

Indwelling Urethral Catheter: Care and Management (Short term) – Adult

For perinatal population, please follow specific perinatal guidelines and protocols for clinical indication for indwelling catheters

Site Applicability

All VCH Acute Care sites

Practice Level

Basic Skills for the following professions (within their respective scope of practice):

- RN, RPN, LPN

Policy Statement

The continued need for indwelling catheter must be re-assessed daily for short term catheters (less than 30 days).

Clinical indications include:

(For perinatal population, please follow specific perinatal guidelines and protocols for clinical indication for indwelling catheters)

- Peri-operative for selected surgical procedures
- Urinary retention – unresolved with intermittent catheterization
- Strict monitoring of urine output and no other means are sufficient
- Facilitate healing of sacral or perineal Stage III or IV pressure ulcers / wounds / incisions / donor sites or flaps
- Immobilization with inability to void with alternative measures (e.g. urinals, condom catheter, intermittent catheterization)
- Improved comfort for end-of-life care

(Note: see [Clinical Indications](#) for more information):

Need to Know

- **The most important factor in the development of catheter associated urinary tract infections is how long the indwelling catheter is in place – daily re-assessment of need for the catheter is critical.** (see [Clinical Indications](#) for Indwelling Catheter). **Removal as soon as possible is recommended** (see [Appendix A – Decision-making regarding removal Algorithm](#))
Exclusion: Removal of urinary catheter in gynecology/urology requires consultation with Physician/NP prior to removal.
- There is a 3 to 7% increase in daily risk of developing a CAUTI for a patient with an indwelling urinary catheter.
- 50% of patients that have an indwelling catheter for greater than 5 days, develop bacteriuria or yeast which can progress to infection if the catheter is not removed. Asymptomatic bacteriuria is not defined a UTI.
- Bacteriuria occurs in over 80% of patients within 10 days of insertion and 100% are affected after 30 days. It can be endogenous: patient's own bugs or exogenous or from contaminated hands of HCPs or equipment.
- Routine surveillance urine cultures are not indicated and urine cultures should only be initiated in the presence of clinical symptoms. For information on clinical signs of UTI and collection of C&S, see guideline below and D-00-07-30110: [CAUTI guideline](#).

Potential complications of Indwelling Urinary Catheters include:

- [urinary tract infection](#),
- [meatal irritation/urethral trauma/catheter associated pain](#)
- [obstructed catheter patency](#), and
- [bladder spasm](#)

For more information on preventing catheter associated urinary tract infections see [CAUTI guideline](#)

Practice Guideline

This section outlines assessments and interventions to reduce the likelihood of complications.

Clinical Indications for Indwelling Catheter	
Assessment	Interventions
<p>Assess daily that there is an appropriate Indication for indwelling urinary catheter. Appropriate indications include: <i>(for perinatal population, please follow specific perinatal guidelines and protocols for clinical indication for indwelling catheters).</i></p> <ul style="list-style-type: none"> • Peri-operative for selected surgical procedures • Urinary retention – unresolved with intermittent catheterization • Strict monitoring of urine output and no other means are sufficient • Facilitate healing of sacral or perineal Stage III or IV pressure ulcers / wounds / incisions / donor sites or flaps • Immobilization with inability to void with alternative measures (e.g. urinals, condom catheter, intermittent catheterization) • Improved comfort for end-of-life care 	<ul style="list-style-type: none"> • Assess daily for appropriate indication for catheter (see Appendix A- Removal Algorithm – decision support tool) Exclusion: <i>Removal of urinary catheter in gynecology/urology requires consultation with Physician/NP prior to removal.</i> • If removal required (see D-00-12-30109: Indwelling Urinary Catheter, Procedure for insertion and removal) • If there is still a clinical indication for catheter document clinical indication for catheter need and continue to reassess daily
Urinary Tract Infection (UTI) (see CPD VCH-U-1000 for CAUTI)	
Assessment	Interventions
<p>Clinical Indicator of UTI (symptoms presentation may vary for spine, neuro or elderly patients due to impaired cognition or sensation) :</p> <ol style="list-style-type: none"> 1. One of the following in febrile patients (oral temp greater than 37.8 degrees Celsius) or two of the following in afebrile patients (VCH-U-1000: Appendix A: CAUTI algorithm): <ul style="list-style-type: none"> • Acute costovertebral angle pain or tenderness (flank pain) • Suprapubic pain • Gross hematuria • Swelling, or tenderness of the testes, epididymis, or prostate • General malaise 2. Obtain Urinalysis and culture and sensitivity when two symptoms present (see CAUTI guideline for sampling requirements) <p>Note: only after clinical assessment and ruling-out other possible causes should changes in mental status, and sudden fever, rigors or new-onset hypotension suggest UTI in patients with</p>	<ul style="list-style-type: none"> • Complete daily assessment for catheter need and remove as soon as it is not required • An indwelling urinary catheter may be removed by an RN, RPN or LPN (see D-00-12-30109 for removal procedures). (NOTE: Physician/NP order to leave in would supersede this algorithm). • Strict hand washing before and after handling catheter • Catheter care bid and prn with soap and water. Move down catheter in circular movement for 10 cm. • Any encrustation noted on catheter should be removed through catheter care • Maintain closed drainage system. Change entire system (catheter and drainage system) if disconnection between the catheter and drainage is required. • If using leg drainage bag system, connect night drainage bag to leg bag with piece of connection tubing rather than disconnecting catheter from drainage tubing to facilitate maintaining a closed system. • Position drainage bag below the level of the bladder. DO NOT place drainage bag on floor

