Rescue Ready: Simulation Solution for Airway Rescue Scenario in Phase 1 Recovery (after General Anesthesia-GA) Class

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Background

- Inexperienced RNs/RNs without ICU background may not have the opportunity to observe/practice airway rescue during their orientation period to a Post-Anesthesia Care Unit
- Airway rescue is a fundamental and crucial aspect to basic PACU nursing care, yet occurs infrequently thanks to advances in practices aimed at prevention of such incidences
- A Phase 1 Recovery (after GA) class was developed in 2023 **for RNs new to providing Phase 1 care in a PACU setting**

Purpose

- The purpose of this initiative is to replicate an experience of PACU airway emergency in a simulated environment to bridge the knowledge-experience gap
- The simulation was developed for the 2024 Phase 1 Recovery Class Cohorts and added to the course curriculum

Literature Review

- Despite advances in monitoring and pharmacological care, limitations can still exist in recognition and management of inadequate or residual neuromuscular blockade

Methods

- A scenario of "Residual Neuromuscular Blockade" was developed in conjunction with Gina Tranel, Clinical Simulation Program Simulation Educator
- Learning Objectives of the scenario:
  1. Recognize signs of residual/inadequate reversal of neuromuscular blockade
  2. Call for emergency assistance
  3. Provide immediate airway rescue to patient (including bag-valve-mask set up, jaw-thrust and/or head-tilt/chin-lift and begin rescue breaths
- Learners of the Phase 1 Recovery Class (RNs new to providing Phase 1 care in a PACU setting) were brought into the Simulation Center and divided into small groups according to their practice area (i.e. East Park Medical Center RNs, East Madison Hospital RNs, Madison Surgery Center RNs, UH PACU RNs)
- The simulation was facilitated using the principles and strategies of simulation-based education
- A retrospective post-then-pre design was used to assess self-reported changes in knowledge. Survey was conducted at the conclusion of each Phase 1 Recovery Class in January, April, and July 2024

Results

In the 2024 Phase 1 Recovery (after GA) classes held in January, April, and July, learners (*n=32*) reported:

❖ 33% increase in understanding of basic care of patients recovering from anesthetics

❖ 38% increase in understanding of various potential complications occurring in the immediate post-anesthesia period

❖ 34% increase in understanding the safety requirements for patients in Phase 1 recovery care.

Conclusions

Using simulation to replicate low-frequency, high-risk events like residual neuromuscular blockade after general anesthesia can be an effective tool to bridge the knowledge-experience gap for RNs new to providing Phase 1 care in a PACU setting

Next Steps

Plans have been established to continue collaboration with the Clinical Simulation Program to maintain this component of the Phase 1 Recovery Class curriculum

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- RN learners of the Phase 1 Recovery Class
- Phase 1 Recovery Class Instructors-Jen Paquette CNS, Jena Brown RT Education Specialist, Neil Brauner CRNA

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