



SWEDISH MEDICAL CENTER  
SEATTLE, WA

# REHABILITATION UNIT ACHIEVES ZERO CAUTI

POSTER # 23

(Catheter Associated Urinary Tract Infections)

## SHARED LEADERSHIP COMMITTEE

Stephanie Nagai, DNP, RN, CRRN, Mary Jo Acker, MA, MBA, RN, Michelle Chapman, BSN, RN, Adela Delos-Reyes, BSN, RN, Sheryl McElheny, BSN, RN, CRRN,  
INFECTION CONTROL DEPARTMENT: Mavis VanDelicht, RN, MN, CIC ADMINISTRATIVE ASSISTANT: Judy Goolsby

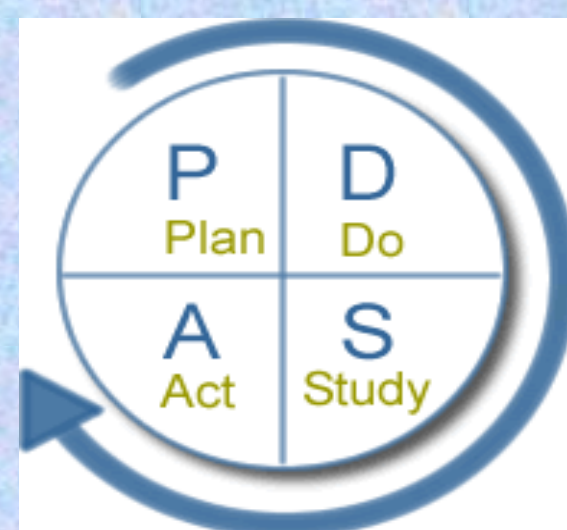
## INTRODUCTION

- Catheter Associated Urinary Tract Infection (CAUTI) is the most common health care associated infection.
- Nationally, the mortality rate is estimated at 13,000 annually.
- Estimated cost to the hospital is \$2500-3000 per case and 3 additional inpatient length of stay days.
- The risk for catheter bacteriuria increases 5% each day of use.
- The Plan-Do-Study-Act (PDSA) framework was used to prevent the occurrence of CAUTI for 471 days.

## FRAMEWORK

Quantitative study for quality improvement  
Plan-Do-Study-Act was the framework used to create change  
Plan-Do-Study-Act (PDSA) cycles.

- Forming the Team
- Setting Aims
- Establishing Measures
- Selecting Changes
- Testing Changes
- Implementing Changes
- Spreading Changes



(Institute for Health Care Improvement, 2013)

## PLAN



Shared Leadership Committee (SL) collaborates with the Infection Control Department

Members to review the literature for the best evidence based practice (EBP) to reduce Catheter Associated Urinary Tract Infection (CAUTI) rates on 6 East

SL recognized that we could enhance our practice by implementing EBP and possible reduce/eliminate CAUTI's

No financial relationships to disclose

## DO

- Created the first Rehabilitation Unit Job Aid “Care of patient with Foley Catheter.”
- The evaluation tool was created and each staff member was observed and checked off on the EBP procedure.

