

FRONTLINE NURSE: Agent of Change in Decreasing Urinary Tract Infections and Creating a Culture of Patient Advocacy





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HISTORY

•In Fiscal Year 2008, the unit reported fifty four catheter associated urinary tract infections.

The Unit Based Clinical Leadership (UBCL) team developed a strategy through a multidisciplinary approach to decrease the indwelling urinary catheter (IUC) device days and subsequent catheter associated urinary tract infection (CAUTI) rates on the unit. A reduction of 10% was projected as a unit goal for 2008. The unit surpassed that goal and has managed to sustain a culture in which evidence based practice, collaboration and advocacy are the keys to successful patient outcomes.

Nursing Leadership recognized the need for an aggressive plan to decrease the incidence of catheter associated urinary tract infections, educate the staff in prevention strategies, and develop an environment of increased awareness for the patient at risk.

OBJECTIVES

- Discuss and illustrate the resulting data from the processes initiated by the Unit Based Clinical Leadership Team which was then implemented by a clinical nurse unit-based champion, and identify implications for practice.
- Design a process that fosters the clinical team's development of autonomy to advocate for and question the need for indwelling urinary catheters in the cardiac surgery population.

BACKGROUND

- Healthcare-Associated Infections (HAIs) are among the top causes of illness and death in the United States.
- In American hospitals alone, HAIs account for an estimated 1.7 million infections and contribute to 99,000 deaths each year.
- Acute care hospitals began reporting all hospital acquired device related infections beginning January of 2004. Since 2008, The Centers for Medicaid and Medicare services (CMS) are no longer reimbursing for CAUTI acquired during hospitalization.
- Throughout 2009, a total of 25,914 HAIs were reported by 250 Pennsylvania hospitals.
- UTIs accounted for 23.71% of these HAIs and 64% were associated with indwelling urinary catheters. This distinguishes CAUTI as the most common hospital acquired infection.
- In total, nosocomial CAUTI cost the health care system over \$400 million annually.
- •An estimated 17% to 69% of CAUTI may be *preventable* with recommended infection control measures, which means that up to 380,000 infections and 9000 deaths related to CAUTI per year could be averted.
- •It is in consistent review of nursing sensitive indicators and benchmarking our performance via participation in numerous national databases, that nurses realize that improvements in quality indicators equal to positive change in patient outcomes based on nursing intervention.

METHODS

- Daily multidisciplinary patient care coordination rounds were utilized to identify patients with IUCs on the unit. Members of the leadership team, RNs, and healthcare providers are present and can develop strategies to eliminate unwarranted catheter use.
- Plan is implemented for catheter removal, or timeline for removal, and patient goals addressed.
- •Daily surveillance on catheter care, data collection of patients at risk and rapid removal of device by RN with utilization of algorithm for early removal to prevent reinsertion.

Practice

- Development of evidence based policy changes to remove catheters based on an algorithmic criteria with staff and provider education.
- Daily multidisciplinary rounding supporting the nurse in questioning the necessity of IUC use and review of UPHS IUC guidelines with collaborative team.
- Electronic documentation for catheter removal or continued use with goals utilized in the form of a Nursing Worklist. Electronic documentation must be completed with each shift. All providers have access to this.

•Safety huddles conducted by the charge RN on each shift to address and remind staff of patients that are vulnerable to infection.

• PM shift proactively seeks removal of IUC in having ongoing dialogue with providers to advocate for rapid removal of cath. Patient's need for catheter and goals reviewed with each shift.

•Data entry into a shared web portal for collection of device data nationally and for internal benchmarking.

CAUTI Evidence Based Practice Champion's Role

•Development of an evidence based protocol for management of patients post IUC removal.

•Collaborated with multidisciplinary team and staff to identify appropriate indications for catheter use based on CDC guidelines.

•Partnered with Informatics for computerized enhancement of IUC orders to include a rationale for the placement and removal of IUC with direct link to CDC guidelines and evidence based practice in charting.

•Facilitates daily auditing through development of a shared web portal and collaborates with leadership team on review of real time infection rates for unit based prevention and analysis.

•Conducted weekly IUC Rounds on inpatient units at HUP. Assessed every patient with an IUC on one unit per week for one year.

Updated the Bladder Catheterization policy in 2009.

 Partnered with hand hygiene and skin care champions to achieve improved patient outcomes.

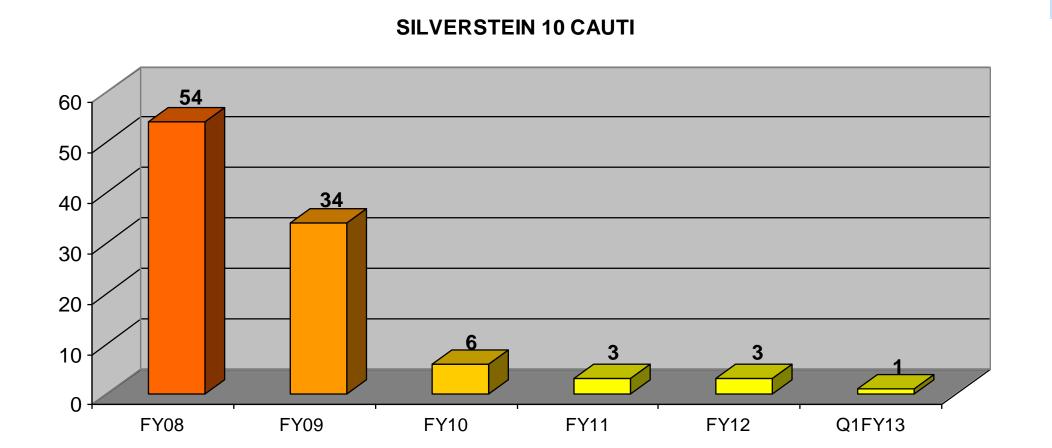
•Encouraged the purchase and review of products for bladder scanning in post catheter removal.

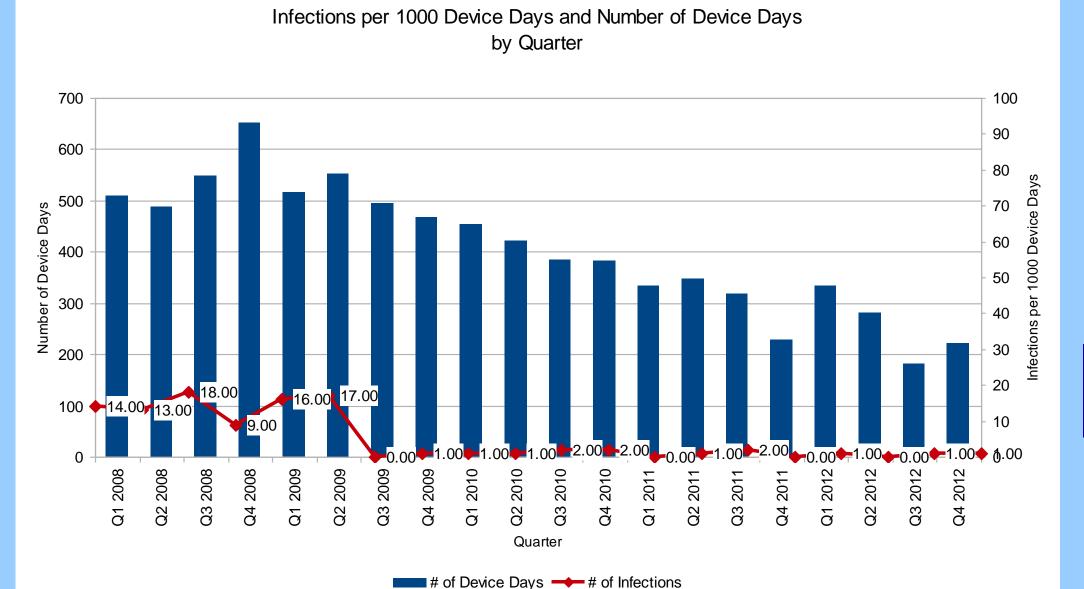
• Utilized as a resource for the clinical staff. In-serviced staff on IUC indications and best care practices as well as why intermittent catheterization can be a beneficial option for the patient.

EDUCATION

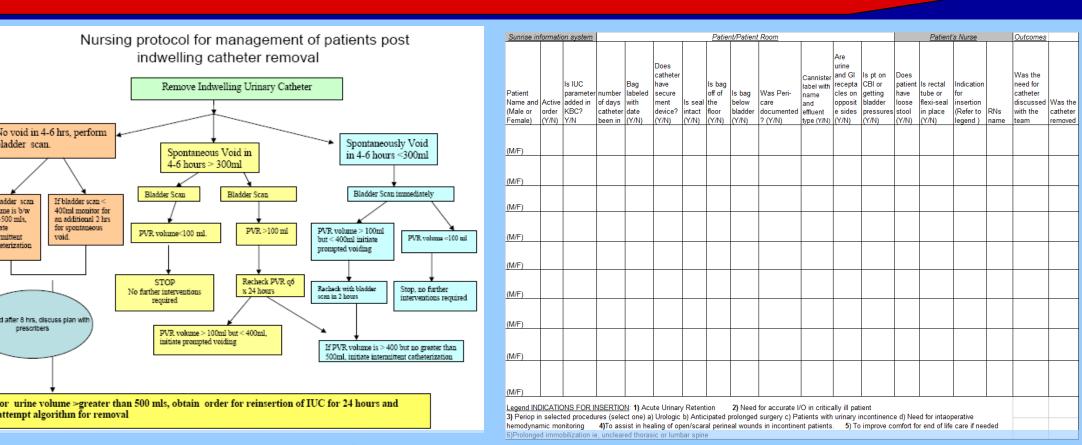
- Collaboration of Nursing Leadership and CAUTI Champion on staff education.
 Staff education on core measures of catheter care: label bag, secure device, label urine canister with name, appropriate catheter positioning with patient transfer, daily pericare with soap and water, frequent change of wash basins and treatment of incontinence without indwelling catheter use.
- Competencies created in "train the trainer" with return demonstration of catheter insertion technique and peri-care for RNs and CNAs hospital wide to decrease variations in care.
 Educated the staff on symptomatic UTI, how to effectively discuss catheter need with provider and indications for use and protocol for nursing directed catheter removal.
 Documentation: date of insertion, size of catheter, initials of inserter, IUC care every 8 hours, removal date, and any post catheter protocols such as bladder scanning and intermittent catheterization were emphasized.

MEASUREMENTS





PROCESS MEASURE



Utilizing a nurse driven algorithm after catheter removal to prevent reinsertion.
Unit surveillance tool for identification of patients requiring catheter, indication for placement, communication with the provider and use of core measures for prevention of infection.

IMPLICATIONS FOR PRACTICE

- •Data collection continues to reflect a trend of decreased device days with a concurrent decrease in CAUTI rates.
- •Through implementation of a multidisciplinary team approach and development of evidence based champions, our unit has created a culture that fosters improved patient outcomes.
- •Sustaining practice change requires a continued focus on education, patient advocacy, detail to safety initiatives and diligent data collection with ongoing analysis.

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