

Background

- F10 OR has transitioned from an ambulatory center to an OR performing complex surgical cases. One challenge is training staff to support higher acuity surgeries and help manage unforeseen intra-operative emergencies. Emergencies in the OR are a high-risk low-volume event, covered by OR teams rather than the NYP Code or rapid response team.
- Staff expressed concern regarding preparedness for OR emergencies after several vascular injuries in robotic cases on F10.**
- The following feedback was obtained from previous OR emergencies:
 - Knowledge gaps
 - Influx of new staff not trained to handle OR emergency
 - Staff not aware of their role & responsibility during code
 - Supply gaps
 - Emergency supplies and instrument trays not stocked on F10 – takes 10-20 minutes to procure from G3 OR & CSPD

PICO QUESTION:

Among F10 OR staff, do multi-modal interventions including interviews, simulations, discussion and on-unit presence of emergency supplies increase staff confidence and readiness for OR emergencies?

Methods

Pre-Interventions

- UPC informal interview of staff identified barriers to care and learning needs of staff in responding to different types of OR emergency- Vascular, Cardiac, Airway.
- Literature review on Cardiac Emergencies in OR suggested that education tools (e.g., checklists and simulations) allow staff to teach, practice, and evaluate their critical thinking skills before they encounter a high-risk situation.
- Collaboration with multi-disciplinary surgical teams identified necessary emergency supplies and OR team roles.

Interventions

- Written education material was designed and distributed, outlining responsibilities and priorities of each team member in vascular, cardiac and airway emergencies
- Specialized supplies, such as vascular instruments and materials (e.g., sutures) commonly used in OR emergencies were added to par and staged in the emergency stand-by cart.
- 6 Small group simulations and discussions were held in the OR consisting of 31 nurses and ORTs.
 - In-person discussion about written material and review of resources available during emergencies.
 - Realistic OR scenario simulation was performed delineating appropriate actions of each team member.
- To measure the impact of these interventions on change in confidence amongst F10 staff, pre- and post-intervention assessments and surveys were distributed.**

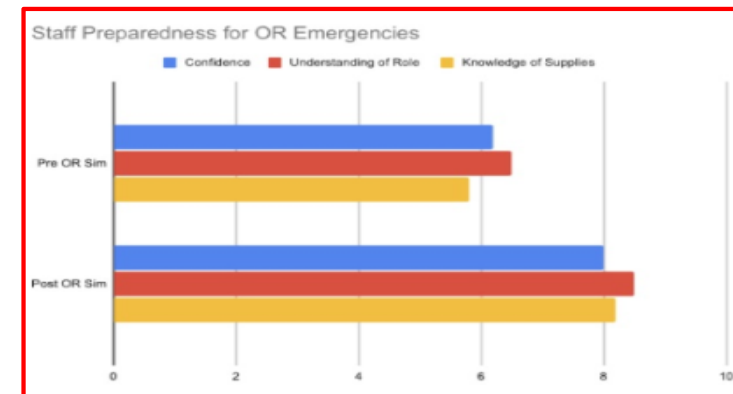


Emergency cart stand-by cart



OR Simulation

Results



- Staff confidence, understanding of roles and knowledge of supplies improved thorough preparedness measures as reflected in pre/post simulation assessments and surveys.

Discussion

- Involving the UPC and front line staff in developing visible changes on the unit increased staff engagement and morale.
- Overall staff attitude and culture trended positively as the exposure to the topic eliminated “fear of the unknown”.
- New staff who were previously unaware of these types of emergencies now have a foundation and a clearer picture of what to expect and anticipate.
- Small focus groups setting was key as it allowed each employee to be fully engaged in discussion/simulation. Questions/feedback were able to be instantly acknowledged and recorded.

References

- Dagey, et al. Using Simulation to Implement an OR Cardiac Arrest CKusler-Jensen. Cardiac Emergency Simulation, 2014
- Drilling for Success in the Ambulatory Setting. *AORN Journal*, 3.risis Checklist. *AORN Journal*, 99(3).