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<p>indwelling catheters.</p> <p>Note: malodorous/cloudy urine is NOT a sign/symptom of UTI and is NOT an indication to obtain urine cultures.</p>	<ul style="list-style-type: none"> • Avoid contact between drainage bag tube and collection device when emptying bags • Empty drainage bags on a regular basis every 6 to 8 hrs. • DO NOT share collection containers for emptying drainage bags between patients. <ul style="list-style-type: none"> ○ Label collection container with date and patient name. ○ Change container q24h. • Prevent backflow of urine into the bladder from the urine drainage bag • Ensure there are no dependent loops present in the drainage tube. Stagnant urine causes intraluminal colonization and impairs proper emptying of the bladder.
Meatal Irritation/Urethral Trauma/Catheter Associated Pain	
<p>Assessment</p> <ul style="list-style-type: none"> • Inspect urinary meatus for signs and symptoms of infection and/or skin breakdown • Assess degree of encrustation around meatus • Inspect catheter securement 	<p>Interventions</p> <ul style="list-style-type: none"> • Secure catheter to patient with tape or securement device to avoid traction • For uncircumcised males - ensure foreskin is in downward position over glans • To prevent urethral trauma, follow manufacturer guidelines for filling balloon (DO NOT over or underfill) found in D-00-12-30109; see (Bard Foley Catheter Inflation/Deflation guidelines). • Catheter care bid and prn with soap and water
Obstructed Catheter Patency	
<p>Assessment</p> <ul style="list-style-type: none"> • Monitor catheter tubing for patency • Assess urine for increased sedimentation or cloudiness • Assess for bypassing around catheter at meatus 	<p>Interventions</p> <ul style="list-style-type: none"> • Encourage adequate fluid intake as patient condition permits • Assess for constipation, intervene as required (see unit specific bowel protocol) • Ensure free flow of urine (no kinks, dependent loops) • Routine irrigation not recommended. If obstruction is suspected, remove catheter and assess ability to void. Re-insert new catheter if long-term catheterization is required (see clinical indications (above) and review D-00-12-30109: Indwelling Urinary Catheter, Procedure for Insertion & Removal)
Bladder Spasms	
<p>Assessment</p>	<p>Interventions</p>

<ul style="list-style-type: none"> • Assess pain • Assess for urine by-passing around catheter • Inspect securement of catheter 	<ul style="list-style-type: none"> • Maintain patency of catheter. • Medicate with antispasmodics if ordered (Note: use caution administering suppositories if patient has had simple open prostatectomy, radical prostatectomy or bowel surgery as rectal wall may be thin; some post-operative orders may explicitly prohibit suppositories)
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Expected Patient/Client/Resident Outcomes

- The patient will be free from catheter associated urinary tract infections (CAUTI)
- The patient will be free from urethral trauma
- The patient will have the indwelling catheter removed as soon as clinically indicated.

