

# Catheter Associated Urinary Tract Infections: Creating a culture to say Bye Bye UTI

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# Purpose

- Nosocomial infections present a potential risk to the hospitalized patient. Catheter-associated Urinary Tract Infections (CaUTI's) are the most common nosocomial infections and account for up to 40% of all such infections.
- CMS guidelines no longer allow for reimbursement of CaUTI and each episode of CaUTI is estimated to cost \$676 in direct costs and increase patient the length of stay (LOS).

# Description

- To create a culture of safety by ensuring best practices are utilized in the assessment of need for foley catheters, utilization of alternative devices, and insertion/maintenance/removal of foley catheters.
- Goal is to reduce CaUTI's by 25% between 10/1/08-10/1/09 with a stretch goal of 50% CaUTI reductions.
- Reduction of foley device days.
- PCMH to achieve in the top 25<sup>th</sup> percentile NHSN performers by September 30, 2009.

# Strategies

- The development of a UTI task Force at Pitt County Memorial Hospital (PCMH) has introduced innovative strategies to decrease the incidence of CaUTI's.
- Development of the foley bundle to include: foley order, criteria for insertion, daily assessment of need, securement, and bag maintenance.
- Transparency of data.
- Focus has been placed on hand hygiene, aseptic catheter insertion technique, and securement.

# Strategies

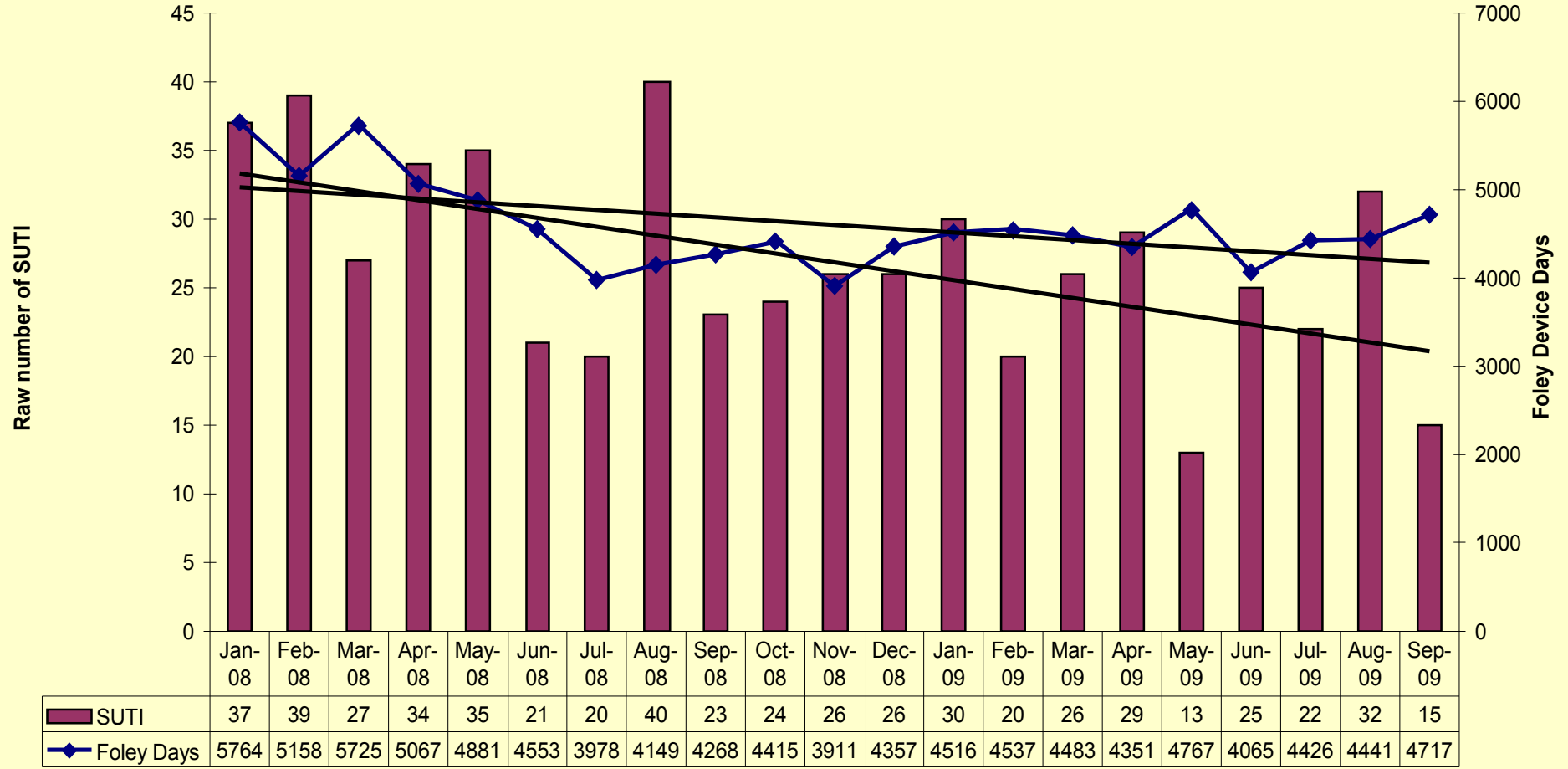
- The introduction of Best Practice Alerts into the Computerized Provider Order Entry System has served as a reminder to the medical team to reevaluate need for urinary catheters.
- Multiple units utilized small test of change to develop and test techniques that are unit specific.
- Patient and family education includes the risk and benefits of urinary catheter and engages their involvement in early removal and maintenance.

