

# Getting to Zero: Decreasing Catheter Associated Urinary Tract Infections with Leader Rounding and a Checklist

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## AIM STATEMENT

In adult medical and neurosurgical intensive care patients with indwelling urinary catheters what is the effect of daily nurse leader rounding and the use of a criteria-based reminder sheet compared with no reminder sheet on indwelling catheter days and the rate of catheter acquired urinary tract infections over a six-week timeframe

## ABSTRACT

### Background:

It has been estimated that each year, more than 13,000 deaths are associated with CAUTI's (Magill et al., 2014). Decreasing use of indwelling catheters through removal when no longer clinically indicated is the key to decreasing or eliminating CAUTI. Approximately 12%-16% of adult hospitalized inpatients will have an indwelling urinary catheter at some time during their inpatient admission. Each day the indwelling urinary catheter remains, a patient has a 3% to 7% increased risk of acquiring a CAUTI (Burton, Edwards, Srinivasan, Fridkin, & Gould, 2011).

### Purpose:

The purpose of this project was to determine if nurse leader rounding using a checklist to prompt removal when indwelling urinary catheters are no longer clinically indicated would decrease catheter days and get to zero CAUTI infections compared to nurse leaders not rounding.

## METHODS

- A process improvement plan was drafted
  - Utilized Focus Plan-Do-Check -Act framework (PDCA)
  - Preventing Catheter-Associated Urinary Tract Infections
- Four Components of Care:
  - Avoid unnecessary urinary catheters
  - Insert urinary catheters using aseptic technique
  - Maintain urinary catheters based on recommended guidelines
  - Daily leader rounding using a checklist for urinary catheter necessity and removal

**Checklist**

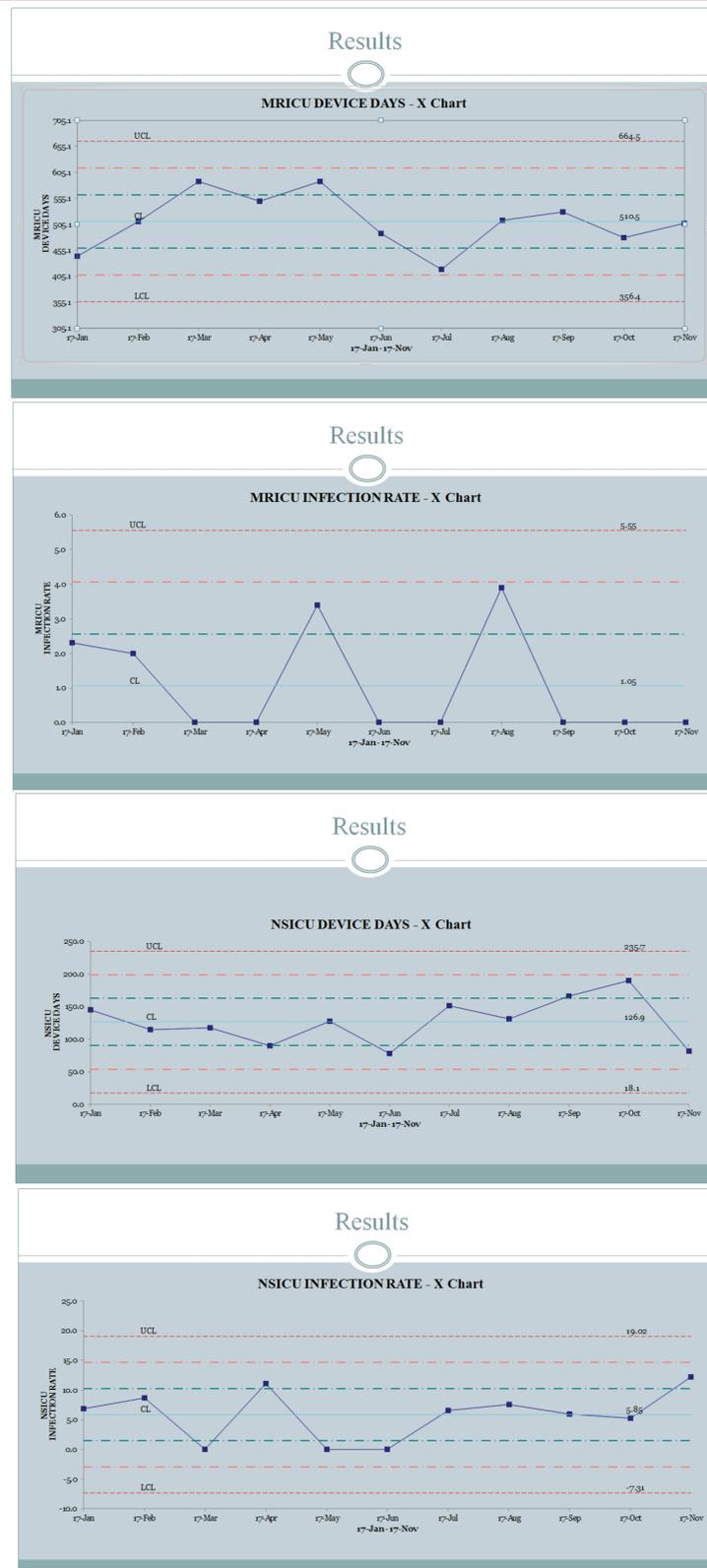
**PAPER CHECKLIST FOR CATHETER REMOVAL**

Nursing protocol for removal of Foley catheters  
Foley catheter checklist

Date: \_\_\_\_\_ Room: \_\_\_\_\_  
 Does your patient have a Foley catheter? Y  N   
 Is there an order for the catheter? Y  N   
 Date Foley catheter inserted: \_\_\_\_\_  
 What service is your patient on? (circle) Medical Surgical \_\_\_\_\_ Other \_\_\_\_\_  
 Which criteria for appropriate use of a Foley catheter does your patient meet?  
 24 hour urine collection (if unable to obtain by voiding) \_\_\_\_\_  
 Epidural Catheter \_\_\_\_\_  
 Head injury, acute \_\_\_\_\_  
 Skin breakdown (in males not manageable with condom catheter) \_\_\_\_\_  
 On "spine precautions" \_\_\_\_\_  
 Acute neurogenic bladder \_\_\_\_\_  
 Clinical need, i.e., chemically paralyzed and sedated \_\_\_\_\_  
 Crush injury or pelvic fracture \_\_\_\_\_  
 Hemodynamically unstable needing strict I/O (Q 1 hour urine output) \_\_\_\_\_  
 Renal/Urology Surgery \_\_\_\_\_  
 Colorectal Surgery (collaborate with MD for earliest removal) \_\_\_\_\_  
 Abdominal/Pelvic Surgery (collaborate with MD for earliest removal) \_\_\_\_\_  
 Comfort for End of Life Care \_\_\_\_\_  
 If none of the above criteria are met, remove the Foley and alert physician.  
 Was Foley removed? Y  N   
 Name of physician notified: \_\_\_\_\_  
 If Foley not removed, explain why: \_\_\_\_\_

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## RESULTS



## LIMITATIONS

- One limitation to the study included the fact that it was a single site study in a multisystem organization.
- Another limitation was that the study had a short duration of a six week period of time. It may be beneficial to evaluate a longer period of time.
- There were two CAUTIs during the study period. One CAUTI was attributed to the neurosurgical intensive care unit that occurred when the patient was in another location within the hospital.
- Another limitation included the fact that there are many other elements that contribute to CAUTI and length of time the catheter is in place is not the only rate limiting factor.

## RECOMMENDATIONS FOR PRACTICE

- CAUTI infections should not occur in the hospitalized patient.
- CAUTI is considered a “never event” by TJC.
- CAUTI infections impact the quality of life for our patients and are considered a nurse sensitive indicator.
- DNP leader’s to role model use evidence based practice through daily review of the ongoing need for indwelling urinary catheters supports empowering the clinical nurse to remove catheters following the nurse driven protocol.
- Outcomes of this study was shared with the study site and system CAUTI committee.
- Leader rounding using the checklist was implemented on all units

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