

Reducing Catheter Associated– Urinary Tract Infections

Decrease/eliminate the incidence of CA-UTI in hospitalized patients by implementing evidence-based practice interventions

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Learning Objectives

1. Describe the steps that can be implemented to reduce the opportunity for a CA-UTI to occur.
2. Recognize when the steps can be implemented.
3. Identify interventions to sustain change.

Purpose

Franciscan St. Francis Health has focused efforts to improve patient outcomes, safety and cost reduction. Catheter Associated Urinary Tract Infections (CA-UTI) reduction is a priority goal. The purpose is to decrease/eliminate the incidence of CA-UTI in hospitalized patients by implementing evidence-based practice interventions.

Significance

CA-UTI accounts for approximately 40% of Healthcare-Associated Infections, and 80% of these infections are attributable to urinary catheters which can lead to complications such as cystitis, pyelonephritis, gram-negative bacteremia and prostatitis. Along with patient discomfort, infections can result in a prolonged hospital stay and increased cost and mortality.

Strategy and Implementation

Inappropriate use of urinary catheters places patients at risk for CA-UTI. Evidence-based practices are designed to reduce these risks. The effectiveness of these prevention strategies are only as good as the care-giver’s application of best practices. Thus, an educational intervention, which contained five best practices for nurses to complete on patients with urinary catheters, was implemented on inpatient nursing units and in emergency departments. Next, the creation of a three-hospital systemwide interdisciplinary CA-UTI Team took form to review current practices and implement and hardwire evidence-based changes to impact hospital policies, practices and physician order sets.

The team completes monthly audits, purposeful rounding of catheter appropriateness, root cause analysis on all CA-UTIs and current and new product evaluation related to CA-UTI. In addition, the CA-UTI Team decreased the standard urinary catheter size and is standardizing urological products. These interventions have contributed to a culture change that has not only heightened awareness of CA-UTI but also reinforced the perception of nursing’s significant role to ultimately eliminate CA-UTI.

Evaluation

The effectiveness of the interventions is demonstrated in the CA-UTI rates. Since inception of the program, CA-UTI has seen a downward trend: 2008: .75/86 patients, 2009: .31/36 patients, 2010: .22/24 patients and currently 2011: 0.01/1 patient. In addition, an approximate 25% reduction of urinary catheter utilization in all nursing units was achieved.

Implications for Practice

Implications for practice increases nursing knowledge and continual nurse-initiated activities to effect change and empower nursing to eliminate the causative factors that contribute to CA-UTI. Therefore, nurses can place their patients in the optimal environment to heal and to achieve health.

