Problem Overview

• Urinary tract infections (UTIs):
  • Most common healthcare-associated infections (incidence rates >30%)
  • Most caused by insertion of urinary catheters (UCs)
• UTIs can lead to increased:
  • Cost
  • Length of stay
  • Morbidity
  • Mortality
• Continued UC use may be overlooked by medical team
• Utilizing nursing to monitor and remove unnecessary UCs may:
  • Lead to decreased UC dwell time
  • Lead to decreased UTIs

Methods

• During the pilot, each patient identified with a foley catheter was added to the daily rounding sheet.
• Data on each patient included:
  • Location
  • Catheter day (how long the catheter has been in place)
  • Who inserted the catheter
  • Reason for catheter
  • If catheter was reinserted
• Data reported monthly to CAUTI team to assess successes as well as lessons learned.

Facility Fast Facts

• Multidisciplinary team, pilot based on Medical-Surgical-Orthopedic-Oncology units
• Pilot units~59 beds
• Cases including:
  • Medical cases (i.e. pneumonia)
  • Surgical cases (i.e. large abdominal surgeries)
  • Total joint replacements
  • Inpatient chemotherapy
• Additional units now included in the protocol include:
  • Progressive Care Unit (PCU-cardiac and stepdown)
  • Intensive Care Unit (ICU)
  • Skilled Nursing Unit (SNU)
  • Inpatient Rehabilitation Unit (IRU)
  • Maternal/Child

Project Purpose

To determine if a nursing-driven catheter removal protocol decreased catheter-associated UTIs (CAUTIs)

Project Objectives

• To decrease CAUTIs
• To remove UCs as quickly as possible
• To prevent urinary tract infections by performing scheduled catheter and pericare

Results

Critical Success Factors

• Cooperation and support from managers as well as buy-in from employees
• Physician buy-in to the protocol
• Daily rounding on the units to assess catheter need
• Ongoing education with staff as well as physicians as to proper catheter indicators
• Both for insertion as well as maintenance

Lessons Learned

• Complete education of all involved parties prior to starting a pilot project
• One on one education and information was much more successful
• The definition of “Accurate Intake/Output” remains an issue, especially in the surgical population
• There is a need for ongoing education in relation to the gap in knowledge about CAUTIs and early removal of UCs

Our Next Steps

• Reinstitute daily catheter rounds
• Hard wiring of the process has yet to occur
• Continue to monitor daily for decreased or improper use of the protocol
• Chart audits show protocol use is not consistent
• Re-education to both staff and physicians as some back sliding has been noted, both in placing UC as well as timely removal

Facility Average Device Days Per Month

Facility CAUTI Rate

Facility Reinsertion Rate

Floors Specific Reinsertion Rate

Days Between CAUTIs

Facilities Reinsertion Rate

Floors Specific Reinsertion Rate

Days Between CAUTIs

Measures of Success

Measures of success identified:
• Device utilization rate (DUR) collected by Infection Prevention
• Days between CAUTIs collected by Infection Prevention
• Reinserter rate figured by the Clinical Nurse Specialists
• CAUTI rate collected by Infection Prevention

Facilities Reinsertion Rate

Floors Specific Reinsertion Rate

Days Between CAUTIs

References

• Centers for Disease Control presentation October 2, 2012. Using the National Healthcare Safety Network (NHSN) for CAUTI surveillance.
• National Healthcare Safety Network (NHSN). Data collected throughout the pilot and ongoing data collection.
• Tufts Medical Center’s Nurse Driven Protocol for Removing Indwelling Urinary Catheters, slide shared.