



Reducing CAUTI through Research

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About Us

Coeur d'Alene,
Idaho

246-bed, not-for-
profit district
hospital

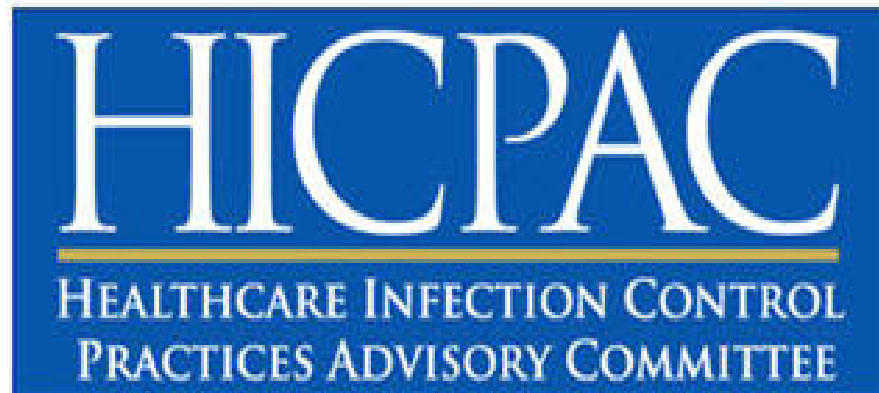
ANCC Magnet
Designation
(2006- present)

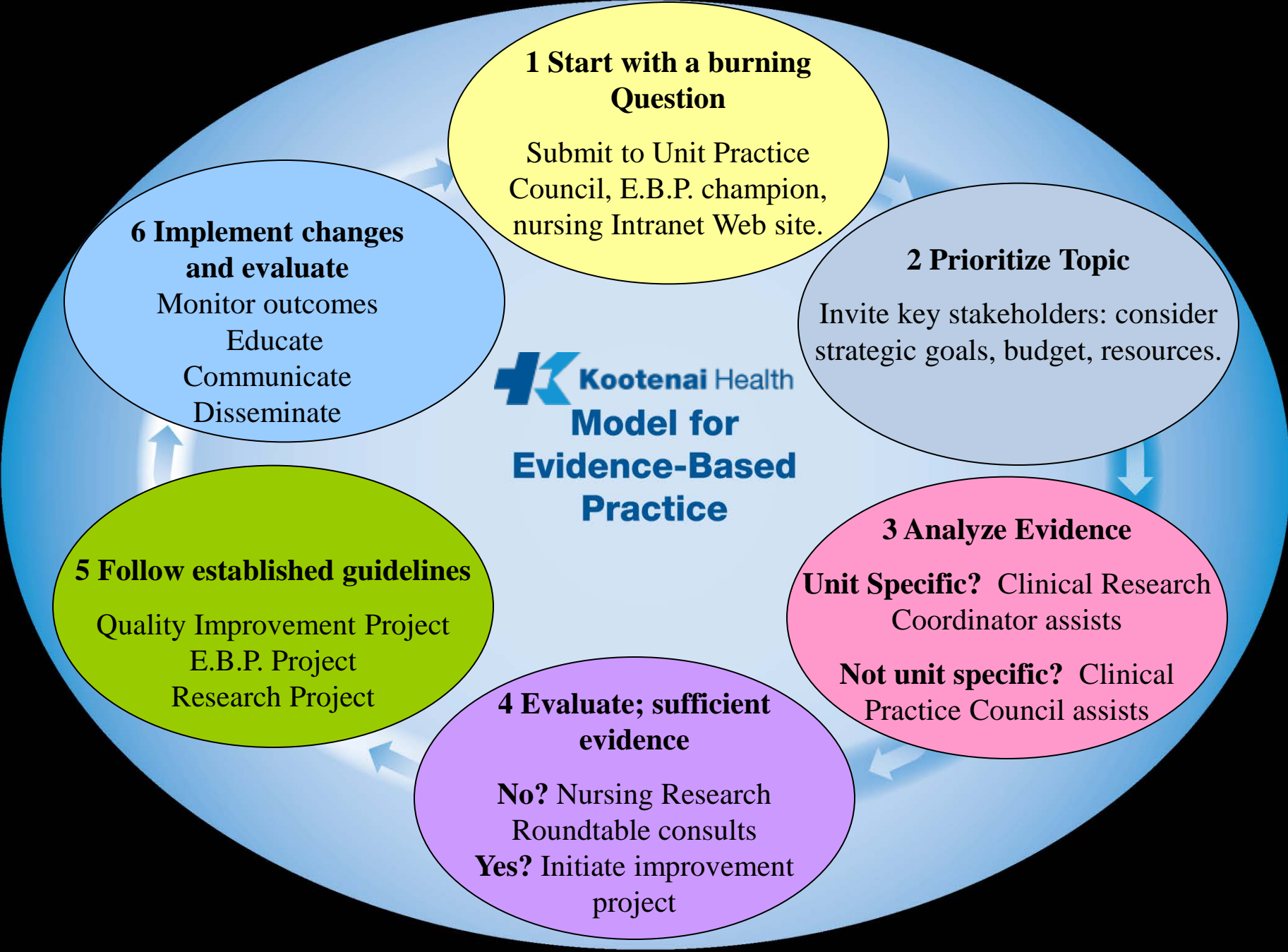




Objectives

- Reduce CAUTI by 30% using systematic research processes
 - Implement evidence-based guidelines
 - Determine “what works” for house-wide implementation
 - Engage staff at every level in process: OR, ED, direct care, leadership, education, PI, medicine





The diagram illustrates a six-step cyclical process for evidence-based practice. It is centered around the Kootenai Health logo and the title 'Model for Evidence-Based Practice'. The steps are arranged in a circle, connected by arrows indicating a clockwise flow. Step 1 is highlighted in yellow, Step 2 in light blue, Step 3 in pink, Step 4 in purple, Step 5 in green, and Step 6 in light blue. The entire process is contained within a larger light blue oval.

Kootenai Health
Model for
Evidence-Based
Practice

1 Start with a burning Question

Submit to Unit Practice Council, E.B.P. champion, nursing Intranet Web site.

2 Prioritize Topic

Invite key stakeholders: consider strategic goals, budget, resources.

3 Analyze Evidence

Unit Specific? Clinical Research Coordinator assists

Not unit specific? Clinical Practice Council assists

4 Evaluate; sufficient evidence

No? Nursing Research Roundtable consults
Yes? Initiate improvement project

5 Follow established guidelines

Quality Improvement Project
E.B.P. Project
Research Project

6 Implement changes and evaluate

Monitor outcomes
Educate
Communicate
Disseminate



How we Learned

A pre-test post-test study design was used to evaluate CAUTI outcomes after a multifactorial intervention:

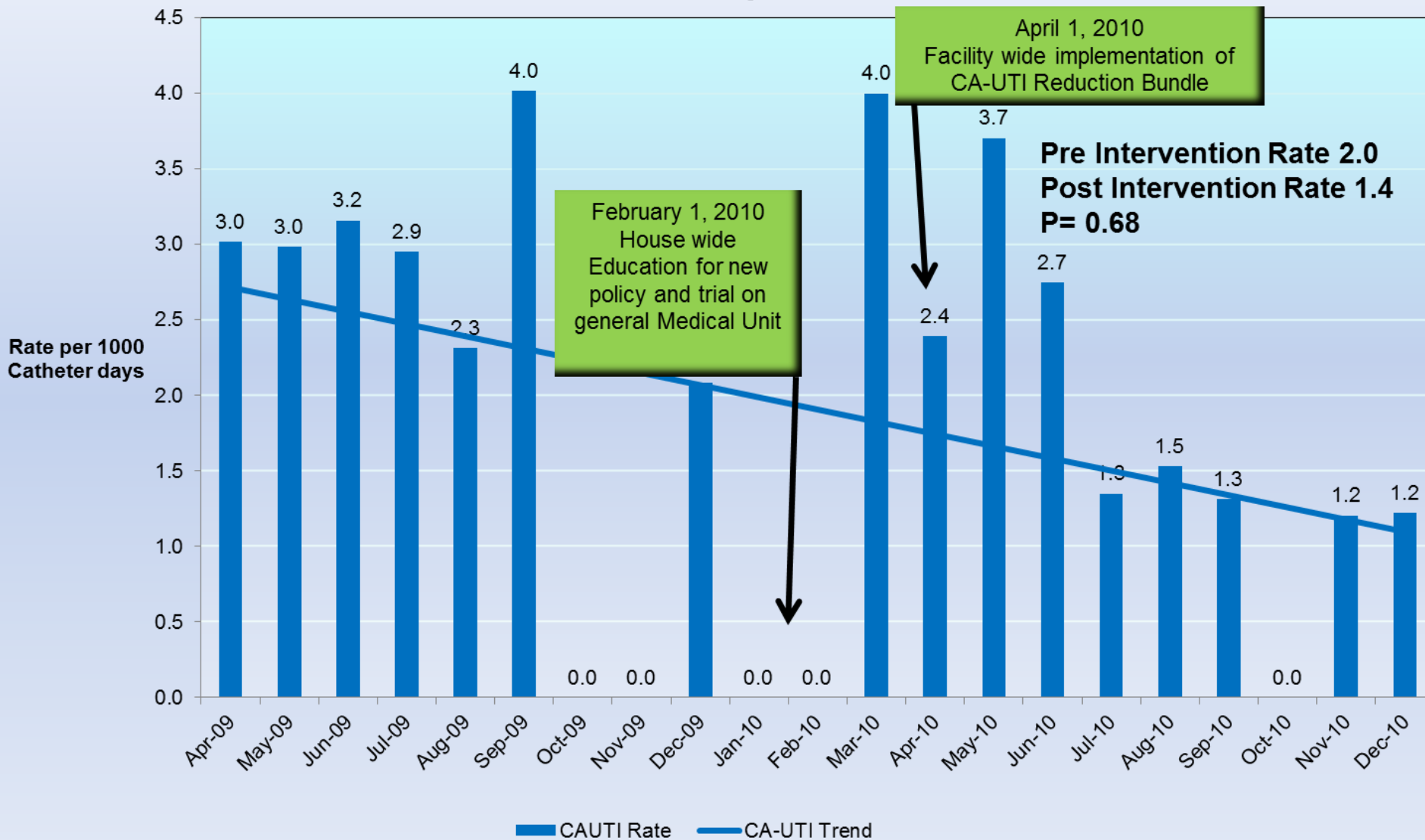
- Policy Revision
 - Included Professional Nursing Council
- Daily Medical Necessity Documentation
 - RN/MD buy-in
- Computerized Education Module
 - All patient care disciplines
- Systematic Surveillance/Feedback





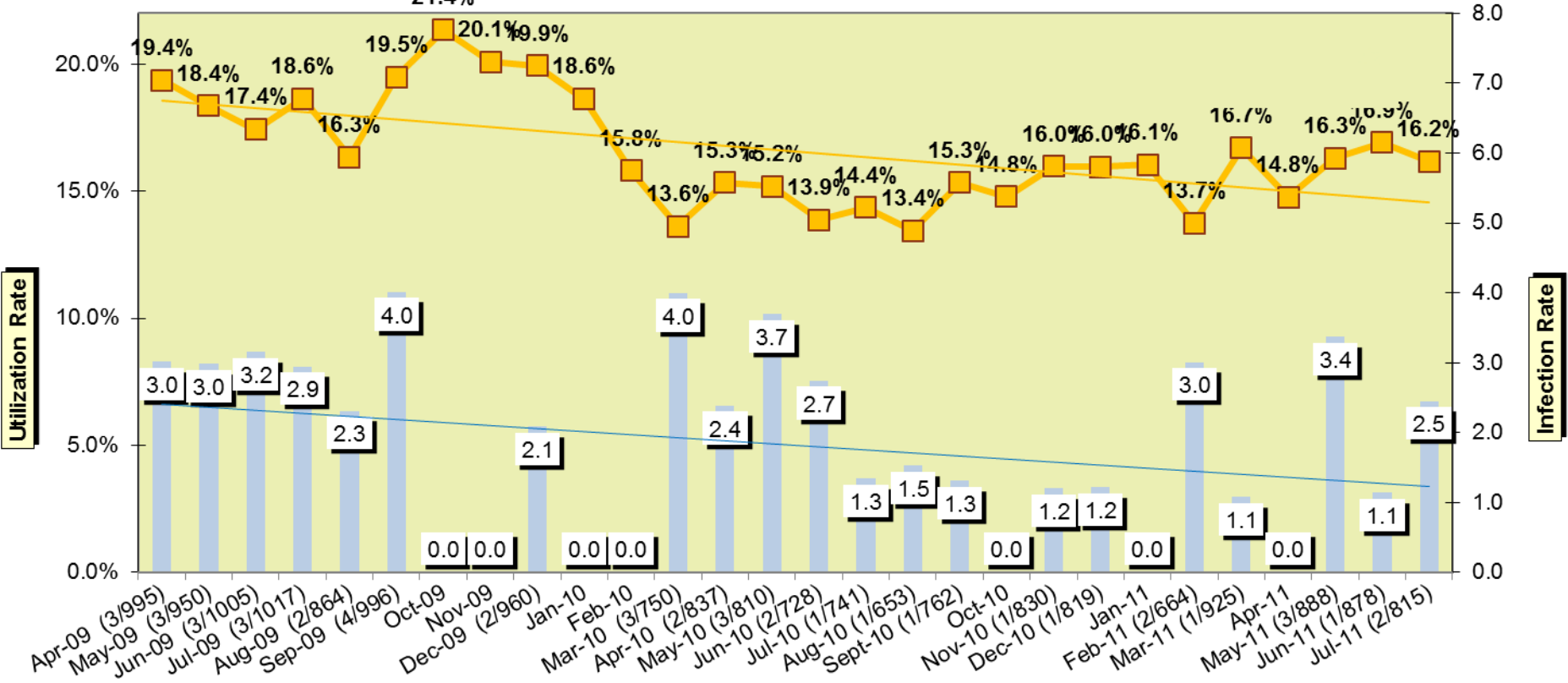
Outcomes

CAUTI Rate Hospital Wide



Gaps in Sustainability

House wide CA-UTI Data



2009 CA-UTI House wide Cases - 27 Rate 2.8

2010 CA-UTI House wide Cases - 15 Rate 1.6

- CAUTI Rate
- Kootenai Device Utilization
- Linear (CAUTI Rate)

2010 CA-UTI Utilization Rate 15.2%

Goal CA-UTI Rate 0.0

Phase 2 Goal: CAUTI = Zero

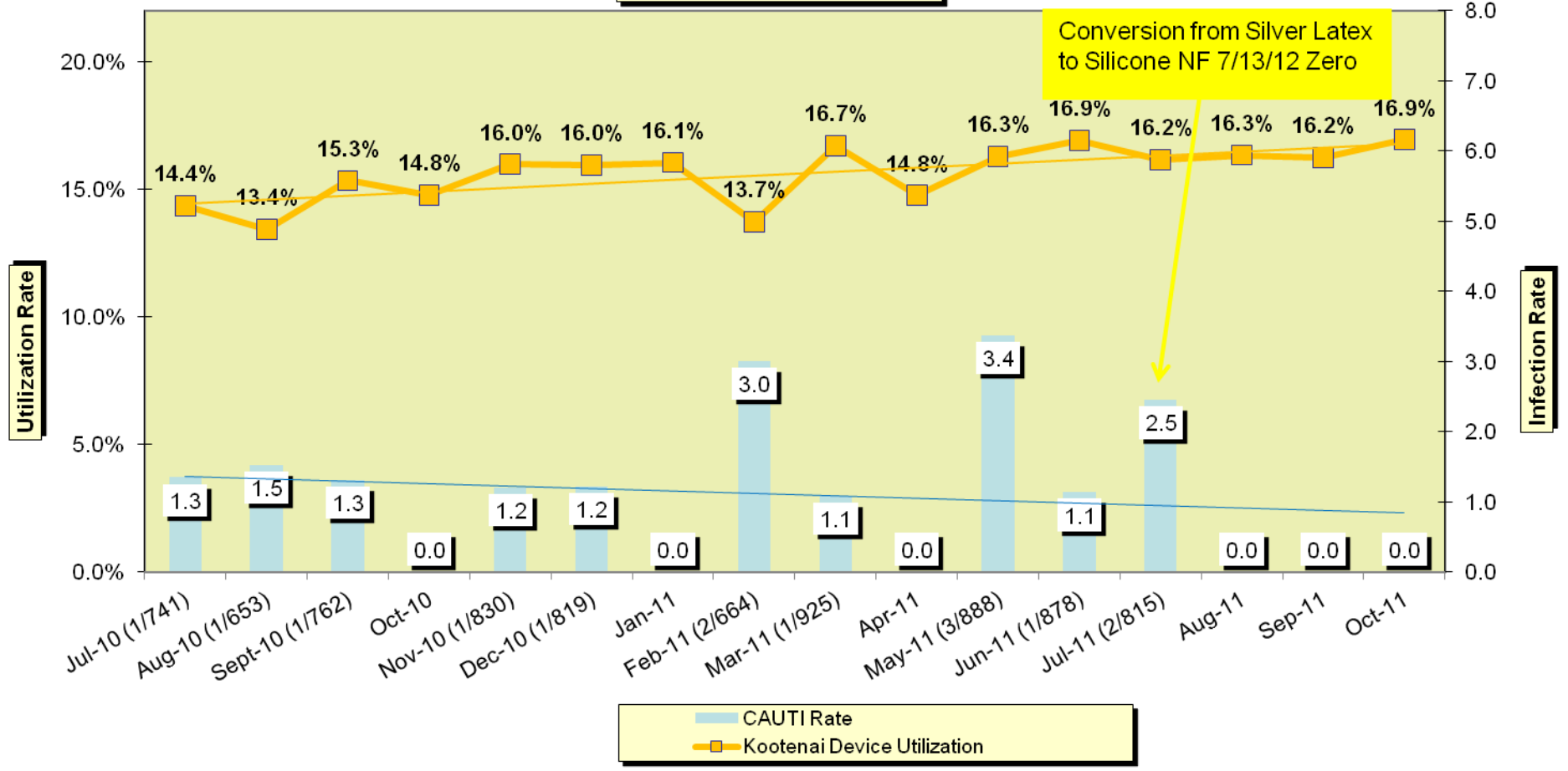
“Silver impregnated latex urinary catheters vs. Nitrofurazone impregnated silicone catheters to reduce the incidence of CAUTI and antibiotic usage: a pilot study”



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Michael Brandt, BS, PharmD | Christopher Shaw, BS | Michelle Wiest, PHD
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Pilot Outcomes

House wide CA-UTI Data





Clinical Implications from Pilot

- Three months of zero CAUTI. Longer time periods will be needed to increase confidence in findings.
 - “Statistical significance” – Will require six months with zero CAUTI
 - “Clinical significance” 1 year post-pilot -> 1 infection using the new product
 - Pathogen (pseudomonas) not susceptible to nitrofurazone
 - 3 CAUTIs attributed to non-nitrofurazone latex catheters (coude, heat-sensing)
- New products may allow organizations to reach target of zero CAUTI events



Next Steps

- Stay abreast of current evidence
- Continue to monitor outcomes – investigate all “never events” for gaps
- Hardwire EBP with nurse engagement

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