Introduction: Cardiopulmonary arrest (Code Blue) remains a high risk, low frequency event in Post-Anesthesia Care Units (PACUs). Literature denotes that healthcare facilities should implement Code Blue refresher programs to bridge the gap amid initial and recertification of Advanced Cardiac Life Support (ACLS) and Basic Life Support (BLS) skills due to the loss of knowledge in as little as two weeks after certification.
Identification of the problem: A gap analysis revealed that PACU RN's compliance to the American Heart Association (AHA)'s ACLS and BLS guidelines during mock Code Blues were suboptimal.
QI question/Purpose of the Study: The purpose of this project was to increase PACU RN's compliance and competence in ACLS and BLS skills while responding to Code Blues.
Methods: Baseline assessment of PACU RN Code Blue response was completed during mock Code Blue drills using a forty-six item standardized observation tool. Areas of opportunity led to the creation of monthly ACLS refresher workshops focusing on teamwork, ACLS algorithms, medication management, BLS skills, and in-situ Code Blue drills. Participant performances were re-evaluated using the same tool following the workshops during mock Code Blue drills several weeks after the last workshop.
Outcomes/Results: Initial assessment revealed a 33.4% Code Blue management compliance, whereas the post-intervention score increased to 92.2%. Tachycardia and bradycardia algorithm adherence increased from 28% to 91.2% and 21.4% to 81%; BLS adherence increased from 40.6% to 96%. Furthermore, 64.3% of participants initially met AHA's guidelines for initiating chest compressions; however, after intervention 100% of the participants initiated chest compression post-intervention appropriately.
Discussion: The AHA emphasizes the importance of ACLS and BLS skills in the chain of survival. BLS components such as: quality and timing of chest compressions, and ventilation skills improved significantly as did the adherence to ACLS guidelines. The PACU RN's response to cardiac arrest and deteriorating patient conditions using ACLS standards indicate that reinforcing ACLS skills leads to increase in knowledge.
Conclusion: ACLS workshops between recertification times improved PACU RN Code Blue response competence.
Implications for perianesthesia nurses and future research: ACLS refresher programs should be implemented in PACUs to bridge knowledge gaps between certification and recertification. Reinforcement of AHA guidelines lead to an increase in competence in Code Blue management, in-hospital cardiac survival rates, and improved patient outcomes.

PACU CRITICAL CARE PROGRAM: INCREASING PRECEPTOR KNOWLEDGE AND CONFIDENCE TO FOSTER FUTURE GENERATIONS OF RNS

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Co-Investigators: Pamela Northrop, MSN RN CPAN, Holly Rodriguez, BSN RN-BC CCRN-CMC

Introduction: An academic medical center's Post-Anesthesia Care Units (PACU) have increased bed space due to increasing surgical volume, patient acuity, and lack of Intensive Care Unit (ICU) beds. Often patients in the PACU require ICU care, requiring an increased stay in PACU due to increased monitoring requirements and medical interventions to stabilize patients postoperatively.
Identification of the problem: Additional Critical Care (CC) training was evident as PACU Registered Nurses (RN) voiced widespread lack of confidence and knowledge in caring for post-surgical ICU patients. Providing CC education to all current PACU RNs is as unrealistic as it is time consuming and cost ineffective.
QI question/Purpose of the study: The project's goal was to create a program that increases CC knowledge and confidence levels in the PACU RN preceptors, who mentor and precept new employees, meanwhile mentoring current PACU staff.
Methods: A four class series, increasing in difficulty was completed over several months to allow the participants to learn and apply the concepts in small increments to maximize learning. Concepts included: post-surgical patient assessment, device management of various pacemakers, external ventricular devices, hemodynamics, lab interpretation and post-surgical complication management. Instruction consisted of didactic lectures and High Fidelity Simulation (HFS). A fifty-question pre and post intervention CC knowledge test and a thirteen-question Likert scale confidence survey measured the effectiveness of the program. Furthermore, a forty-item RAPIDS-Tool was used on day one and on the final day during HFS to evaluate participants' performance rescuing a patient's deteriorating condition.
Outcomes/Results: Confidence levels increased from 3.14 to 4.14 noting a 20.1% increase. The CC knowledge score increased by 27.4%. Additionally, the RAPIDS-Tool score increased from 15.3 to 36.5, noting a 53.1% score increase.
Discussion: Results indicate that the CC class improved confidence and knowledge; most importantly, it improved assessment skills and response to deteriorating patients. Participants voiced their intent to teach learned CC concepts to new employees and colleagues.
Conclusion: CC Concepts Program improved participants' confidence, knowledge and response to deteriorating patients.
Implications for perianesthesia nurses and future research: Including the CC program to PACU preceptor programs may benefit all PACU RNs via confident PACU preceptors/ mentors who share their new knowledge with other staff members caring for critical PACU patients.

BEDSIDE HANDOFF BETWEEN THE PERI-ANESTHESIA CARE UNIT AND MEDICAL-SURGICAL UNIT

Primary Investigator: Ann-Marie Bermingham, BSN
Brigham & Women's Faulkner Hospital, Jamaica Plain, Massachusetts

Introduction: This evidenced-based practice (EBP) project was instituted after noting many rapid response activations (RRT's) on the medical-surgical unit in a community hospital in the greater Boston area.

