

# Evidence-Based Practice (EBP) - E150

## Poster

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### Abstract Title:

**A Trauma Unit's Interprofessional Approach to Reducing Catheter Associated Urinary Tract Infections**

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### Background & Purpose:

In 2007, the urinary tract infection (UTI) occurrence in the trauma population of a Level 1 trauma, academic community Magnet hospital was nearly double that of the state (6.1 and 3.1%, respectively.) Evidence citing inappropriate use of indwelling urinary catheters prompted an organization-wide effort to reduce their use. This poster details a performance improvement project on a 30 bed medical-surgical transitional trauma unit (TTU) to decrease indwelling urinary catheter utilization and the subsequent, dramatic decline in catheter associated urinary tract infections (CAUTIs).

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### Study/Project Design:

Pre-project data collection: 2007-2008; Interventions: 2008-2011; Intra & post data collection: 2008-2012

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### Setting:

A 30 bed transitional trauma unit in a Level 1 trauma, academic community Magnet hospital

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### Sample:

The sample included all adult trauma patients with indwelling urinary catheters over a six year period.

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### Procedures:

An initial strategy was the development of population-specific criteria for the necessity and continuation of indwelling urinary catheters. Those not meeting specified criteria were high priority for removal. The interprofessional team held twice-daily quality huddles to identify patients with catheters and discuss their necessity. Other house-wide efforts were also implemented on TTU and included: an evidence based nurse driven urinary catheter removal protocol; an evidenced based retention protocol; education addressing acceptable uses of catheters, the risks of prolonged use, alternative incontinence options, and bladder scan protocols; and competency-based performance evaluations of the insertion, maintenance and discontinuation of catheters.

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### Findings/Results:

According to data compiled monthly by the hospital's trauma registry and the Quality Department, catheter associated urinary tract infection (CAUTI) occurrences in the hospital's trauma population successfully decreased 57.6% over a five year period. More specifically, the number of CAUTIs in the transitional trauma unit (TTU) population decreased 62% (between July 2007 and June 2012.) TTU staff acknowledged the clinical significance of these results and recognized the likely relationship between decreased catheter utilization and the decrease in incidence of infection. This heightened awareness, along with the staff's commitment to reducing catheter usage in the trauma population, resulted in TTU's ability to sustain a 555 day period during which time there were no identified CAUTIs.

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### Discussion/Conclusions/Implications:

Hospital leadership identified catheter associated urinary tract infection (CAUTI) occurrence as a nurse sensitive quality indicator requiring improvement. Staff commitment to question catheter necessity and nurse empowerment to prompt catheter removal served to dramatically reduce the incidence of CAUTIs in the trauma and general patient population. The staff's unified desire for best practice has effected positive change in the quality of patient care. Leadership recognized the impact of this commitment to excellence and plans are underway to maintain the momentum in future quality endeavors.