

Pulsara Case Study: Virginia Mason Medical Center

22% DECREASE IN TIME-TO-TREATMENT

How one hospital system is using mobile technology to improve patient care in Seattle.



Learn how Virginia Mason Medical Center is transforming communication and care coordination with stroke teams.



BACKGROUND

Virginia Mason Medical Center is a nonprofit health care system based in King County, Seattle, serving the central Puget Sound region and Yakima area.

PROBLEM

Focused on continually delivering the highest quality of care to patients, care teams at Virginia Mason Medical Center wanted to innovate the way they communicated with one another to better respond to time-sensitive stroke cases.

With multiple staff members, it can be challenging to ensure everyone is continually aware of important information about a specific stroke patient. For example, data that helps determine the severity of the stroke is crucial for identifying the appropriate treatment to prepare for, but sometimes this information is not relayed to all team members.

Virginia Mason understood that reliable communication is key, and sought to provide a resource to that would help them collaborate in real-time to treat stroke patients.

SOLUTION

Virginia Mason Emergency Department Director Rea Berg had learned of the success a neighboring hospital in Vancouver, WA, was experiencing with a new technology called Pulsara—a mobile application designed to streamline patient care among health care teams.

"I had the opportunity to visit PeaceHealth Hospital and we were inspired by the improvement in their stroke metrics," said Berg.

Pulsara replaces outdated means of communication such as pagers, faxes and radios, with HIPAA-compliant instant messaging, image transfer, audio



clips, real-time video calling, and more, uniting care teams and improving outcomes in patients with time-sensitive emergencies.

Berg began advocating for Pulsara's potential to improve patient care with executives and community stakeholders, and by August 2018 Virginia Mason began implementing the technology in its stroke department.

A key champion, Berg worked to educate and train staff on its capabilities. "I championed and got the teams engaged as well as ensured we created public awareness with healthcare systems and EMS agencies in the King county region."

RESULTS

Virginia Mason's improved communication processes have yielded many benefits for staff and patients. Results include streamlined systems and processes, better utilization of resources, and standardized data recording.

Most invaluably, the teams at Virginia Mason have increased the number of lives saved by accelerating treatment times for stroke patients through better communication. By analyzing data gathered since the technology's implementation in August 2018, and comparing it to data from the same time frame the year prior, Virginia Mason concluded that Pulsara helped the teams improve treatment times for stroke intervention, reducing from 41 minutes to 32 minutes.



This demonstrates a 22 percent decrease in time-to-treatment that was achieved by Virginia Mason's staff effectively using Pulsara to coordinate care. The hospital is hopeful that overall treatment and intervention times will continue to improve, resulting in better patient outcomes and extending the solution to other critical cases.

In another recent stroke case, the hospital team coordinated the needed definitive care in 21 minutes. That is 24 minutes below the required metric of 45 minutes for a hospital designated as a Comprehensive Stroke Center. That means, from the point of identifying the patient as experiencing a stroke, transferring them to treatment and performing the life-saving intervention, they were able to use technology to accelerate time-to-treatment by 53%.

"All hospitals must move to the 21st century and use new technology to help both our care teams and patients," said Berg. "We can't wait to expand our success with this solution to other case types and involve other hospitals and EMS partners throughout the region."



