CASE STUDY

pulsara®

OVERLAKE MEDICAL CENTER

Facility Cut Stroke Treatment Times by 30 Percent

THE CHALLENGE

As a thrombectomy-capable facility with a large staff of specialists, nurses, and more, Overlake Medical Center sees ~900 acute stroke cases per year. With this volume, providing time-sensitive care is of the utmost importance to producing positive patient outcomes. Overlake knew they needed a streamlined means of communication to help make existing stroke workflows more efficient. "With so many people in the system, unnecessary team members were being alerted for a stroke case, which added extraneous noise as they cared for patients," said Overlake Medical Center's Stroke Team leaders.

For example, the ED would send a page out to all hospital staff, including infusion nurses. This untargeted alert could needlessly pull nurses away from providing much needed IV assistance to other patients. Additionally, team members who were needed, such as neurologists and cath lab specialists, often weren't alerted in real time, since the message came through as a missed phone call or page.

Using Pulsara, Overlake staff connects patients with their families via live video.

OVERLAKE MEDICAL CENTER & CLINICS

Overlake Medical Center in Bellevue, Washington is a 349-bed hospital serving the Puget Sound region since 1953. The hospital treats more than 245,000 outpatients and 18,000 inpatients each year, and is a Joint Commission-certified Advanced Stroke Center.

KEY RESULTS

- Streamlined HIPAA compliant activations
- Reduced door-to-needle (DTN) times for TPA patients by 31%
- Decreased door-to-groin puncture for LVO patients by 24%
- Coordinated Care Communication

THE SOLUTION

The combination of delayed communication and alerting of unnecessary resources led Overlake leadership to assess the stroke coordination process. They found that a single tool for communicating with the right team members was needed to unify dedicated care teams and establish a clear pathway for assessing incoming patients from the ED to determine the appropriate stroke intervention. Pulsara, an advanced healthcare communication technology made for any interaction, was the solution. It helps Overlake Medical Center organize the right team members on a single platform to connect, communicate, and coordinate stroke care.

With Pulsara, the hospital's ED physician is now able to securely activate a stroke case to all appropriate team members' mobile devices as soon as the stroke patient arrives. The instant notification is received by the imaging technicians, allowing them to prepare for needed CT scans. Simultaneously, neurologists are alerted to determine the stroke-specific intervention, such as whether a clot-busting medication (TPA) is required or if a large vessel occlusion (LVO) needs an immediate thrombectomy in the cath lab. This immediate, coordinated communication helps to advance response and treatment to save brain tissue and minimize risk to the patients.

THE RESULTS

Overlake Medical Center's improvement in treatment times demonstrates the power of having a single communication channel. Since implementing Pulsara, staff have worked diligently to:

- Reduce door-to-needle times for TPA patients by 31 percent; from 45 minutes to 31 minutes
- Reduce door-to-groin puncture for LVO patients by 24 percent; from 106 minutes to 81 minutes (with some cases below 65 minutes)

The hospital is looking to expand use of the platform to more case types and is working to onboard EMS partners, as well as to streamline pre-hospital communication and coordination.

"We wouldn't be able to achieve this improvement without Pulsara," said Stroke Team leaders. "It's more than a communication tool; it's a system-wide solution to transform patient care."