AACN Practice Alert
Prevention of Catheter-Associated Urinary Tract Infections in Adults

Scope and Impact of the Problem
Urinary tract infections (UTIs) are the most common hospital-acquired infection, accounting for up to 40% of infections reported by acute care hospitals. The major risk factor associated with catheter-associated urinary tract infection (CAUTI) is the presence of an indwelling urinary catheter. Despite efforts to reduce the occurrence of CAUTIs, their frequency increased 6% between 2009 and 2013. CAUTIs increase hospital cost and are associated with increased morbidity and mortality. CAUTIs are considered by the Centers for Medicare and Medicaid Services to represent a reasonably preventable complication of hospitalization. As such, no additional payment is provided to hospitals for costs related to CAUTI treatment.

Expected Practice
1. Assess patient for accepted indications and alternatives before placement of any indwelling urinary catheter. [level A]
2. Adhere to aseptic technique for placement, manipulation, and maintenance of indwelling urinary catheters. [level C]
3. Document all instances of indwelling urinary catheters including insertion date, indication, and removal date. [level C]
4. Discontinue indwelling urinary catheters promptly as soon as indications expire. [level A]

Supporting Evidence
Assessment of Need for Indwelling Catheter
1. Prolonged catheterization is the major risk factor for CAUTIs. Develop written guidelines for urinary catheterization, and include indications for indwelling urinary catheterization and ensuring that catheter placement is limited to patients who meet indications. Bladder scanning can be used to assess need for catheterization.

Adherence to Proper Technique
1. Recommended infection control measures can prevent 17% to 69% of CAUTIs. Maintenance of the catheter should include use of a securement device, unobstructed flow by keeping tubing...
free of kinks and below the level of the bladder, maintenance of a closed system, and regular emptying of the collection bag. Avoid use of antibiotic-coated or silver-coated urinary catheters. Replacing basin bathing with plain wipe bathing has been recommended. Cleaning the catheter regularly with wipes impregnated with chlorhexidine gluconate has been suggested as an intervention to decrease CAUTIs. Implementing standards and monitoring for catheter insertion and management technique are also recommended. Having devices and supplies (eg, condom catheters, penis pouches, incontinence products) available as an alternative to indwelling catheters can help decrease use. If inserting an indwelling catheter, use the smallest catheter possible.

**Documentation**
1. Daily, review the necessity for catheter continuation for all patients with urinary catheters.
2. Develop systems to ensure prompt removal of catheters when no longer indicated; consider nurse-driven removal protocols.

**Monitoring Use of Indwelling Catheters**
1. It has been noted that indwelling urinary catheters are often placed without sufficient rationale and/or remain in place after indications expire. Use of an intervention reminder that a catheter was in place and/or a stop order to prompt removal of unnecessary catheters reduced the CAUTI rate by 53%. Implementing infection surveillance programs that include unit-based urinary catheter days and rates of CAUTIs have been helpful. The ability to do surveillance and give performance feedback is key to long-term success.

**Implementation/Organizational Support for Practice**
**Consider** use of a previously developed set of criteria or tool, such as the HOUDINI Protocol, to standardize assessment and a nurse-driven protocol for assessing the initial and ongoing need for indwelling catheters. Make insertion of an indwelling catheter a 2-person activity to ensure maintenance of aseptic technique. Include information about catheter days and continued assessment during nurse-to-nurse handoff. Participate in daily rounds as part of the discussion of the ongoing need for each catheter. Identify a unit champion to continue the focus on use of indwelling catheters, maintenance, alternatives, and urinary tract infection rates for the unit. Identify the particular guidelines, criteria, and surveillance mechanism that is being used in your facility to measure catheter days and urinary tract infections.

**Need More Information or Help?**
1. Contact a clinical practice specialist for additional information: go to www.aacn.org then select Practice Resource Network.

Original Author: Ellen Elpern, RN, MSN, CCNS
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Contributing Authors: Alyson Dare Kelleher, RN, BSN, CCRN, and Kathleen S. Oman, RN, PhD, FAEN, FAAN
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Financial Disclosures
None reported.
References