Patient/Client/Resident Education

- Appropriate catheter care and frequency
- Signs and symptoms of infection
- Importance of timely removal of catheter
- Importance of fluid intake/hydration
- When to alert caregiver (catheter blocks, frank blood, pain, etc)

Documentation

- Document DAILY rationale for continue use of catheter in progress notes based on criteria above
- Document data and/or care not sufficiently captured on flowsheets OR findings that fall outside expected limits or established standards of care
- Document peri-care, catheter related interventions, intake and urine output (as ordered) on appropriate site specific forms

Evaluation

- [Quality and Patient safety data](#)

Related Documents

- Indwelling urethral catheter, Procedure for Insertion and Removal ([D-00-12-30109](#))
- Catheter Associated Urinary Tract Infections (CAUTI) ([D-00-07-30110](#))

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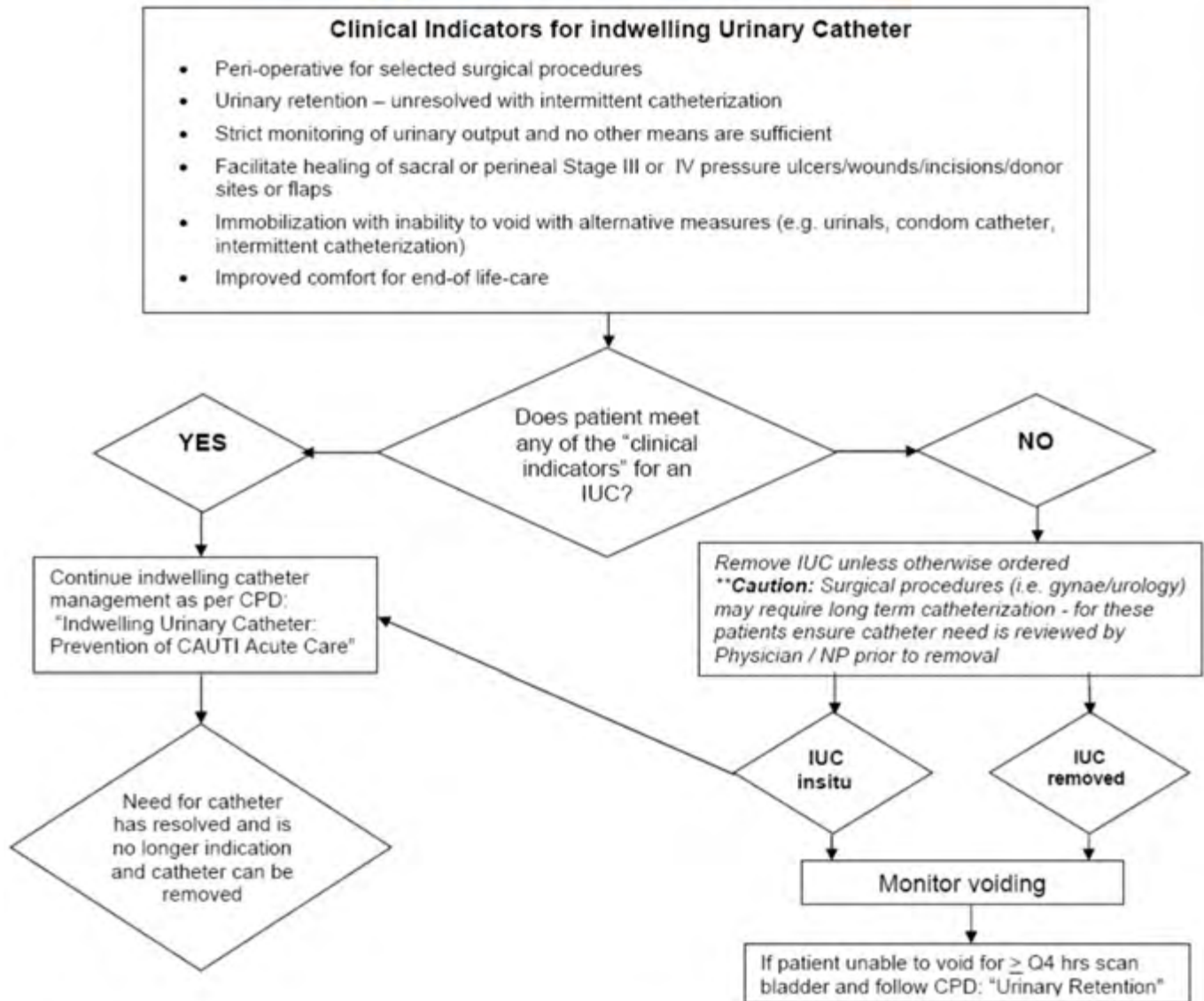
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Appendix A: Decision-making regarding Removal Algorithm

(**Exclusion:** Removal of urinary catheter in gynecology/urology requires consultation with Physician/NP prior to removal.)

