Lean on Post Anesthesia Care Unit Hold Times
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**Background Information:** Efficiency in the operating room (OR) is the driving factor for cost containment and enhancing productivity (Wright et al., 2010). RNs in the post anesthesia care unit (PACU) routinely put the OR on hold. Utilization of A3 management allowed PACU staff to enhance patient throughput (Shook, 2008).

**Objectives of Project:** OR costs range from $7 to more than $100 dollars per minute (Childers & Gibbons, 2018). Increased hold times results in, increased costs, long work days, decreased physician and nurse satisfaction, and unplanned overtime. PACU throughput barriers include, delays in inpatient bed placement, nurse-to-nurse handoff, lack of discharge or transfer orders, pain management, and post-operative nausea and vomiting.

**Process of Implementation:** Lean management is based on the concept of creating value for its customers (Clark, et al., 2013). The A3 management process combines decision making and action with planning and problem-solving, to create a continuous improvement culture (Womack & Jones, 2003). Hospital administration and PACU leadership participated in a rapid improvement experiment (RIE) to reduce PACU hold times by 35%. The team sought to decrease the number of occurrences and, length of hold times, as well as, develop a standard work process for transition of care from Phase 1 to Phase 2 recovery.

**Statement of Successful Practice:** Moving Phase 2 discharge out of the PACU enhanced bed utilization and promoted patient throughput. Visualization of arrival time in the PACU provided the team a length of stay measure.

Creation of hold a announcement alerted the surgical and anesthesia teams to write discharge orders, follow up with patients who required additional recovery time, needed follow up, and disposition decisions.

Evaluation of average recovery times for frequently seen procedures provided increased awareness and enhanced the transition of patients from Phase 1 to Phase 2 recovery care. As a result, PACU beds were available sooner for patients coming from the OR.

**Implications for Advancing the Practice of Perianesthesia Nursing:** Applying Lean management principles to hold times improved patient throughput. Standardized work processes and revision of the visual management board have promoted a continuous improvement environment in the PACU. The team continues to keep OR hold times to a minimum.
References