That has been a big help.”



With Pulsara’s integration with RAPID AI, team members receive scan results directly in the Pulsara channel. “They can immediately look and see if they see a large vessel occlusion, and we can work on getting that patient to the place they need to be,” said Aureli.

If a patient has LVO symptoms and needs to be transferred to Little Rock, North Little Rock staff can enter all of the information about the patient that would be needed to transfer them: their NIH stroke score, symptom onset, last known well, CTA results, and LVO signs into a Pulsara channel, and consult their Access Center. The Access Center receives the Pulsara alert and uses the information in the channel to begin working on the transfer by consulting IVR at Little Rock. The Little Rock team will look at the patient’s scans and information, determine whether they need to be transferred, and if so, whether or not Little Rock can take them. The Access Center will respond to the charge nurse at North Little Rock to inform them of the next steps. From there, North Little Rock can call for transport via ground or air, whichever is faster and safest for the patient. “Gone are the days where the doctor has to look for the phone number

and then call the physician and say, ‘Please look at these images and tell me: do you want this patient or not?’ It’ll all go through Access and it cuts down on time,” said Launius.

“Pulsara cuts down on phone calls and cuts down redundant information having to be shared,” said Aureli. “It’s all right there in the Pulsara app, which is really, really nice.”

“All of the information is right there at your fingertips,” said Launius. “It doesn’t matter where I’m at in this hospital—if I get an alert, I can respond a lot faster. I think our physicians and our neurologists would say the same thing. They can respond a lot quicker and ask questions in the chat. It makes our response times a lot better.”

Baptist Health North Little Rock onboarded with Pulsara in June, but at that time, didn’t have a unified effort for education. The team continued to use a dual process as they relied on the way they had always communicated while testing the waters with the new system. “No one knew that the process was supposed to replace the old way. They were making phone calls and doing Pulsara,” said Launius.



When Launius joined the team as stroke coordinator in October 2023, she spearheaded an effort to educate staff on how to use Pulsara. “It’s taken repeated education for the physicians to know that, ‘Hey, you don’t have to make any phone calls. If you think that this patient is a candidate for a thrombectomy, then we can just say it through Pulsara and you don’t have to worry about it.’”

Sarah is on top of educating in the aftermath—if a team member didn’t use Pulsara quite like they wanted to in a particular case, Sarah is able to talk with them about it, work through challenges, and continue education on the workflow. “It takes someone onsite who’s focused and persistent, and that’s what Sarah’s done,” said Aureli.

“We’re working really hard to improve for our patients,” said Launius.

THE RESULTS

After implementing Pulsara in June 2023, Baptist North Little Rock saw a sharp decrease in their door-in-door-out times for transferring stroke patients. Over the span of a few months, their average door-in-door-out time for stroke transfers dropped from 163.5 minutes down to 94.5 minutes—a 42% decrease.

“I think it’s the way of the future,” said Aureli. “Pulsara has worked well for us. I think the Pulsara team has been very responsive, which makes a big difference. They’ve done a good job at setting it up to make it successful.”

On September 27th, 2023, the Arkansas Department of Health announced that a grant funded by the DOH would make Pulsara available to all ambulance services, acute care, sub-acute care, long-term acute care, nursing homes, behavioral health hospitals, and other affiliated healthcare facilities in Arkansas. Aureli said, “We have

an opportunity in Arkansas to prove that this can make a difference if everyone pulls together and gets on the same page. It is my hope that we continue to grow the number of EMS agencies and hospitals that use Pulsara. Because if we unite, it’s going to make it stronger.”

“It’s the best way to be connected as a team in caring for your patient, which is obviously the most important piece here,” added Launius. “If we can do something that makes it easier and has better outcomes for our patients, then why wouldn’t we do it?”