Indwelling Urinary Catheter (IUC) Removal Algorithm



Catheter Management

- Perform hand hygiene before and after any manipulation of the catheter device or catheter site
- Peri-care and catheter care at insertion site BID and prn
- Use Standard Infection Control precautions
- Take a buddy with you to assist with insertions
- Choose smallest size catheter possible (12, 14)
- Use approved cleansing solution
- Wear gloves as appropriate
- Maintain sterile closed drainage
- Maintain unobstructed urine flow
- Ensure drainage bag is below bladder/bed and above the floor
- No dependent loops in drainage bag system
- Use securement device on thigh to minimize movement
- Use a new drainage measurement container daily and label with patient name and date
- Empty drainage bag every 6 to 8 hrs or sooner to prevent stasis & UTI

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Bard Foley Catheter Inflation/Deflation

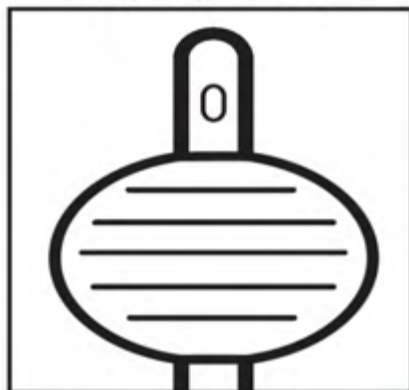
BARD® Foley Catheter Inflation/ Deflation Guidelines

Proper Catheter Inflation

Ensure that the BARD® Foley catheter balloon is positioned well within the patient's bladder. Slowly, with a gentle, constant force, inflate the BARD® Foley catheter balloon with the volume prescribed on the package. Note that the 5cc balloon must be inflated with between 9cc and 10cc of sterile water. Improperly inflated BARD® Foley catheter balloons may cause drainage and deflation difficulties. Using fluid other than sterile water may cause the balloon not to empty properly, especially after long dwell times.

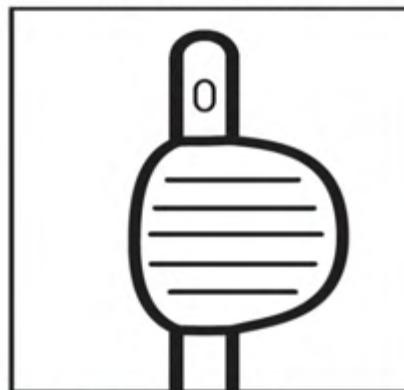
Balloon Size	Recommended Inflation Capacities
3cc balloon	5cc sterile water
5cc balloon	10cc sterile water
30cc balloon	35cc sterile water
75cc balloon	80cc sterile water

Properly Inflated



5cc Foley catheter inflated
with 10cc of water

Under Inflated



5cc Foley catheter inflated
with 5cc of water

Please see
reverse side

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Catheter Deflation

Bard Medical Division
Covington, GA 30014
800.526.4455

- Select a luer slip syringe.
- Slide the plunger of the syringe up and down the barrel of the syringe several times to “loosen it up.”
- Compress the plunger all the way and then pull back the plunger slightly so that it does not adhere to the front of the syringe barrel.
- Gently insert the syringe in the catheter valve.
- Do not use more force than is required to make the syringe “stick” in the valve.
- Allow the pressure within the balloon to force the plunger back and fill the syringe with water.
- If you notice slow or no deflation, re-seat the syringe gently. Once again, allow the balloon to deflate slowly on its own.
- If the balloon does not deflate, reposition the patient.
- Ensure that the catheter is not in traction—the proximal end of the catheter is not compressed within the bladder neck.
- Ensure that urine flows freely.
- Attempt to deflate the balloon by using the pressure in the balloon to force water into the syringe as described above.
- If the balloon still fails to deflate, apply very gentle slow aspiration. Aspiration that is too rapid, or too forceful, may cause the inflation lumen within the Foley catheter to collapse.
- If permitted by hospital protocol, the valve arm may be severed.
- If this fails, contact an adequately trained professional for assistance, as directed by hospital protocol.

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