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		Effective from	October 2014
	<b>STANDARD OPERATING PROCEDURE (SOP)</b> <b>Insertion &amp; Maintenance of Adult Indwelling Urethral Urinary Catheters</b>	Review date	October 2017
		Version	4
The most up-to-date version of this policy can be viewed at the following website: <a href="http://www.nhsggc.org.uk/infectionpreventionandcontrol">www.nhsggc.org.uk/infectionpreventionandcontrol</a>			

This SOP applies to all staff employed by NHS Greater Glasgow & Clyde (Acute Operating Division) and locum staff on fixed term contracts.

### SOP Objective

To ensure the safe insertion and maintenance of urethral urinary catheters (UUCs) in acute adults.


### KEY CHANGES FROM THE PREVIOUS VERSION OF THIS SOP

- Entire document has been changed in line with Acute Adult Safety Programme and HPS Bundles


### Document Control Summary

Approved by and date	Board Infection Control Committee 6 October 2014
Date of Publication	10 October 2014
Developed by	Infection Prevention and Control Policy Sub-Group 0141 211 2526
Related Documents	Standard Infection Control Precautions (SICPs) - (HPS National IPC Policy) Acute Adult Safety Programme (Scottish Patient Safety Programme 2013) Bundle for preventing infection when inserting and maintaining a Urinary Catheter (acute settings) (Health Protection Scotland 2013) Epic 3: National Evidence-Based Guidelines for Preventing Healthcare-Associated Infections in NHS Hospitals in England (2014)
Distribution/Availability	NHSGGC Infection Prevention and Control Policy Manual and the Internet <a href="http://www.nhsggc.org.uk/infectioncontrol">www.nhsggc.org.uk/infectioncontrol</a>
Implications of Race Equality and other diversity duties for this document	This policy must be implemented fairly and without prejudice whether on the grounds of ethnicity, gender, sexual orientation, religion, belief, disability or age.
Lead Manager	Board Infection Control Manager
Responsible Director	Board Medical Director

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<b>UC Care Bundle</b>	<p>A care bundle is a group of evidence-based interventions, when implemented together, result in better outcomes than when implemented individually. The science supporting each bundle component is sufficiently established to be considered the standard of care.</p> <p>The bundle is not intended to be a comprehensive list of all elements of care related to UUCs; rather the bundle approach to a small group of interventions.</p> <p>Compliance with the bundle is measured by adherence to all elements of the bundle. If all elements have been accomplished, or if an element is documented as medically contraindicated, the bundle is counted as complete for that patient.</p> <p>The approach has been most successful when all elements are executed together, an “all-or-none” strategy. If any of the elements are absent, this is deemed non-compliance.</p> <p><b>NHSGGC Adult UUC Insertion &amp; Maintenance Bundle Elements</b>  The NHSGGC Adult UUC bundle has been collaboratively developed by clinical teams and the Infection Prevention and Control Team (IPCT). It is based on the Acute Adult Safety Programme and the Health Protection Scotland UUC Bundle and will support optimal care for adults with a UUC.</p> <p>Every UUC must have supporting documentation to evidence that the correct insertion and maintenance interventions are fully maintained for each patient. This should be completed by the ward or department where the UUC is inserted.</p> <p>If a patient is admitted to an NHSGGC acute ward with a UUC insitu the NHSGGC Adult UUC Insertion &amp; Maintenance bundle must be completed.</p> <p><u>The UUC must be checked at least once per day and the <b>NHSGGC Adult UUC Insertion &amp; Maintenance Care Plan or continuation sheet</b> must be fully completed to ensure optimal practice to avoid patient harm.</u></p>
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<b>Insertion</b> – When inserting a UUC ensure that:	<ol style="list-style-type: none"> <li>1. Alternatives to UUC have been considered and a clinical reason for UUC has been documented.</li> <li>2. Hand hygiene is performed immediately before and after UUC insertion.</li> <li>3. Aseptic technique is performed at insertion.</li> <li>4. The urethral meatus is cleaned with sterile saline and sterile lubricant is used.</li> <li>5. A UUC of smallest gauge has been selected and the balloon is filled to the recommended level.</li> <li>6. Aseptic technique is maintained when connecting the UUC to the closed drainage system.</li> </ol>
<b>Daily Maintenance</b> – When maintaining an inserted UUC ensure that:	<ol style="list-style-type: none"> <li>1. The requirement for the UUC is reviewed and recorded on a daily basis.</li> <li>2. Hand hygiene is performed immediately before and after accessing or manipulating a UUC.</li> <li>3. Meatal hygiene has been carried out.</li> <li>4. The urine drainage bag is situated below the level of the bladder and is not in contact with any surface, e.g. floor.</li> <li>5. The UUC is continually connected to a drainage system and changed in line with manufacturer’s instructions.</li> <li>6. The drainage bag is emptied when clinically indicated using a clean disposable container for each patient.*</li> </ol> <p>* Urine drainage bags must be emptied when it appears to be 70% full.</p>
<b>Practice points</b>	<ul style="list-style-type: none"> <li>• Trained personnel only to insert and maintain UUC.</li> <li>• The use of personal protective equipment (PPE) including gloves and apron is imperative in all procedures where blood and body fluid risk exists.</li> <li>• The featured recommendation on hand hygiene does not detract from other times when hand hygiene is recommended and will be monitored against (namely the 5 Moments for Hand Hygiene).</li> <li>• The featured recommendations do not aim to cover emergency situations which require clinical judgement for patient care actions.</li> <li>• A patient information leaflet containing written guidance on why the UUC has been inserted and possible complications to be aware of should be given to the patient as soon as possible after insertion (unless clinically contraindicated).</li> <li>• Removal of the UUC should be documented in the NHSGGC Adult UUC insertion and maintenance bundle.</li> </ul>

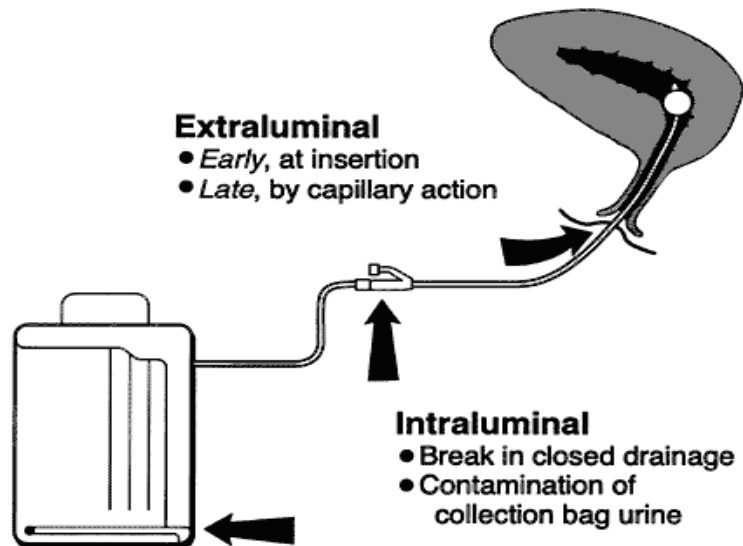
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<b>Practice points (cont/...)</b>	<ul style="list-style-type: none"> <li>• Use the sampling port and aseptic technique to obtain catheter specimens of urine.</li> <li>• Do not use urinary catheter maintenance solutions (irrigate) except to maintain a patent catheter as per individual catheter care regimes.</li> <li>• Change drainage bags as per manufacturer’s instructions.</li> <li>• Do not change urethral urinary catheters at arbitrary fixed intervals. Adhere to manufacturer’s guidelines and individual patient requirements in relation to catheter changes.</li> <li>• Do not add antiseptics to drainage bags.</li> <li>• All UUC days, total number of inpatients in the wards and all catheter associated urinary tract infection (CAUTI) must be recorded on a daily basis on the ‘CAUTI Safety Cross’</li> <li>• When a CAUTI is suspected the ‘Decision aid for diagnosis of suspected Catheter Associated Urinary Tract Infection’ can be utilised in deciding whether to record it on the CAUTI Safety Cross.</li> <li>• If a CAUTI is confirmed, then the ‘CAUTI Safety Cross’ must be completed.</li> </ul>
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### Mechanisms of bacteria entry causing UTI in the catheterised patients



From: Maki DG & Tambyah PA Engineering out the risk of infection with urinary catheters. EID 2001;7;2 1-12

<i>Write or affix label</i> Name: Address: CHI: DOB:	<b>Adult Urethral Urinary Catheter(UUC)</b> <b>Insertion &amp; Maintenance Care Plan</b>	<b>Catheter Batch Label</b>	
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Insertion – Complete all sections				
Date and time inserted	Urethral Urinary Catheter inserted <input type="checkbox"/> Hospital..... ED Theatre ITU/HDU Ward _____	Gauge _____ mls in balloon	Inserted by (Print name & designation [if known])	
<b>Clinical indication for urethral urinary catheterisation</b>		Long term urethral urinary catheter (> 28 days) <input type="checkbox"/>	Short term urethral urinary catheter (≤ 28 days) <input type="checkbox"/>	
Patient had urethral urinary catheter inserted in the community/out with NHS GGC Yes <input type="checkbox"/> No <input type="checkbox"/>		Date UUC inserted (if known) _____		
Insertion Criteria				Comments
Alternatives to urethral urinary catheterisation considered		Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Hand hygiene is performed immediately before urethral urinary catheter insertion		Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Aseptic technique performed at insertion		Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Urethral Urinary catheter of smallest gauge and balloon filled to recommended level		Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Urethral meatus cleaned with sterile saline and sterile lubricant used		Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Aseptic technique maintained when connecting urinary catheter to closed drainage system		Yes <input type="checkbox"/>	No <input type="checkbox"/>	

**DAILY MAINTENANCE: ALL PATIENTS WITH A URETHRAL URINARY CATHETER MUST HAVE:**

- Staff must wear gloves and apron and perform hand hygiene before and after urinary catheter procedures
- The drainage bag must be emptied when clinically indicated using a clean disposable container for each patient. Please refer to Urethral Urinary Catheter SOP.

Maintenance – To be completed daily (observe for signs and symptoms of infection)						
Please regard Day 1 as day of insertion or the day patient is admitted to hospital with Urethral Urinary Catheter.	Ward	Does the patient still require a urethral urinary catheter?	Is the urethral urinary catheter connected to a closed drainage system and changed in line with manufacturer’s instructions?	Daily meatal hygiene has been carried out?	Urine drainage bag is situated below the level of the bladder and not in contact with any surface e.g. floor?	Signature and Print Name
<b>Day 1</b> .... / .... / ....		Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	
<b>Day 2</b> .... / .... / ....		Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	
<b>Day 3</b> .... / .... / ....		Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	


Date removed \_\_\_\_\_ Time removed \_\_\_\_\_ Reason for Urethral Urinary Catheter removal \_\_\_\_\_ Removed by \_\_\_\_\_  
 CHI Number \_\_\_\_\_



**STANDARD OPERATING PROCEDURE (SOP)**  
**Insertion & Maintenance of Adult Indwelling Urethral Urinary Catheters**

The most up-to-date version of this policy can be viewed at the following website: [www.nhsggc.org.uk/infectionpreventionandcontrol](http://www.nhsggc.org.uk/infectionpreventionandcontrol)

Maintenance – To be completed daily (observe for signs and symptoms of infection)						
	Ward	Does the patient still require a urethral urinary catheter?	Is the urethral urinary catheter connected to a closed drainage system and changed in line with manufacturer's instructions?	Daily meatal hygiene has been carried out?	Urine drainage bag is situated below the level of the bladder and not in contact with any surface e.g. floor?	Signature and Print Name
Day 4	..../..../....	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Day 5	..../..../....	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Day 6	..../..../....	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Day 7	..../..../....	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Day 8	..../..../....	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Day 9	..../..../....	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Day 10	..../..../....	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Day 11	..../..../....	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Day 12	..../..../....	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Day 13	..../..../....	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Day 14	..../..../....	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Day 15	..../..../....	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Day 16	..../..../....	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Day 17	..../..../....	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Day 18	..../..../....	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Day 19	..../..../....	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Day 20	..../..../....	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Day 21	..../..../....	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Day 22	..../..../....	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Day 23	..../..../....	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Day 24	..../..../....	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Day 25	..../..../....	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Day 26	..../..../....	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Day 27	..../..../....	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Day 28	..../..../....	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/>	

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### Bundle for preventing infection when inserting and maintaining a Urinary Catheter (acute settings)

#### Inserting an Indwelling Urinary Catheter

**Statement:** Indwelling urinary catheters are the most commonly used invasive device in NHS Scotland; however, their use can lead to serious life-threatening complications. Indwelling urinary catheters give rise to urinary tract infections. Healthcare workers, therefore, have a duty to patients to optimise indwelling urinary catheter care and to ensure that indwelling urinary catheter care does not cause the patients harm.

**Objective:** To optimise indwelling urinary catheter insertion and thereby minimise the risk of catheter associated urinary tract infection  
To be able to demonstrate quality indwelling urinary catheter care in our ward

It should be decided locally how to implement this bundle. Consideration should be given to SPSP PDSA testing in addition to when it is completed, how often it is completed, who completes it and how the data are collected and outcomes fed back.

Ward:	Staff Name:	Date			
		Patient		Example	
<b>Inserting a Urinary Catheter</b>					
1. Alternatives to urethral catheterisation have been considered and the clinical reason is clearly documented		YES	NO	YES	NO
2. Aseptic technique is performed at insertion of indwelling urinary catheter		YES	NO	YES	NO
3. The indwelling urinary catheter was the smallest gauge, once inserted, the balloon was filled to the recommended level i.e. 10mls (unless clinically indicated)		YES	NO	YES	NO
4. The urethral meatus was cleaned with sterile saline and single use sterile lubricant was used prior to inserting the indwelling urinary catheter		YES	NO	YES	NO
5. Aseptic technique was applied/maintained when connecting the indwelling urinary catheter to a sterile closed drainage system		YES	NO	YES	NO
<b>Action Plan (complete if all criteria not achieved)</b>  					

Version 1.0. October 2013