

HealthSouth
Deaconess
Rehabilitation
Hospital

Catheter Associated Urinary Tract Infection (CAUTI) Prevention and Best Practices

CAUTI-The Challenge Continues

IHA-Coalition for Care

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HealthSouth Deaconess Rehabilitation Hospital

Did You Know??

- The urinary tract is the most common site of healthcare-associated infections, accounting for greater than 30% of all infections in the acute care setting
- Most urinary tract infections (UTI) are associated with indwelling urinary catheters
- Between 12% - 25% of all hospitalized patients receive urinary catheters during hospital stays

Information obtained from references listed on Slide #21

Other Facts

- Studies indicate only one-half of these have appropriate indications for use
- CAUTIs have been associated with increased discomfort, prolonged hospital stay, increased cost and mortality (estimated 13,000 attributable deaths/year)
- A CMS focus for rehabilitation hospitals started October 12, 2012 with full implementation by January, 2013
- *Information obtained from references listed on Slide #21*

Other Facts

- More than 25% of patients with a urinary catheter for 2-10 days will develop bacteriuria, and 25% of these will develop a CAUTI
- Daily risk of bacteriuria with urinary catheter is 3% - 10%
- Approximately 450,000 CAUTIs occur annually in hospitals at an increased cost of \$1,200 to more than \$2,700 per case (estimated \$400 million annually)

Information obtained from references listed on Slide #21

Other Facts

- Estimated 17% - 69% of CAUTIs are preventable with recommended infection control measures
- A TJC 2014 National Patient Safety Goal (NPSG) on CAUTI prevention
 - NPSG. 07.06.01

Information obtained from references listed on Slide #21

Objectives of our Program

- Assure that urinary catheters are being ordered and used for appropriate reasons
- Assure proper technique in inserting and maintaining catheter placement
- Provide daily nursing assessment of the patient and the ongoing need for catheter placement
- Provide daily reminders to physicians to order removal of the catheter as soon as possible

Components of the Program

- Review and adopt evidence based guidelines for best practices
- Education and training to clinical personnel and Licensed Independent Practitioners
- Education – patients and families
- Implementation of processes to include the appropriate uses for urinary tract catheters
- Ongoing assessment of the need for continued use
- Daily assessment of the patient for S/S of CAUTI
- Measure and monitor catheter-associated urinary tract infection prevention processes and outcomes

Best Practices & Recommendations

Appropriate Urinary Catheter Use

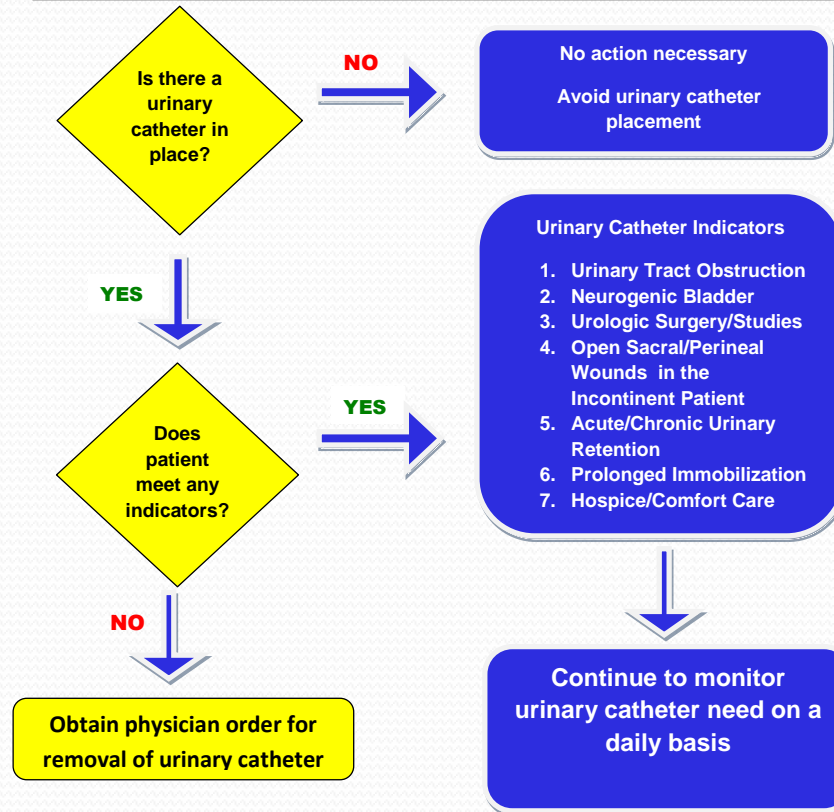
- Insert catheters only for the following appropriate indications:
 - Urinary Tract Obstruction
 - Neurogenic Bladder
 - Urologic Surgery/Studies
 - Open Sacral/Perineal Wounds in the Incontinent Patient
 - Acute/Chronic Urinary Retention
 - Prolonged Immobilization & Hospice/Comfort Care
- Urinary catheters are not indicated for:
 - Incontinence
 - Decreased Mobility
 - Obtaining a Urine Sample & or Monitoring Urine Output
- Consider using alternatives to urinary catheters when appropriate

