### VUMC Guidelines for Management of Indwelling Urinary Catheters

<table>
<thead>
<tr>
<th>UC Insertion</th>
<th>UC Access/ Maintenance</th>
<th>UC Discontinuation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Preparation &amp; Procedure</strong></td>
<td>Perform hand hygiene before handling or accessing UC.</td>
<td>All patients are on the urinary catheter discontinuation protocol unless a provider order is given to exclude them.</td>
</tr>
<tr>
<td>Indications for insertion and continued use of indwelling urinary catheters include:</td>
<td>Perform perineal/meatal care gently with soap &amp; water or bath wipes at least every 12 hours, after bowel movements, and as needed.</td>
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</tr>
<tr>
<td>• Urinary retention or obstruction</td>
<td>Keep the catheter anchored with a securement device at all times to prevent catheter movement.</td>
<td>The catheter is removed when the clinical indications are no longer present.</td>
</tr>
<tr>
<td>o An epidural catheter is not an absolute indication for continued use of a urinary catheter. Patients with epidural catheters should be assessed for urinary retention on an individual basis.</td>
<td>Keep drainage port clean and securely clamped. Do not allow drainage port to touch the receiving container when emptying the drainage device.</td>
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</tr>
<tr>
<td>• Incontinence in patient with open perineal or sacral wounds</td>
<td>Empty the collection bag q 6-8 hours and prior to transport to overfilling and backflow.</td>
<td>Consider changing the catheter if the patient has a confirmed UTI. Routine catheter replacement is not recommended for prevention of CAUTI.</td>
</tr>
<tr>
<td>• Critical illness AND a need for accurate monitoring of urinary output</td>
<td>Small urine samples (urinalyses or cultures) are obtained from the access port closest to the patient. Do not send urine from the drainage bag or meter.</td>
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<tr>
<td>• Terminal illness receiving comfort care or withdrawal of care</td>
<td>Maintain unobstructed urine flow: keep drainage systems free of kinking, above floor level and below bladder level for gravity drainage.</td>
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<tr>
<td>• Perioperative use for selected surgical procedures</td>
<td>Minimize UC access; keep collection system connected unless disruption is required for patient care. (e.g., irrigation).</td>
<td>After catheter removal, assess the patient to determine ability to void, to empty the bladder, &amp; to maintain continence. If unable to void, notify provider.</td>
</tr>
<tr>
<td>o Surgeries of the GU tract or contiguous structures</td>
<td>Aseptic technique is maintained during insertion. If the catheter is contaminated during an unsuccessful attempt at placement, discard it and obtain a new insertion kit.</td>
<td>If patient is unable to void, consider I/O catheterization x 2 before replacing indwelling catheter. Consider Urology consult for urinary retention of unknown etiology.</td>
</tr>
<tr>
<td>o Anticipated prolonged duration of surgery</td>
<td>Do not inflate the balloon prior to insertion. After placement, do not inflate the balloon until urine flow is achieved.</td>
<td>Monitor compliance with elements of insertion, care, access, and discontinuation. Every member of the team is obligated to identify and correct any deviation or potential deviation of these standards.</td>
</tr>
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<td>o Anticipated to receive large volume fluids/diuretics during surgery</td>
<td>Minimize UC access; keep collection system connected unless disruption is required for patient care. (e.g., irrigation).</td>
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</tr>
<tr>
<td>o Need for intraoperative monitoring of urinary output.</td>
<td>Do not routinely replace drainage systems. If bag becomes visibly soiled or integrity is breached, use aseptic technique to change.</td>
<td></td>
</tr>
<tr>
<td>An order is required for catheter placement. When a catheter is placed emergently, or when patients are admitted with a catheter in place, an order is obtained within 24 hours.</td>
<td>Do not inflate the balloon prior to insertion. After placement, do not inflate the balloon until urine flow is achieved.</td>
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<td>Educate Patient/Family about necessity for catheter and about CAUTI prevention.</td>
<td>Minimize UC access; keep collection system connected unless disruption is required for patient care. (e.g., irrigation).</td>
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<td>If patient is at risk for difficult placement, a second person may assist with positioning and/or placement. Consider a Urology consult for patients with a history of difficult insertions or surgery.</td>
<td>Use aseptic technique when performing interventions, including obtaining specimens, emptying urine, and irrigation.</td>
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<td>Aseptic technique is maintained during insertion. If the catheter is contaminated during an unsuccessful attempt at placement, discard it and obtain a new insertion kit.</td>
<td>Do not culture asymptomatic patients (exceptions: patients who are pregnant or undergoing GU surgical procedures).</td>
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</tr>
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<td>Do not routinely replace drainage systems. If bag becomes visibly soiled or integrity is breached, use aseptic technique to change.</td>
<td>The multidisciplinary team assesses continued need for the catheter daily. Patients are assessed by a nurse for clinical indications for continued use:</td>
<td></td>
</tr>
<tr>
<td>Do not routinely replace drainage systems. If bag becomes visibly soiled or integrity is breached, use aseptic technique to change.</td>
<td>• Upon admission; Every shift or with a change in caregiver; With change in the level of care.</td>
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</tr>
</tbody>
</table>