# Strategies

- Executive leadership weekly rounding has been implemented at the unit level with positive feedback and results.
- Education, clarification, and utilization of the data collection tool was provided for the unit collectors.
- Staff development of Foley 101 tool – Job aid – highlights policy and procedure and documentation in electronic medical record.
- Posters demonstrating the incorrect and correct foley techniques with insertion, maintenance, and documentation.

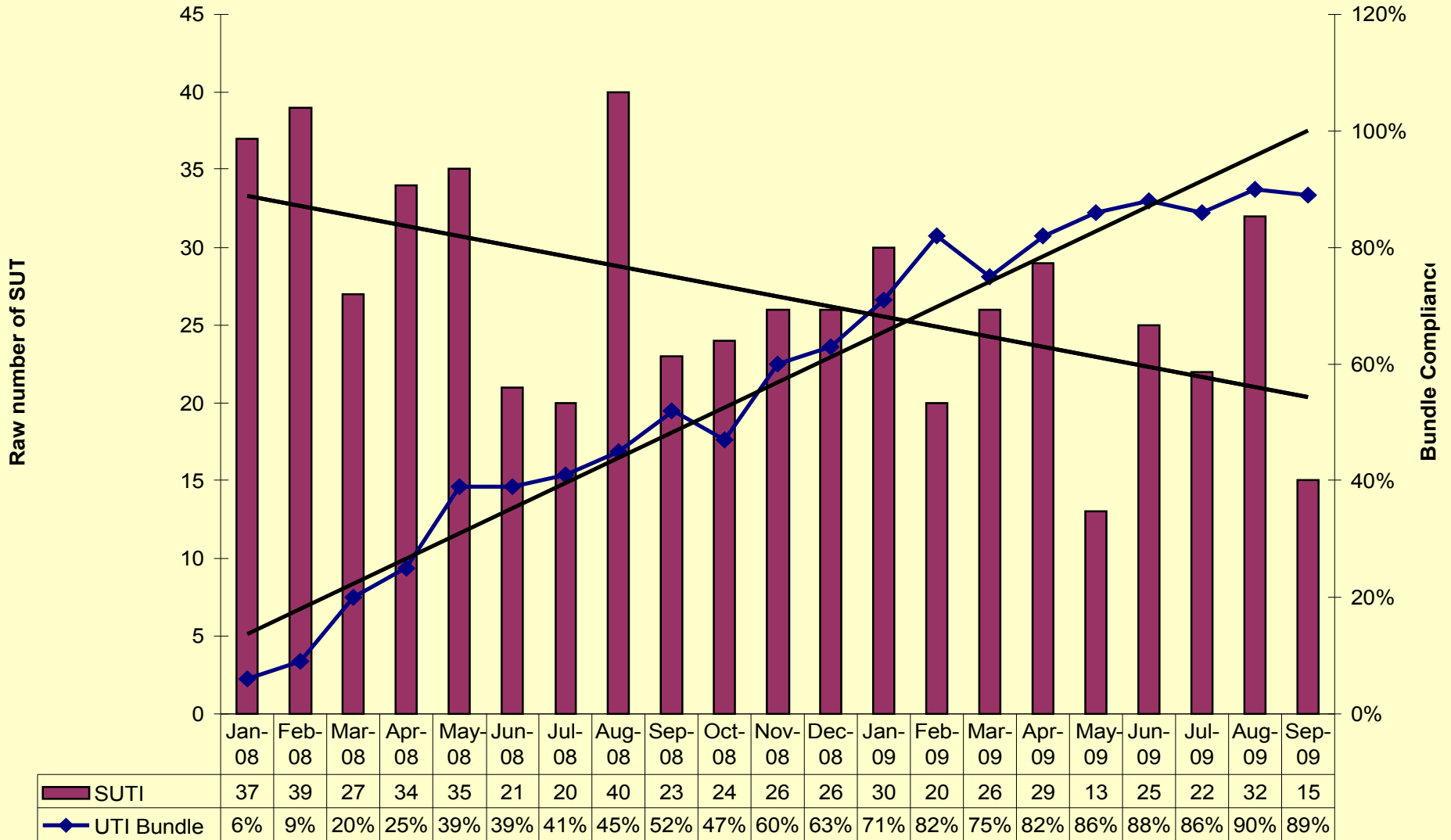


## 2008 & 2009 Foley days and SUTI

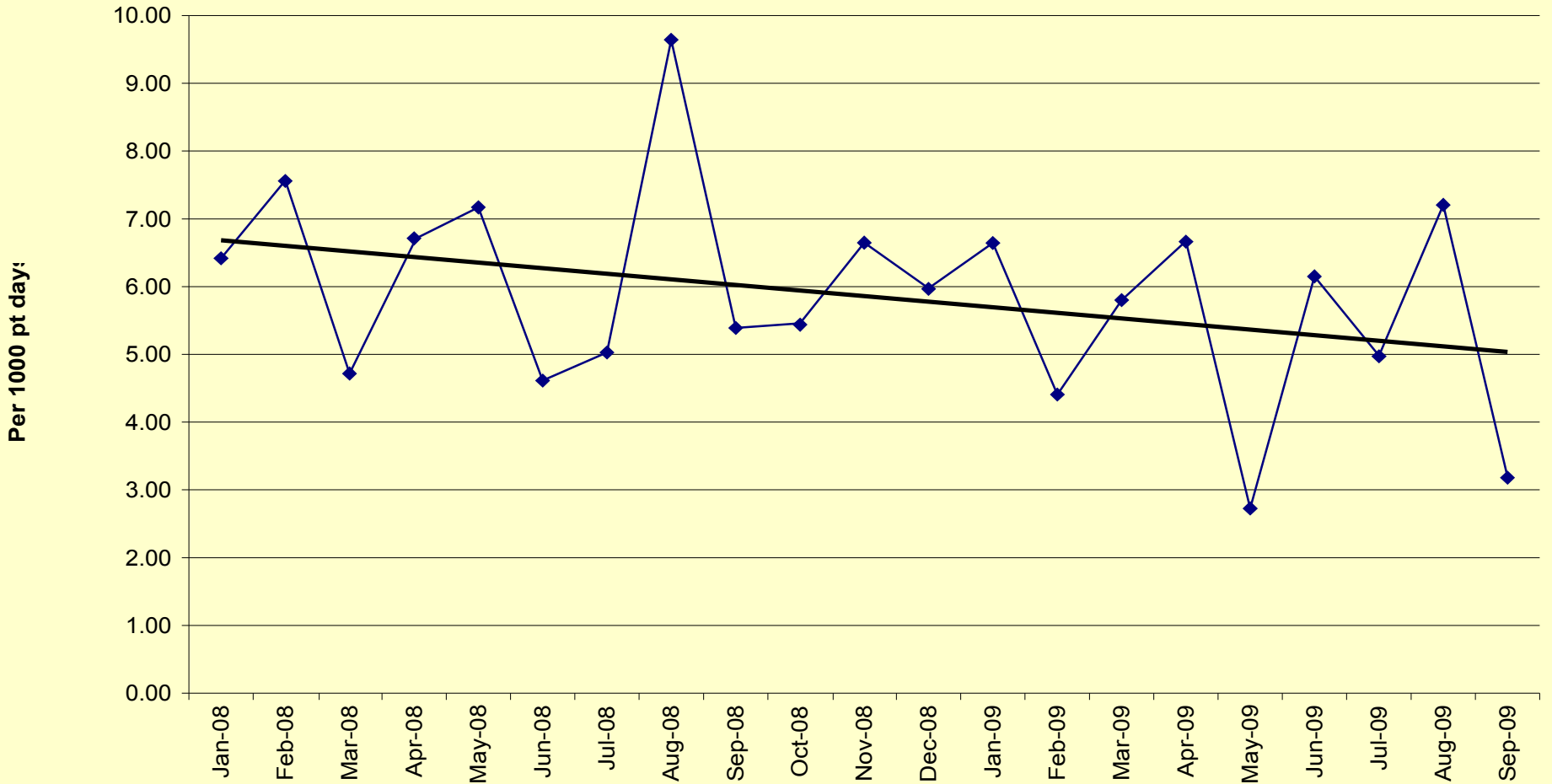




## 2008 & 2009 SUTI and Bundle Compliance



### Rate of CaUTI/Device Days/1000 Patient Days



	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08	Oct-08	Nov-08	Dec-08	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09
Series 1	6.42	7.56	4.72	6.71	7.17	4.61	5.03	9.64	5.39	5.44	6.65	5.97	6.64	4.41	5.80	6.67	2.73	6.15	4.97	7.21	3.18

# Data Collection Tool

## Data Collection Form: Foley Catheter Use and Care Compliance

Instructions: Conduct surveillance monitor 1 day a week (rotate day of week and shift). **Note** – for elements that are to be performed daily – assess for compliance from date of insertion to date of monitor. Enter data on Home page, quality tools, CAUTI tool. If questions contact Diane Hatfield 7-5334, Belinda Bagan CNS 7-0917 or Vickie Kinzie in Infection Control 7-9141

Date \_\_\_\_\_ Unit/Cost \_\_\_\_\_  
 Center \_\_\_\_\_ / \_\_\_\_\_ Auditor: \_\_\_\_\_  
 Component of Care \_\_\_\_\_

	EDP#	EDP#