Quality Improvement Programs

- Implement quality improvement programs to enhance appropriate use of indwelling catheters and to reduce the risk of CAUTIs based on a facility risk assessment
 - See CAUTION! Guidelines for Indwelling Urinary Catheter Use
 - See CAUTION! Nurse Driven Protocol for Removing Indwelling Urinary Catheter
 - See CAUTION! Promptly Remove Urinary Catheters brochure
 - See CAUTION! Chart Labels – to be placed on the front of charts of patients with indwelling urinary catheter as a reminder to staff and physicians to assess the need for continuing the urinary catheter and to document daily the reason
 - See CAUTION! Count to 10 Before You Cath poster (this is a 22 x 28 wipe-off poster board for Team Conference areas to enable staff and physicians to monitor foley days and CAUTI rates)

CAUTION!

Guidelines for Indwelling Urinary Catheter Use



Urinary catheters NOT indicated for:

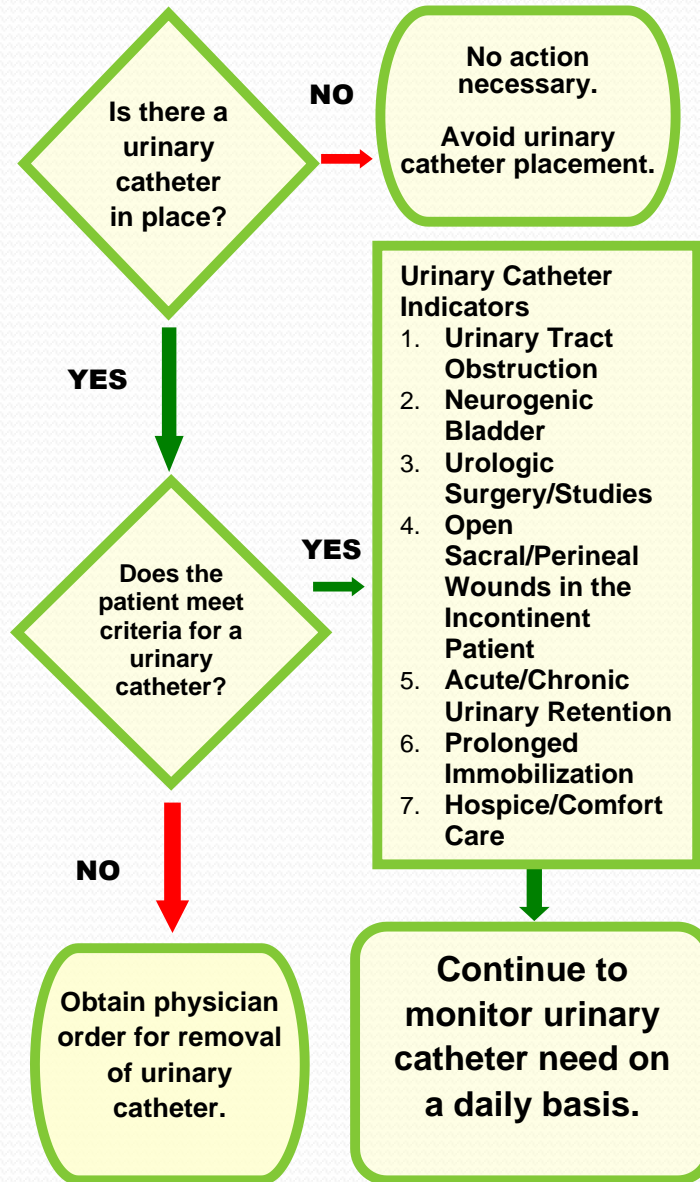
- Incontinence
- Decreased Mobility
- Obtaining Urine Specimen
- Monitoring Output

