



Reduction of Urinary Tract Infections in a Progressive Care Unit

By

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1



Who We Are

- The Hospital of the University of Pennsylvania (HUP) is a quaternary academic medical center and the lead institution for the University of Pennsylvania Health System (UPHS).
- Magnet Designated Organization
- HUP Facts & Figures (FY2009):
 - 749 licensed patient beds
 - 39,451 adult admissions
 - 4,292 births
 - 1.3million outpatient visits
 - 57,200 emergency room visits
 - 1,674 physicians
 - 1,251 professional nurses2

2





Objectives

- Discuss the unit based Clinical Nurse (CN) champion role in educating the nursing staff in implementing Evidence Based Practice (EBP) guidelines to decrease urinary tract infections (UTIs).
- Describe tracer methodology and how reviewing the data can decrease UTIs.

Purpose

- Investigate causes of UTIs on a 48 bed progressive care unit
- Reduce UTI rates
- Prevent UTIs in vulnerable populations

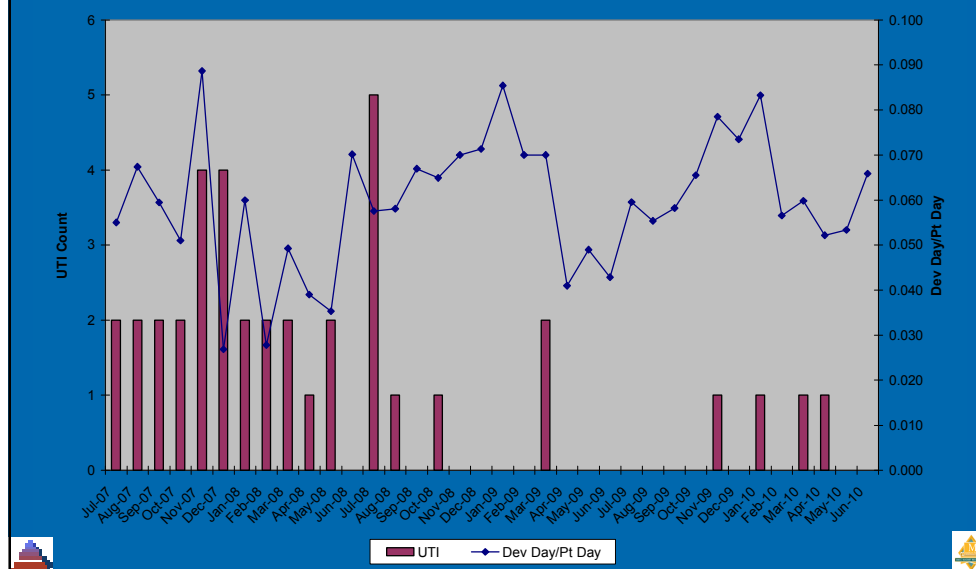
5

Why is This Important?

- Improvement of nursing care.
 - 25 UTIs in 2008 despite following standard protocol.
- Centers for Medicare and Medicaid (CMS) no longer pay for hospital acquired UTI.
- Improved patient outcomes

6

UTI Rate and Device Days



How Did We Do It?

- Clinical Nurse (CN) model champion
- Use of tracer methodology
 - Electronic clinical informatics software surveillance system

CN Champion

- Staff RN chosen to attend institution-based UTI EBP meetings.
- Distribute information from the meetings to the unit staff.
- Discuss current:
 - Study findings
 - Practice changes

9

Responsibilities of Unit CN Champion

- Provided on going education to the nursing staff.
 - Provided latest evidence and policy implementation.
 - Email
 - Poster presentation
- Skills verification
 - Maintain staff competencies
- Auditing
 - Relay problems in practice

10

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Tracer Methodology

- Real time data analysis
- Tracers:
 - Who placed the catheter
 - Catheter dwell time
 - Peri-care
 - Catheter security

13

Original Tracer Tool

Tracer Tool for UTI Infection	Patient Label
Date: _____	
Date of (your unit) Admission _____	
Diagnosis _____	
Date of positive Urine Culture _____ Organism _____	
OSH admission? _____	
Name of Insertor _____	
Date of Insertion _____	
Unit where catheter was inserted _____	
Was prep witnessed _____	
Breach in technique observed _____	
LOS of Catheter (when UTI culture sent) _____	
Daily documentation of peri-care _____	
Diarrhea documented at any time (dates) _____	
Overall state of patient hygiene Excellent Fair Good Poor _____	
Was patient transport used at any point prior to UTI? _____	
Leg band or strap in use? _____	
Broken seal noted? _____	
Measurement containers dated and labeled? _____	
Any confusion and pulling noted? _____	
Epidural used? _____	
Symptomatic UTI/Asymptomatic UTI _____	
Symptom? Fever _____ other _____	
Multiple straight catheters at any time? _____	
Size of catheter if not standard 14 Fr _____	

8

Tracer Significance

- Tracer methodology exposed the patient populations most vulnerable to suffer UTIs.
 - Formed partnership with the nursing team placing the indwelling urinary catheters (IUCs) and implemented EBP guidelines in this area.
 - IUCs emptied prior to transport.
 - IUCs remained below the stretcher on transport.
- UA's sent on all patients admitted to the unit with a preexisting IUC.

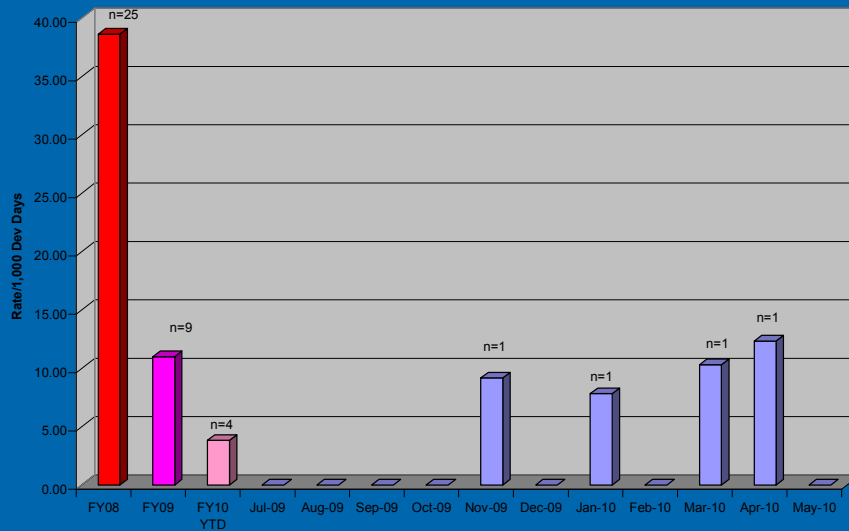
17

Changes in Practice

- Collaboration and teamwork with nursing staff
 - Nursing staff aware of our dashboard numbers.
 - Reported any breach in practice.
 - IUC bags transported in the stretcher
 - Patients arriving with IUC bags full of urine.
- Removed IUC as soon as possible
- Sent UA's on patients arriving to unit with IUC

18

UTI Rate FY 08,09,10



Results

- Reduction in UTIs:
 - FY 2008-2009: 64%
 - FY 2009-2010: 55%



The End