

Catheter-Associated Urinary Tract Infection (CAUTI) Prevention Strategies

A gap analysis is a tool used to assess the difference between actual practice and expected performance. It is useful to compare best practice guidelines against your currently accepted practices. It is important to assess practice through observation and audit rather than relying on if a policy is in place, as practice can vary from policy.

CORE Prevention Strategies = Strategies that should always be in place.

ENHANCED Prevention Strategies = Strategies to be considered in addition to core strategies when:

- There is evidence that the core strategies are being implemented and adhered to consistently.
- There is evidence that CAUTI rates are not decreasing.

Gap Analysis Questions	Yes	No	If answered question "No" – identify the Specific Action plan(s) including persons responsible and timeline to complete.
Patient and Family Education			
1a) The patient and family have been educated about their urinary catheter, such as symptoms of a urinary tract infection, catheter care, and what the patient and family can do to help prevent an infection [4]. • If Patient and Family Advisory Committee available, consider having them review educational materials prior to publication	<input type="checkbox"/>	<input type="checkbox"/>	
1b) If the patient is to be discharged with an indwelling catheter in place, the patient and family have been educated on how to care for the catheter and symptoms of infection, using teach back method to ensure patient's understanding.	<input type="checkbox"/>	<input type="checkbox"/>	
Appropriate Catheter Use			
2a) The facility has a process in place to insert urinary catheters only when necessary, following CDC/HICPAC indications for urinary catheter insertion and use [1,3,4].	<input type="checkbox"/>	<input type="checkbox"/>	
2b) Include insertion criteria into urinary catheter order process [1]. • Utilize the electronic health record to hard wire insertion criteria into order.	<input type="checkbox"/>	<input type="checkbox"/>	
2c) The facility has a process in place to consider the use of alternatives to urinary catheter placement, including [1-4]: • Use of condom catheters • Straight catheterization • Use of external female catheters	<input type="checkbox"/>	<input type="checkbox"/>	
2d) The facility uses a portable ultrasound device to assess the patient's urine volume to reduce unnecessary catheter insertions prior to making a decision regarding catheter placement [2-4].	<input type="checkbox"/>	<input type="checkbox"/>	
The facility's indwelling catheter placement practices include the following indications for appropriate placement [1-4]:	<input type="checkbox"/>	<input type="checkbox"/>	
2e) Management of acute urinary retention and urinary obstruction (consider use of bladder scanner to assess urinary retention).	<input type="checkbox"/>	<input type="checkbox"/>	
2f) Strict urine output monitoring in critically ill patients (consider alternatives other than indwelling catheters to measure urine output) [1-4].	<input type="checkbox"/>	<input type="checkbox"/>	
2g) Perioperative use for selected surgical procedures such as [1-4]: • GU surgery or other surgery on contiguous structures of the GU tract • Anticipated prolonged duration of surgery (catheters inserted for this reason should be removed in PACU) • Patients anticipated to receive large-volume infusions or diuretics during surgery • Need for intraoperative monitoring of urinary output	<input type="checkbox"/>	<input type="checkbox"/>	
2h) Patients requiring prolonged immobilization (e.g., potentially unstable thoracic or lumbar spine, multiple traumatic injuries such as pelvic fractures) [1-4].	<input type="checkbox"/>	<input type="checkbox"/>	
2i) Incontinent patient requiring assistance in healing of open sacral or perineal wounds [1-4].	<input type="checkbox"/>	<input type="checkbox"/>	
2j) Improving comfort of care at end of life [1-4].	<input type="checkbox"/>	<input type="checkbox"/>	
The facility sets clear expectations that indwelling catheter placement is not appropriate for the following reasons [2-4]:	<input type="checkbox"/>	<input type="checkbox"/>	
2k) Incontinence.	<input type="checkbox"/>	<input type="checkbox"/>	
2l) Specimen collection [3].	<input type="checkbox"/>	<input type="checkbox"/>	
2m) Diagnostic test when patient able to void [3].	<input type="checkbox"/>	<input type="checkbox"/>	