**CAUTI** = Catheter-associated urinary tract infection; **UC** = urinary catheter
### VUMC Standards for Non-emergent Insertion and Management of Central Venous Catheters (CVCs)

<table>
<thead>
<tr>
<th>CVC Insertion</th>
<th>Insertion Site Care</th>
<th>CVC Access</th>
<th>CVC Discontinuation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation</td>
<td>Procedure</td>
<td></td>
<td>Remove CVC when no longer medically necessary and when an alternative IV access (e.g. peripheral IV) can serve the patient’s needs.</td>
</tr>
<tr>
<td>Educate Patient/Family about CLABSI prevention and obtain informed consent.</td>
<td>Prep site with chlorhexidine (CHG); allow to dry before procedure starts.</td>
<td>Assess insertion site and catheter each shift.</td>
<td>Minimize CVC access; bundle the collection of multiple lab tests to a single CVC access when possible.</td>
</tr>
<tr>
<td>Obtain all supplies.</td>
<td>Place sterile full body drape over patient.</td>
<td>Report abnormal findings to physician or designee.</td>
<td>Perform hand hygiene before accessing CVC.</td>
</tr>
<tr>
<td>Perform hand hygiene before procedure.</td>
<td>After insertion, a transparent CHG-impregnated dressing is placed, maintaining sterility of the insertion site.</td>
<td>Daily evaluation by primary care team re: CVC necessity.</td>
<td>Scrub to disinfect access port with an alcohol or CHG prep pad using a twisting motion 5 times around the threads and scrubbing 5 times across the septum. Allow to dry before accessing.</td>
</tr>
<tr>
<td>Perform time-out.</td>
<td>Confirm CVC placement radiographically, as appropriate.</td>
<td>Change dressings at regular intervals (Q7d for transparent, q24hrs if gauze).</td>
<td>Daily evaluation by primary care team re: CVC necessity.</td>
</tr>
<tr>
<td>Proceduralist(s) wears cap, mask, sterile gloves, sterile gown.</td>
<td>When adherence to aseptic technique cannot be ensured (i.e., when catheters are inserted during a medical emergency), replace all catheters as soon as possible and after no longer than 48 hours. Lines placed at outside facilities are considered for replacement.</td>
<td>Change dressing if damp, soiled or non-occlusive.</td>
<td>Guidewire exchange of CVC follows same procedures as CVC insertion.</td>
</tr>
<tr>
<td>Nursing personnel is present in room; wears cap and mask if not in contact with sterile field.</td>
<td>After 3 attempts at placement or before changing sites, a second proceduralist is consulted.</td>
<td>Perform dressing changes as a sterile procedure.</td>
<td>Trained providers discontinue CVCs.</td>
</tr>
<tr>
<td>Site selection is based on patient needs and condition. Subclavian site is preferred; femoral placement in adults is avoided.</td>
<td>Ultrasound should be used for guidance prior to or during UJ placement, and may be useful to evaluate other vessels prior to line placement.</td>
<td>Change soiled, leaking, potentially contaminated hub caps.</td>
<td>Routine CVC replacement is not recommended for prevention of CLABSI.</td>
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<td>Ultrasound should be used for guidance prior to or during UJ placement, and may be useful to evaluate other vessels prior to line placement.</td>
<td></td>
<td></td>
<td>Avoid guidewire exchange to replace CVCs in patients suspected of having catheter-related infection.</td>
</tr>
</tbody>
</table>

- **CLABSI** = Central line-associated bloodstream infection; **CVC** = central venous catheter (includes temporary central lines, PICCs, tunneled catheters, etc)
- For more detail see [CL 30-07.02](#) CVC Care and Maintenance
- For more detail see [CL 30-07.11](#) CVC Insertion

Monitor compliance with elements of insertion, care, access, and discontinuation. Any member of the team is obligated to identify and ensure correction of any deviation or potential deviation from these standards.

