Urinary catheter practices:

Is your team always doing the right thing?

Your goal is to keep patients safe from catheter-associated urinary tract infections (CAUTIs). You have protocols in place for everyone to follow. Yet practice variation still happens and CAUTIs still occur. What's going on? And how can you lower CAUTI rates?

Let's take a look at what Medline identified in 2022, starting with the placement of indwelling urinary catheters (IUCs).

Practice audits

Of more than 2,500 IUC placements (in multiple US hospitals)[1]:

Bed sheet clamp was not used to secure the tubing

Why it matters: Bags attached to moveable objects increase trauma risk because of pulling. The catheter drainage bag can be placed near the bed's foot by securing tubing to the bottom sheet using the clip on the drainage tube to hook the bag on the bottom bed rail.[3]

Catheter drainage bags were hung with dependent loops

Why it matters: Dependent loops trap drained urine and are suspected of impeding bladder drainage and increasing the residual volume of retained urine in the bladder.[2]

No label with date/time of insertion was placed on the drain bag or urine meter

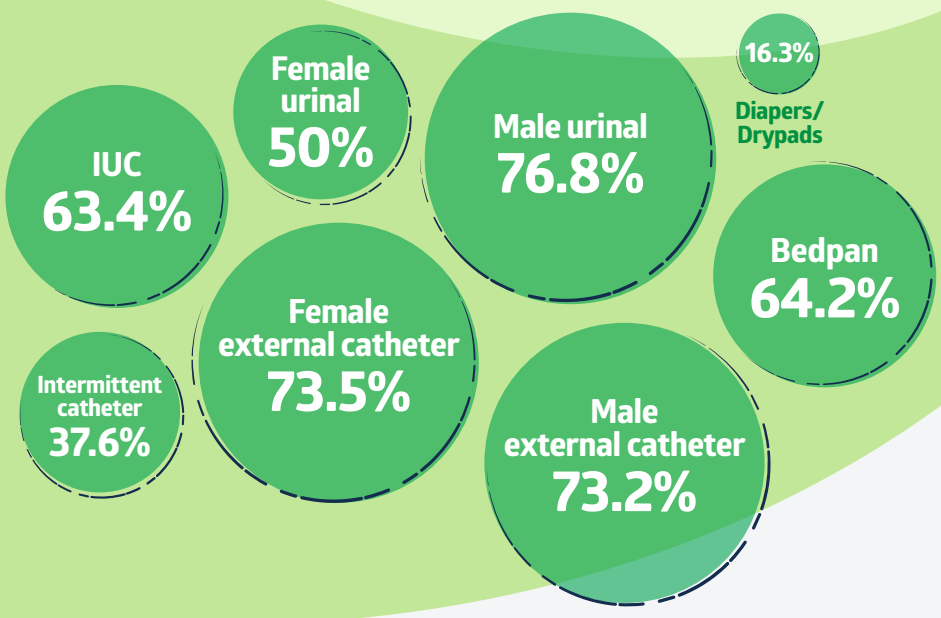
Why it matters: A label sticker on a patient's catheter bag reminds caregivers that an IUC is still in use; it may also remind staff of appropriate indication to continue catheterization.[4]

Staff surveys

Of more than 2,100 participants (from multiple US hospitals)[1]:

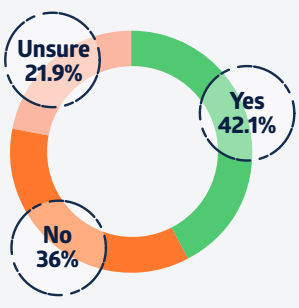
Interventions or devices used if the patient is ordered for 24-hour intake/output

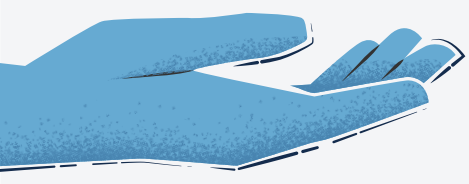
Why it matters: When urine output monitoring is needed to provide care but hourly measurement is not required, alternatives to indwelling catheters should be prioritized.[5]



Have a nurse-driven protocol enabling nurses to bladder scan and straight cath the patient without a physician order

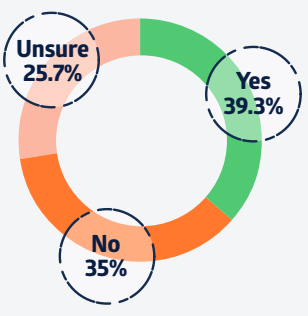
Why it matters: Nurse-driven protocols and handheld bladder scanners have been shown to reduce the risk of CAUTI. A straight catheter can be used for one-time, intermittent or chronic voiding needs.[5]





Have a protocol for straight cath after an IUC is removed without post-op or physician set of orders

Why it matters: IUCs should be discontinued within 24 hours or less after surgery unless there is an appropriate indication for continued post-operative use. Straight cathing after IUC removal prevents urinary retention patients may have post-operatively.[5]



How often bladder scanner used to determine next steps for patient care

13.3%	45.8%	34.1%	5.0%	1.8%
Always	Often	Sometimes	Rarely	Never

Why it matters: This tool should be used to assess and confirm urinary retention before placing a catheter to address suspected urinary retention. Its use reduces unnecessary catheterization when the bladder's volume is not the cause of the patient's symptoms.[5]

Why bladder scanner used

94.3%	91.1%	70.2%	5.3%
Patient has urine retention	To assess adequate bladder emptying	Foley isn't draining	Other

Interventions used if the patient has not voided in 4-6 hours

89%	6.2%	3.3%	1.5%
Bladder scanner	Other	Intermittent catheter	IUC

S M T W T F S

94.2% Assess daily need for the IUC

51.2% Have delayed removing the IUC if clinically indicated, due to competing priorities

Why it matters: The most important risk factor for developing CAUTI is prolonged use of an IUC. Catheters should only be used for appropriate indications and should be removed as soon as they are no longer needed.[4]

What you can do

It's all about making education continuous. Keep the findings shown here in mind for future teachable moments. And make sure your protocols include clear processes that everyone can follow every time to prevent CAUTI.

Medline is here to help with our comprehensive Urological Solution.

Infection Prevention

References: **1.** Data on file. Danek, G., et al. (2015, May). **2.** Prevalence of Dependent Loops in Urine Drainage Systems in Hospitalized Patients. Journal of Wound, Ostomy and Continence Nursing, 42(3), 273–278. Prevalence of Dependent Loops in Urine Drainage Systems in Hospitalized Patients—PMC (nih.gov). **3.** UroToday. Prevention of Catheter-associated Urinary Tract Infections through Evidence-based Management of Indwelling Urinary Catheters in Adult Patients. Retrieved May 5, 2023, from https://www.urotoday.com/cauti-challenge-cdc-guidelines/133949-prevention-of-catheter-associated-urinary-tract-infections-through-evidence-based-management-of-indwelling-urinary-catheters-in-adult-patients.html. **4.** Meddings, J. Appropriate Use and Prompt Removal of Indwelling Urinary Catheters. Centers for Disease Control and Prevention (CDC). Retrieved May 5, 2023, from https://www.cdc.gov/infectioncontrol/pdf/strive/CAUTI102-508.pdf. **5.** Agency for Healthcare Research and Quality (AHRQ). Toolkit for Reducing Catheter-Associated Urinary Tract Infections in Hospital Units: Implementation Guide. Retrieved May 5, 2023, from https://www.ahrq.gov/hai/cauti-tools/guides/implguide-pt3.html