A Nurse-Driven Protocol to Reduce Catheter-Associated Urinary Tract Infection
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**Problem:** In 2008, an acute care community hospital implemented a quality improvement (QI) pilot project targeting Catheter Associated Urinary Tract Infections (CAUTI). The initial project resulted in a 66% reduction in the incidence of CAUTI however these changes were not sustained over time.

**Evidence:** Over 80% of hospital associated urinary tract infections are caused by indwelling urinary catheters (Reilly, et al, 2006). Studies reveal 40% of patients have urinary catheters for unjustified reasons. The most important risk factor for the development of a CAUTI is the length of time a catheter is in place (Robinson, et al, 2007). CAUTI has been associated with increased morbidity, mortality, hospital cost, and length of stay. Nurse-driven protocols have been successful in decreasing the duration of urinary catheters thereby preventing CAUTI (Robinson, et al, 2007, Gotelli, et al, 2008).

**Strategy:** Using a QI framework, a protocol was developed to discontinue catheters after 48 hours in eligible patients. The protocol consisted of: 1) Nursing assessment, 2) Catheter rounds, 3) Exclusion criteria and 4) Nursing management after catheter removal that included parameters for bladder scanning and straight catheterization. In addition, a unit-based educational bulletin board was developed for patient, visitors and staff. The project was piloted over a two month period.

**Evaluation:** Outcome measures for this project included: the number of catheter associated urinary tract infections and nurse satisfaction with the protocol.

**Results:** Nurses responded positively to the autonomy the protocol provided and noted increased collaboration with physicians. CAUTI-related infections have decreased to zero and this has been sustained over 9 months.

**Recommendations:** Based on the results from the pilot unit, the protocol is being implemented housewide. Five additional bladder scanners which were used as part of the nursing assessment have been purchased and will be distributed throughout the hospital.

**Lessons Learned:** Newer nurses required mentoring from the senior nurses before developing confidence in the removal of urinary catheters. Front-line nurse champions are key in reducing CAUTI.

**References:**