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

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OVERVIEW

- Keck Medical Center (KMC) aimed to increase the total number of surgical cases by 5% in 2015.
- In 2014, The PACU Unit Practice Council (UPC) designed a two-year project to examine
 - Length of stay
 - Transfer times
 - Reasons for prolonged stay
- An interprofessional approach was used to devise interventions to improve throughput.

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.

DATE	AVERAGE PHASE I PACU LENGTH OF STAY IN MINUTES
10	122
11	92
12	97
13	107
14	96
17	104
18	110
19	112
20	114
21	102
24	99
25	107
26	133
27	142
28	134
31	103

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METHODS

- Baseline data were obtained for three quarters in 2014
- The top three reasons identified for prolonged stay were:
 - 1. Pain management
 - 2. No hospital bed available for transfer
 - 3. Assigned room not clean
- Interventions were developed using the PDCA (Plan-Do-Check-Act) model.
- Post-intervention data were collected for three quarters in 2015.
- New anesthesia and PACU order sets were developed with Department of Anesthesiology.
- Discharge by Criteria Stage I Policy and PACU guidelines were revised to reflect current evidence.
- Partnerships with inpatient units were created.
- PACU UPC collaborated with management to improve staffing.

OUTCOMES

- There was a 22% increase in the total number of patients recovered from 2014 to 2015.
- The average PACU length of stay per patient decreased from 104 minutes in 2014 to 100 minutes in 2015.
- This reduction of four minutes per patient saved an estimated \$459,551 in hospital cost in 2015.



Table 1. Percentage of patients ready for transfer after minimum amount of monitoring time in PACU by month and year

CONCLUSION

• By decreasing length of stay in the PACU, we were able to assist our organization in reaching its goal of increasing surgical volume by 5%.

IMPLICATIONS FOR PRACTICE

This study can aid in:

- Developing best practice guidelines.
- Identifying strategies to create a more efficient throughput process.
- Decreasing patient length of stay in PACU.

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