Gap Analysis Questions	Yes	No	If answered question "No" – identify the Specific Action plan(s) including persons responsible and timeline to complete.
Urine Culturing Practices			
5a) Develop standardized practices and indications for obtaining urine cultures based on clinical guidelines (e.g., American College of Critical Care Medicine [5]; Centers for Disease Control and Prevention [3]; Infectious Diseases Society of America [2]).	<input type="checkbox"/>	<input type="checkbox"/>	
5b) The facility has a process in place to evaluate practices and indications for ordering urine cultures to support the following practices/rationale [2]: 1. Based on patient signs/symptoms compatible with CAUTI 2. Part of an evaluation of sepsis without a clear source 3. Prior to urologic surgeries where mucosal bleeding anticipated or transurethral resection of prostate 4. Early pregnancy (avoid urinary catheters if possible)	<input type="checkbox"/>	<input type="checkbox"/>	
5c) Practices and indications for obtaining urine cultures discourage the following practices [2]: 1. Urine cultures to screen patients on admission (in the absence of CAUTI symptoms) 2. Standing orders for urine cultures in the absence of an appropriate indication 3. Urine quality (pyuria, odor, color, turbidity) to trigger urine culture 4. Ordering urine cultures without a clinical assessment of the patient's condition; ensure that the signs and symptoms are compatible with CAUTI per IDSA Recommendations [2] 5. Pan culturing (i.e., requesting multiple specimens and tests at once in an attempt to identify a possible infection) 6. Reflex orders for urine cultures based on urinalysis results for catheterized patients; each urinalysis result should be evaluated prior to urine culture order 7. Repeat urine cultures to document clearing of bacteriuria	<input type="checkbox"/>	<input type="checkbox"/>	
5d) The facility has a process in place that addresses treatment of catheter-associated asymptomatic bacteriuria (presence of bacteria in urine culture without signs/symptoms of CAUTI); specifically, avoid the use of antimicrobials for asymptomatic bacteriuria except for patients with selected conditions (e.g., undergoing urologic procedures, pregnancy) [1-2, 6-7].	<input type="checkbox"/>	<input type="checkbox"/>	
5e) The facility has a process in place that addresses screening of catheter-associated asymptomatic bacteriuria; specifically, avoid screening patients for asymptomatic bacteriuria except for patients with selected conditions (e.g., undergoing urologic procedures, pregnancy) [1-2, 6-7] and patients at high risk for urinary tract infection [5].	<input type="checkbox"/>	<input type="checkbox"/>	
5f) The facility has a process in place to evaluate uncommunicative, febrile patients whereby an alternative explanation of fever is assessed prior to urine evaluation [5,8].	<input type="checkbox"/>	<input type="checkbox"/>	
5g) The facility has a process in place to conduct periodic audits on urine culturing practice patterns to determine trends (e.g., among provider groups, specialties, units) [4].	<input type="checkbox"/>	<input type="checkbox"/>	
Indwelling Catheter Removal			
The facility has a process in place for:			
6a) Daily review of catheter necessity [1,3-4]. · Consider incorporating into already-established rounds	<input type="checkbox"/>	<input type="checkbox"/>	
6b) Utilizing electronic or other reminders such as an automatic stop order that requires review of catheter indications and renewal of indwelling catheter order [1-4].	<input type="checkbox"/>	<input type="checkbox"/>	
6c) Practicing hand hygiene immediately prior to the removal of the catheter [1].	<input type="checkbox"/>	<input type="checkbox"/>	
6d) Evaluating the need for reinsertion post catheter removal e.g., bladder scanner to assess urinary retention.	<input type="checkbox"/>	<input type="checkbox"/>	
6d) Implementation of a nurse-driven protocol to empower nurses to evaluate and discontinue unnecessary urinary catheters [1-2,4].	<input type="checkbox"/>	<input type="checkbox"/>	

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