<b>Appropriate Use of Foley catheter –</b>	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
• Is there an order for a foley catheter?	<input type="checkbox"/> No	<input type="checkbox"/> No
<b>Does the foley meet one or more of the following criteria? (written or verbal)</b>	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
1. Patients requiring relief of anatomic or physiologic outlet obstruction (includes retention)/undergoing surgery or procedure and pt may be at risk for urinary retention	1 2 3 4 5	1 2 3 4 5
2. Patients undergoing surgical repair of genitourinary tract.	<input type="checkbox"/> No	<input type="checkbox"/> No
3. Patients for whom strict I&O are likely to significantly alter clinical management.		
4. Debilitated, paralyzed or comatose patients with stage 2 or higher skin breakdown		
5. Patients that are palliative/hospice care (patient preference)		
<b>Circle the criteria that applies when checking "Yes" on the monitor tool</b>		
<b>Documented insertion</b>	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
• Under procedure note includes date, time, who inserted, type and size of foley (includes foley put in from other facilities, OR and ED)	<input type="checkbox"/> No	<input type="checkbox"/> No
<b>What unit was the patient on when foley was inserted? (please list)</b>		
<b>Daily Assessment for Need</b>	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
• Assessment every 24 hours post-insertion concerning need for continued use of foley	<input type="checkbox"/> No	<input type="checkbox"/> No
<b>Note:</b> Use of automatic stop orders does not negate the need for daily assessment		
<b>Securement</b>	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
• Upon physical inspection of the patient, foley is properly secured to the leg with approved product (ie: securement device)	<input type="checkbox"/> No	<input type="checkbox"/> No
<b>Proper Maintenance of Drainage Bag – Include all of the following:</b>	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
• Drainage bag must be below the level of the bladder	<input type="checkbox"/> No	<input type="checkbox"/> No
When patient in bed, drainage tubing must not be coiled and flow straight from patient to bag (* maintain bags on cribs or smaller beds as straight as possible)		
• Is drainage bag off the floor?	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
	<input type="checkbox"/> No	<input type="checkbox"/> No
<b>Total Compliance with Foley Best Practices (Yes checked for each component. (all or none, were all indicators met, if any are no, check no)</b>	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
This question is not included in the bundle compliance, Foley/perineal care is documented twice a day.	<input type="checkbox"/> No	<input type="checkbox"/> No

# Patient Education Material

## Safety Matters.

### What you should know about urinary catheters.

During hospital stays, some patients may require a urinary catheter. A urinary catheter is a small tube made of soft, flexible material that is placed in the bladder to drain urine. Urine automatically passes through the urinary catheter into a urine drainage bag.

