



Can Changes to Foley Practices & Clinical Management of Fever Reduce CAUTI Rates?

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Problem Statement

The purpose of this research quality improvement project was to assess whether the implementation of the new suspected urinary tract infection algorithm, which guides clinical practice changes in Foley utilization and fever management, improved the rates of catheter associated urinary tract infection (CAUTI) in the Surgical Trauma Intensive Care

Background

Of the various healthcare-associated infections threatening patient safety, catheter associated urinary tract infections (CAUTIs) are among the most common. While hospitalized, 1 in 4 patients will undergo urinary catheterization. The risk of CAUTI development increases with each day of continued catheterization. Trauma and acute care patients in the intensive care unit (ICU) are among the highest risk patients for CAUTI development given their prolonged immobilization and frequent peri-surgical catheterization. Improving urinary catheter maintenance remains a leading area of research in CAUTI prevention.

Research and QI Project Design

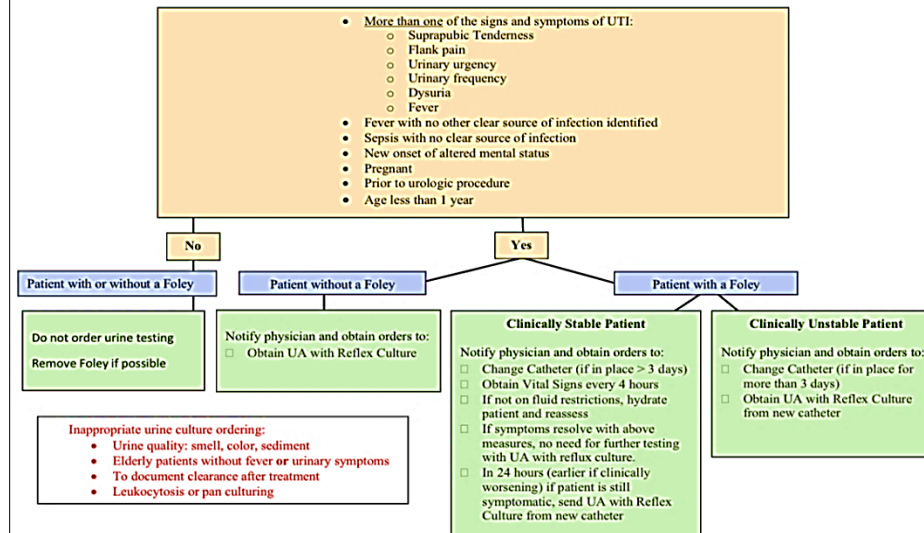
A multidisciplinary approach was enacted to improve Foley care at the bedside, reduce prolonged catheterization, and change the clinical practice of fever management in catheterized patients. The below algorithm was developed to verify the appropriateness of UA collection and guide further management in patients with suspected UTIs. A retrospective study design evaluated the effectiveness of this clinical practice change. Foley wipe usage was initially 24% pre-intervention with 11 CAUTIs occurring annually at Northeast Georgia Medical Center.

Conclusion

Overall, the suspected urinary tract infection (UTI) assessment algorithm has guided a safe and effective clinical practice change in catheter utilization and fever management in STICU patients.

Suspected UTI Assessment Algorithm

Replace ALL urinary catheters at time of admission to STICU



Results

After algorithm implementation in October 2021, usage of Foley care wipes improved from 24% to 100%. Similarly, the prolonged usage of catheters decreased from an average of 6-11 days duration to 1-8 days on average. Most importantly, the annual CAUTI rate was reduced from the peak incidence of 11 to only 3 the year after algorithm implementation.

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