### VUMC Guidelines for Management of Indwelling Urinary Catheters

#### UC Insertion

**Preparation & Procedure**

<table>
<thead>
<tr>
<th>Indications for insertion and continued use of indwelling urinary catheters include:</th>
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<tbody>
<tr>
<td>• Urinary retention or obstruction</td>
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<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>
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<tr>
<td>• Incontinence in patient with open perineal or sacral wounds</td>
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<tr>
<td>• Critical illness AND a need for accurate monitoring of urinary output</td>
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<tr>
<td>• Terminal illness receiving comfort care or withdrawal of care</td>
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<tr>
<td>• Perioperative use for selected surgical procedures</td>
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<tr>
<td>o Surgeries of the GU tract or contiguous structures</td>
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<tr>
<td>o Anticipated prolonged duration of surgery</td>
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<tr>
<td>o Anticipated to receive large volume fluids/diuretics during surgery</td>
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<tr>
<td>o Need for intraoperative monitoring of urinary output.</td>
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</table>

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.

Perform hand hygiene prior to insertion. Proceduralist(s) wears sterile gloves. Other PPE is necessary only if indicated by the patient's condition or comorbidities, and per Standard Precautions.

Educate Patient/Family about necessity for catheter and about CAUTI prevention.

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.

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.

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.

#### UC Access/Maintenance

| Perform hand hygiene before handling or accessing UC. |
| Maintain unobstructed urine flow: keep drainage systems free of kinking, above floor level and below bladder level for gravity drainage. |
| Do not inflate the balloon prior to insertion. After placement, do not inflate the balloon until urine flow is achieved. |

Minimize UC access; keep collection system connected unless disruption is required for patient care. (e.g., irrigation).

Do not routinely replace drainage systems. If bag becomes visibly soiled or integrity is breached, use aseptic technique to change.

Do not culture asymptomatic patients (exceptions: patients who are pregnant or undergoing GU surgical procedures).

Use aseptic technique when performing interventions, including obtaining specimens, emptying urine, and irrigation.

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.

**UC Discontinuation**

| Perform perineal/meatal care gently with soap & water or bath wipes at least every 12 hours, after bowel movements, and as needed. |
| Keep drainage port clean and securely clamped. Do not allow drainage port to touch the receiving container when emptying the drainage device. |
| Empty the collection bag q 6-8 hours and prior to transport to avoid overfilling and backflow. |

Small urine samples (urinalyses or cultures) are obtained from the access port closes to the patient. Do not send urine from the drainage bag or meter.

Consider changing the catheter if the patient has a confirmed UTI. Routine catheter replacement is not recommended for prevention of CAUTI.

The catheter is removed when the clinical indications are no longer present.

All patients are on the urinary catheter discontinuation protocol unless a provider order is given to exclude them.

After catheter removal, assess the patient to determine ability to void, to empty the bladder, & to maintain continence. If unable to void, notify provider.

The multidisciplinary team assesses continued need for the catheter daily. Patients are assessed by a nurse for clinical indications for continued use:
- Upon admission;
- Every shift or with a change in caregiver;
- With change in the level of care.

CAUTI = Catheter-associated urinary tract infection; UC = urinary catheter
<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>
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<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>
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<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>
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<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>Guidewire exchange of CVC follows same procedures as CVC insertion.</td>
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<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>Trained providers discontinue CVCs.</td>
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<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>Only draw blood cultures from CVC with physician order for collection from CVC.</td>
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<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>Routine CVC replacement is not recommended for prevention of CLABSI.</td>
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<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 IJ placement, and may be useful to evaluate other vessels prior to line placement.</td>
<td>Change soiled, leaking, potentially contaminated hub caps.</td>
<td>Avoid guidewire exchange to replace CVCs in patients suspected of having catheter-related infection.</td>
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<tr>
<td>Change soiled tubing, needleless devices, and fluid as specified by policy (CL 30-07.01).</td>
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</table>

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.

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  
CL 30-07.11 CVC Insertion
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.
- Foley's 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.

NO

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

NO

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

REMOVE catheter

NO

Patient able to void within 4 hours following removal?

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

YES

Evaluate bladder using bladder scanner

Continue to monitor per unit standards.

Scanned volume ≥ 300 mL AND / OR
Suprapubic pain

Notify Provider. Consider I/O catheterization.