## **Surgery Center Quality Improvement Study:**

## Identifying Barriers to Patient Readiness to the Operating Room—Phase I Primary Investigators: Christine Deitrick BS RN CAPA, Sandra Price MS RN CAPA, Gianna Cocuzzi RN CAPA, Cherie Buckley MS RN, Cynthia Lucieer BSN RN CAPA

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**Introduction:** Operating room (OR) delays have significant implications on workflow and resource efficiency. Time is the OR's most valuable resource; delays in OR start times can lead to dissatisfaction for the patient, nurse, anesthesiologist and surgical team.

**Identification of the Problem:** OR delays can negatively impact the perioperative team, environment and patient experience.

**Purpose of the Study:** The purpose of this nurse driven quality improvement (QI) prospective study was to identify barriers that contribute to first case OR delays.

**Methods:** Registered nurses (RNs) collected data on first case surgery patients for one month including additional nursing care contributing to delays. A nursing related delay was defined as not having the patient ready 20 minutes prior to OR start time. A Lean Six Sigma (LSS) process improvement model analyzed the prevalence of barriers contributing to patient readiness for the OR. Nurses provided solutions using an "Ever Better" poster board tool.

**Outcomes/Results:** Total first case patients (n=230) undergoing surgical procedures during a 4-week period revealed 19% (n=44) met the nursing related delay definition, nearly half of the patients 47% (n=109) required additional nursing interventions. The top five of 20 barriers contributing to delayed patient readiness were: communication with health care providers (15%); additional day of surgery testing (15%); difficult intravenous access (9%); physical disabilities requiring additional staff (0.6%); and unplanned medications (0.6%).

**Discussion:** Solutions to the delay in patient readiness for the OR cannot be understood unless barriers are addressed. Awareness of the problem requires a multidisciplinary team approach.

**Conclusions:** Findings revealed additional nursing interventions contributed to approximately one quarter of first case OR delays by an average of 18 minutes. With further education, communication, and workflow changes using a multidisciplinary team approach the number of delays can be decreased.

**Implications for Perianesthesia Nurses & Future Research:** Delays in OR procedures cause frustration to the patient, nurse, anesthesiologist and surgical team. Phase II of this QI project will implement developing a patient portal informational website, utilizing pre-surgical screening by anesthesia, improving perioperative staff communication, and changing workflow by staggering patient admission times to decrease patient delays.