Note: All abstracts are printed as received from the authors.

Identification of the problem: Prior to this project, the handoff process involved the PACU nurse calling report to a nurse on the medical-surgical unit who would then provide report to the clinical nurse caring for the patient. Research has suggested that multiple handoffs results in increased patient errors, decreased patient satisfaction, decreased communication, and decreased continuity of care (Bradley & Mott, 2013; Drach-Zuhavy & Hadid, 2013; Groves, Manges, & Cawiezell, 2016; Kerr & McKinlay, 2013; McMurray, Chaboyer, Wallis, & Ferherston, 2010; & Sand-Jecklin & Sherman, 2014). In addition, multiple handoffs are not consistent with recommended best practices (American Society of PeriAnesthesia Nurses [ASPAN], 2016), who recommend that "Handoff report should be completed before or at the time of transfer. There should be an opportunity for the provider assuming care to ask the transferring nurse questions." (ASPAN FAQ, 2017).
EBP Question/Purpose: What is the effectiveness of bedside handoff between the PACU and medical-surgical unit in decreasing the rate of rapid response activations? The purpose of the project was to decrease the number of rapid response activations on the medical-surgical unit.
Methods/Evidence: After a review of the literature and best practices it was determined that the PACU nurses should transfer the patients to the medical-surgical unit and give bedside handoff to the nurse scheduled to care for the patient. Predata was collected several months prior to the intervention and post-data was collected monthly after initiation of the bedside handoff.
Significance of Findings/Outcomes: There was a 50% decrease in the number of rapid response activations within three months after instituting bedside handoff between the PACU and medical-surgical unit. Nurses, patients, and families reported satisfaction with the process. In addition, it improved communication, decreased patient complications, and proved to be less time consuming.
Implications for perianesthesia nurses and future research: Bedside handoff between the PACU and medical-surgical unit demonstrated a decrease in rapid response activations and is a practice that should be continued. Bedside handoff allows for a quick assessment of the patient with the PACU nurse and nurse assuming care present, and immediate response to any identified issues. Future research should examine patient and nurse satisfaction, and timeliness of handoff.

PAIN, NAUSEA AND…THIRST?

Primary Investigator: Joni Lauri, RN BSN CPAN
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Introduction: Literature shows that the thirst sensation is often among the top patient complaints in ICU settings. While the Post Anesthesia Care Unit (PACU) is a comparable space, there is little available information on evaluating and treating thirst there.
Identification of the problem: Much PACU research focusses on evaluating and treating pain and nausea in the post-operative period. However, thirst is often cited by patients themselves as also being an intensely uncomfortable sensation after surgery.
EBP Question/Purpose: What is the prevalence and intensity of thirst compared to pain and nausea in the PACU among patients who received general anesthesia for their surgery?
Methods/Evidence: This project was performed in the inpatient PACU of a large academic medical center, by the staff nurses responsible for direct patient care. Patients were asked to rate their discomfort levels for pain, nausea and thirst on a zero to ten verbal numerical rating scale prior to any interventions. Of 200 patients, 117 gave ratings on all three categories, which were recorded by the nurses on a survey tool.
Significance of Findings/Outcomes: The mean rating for thirst was 4.34, compared with 3.3 for pain and 0.54 for nausea. The median was 5, compared with 2 for pain and 0 for nausea (the ratings for which were heavily weighted towards being either zero or greater than eight). Of particular note, 50 patients indicated thirst as their highest rated source of discomfort, compared with 37 for pain and 2 for nausea. These results correspond with a limited number of studies that have been performed in ICUs that have likewise found thirst to be a common and a significant source of discomfort, more so than either pain or nausea.
Implications for perianesthesia nurses and future research: Thirst is a major source of patient discomfort that should be evaluated and treated early and actively in the postoperative period. More studies should be performed in order to better quantify the problem and determine effective interventions.

IMPLEMENTING SEPSIS-3 AND THE QSOFA IN AMBULATORY SERVICES

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Introduction: Sepsis-3 and the Quick Sequential Organ Failure Assessment (qSOFA) was released in 2016. A large university healthcare system implemented Sepsis-3 education and a qSOFA best practice alert (BPA) trial in Ambulatory Services (AS).
Identification of the problem: Sepsis is a worldwide leading cause of death and the costliest condition to treat. Early recognition of Sepsis remains the cornerstone for survival. Limited understanding of Sepsis 3 and the qSOFA was identified in AS.
QI question/Purpose of the study: Can we decrease Sepsis mortality by early identification of patients in AS through education and implementation of a qSOFA BPA?
Methods: Participant completed a 4 question pre learning survey. They documented their role in healthcare. They participated in a Sepsis-3 PowerPoint presentation. A post learning survey was completed. There were no participant restrictions. Pre/post learning results were compared, and yearly Sepsis mortality was compared. Retrospective data was obtain for possible positive qSOFA results. An active qSOFA BPA is being trialed in AS Urology Clinic.
Outcomes/Results: The project demonstrated that after education, all levels of AS healthcare professionals had a greater understanding of Sepsis-3 and the qSOFA. Yearly sepsis mortality decreased slightly. Retrospective data showed a possible qSOFA