After the CAUTI Bundle….What Then?

Introduction
Catheter-related urinary tract infection (CAUTI) is one of the most frequent hospital-acquired infections. It is known that following the bundle of best practices such as strictly adhering to insertion asepsis, scrutinizing Foley candidates to assure they meet insertion criteria, removing the Foley catheter as soon as possible, avoiding dependent loops in tubing to prevent bacterial overgrowth, can lead to a reduction in CAUTI. Our critical care unit had already aggressively implemented this bundle of care and participated in a LEAN Rapid Improvement event and were still experiencing some patients with CAUTI. We wanted to do more.

Background/Purpose
After carefully tracking our CAUTI in the ICU with a root cause mentality we determined that several of our 2013 CAUTI events were in patients who had frequent liquid stooling and who met all criteria to leave their catheters in place. One of our infection control physicians suggested that we consider prophylactic Clorpactin irrigations as an additional intervention. After a Pharmacist presentation to our Infection Prevention Committee we decided to trial this intervention as prophylaxis.

Methods
ICU patients who met criteria to keep their indwelling catheters in place had bladder irrigations ordered at 72 hours of catheterization, and then Q 72 hours by protocol. A one minute dwell to flush, followed by a 10 minute dwell of 0.05% concentration Clorpactin was implemented with physician approval. Charge nurse, direct care nurse and multi-disciplinary morning rounding clinicians all played a roll in assuring that this new practice was implemented when criteria were met.

We want to emphasize that we were already aggressively implementing all aspects of the CAUTI bundle recommended in the literature, and were having success, as a hospital in the area of CAUTI reduction. A LEAN project hospital-wide had successfully reduced CAUTI in our facility by 40% in 2013.

Data/Results
After implementing the Clorpactin bladder irrigation prophylaxis protocol in January of 2014 our 16 bed ICU/PCU went from six CAUTI in 2013 down to two CAUTI in 2014, a 66% reduction. Our CAUTI rate per 1000 Foley days reduced form 3.4 in 2013 to 1.31 in 2014. We are currently at zero for the first six months of 2015.

Conclusions/Implications
It appears that this practice is making a difference for our patients. We realize that this practice is not currently supported by the highest level of clinical evidence and is not therefore ready for wide spread. We plan to continue to track our outcomes closely and encourage cautious spread of this practice in our 17-hospital system in order to collect more data about the efficacy of this clinical protocol.

We heartily support first implementing all aspects of the traditional CAUTI Bundle of care prior to implementing a Clorpactin irrigation protocol in your facility. Clorpactin irrigation might best be reserved for patients with liquid stool or chronic indwelling catheterization.

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