Urinary Catheter Usage: A Multidisciplinary Approach to Implement Evidence Based Practice

Advocate Research Symposium
April 9, 2014
Mary Sue Dailey, APN- CNS
Introduction

CAUTI

• Most prevalent HAI in acute care
  ❖ 10-35% of patients with catheters develop infection
• Can progress to septicemia
  ❖ 4-5% of patients with catheter associated bacteremia develop a bloodstream infection
• Affects cost and LOS
• Non-reimbursable and preventable (CMS)
Purpose of Project

Multidisciplinary CAUTI Team Charter

• Improve SCIP core measure compliance

• Decrease incidence of CAUTI

• Implement evidence based catheter necessity protocol
Strategies

- Policies, Procedures and Standing Orders:
  - Revised Urinary Catheter Policy and Procedure
  - Developed evidence based algorithm for catheter discontinuation
  - Partnered with DMG urologists to develop algorithm/tip sheet for use of coude catheters
  - Standardized catheter language in standing orders
Strategies

- **Quality monitoring**
  - Foley Catheter Prevalence study to determine current practices
  - Monitoring criteria established. Baseline information collected by Infection Control
  - Quality management department monitors SCIP compliance and report to unit manager
  - Daily review of catheter necessity hardwired by including patients with catheters on daily State of the Unit report for bedside RN’s
Strategies

Equipment standardization

• Bladder scanners purchased and stored on units- staff educated

• Securement device bundled into catheter insertion kits (STATLOCK)

• Specimen collection devices standardized
Coude Decision Tree

Coude Decision Tree
11/2013

Physician Order
Obtained for Urinary Catheter

Male

Does he have any of the following:
- Enlarged prostate
- BPH
- Narrowed urethra (stricture)
- History of prostate surgery
- Contracture of bladder neck
- Previous traumatic catheter removal and/or insertion
- Receiving therapeutic anticoagulation (if no gross bleeding)
- >50 years of age

No

Insert Traditional Foley Catheter (Follow Lippmann Procedure)

Yes

Consider utilizing a coude catheter (Follow Lippmann Procedure) Reference Tip Sheet

Female

Does she have any of the Following:
- Contracture of the bladder neck
- Reccessed Urethra In vagino
- Receiving therapeutic anticoagulation (If no gross bleeding)
- Previous traumatic catheter removal and/or insertion

No

Insert Traditional Foley Catheter (Follow Lippmann Procedure)

Yes

Consider utilizing a coude catheter (Follow Lippmann Procedure) Reference Tip Sheet

Advocate Good Samaritan Hospital
State of Unit Report Reminder

Foley> 1 day - if surgical need MD documentation
________________________
________________________
________________________
________________________
Results

- SCIP compliance improved from 91% (2010) to 99% (2013)
- ICU and non ICU Standardized Infection rate decreased
- Overall catheter utilization rate decreased
- EMR revisions achieved
- Nurse driven protocol for use of Coude and catheter removal approved
Percent SCIP Urinary Catheter Removed POD 1 or POD 2
January 2011 - December 2013

- Core SCIP-Inf-9 - Urinary catheter removed POD 1 or POD 2
- Linear (Core SCIP-Inf-9 - Urinary catheter removed POD 1 or POD 2)
Results

Standardized Infection Ratio

\[
\frac{\text{#infections}}{\text{#device days}} \times 1,000
\]
Results

Overall Foley Utilization Rate - Adult

Device days/patient days

Month/Year
- Overall utilization rate
- Linear (Overall utilization rate)

Advocate Good Samaritan Hospital
Conclusions

Many OFI’s identified beyond original scope of team

EMR changes necessary for accurate charting and reports and to help drive change in culture

Questioning attitude, administrative support and continual feedback necessary to sustain change
Implications for Nursing

• Requires daily attention to detail by RN

• Feedback and follow-up on performance is essential-relationship with quality department invaluable

• Many opportunities for partnership with exist skilled nursing facilities to ensure that catheters not used beyond essential time- increases infections, sepsis and readmission

• Continual staff education

• Diligence needed to create accurate documentation in EMR is needed
Acknowledgements

Multidisciplinary CAUTI Team
- Clinical Nurse Specialists
- Clinical Informatics
- Lipinski Center for Education
- Infectious Disease Physician - adhoc
- Infection Control Manager
- Quality Improvement

Dupage Medical Group Urology Department