PERFORMANCE EXCELLENCE 2020

Main Line Health®

Indwelling Urinary Catheter (IUC)

This advisory for the management of Indwelling Urinary Catheter devices was developed jointly by the MLH process improvement team, Infection Prevention, nursing and physician partners. Multiple sources were used including expert opinion and the Centers for Disease Control and Prevention (CDC) Clinical Practice Guidelines.

KEY POINTS

- Indwelling Urinary Catheter (IUC) placement and utilization to be based on medical necessity and meeting the CDC Guidelines for use
- Consider use of alternatives to IUC
- Perform pericare at least twice daily and as needed → Process Measure
- Maintain sterile closed system with unobstructed flow
- "Urinalysis with Hold Culture" should be the only test used for evaluation of inpatients with a possible urinary tract infection → Process Measure
- Document necessity and plan for removal daily → Process Measure
- Utilize the nurse-driven Foley removal protocol

Why focus on CAUTI reduction?

- CAUTI is the most common healthcare-associated infection resulting in thousands of deaths each year and billions in added costs
- The most important risk factor for developing a CAUTI is the prolonged use of an IUC
- MLHS had 45 CAUTIs between April '16—March '17, which were more than expected

GOALS

- Eliminate catheter associated urinary tract infections (CAUTI)
- Reduce urinary catheter device utilization by 10%

PROCESS MEASURES

Process Measure

1. Use of "Urinalysis with Hold Culture" order
2. Documented clinical necessity in the Foley Catheter Care section of SmartChart
3. Documented pericare using the ADLs pericare checkbox in SmartChart by RN daily
4. Documented necessity of IUC and plan for removal daily by physician in progress note

Safe and Careful Insertion — Important Points (a)

Physicians, NP, PA, RN

- Insert a IUC only if patient meets MLH-approved indications **(a)**
- Consider use of alternatives to urinary catheter **(b)**
- Gather materials needed including standard IUC Kit
- Perform hand hygiene and pericare prior to insertion
- Insert IUC ensuring sterile and standard technique (Using two trained staff if possible)
- Apply securement device to prevent movement

Maintenance

RN, PCT

- Perform hand hygiene **(c)**
- Complete pericare at least twice a day and as needed
- Document pericare when performed using *Foley Care* checkbox in SmartChart or *Lines, Drains, Airways, Tubes, and Wounds Properties* in EPIC (see pages 4-5) → Process Measure
- Maintain sterile closed system
- Maintain unobstructed flow by avoiding kinks and dependent loops
- Keep drainage bag below bladder
- Collect urine from port, do not drain from tubing
- Empty drainage bag regularly using dedicated collection container
- Replace collection container every 24 hours

Safe and Careful Insertion Notes

(a) Indwelling Urinary Catheter Indications

- Known or suspected urinary tract obstruction
- Neurogenic bladder/acute spinal cord pathology
- Recent urologic surgery, bladder injury, pelvic surgery (i.e., GYN, colorectal surgery), or recent surgery involving structures contiguous with the bladder or urinary tract
- Urinary incontinence in a patient with Stage III or Stage IV pressure ulcers on the trunk, perineal wounds, or necrotizing infections
- Need for accurate measurement of urinary output in a critically ill patient
- Gross hematuria in patients with potential clots (for irrigation)
- Post-surgical procedure, discontinue within 24 -48 hours
- Epidural catheter still in place
- Palliative care for terminally ill
- Physician order to maintain catheter

(b) IUC Alternatives

- External male catheter
- Intermittent straight catheterization
- Male urinal
- Scheduled toileting
- Bladder scanning

Necessity and Removal

Physicians

- Evaluate continued need for IUC with transition in level of care
- Document daily in the progress note: 1) duration of dwell, 2) indication, and 3) plan for removal →  Process Measure

Bedside RN

- Discuss IUC necessity and plan for removal at all handoffs and at the safety huddle
- Review IUC necessity with the physician and document it on a daily basis by using checkbox for Foley Necessity (see page 4) →  Process Measure
- Consider alternatives when indwelling catheter is no longer indicated **(b)**
- Remove IUC when the IUC no longer meets indications **(a)** and meets Nurse-Driven Foley Removal Protocol criteria **(d)**

Urinalysis with Hold Culture

Physicians

- "Urinalysis with Hold Culture" order should be the **only** test used for evaluation of inpatients with a possible urinary tract infection →  Process Measure
- Urinalysis to be interpreted within 24 hours
- Order "Add On: Urine Culture" only if urinalysis suggests infection

Bedside RN

- Collect one sample for culture and one for urinalysis simultaneously and send both specimens to lab

