Nurse Driven Foley Removal Protocol

Cathy Moore, MSN, ACNS-BC, CCRN
2009
Nosocomial urinary tract infections (UTI) are common and costly occurrences for hospitalized patients. Patients may experience poor outcomes and prolonged length of stay (LOS). The cost of treating Nosocomial UTI’s and additional hospital days will no longer be covered by Medicare beginning October 2008. Development of a nurse driven foley removal protocol prevents unnecessary use of foley catheters which may decrease the incidence of Nosocomial UTI’s. The goal of the protocol is to decrease the incidence of Nosocomial UTI’s.
Purpose

This evidence based protocol was developed to decrease the incidence of Hospital Acquired Urinary Tract Infections.
Evidence Based Protocol

- Several studies have examined the effect of implementing a nurse-driven protocol to discontinue foley catheters that were no longer medically appropriate in reducing UTIs.
  - Topel et al., 2005
  - Huang et al., 2004
  - Reilly et al., 2006
  - Apisarnthanarak et al., 2007
  - Smith, and Hickner, 2007
Background/Significance

Hospital Acquired Urinary Tract Infections were at an unacceptable rate which translated into poor patient outcomes, prolonged LOS and non-reimbursable healthcare costs.
Risk factors for development of Hospital Acquired Urinary Tract Infections

- The duration of catheterization is the most important risk factor for development of infection.
- Limiting catheter use and, when a catheter is indicated, minimizing the duration the catheter remains in situ are primary strategies for Hospital Acquired Urinary Tract Infection prevention.
New CMS standard

- Beginning October 2008 Medicare and Medicaid will no longer reimburse hospitals for specific hospital acquired infections, UTI related to foley catheters will be among those non reimbursed infections.
Methodology

• A literature review of current evidence was completed utilizing websites such as; Joanna Briggs Institute for Best Practice, Centers for Disease Control and Prevention, and Peer Reviewed Journals dated from 2000 to 2008.

• The protocol was implemented in all acute care areas of a 354 multi-campus community hospital.

• The protocol consists of two parts; the checklist and the foley removal flow diagram.

• The protocol guides the bedside nurse’s decision making process.

• Nurses evaluate the need to remove a foley catheter by using the checklist.
Review of the Literature

- The Centers for Disease Control and Prevention (CDC) (2007) estimates that 32% of healthcare associated infections (HAIs) or nosocomial infections, are urinary tract infections (UTIs).
- The cost of treating a single Hospital Acquired UTI can cost over $4000 (Huang et al., 2004).
Methodology

- Nurses refer to the flow diagram to guide them to take appropriate actions to care for the patient without a foley catheter.
- The Infection Control Department (IC) collects device statistics daily from all in-patient care areas (*Catheter utilization rate* = indwelling catheter days/patient days).
- The lab reports any positive urinalysis screen to IC.
- IC then calculates the number of Hospital Acquired UTI’s from the data.
Findings

• The foley removal protocol has decreased Hospital Acquired Urinary Tract Infection by 60%.

• It also decreased the total number of indwelling catheter days per patient.
Graphic Results of HAUTI

# Foley Days 2008

- # of Foley Days

# Foley Days 2009

- # of Foley Days

# HAUTI 2008

- # HAUTI

# HAUTI 2009

- # infections

Protocol implemented in Dec 2008
Conclusions

A Nurse driven Foley Removal Protocol decreases the rate of Hospital Acquired Urinary Tract Infections and improves patient outcomes and provides a cost savings to the hospital from prevention of non-reimbursable infections.
FOLEY REMOVAL PROTOCOL DAILY CHECKLIST

• To be completed everyday for every patient that has a foley catheter.
• Date: _____________________ Room number: _____________
• Does your patient have a foley catheter? Y (reassess daily) N
• # days foley present __________________ If foley catheter present, > 24 hours, please send a progressive UA to the lab. Date sent: ___
• Which criteria for appropriate use of foley catheters does your patient meet?
  – Urinary retention/obstruction
  – Continuous Bladder Irrigation Placement of urinary catheter by urologist or ordered by a urologist Strict
  – I/O measurement in critically ill patients (strict I/O is not an eligible requirement to keep foley catheter)
  – Palliative care for terminally ill patients
  – Urinary incontinence with stage III or IV pressure ulcers
  – Neurogenic bladder Pre operative placement for surgery/procedure
  – Labor and Delivery patients with an epidural
  – Physician ordered not to follow foley removal protocol (consult physician for continued foley orders on a daily basis)
  – If none of the above criteria was met – discontinue foley catheter and refer to foley removal protocol-flow diagram action chart.
  – Give this daily assessment tool to your unit CNS/CPL. Thank you for your assistance.
• Initials of nurse completing checklist________________
Flow Diagram

- Handout for audience