Prevention of Catheter- Associated Urinary Tract Infections through CAUTI Protocol Implementation

Kaitlyn Prow & Sydney Petonic

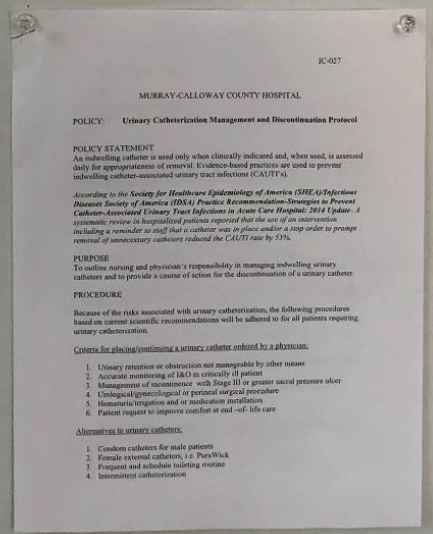
MURRAY STATE UNIVERSITY

"Indwelling urinary catheters are a primary cause of catheter-associated urinary tract infections (CAUTIs), especially in older adults. CAUTIs can increase hospital costs by prolonging the patient's length of stay and complicating his or her recovery" (p. 415).

Ignatavicius, D. D. L., Workman, L. W., & Rebar, C. R. R. (2017). *Medical-Surgical Nursing: Concepts for Interprofessional Collaborative Care (9th ed., Vol. 1). Saunders.*

Florence Nightingale's Environmental Theory: to allow a patient to heal, you have to control the environment

Florence Nightingale. (2019, September 18). Nursing Theory. Retrieved October 17, 2021, from https://nursing-theory.org/nursing-theorists/Florence-Nightingale.php



IC-027

MURRAY-CALLOWAY COUNTY HOSPITAL

POLICY: **Urinary Catheterization Management and Discontinuation Protocol**

POLICY STATEMENT
An indwelling catheter is used only when clinically indicated and, when used, is assessed daily for appropriateness of removal. Evidence-based practices are used to prevent indwelling catheter-associated urinary tract infections (CAUTI's).

According to the ***Society for Healthcare Epidemiology of America (SHEA)/Infectious Diseases Society of America (IDSA) Practice Recommendation-Strategies to Prevent Catheter-Associated Urinary Tract Infections in Acute Care Hospital: 2014 Update*** *- A systematic review in hospitalized patients reported that the use of an intervention including a reminder to staff that a catheter was in place and/or a stop order to prompt removal of unnecessary catheters reduced the CAUTI rate by 53%.*

PURPOSE
To outline nursing and physician's responsibility in managing indwelling urinary catheters and to provide a course of action for the discontinuation of a urinary catheter.

PROCEDURE

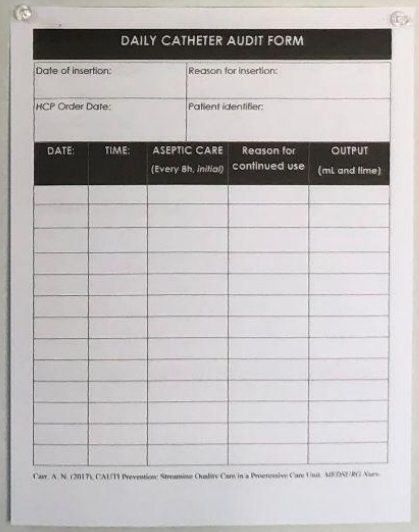
Because of the risks associated with urinary catheterization, the following procedures based on current scientific recommendations will be adhered to for all patients requiring urinary catheterization.

Criteria for placing/continuing a urinary catheter ordered by a physician:

1. Urinary retention or obstruction not manageable by other means
2. Accurate monitoring of I&O in critically ill patient
3. Management of incontinence with Stage III or greater sacral pressure ulcer
4. Urological/gynecological or perineal surgical procedure
5. Hematuria/irrigation and or medication installation
6. Patient request to improve comfort at end -of- life care

Alternatives to urinary catheters:

1. Condom catheters for male patients
2. Female external catheters, i.e. PureWick
3. Frequent and schedule toileting routine
4. Intermittent catheterization



DAILY CATHETER AUDIT FORM

Date of insertion:	Reason for insertion:
HCP Order Date:	Patient identifier:

DATE:	TIME:	ASEPTIC CARE (Every 8h, *initial*)	Reason for continued use	OUTPUT (mL and time)

Carr, A. N. (2017). CAUTI Prevention: Streaming Quality Care in a Progressive Care Unit. *MEDSURG Nurs-*

"...the unit achieved and sustained a CAUTI rate of 0 for 22 months with a 38% reduction of catheter days. The workgroup found 95% staff adherence to CPF completion" (Carr, 2017).

Carr, A. N. (2017). CAUTI Prevention: Streaming Quality Care in a Progressive Care Unit. *MEDSURG Nursing, 26(5), 306–323.*

"A downward trend in CAUTI rates and a significant reduction for DUR were noted...**There were 16 CAUTIs captured pre-intervention and 8 in the post-intervention timeframe.** Finally, alternative device usage increased significantly, with a **105% increase in condom catheter use, 16% with intermittent catheterization, and 409% increase in female urinary-incontinence device usage**...Cost estimates showed a **reduction of more than $55,000** from the pre- to post-intervention timeframe" (Leontie, 2021).

Leontie, S. L. (2021). Utilizing a "Fight the Foley" Bundle to Reduce Device Utilization Rates and Catheter-Associated Urinary Tract Infections. *Urologic Nursing, 41(4), 208–213.*

"The incidence of CAUTIs at our institution significantly decreased from the baseline year, 1.34% in 2014 to 0.25% in 2017...with an 80% reduction in average CAUTI rate after implementation of a 5-S bundle approach for prevention over the 4-year study period" (Elkbuli et al., 2018).

Elkbuli, A., Miller, A., Boneva, D., Pizzuto, S., Bernal, E., Hai, S., & McKenney, M. (2018). Targeting Catheter-Associated Urinary Tract Infections in a Trauma Population: A 5-S Bundle Preventive Approach. *Journal of Trauma Nursing, 25(6), 368–375. https://doi.org/10.1097/JTN.0000000000000402*