

The Implementation of a Standardized Nursing Process to Prevent Postoperative Urinary Retention (POUR)

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Introduction: The Audie L. Murphy VA Hospital is a comprehensive healthcare system that serves 96,000 veterans throughout South Texas. In the Fall of 2020, our veterans were experiencing postoperative urinary urgency and near falls due to an extended period since last void related to anesthesia. Recommendations from literature created a nurse driven clinical pathway assessment to prevent further injury in postoperative patients.

Identification of the Problem: First attempts at finding literature or congruent practice guidelines were unfruitful, making it difficult to find guidance regarding bladder assessment and intervention times for postoperative patients undergoing general or spinal anesthesia.

EBP Question/Purpose: PICO question. Databases utilized: For postsurgical patients, does the use of a standardized bladder assessment and intervention process reduce the risk of POUR and bladder injury compared with clinical examination and subjective symptom reporting only? Literature review resulted in 9 high quality sources and led to the implementation of several small, but hugely effective changes in daily nursing practices of PACU nurses.

Methods/Evidence: Data collected included types of surgery provided, time admitted to PACU, TOLV (time of last void), bladder assessment, bladder scan results, and transfer time. Total hours were calculated, interventions documented, and total fluid intake during surgery and PACU was considered. Urinary retention was generally defined as volumes between 400-600ml. Evidence recommends bladder catheterization on high-risk patients when bladder volume is greater than 500 ml over a minimum period of 2 hours.

Significance of Findings/Outcomes: Surgeries with higher incidence of POUR included Ortho, GYN, Colorectal, and hernia repair. Risk factors included history of BPH, intra-operative fluid administration > 2 liters, age >50 years old, and spinal anesthesia. If multiple risk factors were present, a bladder scan was completed at 4 hours regardless of bladder assessment findings. The team identified patients at risk for POUR and orders were placed to monitor for urinary retention > 500ml or an inability to void for 4-6 hours from TOLV.

Implications for peri anesthesia nurses and future research: A standard operating policy and diagram were developed to guide nurses to better understand and prevent a delay in care. Potential fall incidents related to voiding post-surgery dropped to zero and nurses were more confident in understanding the obligation and methods to perform a detailed bladder assessment.