

# Hands-on Critical Care Knowledge and Clinical Judgment Skills for PACU Nurses

## An Evidence- Based Proposal for Change

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### Purpose

- To implement an educational program for the PACU nurse to develop hands-on critical care knowledge and clinical judgment skills.
- The evidence-based proposal is based on current literature and the significance of this educational program not only improves nursing knowledge, patient safety, but nursing satisfaction.

### Clinical Focus/Background

- Nursing continues to evolve
- Patient acuity, comorbidities increasing in PACU
- Novice PACU nurses from varied units, varied preparation
- Hands-on critical care skills gleaned upon pt arrival to PACU
- Demographic critical patient assignments
- Limitations to critical thinking and hands-on skills development
- The unique body of knowledge for perianesthesia care must be balanced with critical care teaching/learning

### PICOT and Objective

In the PACU setting, does the implementation of an evidence-based innovative and learner-centered educational program for developing hands-on critical care knowledge and clinical judgment skills of the PACU nurse result in a reduction of poor patient outcomes as compared to the current orientation and training program for the PACU nurse?

#### Objectives:

- to improve quality of care and safety for PACU patients by transforming the orientation process of newly hired nurses without critical care experience prepare nurses
- to prioritize Phase I PACU with evolved critical care knowledge, and assist nurses to utilize evidence
- to prevent poor patient outcomes or adverse events in the critical care population

### Innovation Description

This Learner-centered educational program is composed of innovative teaching components that mimic real-life scenarios. The innovative techniques used for this program are supported by evidence. The content of focus was developed using guidelines from the American Society of PeriAnesthesia Nurses (ASPAN) Core Curriculum, and ASPAN's Joint Position Statement.

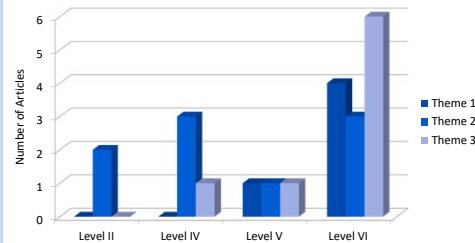
### Review of the Literature

The importance of utilizing different teaching methods that consist of innovative hands-on learning showed beneficial outcomes for clinical nurses as well as the new graduate nurse. Research supports the proposal for enhancing individual nurses' technical skills in critical care nursing, but also to improve non-technical skills. This can be accomplished in a safe learning environment utilizing simulation where nurses can practice skills without risk of patient harm. Innovative teaching methods are becoming more prevalent in healthcare professions to develop different ways of thinking. Literature supports the idea of incorporating problem-based teaching methods, simulation experiences, and routine competencies. PACU nurses will gain the knowledge and hands-on critical thinking skills needed to care safely for all patients within PACU, with confidence.

#### Themes

- 1) Simulation & Critical Thinking
- 2) Problem-based Learning
- 3) Critical Thinking in Graduate Nurses

#### Levels of Evidence Summary Table



#### Levels of Evidence

Critical thinking: substantial qualitative evidence from articles

- 9/15 discussed critical thinking impact w correlation with patient safety and positive patient outcomes
- 7 level VI measured qualitative data primarily
  - o nurses' perception of critical thinking knowledge
  - o feelings @ simulation/problem-based learning
  - o data positive, supported EBP use of simulation

The evidence gathered through the literature review primarily consists of qualitative and quantitative data with the exception of two randomized, controlled trials. This evidence strengthens the proposed change as critical thinking is measured and translated into both qualitative and quantitative data.

### Recommended Implementation Plan

#### Conceptual Framework

Kotter's change model: motivation and support throughout transitions support success. As healthcare and technology advance to meet increasingly complex patient needs, strategic planning is imperative to gain and sustain success with enhanced critical care knowledge and critical thinking skills.

#### Kotter's Model of Change



Rapid hemodynamic decline in PACU may be infrequent; therefore, there may well be knowledge deficit and nurses may have inadequate reactions. It is important to provide educational activities to give nurses the opportunity to observe, practice and reflect on different skills that they may not routinely utilize. Kolb's experiential learning theory is applicable to support this EBP proposal.

#### Facilitators

- Excellent administrative and departmental support for change
- EBP workshops facilitated by nursing leaders; to focus on the specialty body of perianesthesia knowledge
- Access to library resources through the local College of Nursing
- Introduction of EBP during orientation

#### Barriers

- Resistance from staff regarding EBP change
- Staff may not have articulated this learning need due to lack of critical incidents
- EBP workshops are infrequent
- Staff is not familiar with resources available
- Time constraints

### Nursing Sensitive Outcomes (1 year post initiation)

#### Patient-centered

- 25% reduction in poor patient outcomes: pain, cardiac complications, respiratory complications, neurologic changes, drug reactions, nausea and vomiting, hypothermia, bleeding, and altered mental status
- 100% PACU nurses will have improved clinical judgment and ability to prioritize critical patient care needs

#### Nurse sensitive

- 100% of Nurses will have improved knowledge and better critical thinking skills when caring for ICU patients
- 25% nursing satisfaction and nurse retention

### Discussion

Implementing a learner-centered, innovative educational program targeting critical care patients will improve the safety of care for all patients within the PACU.

Successful integration of external evidence into nursing practice will require an evidence based practice model and enhanced nursing skills including critical thinking and clinical wisdom. Nurses will build on previous knowledge, and gain experiences to ready to care for critical patients who enter PACU.

- PACU provides care for all post-operative and procedural patients post anesthesia
- Extended stays and boarding of ICU patients in PACU is not uncommon
- Nurses must be attentive to potential and real changes before adverse events occur and to be prepared to care for these complex patients; they need to preempt emergencies.
- The goal is to improve patient outcomes, nursing knowledge, critical thinking skills, and nursing satisfaction

### CONTACT

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