AN ASSESSMENT OF POST ANESTHESIA COMPLICATIONS AND DISCHARGE DELAYS IN THE POST ANESTHESIA CARE UNIT

Primary Investigator: Margaret Divine RN, BSN, CPAN
Saint Elizabeth Regional Medical Center, Lincoln, NE

Co-Investigators: Cheryl Holmes, RN; Jeanne Hupp, RN; Kay Johnson, RN;
Kim Kumwenda, RN; Jane Wadell, RN;
Consulting: Nancy Gondringer, RN, CRNA; Paula Schulz, PhD, RN; Tiffany Stoll, RN, BA;
Vickie Waymire, MSN, APRN-CSN

Prolonged stays in the PACU may result from post anesthesia complications or administrative or systems issues in transfer. These adverse events or systems delays may be stressful to patients who are awake and in close proximity to arriving patients, to families awaiting arrival of their loved one, and to nurses who must manage backlog issues and increasing congestion in the unit.

The purpose of this study is to: 1) Identify post anesthesia or clinical complications that delay discharge from phase I PACU care, and 2) to identify administrative or systems delays from PACU. The impetus for this study was a general perception among PACU staff nurses that patients seemed to be staying for increasing lengths of time.

Every patient admitted to the PACU from 0730 to 2330 Monday through Friday between September of 2009 and December of 2009 was evaluated for prolonged LOS greater than 60 minutes. Once the patient stay exceeded 60 minutes, the patient was included in the study. Six PACU nurses were trained in the use of the data collection tool. The collection forms were kept in a secure location. The Data collected included the patients ASA (American Society of Anesthesiologist) rating, postanesthesia complication and was analyzed under clinical delays and non-clinical delays. A data collection assessment tool was used that provided a key for definitions of clinical delays and nonclinical delays. The first twelve definitions were developed in consultation with an Anesthesiologist in the Surgery Department and a review of literature, 2,7,8,12 and for this study, were recorded as reasons for discharge delay. Numbers 13-16 were considered non-clinical and were included in the data collection tool.

Reasons for dismissal delays were categorized as clinical (n=231) or non-clinical (n=77). In the clinical group, the most common recorded reason for discharge delay was time involved pain management (n=130, 42.21%). The major non-clinical reason for discharge delay, was related to giving the receiving nurse hand off report, (n=77, 56%). Patients room availability was the reason for the remainder of patient delays in dismissal from the PACU, (n=77, 44%). There were delays due to post anesthesia complications with the most frequent issues being pain, airway support, hypotension and hypertension, followed by hypothermia, tachycardia, PE/emboli, reintubation/ventilator support, angina/ischemia, bradycardia and cardio-pulmonary arrest. There were significant discharge delays due to non-clinical reasons. Further studies can be done looking at the topic of pain management in PACU and examine issues such as pre-operative pain assessments and increased opioid use in the PACU.14 Collaborative studies with anesthesiologist or retrospective studies could be done to examine nursing assessment of patients pain management after epidural or regional block anesthesia. Non-clinical delays or administrative delays can be evaluated and studies done to investigate systems delays. This could reduce cost to patients and unit staffing needs. Thorough nursing analysis of discharge delays and complications can provide opportunities to affect change in perianesthesia nursing practice and improve patient care.