

Use of Simulation to Decrease Door to Alteplase Times in the Emergency Department (ED)

Kaiser Westside Medical Center

Presenters: Michael Telanoff, BSN, RN *KWMC ED Charge Nurse*
and Heather Hurst, MSN, RN *KPNW Stroke Care Program Manager*



Statement of Disclosure:

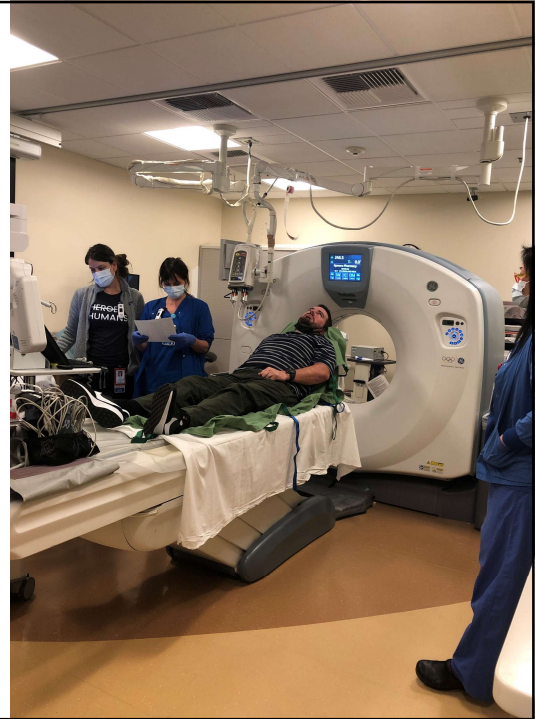
No conflicts of interest have been identified with anyone involved or presenting this learning activity.



Use of Simulation to Decrease Door to Alteplase Times in the Emergency Department (ED)

Michael Telanoff, BSN, RN *KWMC ED Charge Nurse*

Problem: In 2018, median time to Alteplase administration was exceeding the American Heart and Stroke Association (AHA/ASA) guideline for eligible ischemic stroke patients. Stroke kills 1.9 million brain cells per minute, making quick identification and treatment of eligible patients critical. Delays in treatment, may contribute to permanent disability for acute ischemic stroke patients.



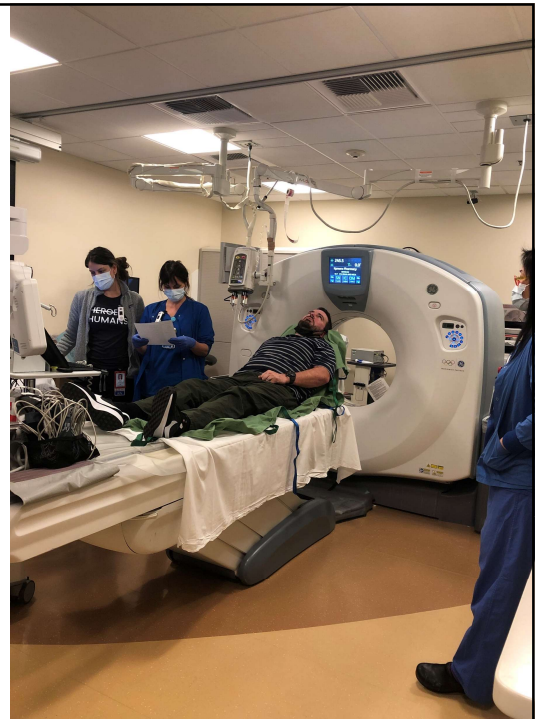
Use of Simulation to Decrease Door to Alteplase Times in the Emergency Department (ED)

Heather Hurst, MSN, RN *KPNW Stroke Care Program Manager*

Purpose: To decrease time to thrombolytic administration for eligible patients with ischemic stroke.

Methods: We formed a workgroup to review ED Stroke Alert processes and the ASA/AHA guidelines. We partnered with the Simulation Team and held near monthly Stroke Alert simulations throughout 2019, to refine our processes.