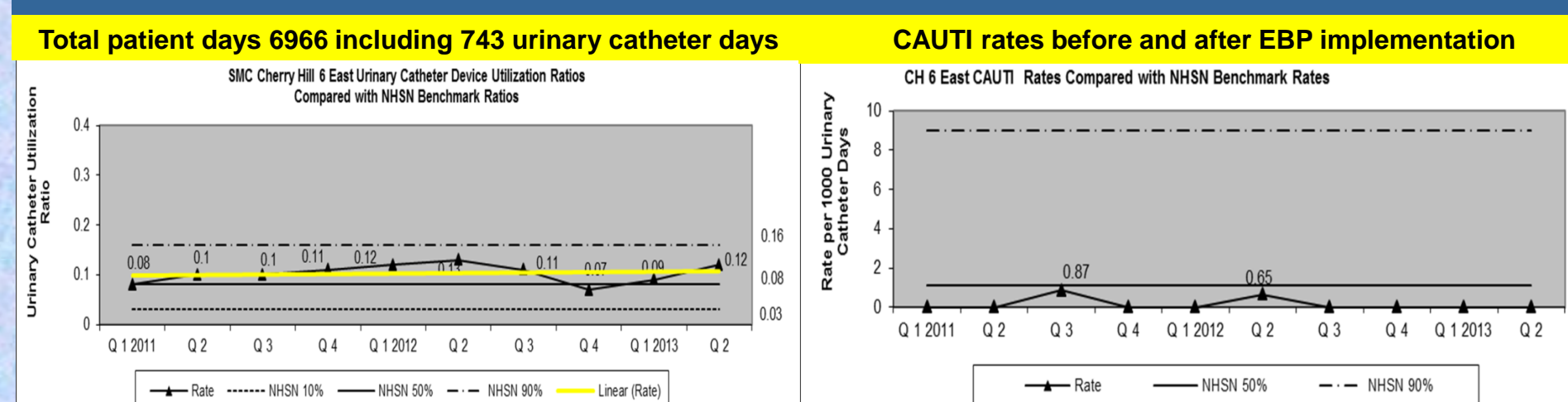


### Foley Care Procedure:

- The area around the Foley is cleaned every 12 hours, between 0800-1200 and again between 2000-midnight and after each bowel movement with soap and water. You wipe away from the meatus; for females that means front to back. After washing with soap and water, the perineal area is rinsed with water.
- Wash 4 inches of the catheter closest to the meatus.
- Do not pull on the catheter exposing section that was inside the urethra, as when you release the catheter the contaminated section will go in.
- The catheter is to be secured at all times to prevent movement and traction. See the product directions for anchoring.
- To obtain a specimen, scrub the access port vigorously before and after with alcohol. Allow to air dry.
- Collection bags must be below the bladder. It should never rest on the floor.
- Collection bags are emptied when they are 1/2 to 3/4 full.
- When emptying, never allow the outlet port to touch the collection container. Scrub the outlet port vigorously with alcohol before and after draining.
- If patient has multiple drainage systems, they should be on opposite sides of the bed.
- If the collection bag is switched over to a leg bag, discard the old collection bag and obtain a new one and visa versa.
- Document.

## STUDY RESULTS

CAUTI rates as reported by the Infection Control Department  
**Zero CAUTI FOR 471 DAYS**      **MAY 2012 – AUGUST 2013**



Rehabilitation Patient Population N=1090

## ACT

- Provided in-services to educate nursing staff on best evidence based practice information.
- An Infection Control Bulletin Board provided handouts to patients and families.
- Patients were educated and demonstrate Foley care.
- Presented our evidence-based practice at the Swedish Nursing Quality Research Conference.
- Created a checklist to observe staff competency.
- Audited charts for Foley care compliance.
- Since 2013, Swedish Medical Center implemented new standards “Care for a Patient with a Foley Catheter on the Acute Rehabilitation Unit” and “Nurse Protocol: Foley catheter removal.”

## CONCLUSION

- The Rehabilitation Unit at Swedish Medical Center was without a CAUTI from May 13, 2012 through August 12, 2013.
- The ID continues to monitor all patients with Foley catheters, providing surveillance data to support the health care team in decreasing the number of CAUTIs.
- The Rehabilitation Nursing Team continues to be vigilant in Foley catheter maintenance and providing the best EBP.

## REFERENCES

Centers for Disease Control and Prevention (CDC) (2010). CAUTI Guideline Fast Facts. Retrieved from [http://www.cdc.gov/hicpac/CAUTI\\_fastFacts.html](http://www.cdc.gov/hicpac/CAUTI_fastFacts.html)

Gould, C. V., Umscheid, C. A., Agarwal, R. K., Kuntz, G., Pegues, D. A. & Healthcare Infection Control Practices Advisory Committee (HICPAC) (2009). Guidelines for prevention of catheter-associated urinary tract infections. Retrieved from [http://www.cdc.gov/hicpac/cauti.001\\_cauti.html](http://www.cdc.gov/hicpac/cauti.001_cauti.html)

Gray, M. (2004). What nursing interventions reduce the risk of symptomatic urinary tract infections in the patient with an indwelling Foley. *Journal of wound, ostomy, and continence nursing*, 31(1), p. 3-13.

Gray, M. (2006). Best practices in managing the indwelling catheter. *Prospectives*, p.1-12.

Institute for Health Care Improvement (2013). *Plan-do-study-act worksheet*. Retrieved from <http://www.ihc.org/knowledge/Pages/Tools/PlanDoStudyActWorksheet.aspx>

Joint Commission (2013). *Hospital National Patient Safety Goals*. Retrieved from [http://www.jointcommission.org/hap\\_2013\\_npsg/](http://www.jointcommission.org/hap_2013_npsg/)

Lo, E., Nicolle, L., Classen, D., Arias, K. M., Podgorny, K., Anderson, D. J., Burstin, H., Calfee, D. P., Coffin, S. E., Dubberke, E. R., Fraser, V., Gerding, D. N., Griffin, F. A., Gross, P., Kaye, K. S., Klompas, M., Marschall, J., Mermel, L. A., Pegues, D. A., Peri, T. M., Saint, S., Salgado, C. D., Weinstein, R. A., Wise, R., & Yokoe, D. S. (2008). Strategies to prevent catheter associated urinary tract infections in acute care hospitals. *Infection control and hospital epidemiology*, 29(1), p. 41-50.

Melnik & E. Fineout-Overholt (Eds.) (2011). *Evidence-based practice in nursing & healthcare: A guide to best practice* (2nd ed.). Philadelphia, PA: Lippincott, Williams, & Wilkins

Stokowski, L. A. (2009). *Preventing catheter associated urinary tract infections*. Retrieved from [www.medscape.com](http://www.medscape.com)

Contact Information: Stephanie Nagai, DNP, RN, CRRN  
Email: [stephanie.nagai@swedish.org](mailto:stephanie.nagai@swedish.org)