Maintenance Notes

(c) Perform Hand Hygiene

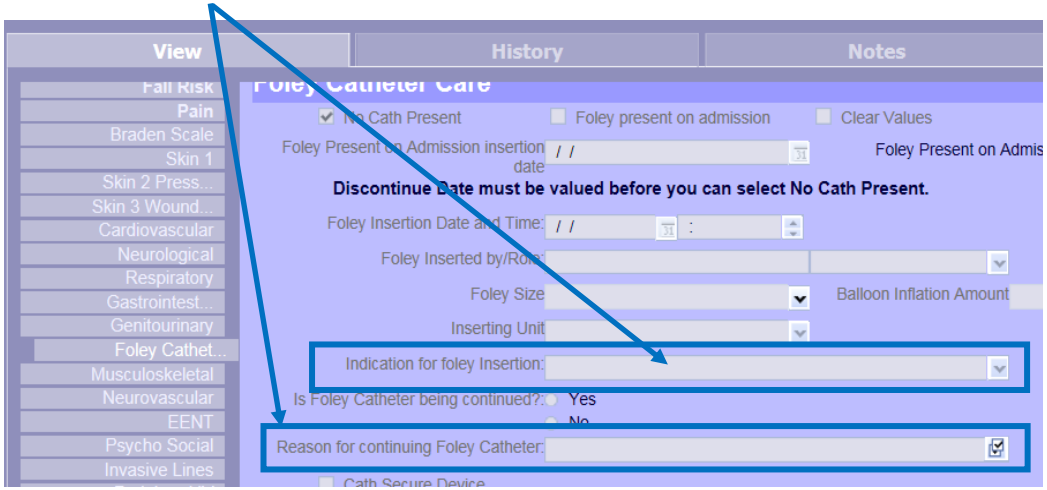
- Prior to performing pericare
- Prior to catheter manipulation
- After catheter manipulation
- Prior to container manipulation
- After container manipulation
- As needed

Necessity and Removal Notes

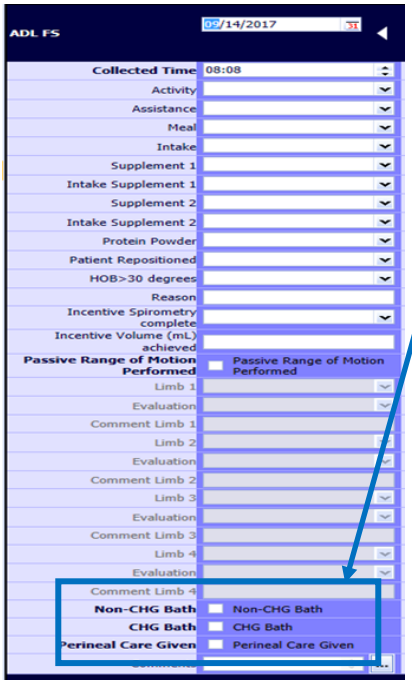
(d) Nurse-Driven Urinary Catheter Removal Criteria

- The patient is awake, alert and oriented and can verbally express they had no trouble voiding before the catheter was placed
- Patient is able to resume their voiding position
- A physician order for strict I&O is discontinued or the patient is able to cooperate with strict I&O monitoring
- If a Foley is present post invasive cardiac or radiological procedure, confer with physician to remove catheter unless patient meets MLH-approved indications (a)
- Epidural catheter is removed
- A physician order is required for discontinuing the catheter for patients who have had recent urologic surgery, bladder injury, pelvic surgery (i.e. GYN, colorectal surgery) and/or recent surgery involving structures contiguous with the bladder or urinary tract
- Record in EMR "Indwelling urinary catheter discontinued per protocol" including date, time and the signature of the RN
- There is no need for a routine urine culture upon removal of the Foley

Bedside RN must confirm that the device was assessed daily for necessity by documenting indication for insertion or reason for continuing catheter in SmartChart:



Bedside RN to document that pericare was provided in the ADLs section of SmartChart:



This advisory for the management of Indwelling Urinary Catheter devices is based on the best available scientific evidence at the time of publication. It is not a prescription for every physician or every patient, not does it replace clinical judgment.

For questions or concerns, please contact your campus' Infection Preventionist (IP) available at http://intranet/infectionprevention/.