Guidelines for Indwelling Urinary Catheter Use



Urinary Catheter Facts:

- 600,000 patients develop hospital-acquired urinary tract infections (UTIs) every year.
- 80% of these infections are from a urinary catheter.
- About half of the patients with a urinary catheter do not have a valid indication for placement.
- Each day the urinary catheter remains in place the risk of a UTI increases 5% per day.
- In other words, the urinary tract is the most common site of healthcare associated infection, accounting for more than 30% of infections reported by acute care hospitals.



Urinary Catheter Indicators:

- Urinary Tract Obstruction
- Neurogenic Bladder
- Urologic Surgery/Studies
- Open Sacral /perineal Wounds in the Incontinent patient.
- Acute/Chronic Urinary Retention
- Prolonged Immobilization
- Hospice/Comfort Care

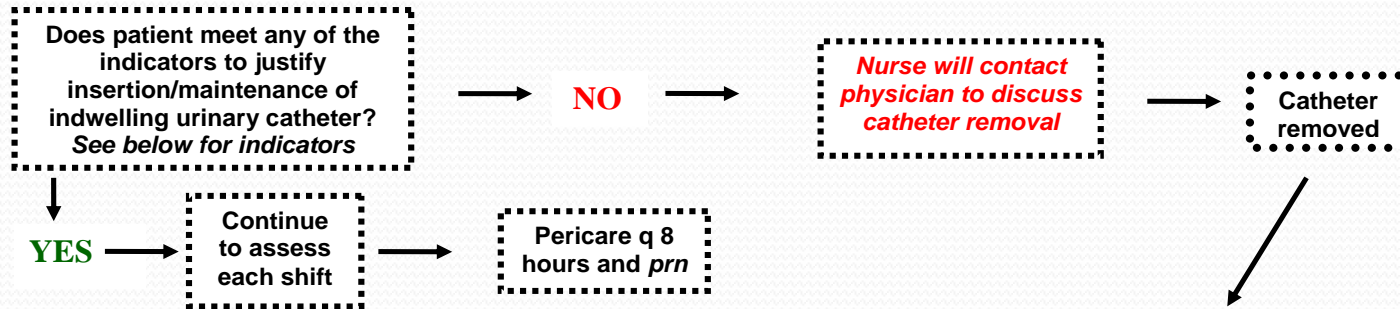
Urinary Catheters are **NOT** Indicated for:

- Incontinence (place on toileting routine, change frequently)
- Patients transferred from intensive care to general units
- Prolonged postoperative use
- Morbid obesity
- Immobility without a sacral or perineal pressure sore (turn patient q 2 hours, up in chair)
- Confusion or dementia
- Patient request
- Substitute for nursing care with incontinent patients
- Obtaining diagnostic test (cultures)

CAUTION!

NURSE DRIVEN PROTOCOL FOR REMOVING INDWELLING URINARY CATHETER

Procedure to be completed daily until catheter removed



Indicators for Indwelling Urinary Catheter

1. Urinary Tract Obstruction
2. Neurogenic Bladder
3. Urologic Surgery/Studies
4. Open Sacral/Perineal Wounds in the Incontinent Patient
5. Acute/Chronic Urinary Retention
6. Prolonged Immobilization
7. Hospice/Comfort Care

Post-Indwelling Urinary Catheter Removal Guidelines

1. Continue pericare q 8 hours and prn
2. RN will monitor patient's elimination status q 6 hours and prn
3. Bladder scan will be completed for the following:
 - Patient has not voided within 6 hours
 - Patient has urge to void but is unable to do so
 - Patient is complaining of bladder discomfort
4. Straight cath for residual greater than 250 cc



Avoid unnecessary catheterization and remove urinary catheters that are no longer necessary promptly.

CAUTION!

Promptly
Remove
Urinary
Catheters

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CAUTI Signs/Symptoms (NHSN)

Suprapubic tenderness
Fever >38 C
Urgency, Frequency, Dysuria
Costovertebral angle pain/tenderness



October 1, 2008, Medicare stopped reimbursing US hospitals for several complications of hospitalization, including CAUTI that develops during hospitalization. This rule change has increased the focus on prevention of CAUTI.



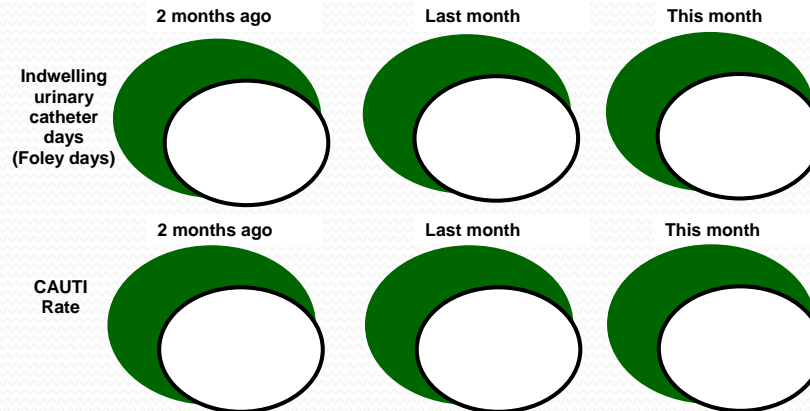
A Focus
On
Patient
Safety

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Rehabilitation Hospital

CAUTION!

Count to 10 before you cath!

1. Insert catheters only for appropriate indications.
2. Consider using alternatives to indwelling urethral catheterization.
3. Perform hand hygiene!
4. Have you been trained? Insertion of catheters is limited to trained personnel.
5. Insert catheters using aseptic technique and sterile equipment.
6. Properly secure catheter after insertion.
7. Maintain a closed drainage system.
8. Maintain unobstructed urine flow.
9. Do not clean periurethral area with antiseptics. Routine hygiene is appropriate.
10. Assess daily! Remove unnecessary catheters or document reason for extended use.



Urinary Catheter Indicators

1. Urinary Tract Obstruction
2. Neurogenic Bladder
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5. Acute/Chronic Urinary Retention
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7. Hospice/Comfort Care

Urinary catheters NOT Indicated for:

- Incontinence
- Decreased Mobility
- Obtaining Urine Specimen
- Monitoring Output

Education and Training

- Ensure that staff and physicians are properly educated and trained regarding CAUTIs, as well as techniques and procedures for urinary catheter insertion, maintenance, and removal
 - Refer to the CAUTION! documents
- Educate patients/families on evidence based best practices
 - Refer to the CAUTION! brochure

Documentation

- Implement a system for documenting the following in the patient medical record:
 - Indications for catheter insertion
 - Date and time of catheter insertion
 - Individual who inserted catheter
 - Date and time of catheter removal
- Physician should document daily in the Progress Notes the appropriate indicator for continuing the urinary catheter

Surveillance

- Use standardized methodology for performing CAUTI surveillance
 - Examples of metrics that should be used for CAUTI surveillance include:
 - CAUTI Rate equals the number of CAUTIs identified divided by the number of indwelling catheter days, multiplied by 1,000
 - Indwelling Catheter Device Utilization Ratio equals the number of indwelling catheter days divided by the number of patient days

Surveillance

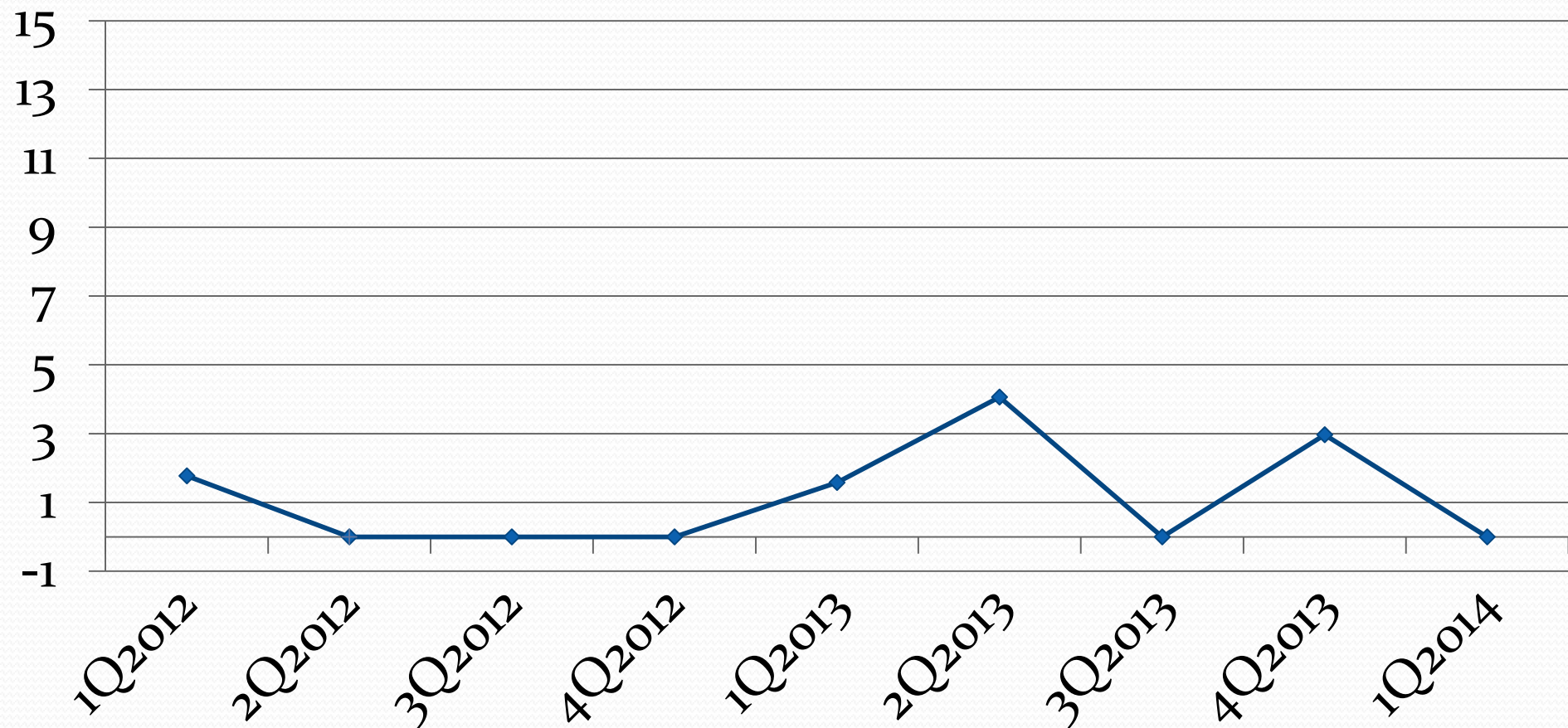
- Use Centers for Disease Control and Prevention/National Healthcare Safety Network (CDC/NHSN) criteria for identifying patients who have symptomatic urinary tract infection (SUTI) or asymptomatic bacteremic urinary tract infection (ABUTI) with an indwelling urinary catheter at the time of specimen collection or discontinued within the 48 hours prior to specimen collection

