

## **A Risk-based Perioperative Bladder Management Guideline Based on Post-Operative Urinary Retention (POUR) Risk Factors**

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**Background Information:** A chart audit in April 2018 determined compliance of our perioperative bladder management guideline was low (27%). The current guideline instructed operating room nurses to bladder scan surgical patients at the end of the case if the total amount of IV fluids given were  $\geq 750$ mls and/or the surgery length was  $\geq 90$  minutes. If the bladder scan resulted  $\geq 500$ ml, the RN would perform straight catheterization. If these criteria were not met, the patient would be re-scanned in PACU every 1-2 hours based on the bladder scan result and the patient's ability to void.

**Objectives of Project:** A multi-disciplinary process improvement team formed to uncover why the current guideline was not being followed, how to improve compliance and/or revise the guideline to reflect current evidenced based practice. The team set a goal to increase guideline compliance to achieve 40% by August 1, 2018.

**Process of Implementation:** The improvement team utilized a FOCUS-PCDA process improvement method. We observed in the OR and PACU as well as obtained feedback from nurses, surgeons and anesthesiologists to understand the current state. Next, the team conducted a cause & effect analysis to uncover why the current guideline was not being followed. Simple changes included educating patients on POUR risk and ensuring patients void just prior to surgery. A revision to the current guideline was indicated because a review of the current literature suggested IV fluid amount was not a risk factor for POUR. The revised bladder guideline is patient-centered and evidenced-based via a pre-operative risk assessment. These include: Advance age; diabetes; previous major pelvic/abdominal surgery; history of POUR after previous surgery; history of urological/prostate conditions; spinal/epidural anesthesia; and total surgery length  $\geq 3$  hours.

**Statement of Successful Practice:** A series of small tests of change using the new risk-based perioperative guideline resulted in improved compliance to 94% in August 2018. The guideline was piloted to the entire perioperative department and after a 1-month pilot, compliance was 92%.

**Implications for Advancing the Practice of Perianesthesia Nursing:** Using an established process improvement method to integrate current best practices enhanced the development and implementation of a cross-functional, risk-based perioperative bladder guideline.