Post Anesthesia Care Unit (PACU) Throughput Tracking: Decreasing Length of Stay

Background:
- 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. Data was needed to determine areas of improvement to reduce length of stay and provide a more streamlined and efficient throughput process in the 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.\(^1\),\(^2\)

Methodology and Plan:
- 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 voluntary UPC survey was blinded to reviewers and had no identifiers as it was completed by PACU Registered Nurses and left in a secure folder to decrease bias.
- We identified that the top three baseline reasons for delay or prolonged stay were pain management, no hospital bed available for transfer, and assigned room not clean.
- In 2015, utilizing the PDCA 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.

Implementation:
- Interventions included:
  - Developed a new anesthesia order set in collaboration with Information Technology (IT) and the Department of Anesthesiology.
  - Revised the Discharge by Criteria Stage I Policy and PACU guidelines to reflect current evidence-based practice.
  - Created partnerships with inpatient units to improve transfer times.
  - Collaborated with management to improve staffing.

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.

Conclusions:
- We were able create a more efficient throughput process by implementing various interventions aimed at decreasing patient length of stay in PACU.

References: