

# AN EVIDENCE-BASED INITIATIVE TO REDUCE CAUTI IN THE PICU

Lisa Morgan, MSN, RN • Deborah Salani, DNP, ARNP, CPON, BC-NE, CPN • Nicole Sardinas-Lago, BSN, RN, CCRN, CPN • Christina McRay, BSN, RN



## Background

Catheter Associated Urinary Tract Infections (CAUTIs) are the most common healthcare associated infections (HAIs) that patients experience while being hospitalized. Approximately 80% of these infections are associated with the use of an indwelling urinary catheter (IUC). According to the Centers for Medicare and Medicaid Services (CMS), CAUTI is considered a HAI and; therefore, hospitals are no longer receiving reimbursement for CAUTI related treatment costs. CAUTI is a burden that increases hospital expenses, patient length of stay, and is associated with increased morbidity and mortality. It is not surprising why The Joint Commission (TJC) has recognized the prevention of CAUTI as a national patient safety goal for 2012.

(AACN Bold Voices, January 2012)

## Purpose

The purpose of this initiative was to increase knowledge and awareness of CAUTI in the PICU and to standardize nursing care and surveillance of pediatric patients with an indwelling urinary catheter (IUC).

## Goal

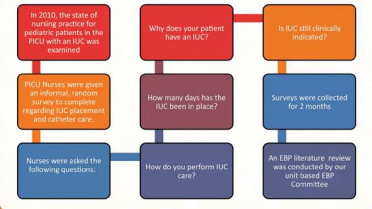
- Implementation of evidence based practice strategies to enhance the delivery of patient care by:
- Reducing CAUTI rate <2.0 per 1000 catheter days
  - Standardizing nursing care for patients with an IUC
  - Monitoring compliance to sustain positive outcomes

Howdy Boys and Girls! I'm Kiko the Kidney



© Miami Children's Hospital 2014

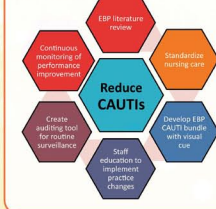
## The Process



## Observations



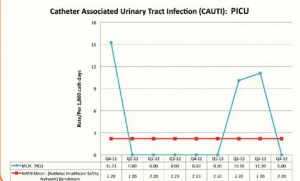
## Action Plan



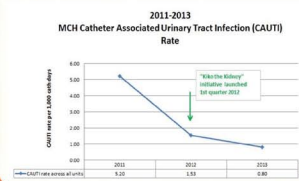
## MCH Practice Bundle "Kiko the Kidney"

- A visual cue was created for all patients with an IUC. Our colorful mascot was named "Kiko the Kidney"
- Small laminated cards were designed with a picture of Kiko including a standardized list of nursing interventions (practice bundle) to decrease CAUTI
- "Kiko" is placed, in a visible location, at the bedside for every patient with an IUC
- "Kiko" serves as a reminder for the nursing staff and medical staff to provide the necessary interventions to help reduce CAUTI!

## Quality CAUTI 2011-2013



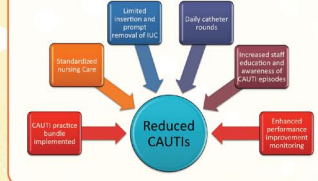
## Decreasing Rates



## Sustaining Performance



## Outcomes



### CATHETER ASSOCIATED URINARY TRACT INFECTION PREVENTION CAMPAIGN

Remember boys and girls! It's Kiko the Kidney!

- Do you have a protocol/catheter to empty urine at the bedside?
- Did you perform indwelling urinary catheter care today with soap and water? Is it secured?
- Did you perform a check to make sure the bag is in an elevated/emptying position (above the level of the patient)?
- Is the indwelling urinary catheter secured properly?
- Is the indwelling urinary catheter properly secured?
- Is the specimen bag less than 12 in. x 9 in. bag?

## Discussions



## CAUTI Auditing Tool

Room#	MR #	Bed#	MR Assigned	CAUTI Rate	CAUTI Rate	CAUTI Rate	CAUTI Rate	CAUTI Rate	CAUTI Rate

## Huddle Form

Patient Name: \_\_\_\_\_ MR # \_\_\_\_\_

- What was the primary reason for IUC insertion?
  - Prevention of medical control obstruction
  - Management of acute urinary retention or urinary obstruction
  - Prevention of urinary tract infection
  - Prevention of urinary tract infection
- How many days was the IUC in place? \*Duration is the primary risk factor associated with CAUTI
- Was IUC care performed and documented?
- What issues have been done to prevent the re-occurrence?
- Lessons learned

## Conclusions

- "Kiko the Kidney" is an effective visual cue for standardizing nursing practice
- Staff involvement is the key to implementing change
- Unit champions are instrumental in motivating and encouraging the staff
- Nurses play a vital role in creating and sustaining an evidence-based practice environment

## References

• Bloodgett, T. (2009). Reminder systems to reduce the duration of indwelling urinary catheters: A literature review. *Urologic Nursing* 29(5), 369-378.

• Eliminating Catheter-Associated Urinary Tract Infections. Health Resources & Educational Trust, Chicago. July 2011 from [www.ha.org](http://www.ha.org)

• Epstein, S., Kilwein, K., Kerchem, A., Wiley, A., Goanjan, P., et al. (2009). Reducing use of indwelling urinary catheters and associated urinary tract infections. *American Journal of Critical Care*, 18(6), 535-541.

• Gaski, G., Linwood, G., Apparel, R., Kuntz, G., & Rogers, D., et al. (2009). Guideline for prevention of catheter-associated urinary tract infections. Retrieved February 5, 2011 from [www.aacn.org](http://www.aacn.org)

• Agency Healthcare Research and Quality (2008). Prevention of catheter-associated urinary tract infections. Retrieved February 5, 2011 from [www.aahr.org](http://www.aahr.org)

• Shannon, E., & Chiversworth, C. (2010). Recognition and prevention of healthcare-associated urinary tract infections in the intensive care unit. *Critical Care Medicine*, 38(8), 373-379.

• Sivert, D., Ayuda, R., Hahn, M. (2011). Catheter hygiene performance barriers: Does a decrease hospital acquired infections? *American Journal of Critical Care*, 20(2), 165-170.



Indwelling Urinary Catheter