Background

- An ambulatory surgery center exemplifies a positive trend of successful transformation in healthcare delivery outside of a hospital setting that has proven to improve quality and customer service.
- With the development of a shorter-acting anesthetic drugs, multimodal analgesia and minimally invasive surgery within the environment, perioperative emergencies can occur.
- Critical events in this fast-paced environment present challenges due to limited resources.
- In situ simulation is an educational modality built on the principles of adult learning theories geared towards:
  - Cultivating emergency response preparedness.
  - Professionals’ competencies.
  - Collaborative practice to promote patient safety and outcomes.

Objective of Project

- To implement efficient in situ simulations in the operating room and perianesthesia units to foster optimal performance in crisis resource management situations.
- Enhance professional skills and behaviors such as:
  - Collaboration.
  - Communication.
  - Leadership.
  - Self-efficacy.
  - Decision-making.
  - Role responsibility.
  - Situational awareness to ensure team functioning for safe patient care.

Process of Implementation

- Interdisciplinary team attended the Center for Medical Simulation comprehensive instructor workshop.
- Learned how to develop a simulation with measurable objectives and components consisting of:
  - Pre-briefing
  - Scenario development
  - Debriefing
- Simulations
  - Develop scenarios tailored to our specific patient populations.
  - Scenarios developed are the following:
    - Narcotic over sedation.
    - Airway management.
    - Local Anesthetic Systemic Toxicity (LAST).
    - Blue Dye Anaphylaxis
    - Robotic Vascular Emergency
  - Are performed once or twice monthly in either the operating room or perianesthesia setting.
- simMan Essential Manikin
  - Members were educated on how to navigate the capabilities of the computer system.
  - Familiarized with the functions of the manikin.

Statement of Successful Practice

- Based on the interdisciplinary Simulation Effectiveness tool (ID-SET) secure real-time online survey, participants response has been overwhelmingly positive. Some responses have been:
  - Improving practice.
  - Learning to execute critical resource management (closed-loop communication, mobilizing resources within the facility, and establishing clear leadership).
  - Utilization of new knowledge for practice change to optimize patient outcomes.
- The opportunity to breakdown the causes of poor communication, ambiguity of roles, correct diagnosis, treatment and team functioning is commended.

Implication of Advancing the Practice of Perianesthesia Nursing

- Opportunity to develop and disseminate real-life scenarios in a safe, controlled environment.
- Debriefing encourages an engaging environment for participants to evaluate their response to a critical event, working individually and as a team to care for a patient.
  - Mistakes are viewed as a learning opportunity in which asking questions is encouraged and criticism is constructive and positive.
  - The combination of simulation and theory leads to reflective debriefing that generates significant and measurable difference in nurse practitioners’ critical thinking skills.

Reference: