PATIENT AND CLINICAL FACTORS ASSOCIATED WITH RAPID RESPONSE TEAM USE WITHIN 24-HOURS OF SURGERY

Team Leaders: Bernadette Grady, RN, BSN, CCRN, RN-C;
Mary Ann Heller, RN, BSN, CPAN; Kristina King, RN, BSN, CPAN;
Anne Marlay, RN, BSN, CPAN; Erin Otten, RN, BSN, CCRN
Thomas Jefferson University Hospital, Philadelphia, PA
Team Members: James Heitz, MD; Meg Bourbonniere, PhD, RN;
Nancy DuBois, CRNI, MSN

Introduction: Surgical patients are more complex than ever before and are at an increased risk of experiencing complications and adverse outcomes; with the greatest risk for initial postoperative complications in the first 24 hour period following surgery.

Identification of the problem: During the initial postoperative period patients may reach dangerously high levels of sedation caused by opioid use. A respiratory event precipitated by opioid administration is very likely to occur in the first postoperative day.

Purpose of the study: The purpose of this pilot study is to identify and describe patient and clinical factors associated with Rapid Response Team (RRT) use among surgical patients within 24-hours of surgery.

Methodology: The planned study design is descriptive. Utilizing a retrospective chart review, we will examine records of all adult patients who received RRT services between July 1, 2009 and June 30, 2010. Key data elements will include patient information, such as age, gender, race, BMI, comorbidities, and admitting diagnoses. Clinical data including peri- and post-operative medications, vital signs, oxygen saturation and delivery methods will also be examined. Data will be entered into SPSS and sorted to differentiate medical and surgical cases. Analyses will consist of measures of distribution, central tendency, and dispersion. Medical and surgical cases will be scrutinized and commonalities in clinically related aspects and patient characteristics will be categorized.

Results: 425 RRT calls during this 12 month period will provide rich data. We estimate that 33% to 50% of this sample will be surgical patients.

Discussion: Results of this study will be used as a foundation for future work to identify postoperative patients at a high risk for adverse events.

Conclusion: The findings from this study could have enormous impact in the post-operative management of pain in the institution.

Implications for perianesthesia nurses and future research: This work has the potential to modify pain management strategies in the PACU. It may identify preoperative patients at an increased risk for postoperative respiratory events.