A urinary catheter may be needed:

- If you are not able to urinate on your own
- During and after certain types of surgery and tests
- To measure the amount of urine you make
- If you are bedridden with a bedsore

Patients with urinary catheters have a much higher chance of getting a urinary tract infection (UTI) than patients that do not have a urinary catheter. A urinary tract infection is an infection of the urinary system, which includes the kidneys and bladder.

To help prevent a urinary tract infection, your health care team will:

- Only use a urinary catheter when necessary and remove the urinary catheter as soon as possible
- Insert your urinary catheter in a sterile manner
- Secure your urinary catheter to your leg to help prevent it from moving
- Avoid twisting or kinking the tubing that drains urine into the drainage bag
- Keep the drainage bag lower than your bladder to prevent urine from flowing back into your bladder
- Empty your urine bag regularly. When we empty your urine bag, we will not let the drainage spout touch anything.
- Evaluate daily if you still need the urinary catheter
- Always clean our hands before and after touching your catheter.

The staff at Pitt County Memorial Hospital takes a team approach in assuring safe, quality health care. We recognize that patients and their families are important members of this team. If you or your loved one has a urinary catheter, you can help prevent a urinary tract infection by:

- Asking every day if you still need the urinary catheter.
- Keeping your urine bag lower than your bladder.
- Not pulling, tugging or kinking the tubing.
- Asking your healthcare team to clean their hands if you are unsure
- Asking questions about your urinary catheter and the steps we take to prevent infection.

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# Foley 101

Foley 101 Tool

**For every patient that has a foley you MUST follow the following guidelines:**

**•Verify you have an order from the MD:**

- All foleys must have an order from a doctor. If you receive a patient from another floor you must have an order for the foley.

**•Make sure the foley meets one or more of the following best practice criteria:**

- Patient requires relief of anatomic or or physiologic outlet obstruction; undergoing surgery or procedure and patient may be at risk for urinary retention.
- Patients undergoing surgical repair of genitourinary tract.
- Patients for whom strict I&O are likely to significantly alter clinical management.
- Debilitated, paralyzed or comatose patients WITH stage 2 or higher skin breakdown.
- Patients that are palliative/hospice care.

**•Document insertion:**

- All foleys must have their insertion documented. If you insert the foley then you must document the insertion. If a patient comes to you with a foley from another floor or hospital then you must verify that the foley insertion is documented. If there is no documentation then you must document. All foleys must have their insertion documented regardless of when and who inserted it.

**•The RN must conduct a needs assessment each shift:**

- Each RN (day and night shift) must assess if the patient continues to meet the best practice guidelines for a foley. If the patient does not meet the needs for the foley then you will need to ask the MD for an order to D/C the foley.

**•All foleys must be secured to the leg using a hospital approved securement device:**

- PCMH has 2 securement devices: Statlock and the leg strap.

**•The foley drainage bag must always remain below the level of the bladder:**

- The foley tubing can never be coiled. The foley bag cannot touch the floor.

**•Foley care must be performed and documented a minimum of once a shift.**

**How do I document foley care?**

- doc. Flowsheet - interventions - add row - foley care

**How do I document foley securement?**

- doc. Flowsheet - interventions - add row - foley securement

# Conclusions/Project Outcomes

- The conjoined efforts to decrease catheter associated urinary tract infections at PCMH have led to:
  - Bundle compliance as high as 95%
  - Decrease in foley device days
    - 6092 days/10% reduction
    - While increasing our overall patient beds (150)
  - 15% reduction in raw number of CaUTI's

# Conclusions/Project Outcomes

- Multiple strategies need to be employed to engage staff in assisting in CaUTI reduction. Sustainability can only be maintained through collaboration of the medical and nursing staff.
- Patient involvement in the process serves as redundancy step in assuring early device removal, thereby, decreasing infection rates.

# Implications/Recommendations

- One half of all catheterized patients will be bacteriuric and/or candidiuric by day 5 of catheter use; as the duration of catheterization increases, so does the risk for infection.
- Early removal of catheters, evaluating the need for the foley PRIOR to insertion, competencies/training for insertion of foleys, and establishing CaUTI as a priority within the organization.