The Simulation Team arrived at the ED unannounced, acting as a stroke patient. We simulated the Stroke Alert process from arrival, to CT scan, to Neurology consultation, with the process observed and timed. Finally, we instituted a debrief process for all Stroke Alert simulations, with immediate participant feedback after each simulation, and refined our processes with each experience.

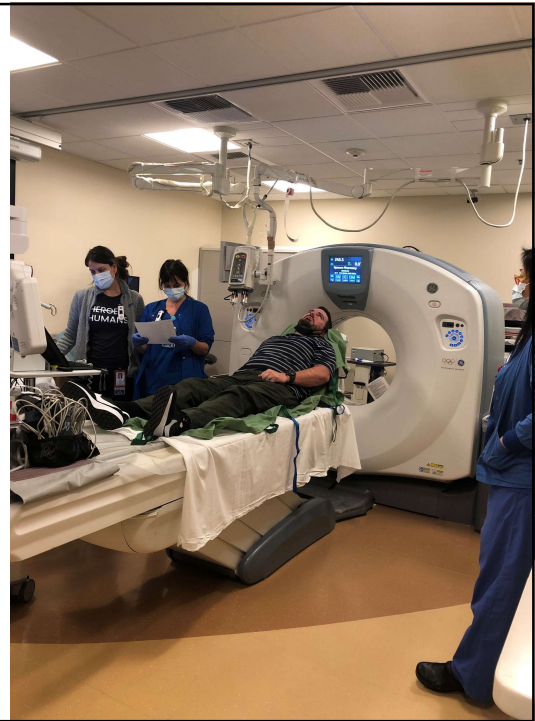


Use of Simulation to Decrease Door to Alteplase Times in the Emergency Department (ED)

Michael Telanoff, BSN, RN *KWMC ED Charge Nurse*

Results: In 2018, we had 10 patients who received alteplase in the ED, median time of 70 minutes. In 2019, we treated 14 patients, median time of 53 minutes, including our latest record of 32 minutes, door to needle. We maintained this progress in 2020, with 80 percent of eligible patients treated in less than 60 minutes. Covid-19 limited live simulation learning, but we are now resuming simulations in 2022.

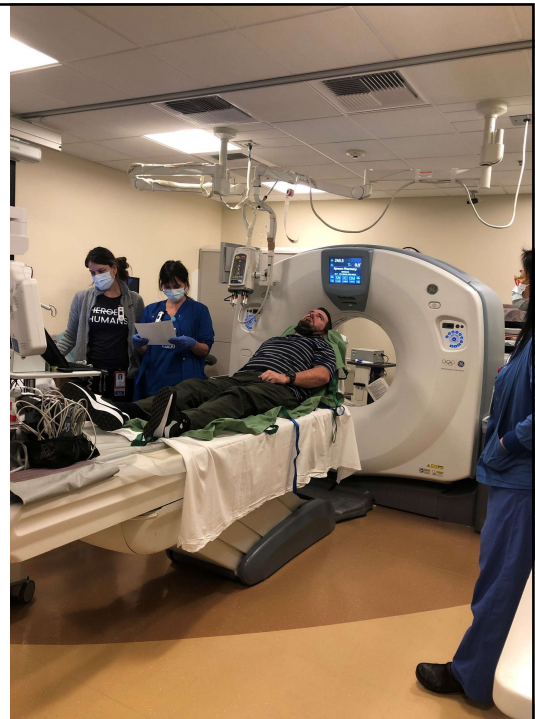
The picture is from our April 6th simulation.



Use of Simulation to Decrease Door to Alteplase Times in the Emergency Department (ED)

Heather Hurst, MSN, RN *KPNW Stroke Care Program Manager*

Conclusion: Utilizing our own organizational Simulation Team, allowed us to hold low-cost/free, ED Stroke Alert practice sessions, granting us the opportunity to identify issues in workflow, create solutions, and develop confidence as efficient members of a stroke team. This process also assisted us in meeting and exceeding the acute stroke care goals set by the AHA/ASA.



QUESTIONS?

We are honored to present today, as well as to be a part of such a collaborative community of nurses, striving to improve patient care together.

Thank you!



**KAISER
PERMANENTE®**

