Implementation of a Nurse-Managed Bladder Management QI Pilot
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Introduction

- Monitoring and management of bladder functioning following indwelling urinary catheter (IUC) removal and for urinary retention on the neurosciences units varies and is prescriber dependent.
- The aim of this quality improvement (QI) project was to ascertain:
  - whether nursing staff can use a bladder management algorithm correctly
  - whether bladder distention occurrences are decreased using the bladder management algorithm
  - any effect on IUC days (per 1000 IUC days) & urinary tract infection (UTI) rates.

Methods

- A bladder management algorithm was created following an evidence-based practice project on best practices to prevent UTIs following IUC removal and retention.
- The bladder management QI pilot was over six months (December 13, 2019-June 15, 2020) for patients on neurosciences services on two acute-care and two intermediate-care medical-surgical units.
- Based on bladder scan volumes, the algorithm and orders in the electronic medical record guided nursing staff to perform specific interventions and monitoring.

Results

- 115 pilot patients were compared to 119 baseline patients (see Table 1).
- Protocol use was associated with (see Table 2):
  - improved nursing bladder management compliance (e.g., timing of actions & intervention).
  - improved rates of bladder management monitoring following IUC removal.
- Protocol use was not associated with:
  - length of stay
  - rates of fall during hospitalization
  - decreased mobility
  - rates of UTI
  - More patients discharged with an IUC during the pilot period compared to baseline.
  - Zero CAUTIs occurred during the pilot period compared to 4 during the baseline period.

Discussion

- Implementation of a nurse-led bladder management algorithm was successful and found to be safe for patients.
- Further study is warranted to:
  - adjust the bladder management algorithm to ensure urinary volumes guiding intervention decisions and frequency of interventions have the greatest positive impact on patient outcomes.
  - ascertain generalizability of the algorithm to a variety of patient populations.