

# An Education Intervention on Indwelling Urinary Catheter Maintenance to Prevent CA-UTI

Ashley R. Bunnell BSN, RN

*Lehigh Valley Health Network, ashley\_r.bunnell@lvhn.org*

Andrea L. Harring BSN, RN

*Lehigh Valley Health Network, andrea\_l.harring@lvhn.org*

Kelly Pellathy BSN, RN

*Lehigh Valley Health Network, kelly\_m.pellathy@lvhn.org*

Follow this and additional works at: <http://scholarlyworks.lvhn.org/patient-care-services-nursing>



Part of the [Nursing Commons](#)

---

## Published In/Presented At

Bunnell, A. Harring, A. Pellathy, K. (2016, Oct). *An Education Intervention on Indwelling Urinary Catheter Maintenance to Prevent CA-UTI*. Poster presented at LVHN Vizient/AACN Nurse Residency Program Graduation, Lehigh Valley Health Network, Allentown, PA.

This Poster is brought to you for free and open access by LVHN Scholarly Works. It has been accepted for inclusion in LVHN Scholarly Works by an authorized administrator. For more information, please contact [LibraryServices@lvhn.org](mailto:LibraryServices@lvhn.org).



# An Educational Intervention on Indwelling Urinary Catheter Maintenance to Prevent CA-UTI

Ashley Bunnell, BSN, RN, Andrea Haring, BSN, RN, & Kelly Pellathy, BSN, RN

Lehigh Valley Health Network, Allentown, Pennsylvania

## BACKGROUND

- Catheter associated urinary tract infection (CA-UTI) is the most common type of healthcare-acquired infection (HAI): 36% of HAIs are caused by CA-UTI
- Most CA-UTIs can be prevented with proper insertion, maintenance, and prompt removal of the Foley when no longer indicated.
- Case reviews of CA-UTI incidence on 2KS (a medical-surgical ICU) revealed that urinary catheter maintenance practices were a contributing factor.
- On 2KS, reducing CAUTI rate by 5% is a FY17 RN goal.
- Fiscal year 2015 there were 4 CA-UTI incidences on 2KS
- Fiscal year 2016 there were 11 CA-UTI incidences on 2KS

## PICO QUESTION

Will an educational intervention on urinary catheter maintenance increase knowledge, reported comfort level, and reported compliance of best practices among staff on a medical-surgical intensive care unit?

## EVIDENCE

- RN education focusing on urinary catheter maintenance has contributed to multi-faceted efforts to reduce CA-UTI in acute care settings (Underwood, 2015).
- On-going education to enhance staff knowledge about urinary catheter maintenance is recommended by the CDC.
- There are recommended actions by experts that when performed help to reduce the risk of CAUTI. They include:
  - maintaining a closed system
  - keeping the collection bag below the bladder level
  - emptying collection bag Q8 hours

## METHODS

- A 10-question pre-education survey was sent to nurses and technical partners on 2KS via email, regarding current knowledge of urinary catheter maintenance, comfort level and compliance with urinary catheter care.
- Education of urinary catheter maintenance to 2KS staff was provided through an online power point and orally at staff meetings. Areas of opportunity identified in the pre-survey were reinforced through the education.
- Post-education survey was sent via email.
- Alcohol swabs were passed out at every safety huddle with a reminder to clean catheter hub after draining drainage bag as reinforcement of LVHN policy.



## RESULTS

Table 1. Education Participation

	Pre-Education Survey	TLC Online Education	Post-Education Survey
Number of Participants (out of 52 staff)	21	31	12

Table 2. Reported Comfort Level and Compliance Pre and Post Education

	Pre-Education Survey	Post-Education Survey
Reported Comfort Level	4.52	5
Reported Compliance	3.95	4.58
Average Score (out of 100%)	78.6%	90.2%

Table 3. CA-UTI Incidences on 2KS

	Fiscal Year 2015	Fiscal Year 2016	Fiscal Year 2017 YTD
CA-UTI Incidences	4	11	1

## OUTCOMES

- After staff re-education on indwelling urinary catheter maintenance, staff reported increased comfort level, compliance, and knowledge of foley catheter maintenance practices necessary to prevent CAUTI.
- Decreased number of CA-UTI in fiscal year 2017 1<sup>st</sup> quarter.

## CONCLUSIONS

A re-education intervention regarding urinary catheter maintenance for the staff on a medical-surgical ICU was shown to increase knowledge, comfort level, and reported compliance in best practices.

## REFERENCES

- Association for Professionals in Infection Control and Epidemiology (April 2014). *Guide to the Elimination of Catheter-Associated Urinary Tract Infections*. Retrieved June 30, 2016 from [apic.org/Resource/\\_EliminationGuideForm/Off6ae59-0a3a-4640-97b5-eee38b8bed5b/File/CAUTI\\_06.pdf](http://apic.org/Resource/_EliminationGuideForm/Off6ae59-0a3a-4640-97b5-eee38b8bed5b/File/CAUTI_06.pdf)
- Centers for Disease Control and Prevention. (2009). *Guideline for Prevention of Catheter-Associated Urinary Tract Infections 2009*
- Ribby, K. (2006). Decreasing Urinary Tract Infections Through Staff Development, Outcomes, and Nursing Process. *Journal of Nursing Care Quality*, 21 (3), 272 - 276.
- Underwood, L. (2015). The Effect of Implementing a Comprehensive Unit-based Safety Program on Urinary Catheter Use. *Urologic Nursing*, 35 (6), 271 - 279.

© 2016 Lehigh Valley Health Network