References

CDC — Center for Disease Control. 2009."Guideline for Prevention of Catheter-Associated Urinary Tract Infections" https://www.cdc.gov/infectioncontrol/guidelines/CAUTI/index.html

TJC — The Joint Commission. 2016. "National Patient Safety Goal for Catheter Associated Urinary Tract Infections (CAUTIs)." https://www.jointcommission.org/assets/1/6/NPSG_Chapter_HAP_Jan2017.pdf

APIC — Association for Professionals in Infection Control and Epidemiology (APIC). 2015. "APIC Implementation Guide: Guide to Preventing Catheter Associated Urinary Tract Infections ." Web 6-87 https://apic.org/Resources/Topic-specific-infection-

AJIC — Regagnin, DA et al. 2016. "Sustainability of a program for continuous reduction of catheter-associated urinary tract infection." http://www.ajicjournal.org/article/S0196-6553(15)01239-0/pdf

Urologic Nursing — Strouse, A. 2015. "Appraising the Literature On Bathing Practices And Catheter-Associated Urinary Tract Infection Prevention." https://www.ncbi.nlm.nih.gov/pubmed/26298937

Resources

http://intranet/infectionprevention/

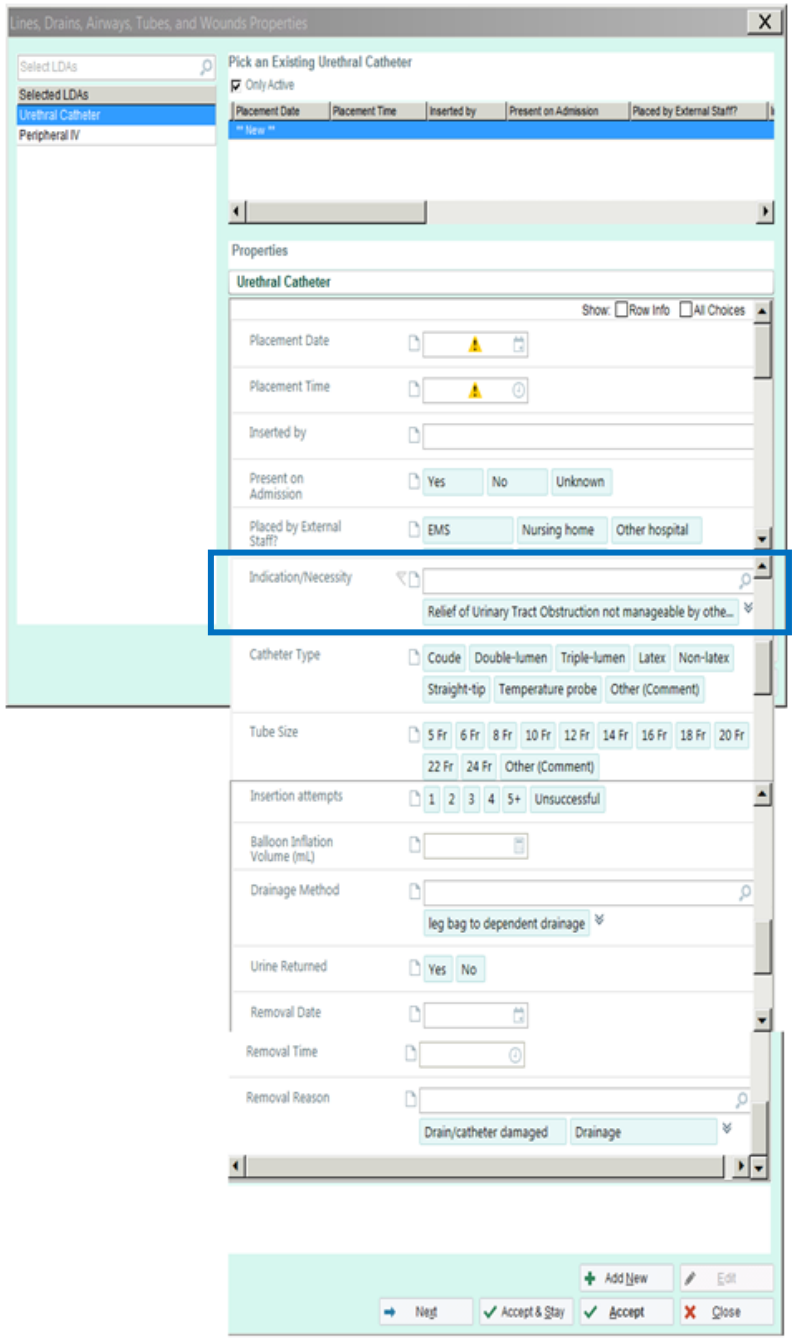
http://www.bardmedical.com/products/urological-drainage/foley-trays-and-kits/surestep-foley-tray/

https://www.cdc.gov/hai/pdfs/toolkits/cautitoolkit_3_10.pdf

https://www.cdc.gov/infectioncontrol/pdf/guidelines/cauti-guidelines.pdf

Development Team

Dr. Mark Ingerman	Heather Arata
Eileen Sherman	Dr. Jon Doroshow
Margarita de la Fuente	Paula Bellenzeni
Dr. Karl Bezak	Trish McCusker
Kathy Francis	Roger Paul



EPIC Documentation

Bedside RN must confirm that the device was assessed daily for necessity by documenting indication for insertion or reason for continuing catheter in Epic: