

**POST ANESTHESIA CARE UNIT (PACU) THROUGHPUT TRACKING:  
DECREASING LENGTH OF STAY**

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**Identification of the problem – Overview:**

- In 2014, Keck Medical Center (KMC) aimed to increase the total number of surgical cases by 5% in 2015. The PACU Unit Practice Council (UPC) identified the need to collect baseline data on the current patient length of stay in PACU.
- Current literature shows that using an inter-professional approach to examining PACU length of stay and delays in transfers was successful in reducing PACU length of stay.<sup>1,2</sup>

**EP Question/Purpose:**

- The purpose of this study is to determine areas of improvement to reduce length of stay and provide a more streamlined and efficient throughput process in the PACU.

**Methods/Evidence:**

- In 2014, pilot quality improvement data was prospectively obtained over a period of three quarters via a developed peer reviewed UPC survey examining PACU length of stay, patient transfer times, and reasons for prolonged stay. The PACU registered nurses chose from a list of possible delay reasons and entered patients' arrival and discharge times. The voluntary survey was blinded to reviewers and had no identifiers as it was completed by RNs and left in a secure folder to decrease bias.
- The top three reasons for prolonged stay were: pain management, no hospital bed available for transfer, and assigned room not clean.
- In 2015, utilizing the PDCA (Plan-Do-Check-Act) model, interventions focused on the top three delay reasons. Throughput data was collected utilizing the same methodology used during baseline data collection for three quarters to monitor effectiveness of interventions.
- Interventions included: developing a new anesthesia order set in collaboration with Information Technology (IT) and the Department of Anesthesiology, revising the Discharge by Criteria Stage I Policy and PACU guidelines to reflect current evidence-based practice, creating partnerships with inpatient units to improve transfer times, and collaborating with management to improve staffing.

**Significance of Findings/Outcomes:**

- The average PACU length of stay per patient decreased from 104 minutes in 2014 to 100 minutes in 2015. A total of 9,947 patients in 2015 (22% increase from 2014), and a reduction of 4 minutes per patient saved 39,788 minutes and an estimated \$459,551 in hospital cost in 2015.

**Implications for perianesthesia nurses and future research:**

- To decrease length of stay, post anesthesia care units need to adhere to evidence-based standards and guidelines developed by professional organizations.
- Interprofessional collaboration is integral to developing best practice.