Recommended Policy/Procedure

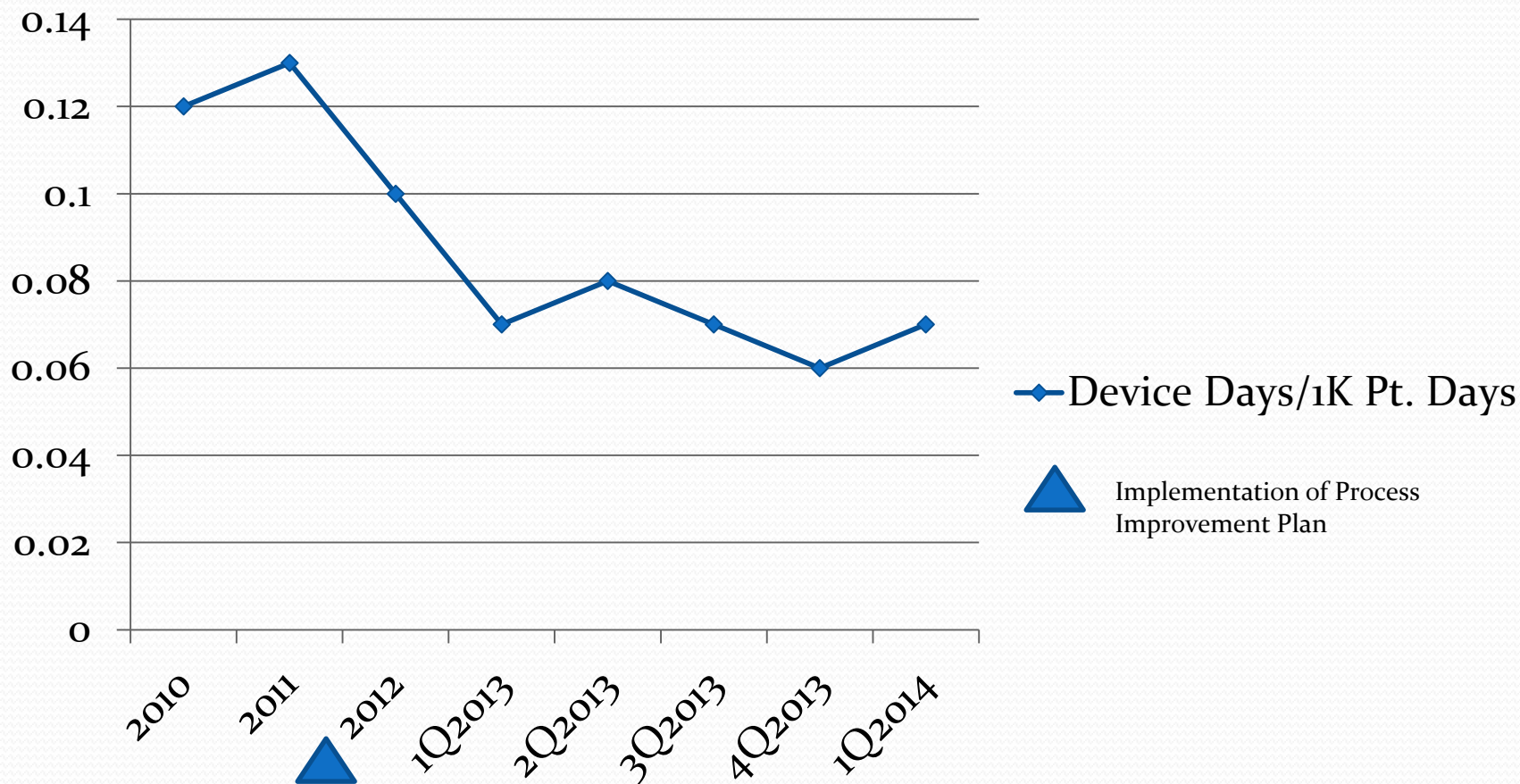
- To identify criteria for the appropriate utilization of indwelling urinary catheters and provide written guidelines for the proper insertion, care, and early removal of indwelling urinary catheters
- To provide written guidelines to assist in the prevention of catheter associated urinary tract infections (CAUTI) & outline the steps to be taken for the appropriate timely required reporting of CAUTI occurrences to the Centers for Disease Control and Prevention (CDC)

HealthSouth Deaconess

CAUTI's / 1K Device Days



HealthSouth Deaconess Device Utilization Ratio



Resources

- Gould, C. V., Umscheid, C. A., Agarwal, R. K., Kuntz, G., Pegues, D. A., & the Healthcare Infection Control Practices Advisory Committee (HICPAC) (2009). *Guideline for Prevention of Catheter-Associated Urinary Tract Infections 2009*. Retrieved from www.cdc.gov/hicpac/pdf/CAUTI/CAUTIguideline2009final.pdf
- Lo, E., Nicolle, L., Classen, D., Arias, K. M., Pdogorny, K., Anderson, D.J., Yokoe, D.S. (2008). Strategies to Prevent Catheter-Associated Urinary Tract Infections in Acute Care Hospitals. *Infection Control and Hospital Epidemiology*, 29 (S41-S50). Retrieved from <http://www.wsha.org/files/82/HAI-Catheter-AssocUrinaryTractStrategies.pdf>.
- Gould, C. *Catheter-Associated Urinary Tract Infection (CAUTI) Toolkit*. www.cdc.gov/HAI/pdfs/toolkits/CAUTItoolkit_3_10.pdf
- Aviles, M. R. (2011). *Clinical Care Improvement Strategies: Preventing Catheter-Associated Urinary Tract Infections*. The Joint Commission.



Questions?