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CVC Insertion and Management

Approved MCMB 6 3 2010

Vanderbilt University Medical Center
Urinary Catheter Guidelines for Providers

All Providers Should:

Be Aware of the VUMC Indications for Urinary Catheters:
- Urinary retention or obstruction
  - An epidural catheter is **not** an absolute indication for continued use of a urinary catheter.
- Incontinence in patient with open perineal or sacral wounds
- Critical illness **AND** a need for accurate monitoring of urinary output
- Terminal illness receiving comfort care or withdrawal of care
- Perioperative use for selected surgical procedures (involving GU tract or contiguous structures)

Be Aware of Requirement for Provider Orders for Catheters
- All urinary catheters require an order.
- Every patient is on the nurse-driven discontinuation protocol unless specifically excluded by a provider order.

Perform a Daily Assessment of Continued Need for the Urinary Catheter
- Patients with urinary catheters should be assessed daily whether the catheter is still necessary, and unnecessary catheters are removed.

Understand the VUMC Urinary Catheter Discontinuation Protocol
- Nursing will assess catheter necessity and will remove catheters from patients who no longer meet the indications for continued need (see above).
- If patient is unable to void after catheter removal, the provider will be notified. Unless there is a known obstruction, in and out catheterization x 2 is recommended before the indwelling catheter is replaced.
Education Highlights for Foley Policy Implementation

Insertion

- Patients must have an order for a foley (even if device was present on admission).
- The patient must have one or more of the following indications for a catheter:
  - Urinary retention or obstruction. If the patient has a foley placed for this reason, a provider order is needed to remove it.
  - Incontinence in patient with open perineal or sacral wounds. (e.g., Stage 3 or 4 pressure ulcer, surgical wound, wound vac)
  - Critical illness AND a need for accurate monitoring of urinary output (does not apply outside the ICUs)
  - Terminal illness receiving comfort care or withdrawal of care
  - Perioperative use for selected surgical procedures—these should be removed as soon as possible after surgery
- If the patient has a foley and no order, evaluate for indications. If the foley is indicated, contact the provider to obtain an order. If not, remove the catheter.
- Foleys are placed aseptically
  - A second person assists when placement may be difficult (e.g., obese, limited mobility, etc.)
  - If the first attempt fails, a new kit is obtained for the next attempt. Consider asking a second person to attempt the placement.

Maintenance

- While the foley is in, care is meticulous.
  - BID and prn perineal / foley care—bath wipes or soap and water are acceptable, depending on patient needs
  - Keep the catheter secured with Stat Lock
  - Keep the bag below the bladder and off the floor—this means in transport, too.
- Don’t open the drainage system unless absolutely necessary. If you must open it, use aseptic technique.

The Discontinuation Protocol

- Every patient with a catheter is on the discontinuation protocol unless the provider excludes the patient by order.
- Remove the foley as soon as the patient no longer needs it (based on indications for use.) No order is needed to remove the foley unless the provider has written an order specifying so.
- If the order indicates a date and time for foley removal (4/1/14 @ 1400 or POD 2 at 0600), the patient is not on the protocol, and the foley is removed as specified.
- Once the catheter is removed, the patient is assessed at least every two hours for the need to urinate. Assistance is offered for toileting. If the patient is unable to void within six hours, assess bladder volume with the bladder scanner.
- Notify provider for next steps if
  - Patient has suprapubic pain or the urge to void but is unable to do so.
  - A volume of greater than 300 ml is identified with the bladder scanner, and the patient is unable to void.
  - The patient has not voided and does not have significant volume in the bladder 6 hours after catheter removal.

For more information see VUMC Guidelines for Management of Urinary Catheters and VUMC Policy CL 30-15.05 Indwelling Urinary Catheters: Insertion, Maintenance, Discontinuation
INDWELLING URINARY CATHETER
NURSING-DIRECTED DISCONTINUATION PROTOCOL

All patients with urinary catheters are placed on the protocol unless excluded by provider order.

Was the catheter placed
- For urinary retention or obstruction?
- In conjunction with GU surgery or instrumentation?
- By Urology?

Contact the ordering provider for discontinuation instructions / orders if not already noted in chart.

Does the patient have one or more of the following conditions?
- Terminal illness receiving comfort care or withdrawal of care;
- Open perineal or sacral wounds;
- Critical illness AND a need for accurate monitoring of urinary output.

LEAVE catheter in place
Reassess with change in shift, caregiver, or level of care

Is the patient able to use one or more of the following?
- toilet
- bedpan
- urinal
- bedside commode
- adult protective garment

REMOVE catheter

Patient able to void within 4 hours following removal?

Evaluate bladder using bladder scanner

Continue to monitor per unit standards.

Scanned volume ≥ 300 mL AND / OR Suprapubic pain

REPEAT BLADDER SCAN every 2 hours until:
(a) patient able to void OR
(b) patient meets criteria to notify provider

Notify Provider. Consider I/O catheterization.