

WHAT GOES IN (THE OR) MUST COME OUT

Team Leader: Vonda L. Davidson BSN RN CPAN

Hospital of the University of Pennsylvania, Philadelphia, Pennsylvania

Team Member: Joseph Moffa MSN BS RN NE-BC CCRN

Background Information: The staffing of the Post Anesthesia Care Unit (PACU) is contingent upon the daily schedule of 33 operating and procedure rooms. Efficient PACU patient flow plays an integral part in managing timely operating room flow and costs. Scheduling nurses on fixed shift templates often resulted in a lack of nursing staff present to recover patients or created imbalances that did not support the patient acuity level. These disproportions led to frustration and overall dissatisfaction among the nursing staff. At this institution we use a computerized patient tracking system which allows its users to visualize all patient activity. Icons are representative of the patient's perioperative progress. This data enables the PACU charge nurse to anticipate the need for an available PACU nurse for patient recovery. Utilizing monthly patient flow graphs that depict the number of patients in the PACU and the time of day allows us to create a cost-effective nursing schedule to provide adequate staffing at the appropriate times in order to ensure patient safety. This analysis revealed that we had been staffing an insufficient number of nurses to accommodate the needs of the operating rooms at specific points of the day and an overabundance of staff at slower periods of the day. The data also demonstrated that our practice of staffing the same number of nurses each day of the week was not meeting the needs of the unit.

In addition, patient safety net reports revealed OR to PACU delays that were reportedly due to inadequate staffing; the PACU received below average scores on the NDNQI RN Satisfaction Survey and there was an increase in the percentage of staff clocking out before the end of their shift, all indicating an inadequacy in our scheduling process.

Objectives of Project: The purpose of this project was to ensure there were sufficient nursing staff in the PACU to accommodate the operating room throughout the day to deliver safe world class care.

Process of Implementation: After in-depth review of patient flow activity graphs and utilizing ASPAN guided nurse- to- patient ratio recommendations it was identified that this institution was in need of five nursing FTE's in addition to our current staff. This data support allowed for the approval and onboarding of five additional nurses in the PACU. A monthly review of patient flow activity is completed prior to each schedule being created. If the flow activity changed from the previous month, the scheduler would evaluate and adjust the overall staffing compliment. This evaluation allowed for us to create a cost-effective nursing schedule that provides staff accordingly at the appropriate time ensuring patient safety and the delivery of world class care. Even with these implemented changes, the ability for nurses to self-schedule remained intact, which is a staff satisfier.

Statement of Successful Practice: Hiring and onboarding additional nursing FTE's, adjustment of daily staffing compliment and continuing self-scheduling allowed for this institution to totally eliminate delays and improve our NDNQI results. Over a two-year period, the PACU did not have any safety nets placed that pertained to OR to PACU patient flow. In addition, nursing staff worked their entire shift recovering patients and the long downtimes and leaving early was eliminated. In addition, our NDNQI results increased at a steady rate over a two-year period.

NDNQI RN Satisfaction Results	2012 (completed as a T-score)	2013 (completed as a T-score)	2014 (Revised Scale version)
RN to RN Interacions	64.0 (<50 th) %tile	67.26 (>50 th) %tile	5.52 (>75 th) %tile
Task T-Scores	58.21 (<50 th) %tile	59.71 (>50 th) %tile	5.19 (>75 th) %tile
Job enjoyment	51.78 (<50 th) %tile	55.92 (>50 th) %tile	74.95 (50-75 th) %tile
Turnover Rate (%)	0%	0%	0%

Implications for Advancing the Practice of Perianesthesia Nursing: Historical case data obtained from a computerized patient tracking system can be analyzed and used to predict daily patient load and create a cost effective nursing schedule.