<table>
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<tr>
<th>Policy Title</th>
<th>Urinary Catheterisation Policy</th>
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<tr>
<td>Author(s) (name and designation)</td>
<td>Lorraine Montgomery, Urology Nurse Specialist Gillian Bowden, Safecare Lead Bladder and Bowel Service</td>
</tr>
<tr>
<td>Sponsor</td>
<td>Hilary Lloyd, Director of Nursing, Midwifery and Quality</td>
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This policy supersedes all previous issues
## Version Control

<table>
<thead>
<tr>
<th>Version</th>
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<tr>
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<td>27/01/2011</td>
<td>Lorraine Montgomery – Urology Nurse Specialist Urology nurse Angela Cobb – Infection Prevention &amp; Control Nurse</td>
<td>SafeCare Council</td>
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<td>SafeCare Council</td>
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<td>Safe Care Council</td>
<td>17/07/2018</td>
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Summary of the urinary catheterisation policy.

<table>
<thead>
<tr>
<th>Aim of the policy</th>
<th>To support evidence based practice by providing a policy for urinary catheter insertion, the ongoing care of the catheter and urinary catheter removal.</th>
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</table>
| Development process | A trust-wide audit of urinary catheters was performed in 2010 and illustrated variability in practice and highlighted the need for a urinary catheter policy to standardize practice. The evidence base was reviewed and it was recognized that the reduction in the risk of developing a catheter associated urinary tract infection (CAUTI) relates to four components of care:  
1. Avoid unnecessary urinary catheters  
2. Insert catheter using aseptic non-touch technique (ANTT)  
3. Daily catheter maintenance  
4. Daily review of the urinary catheter necessity and the prompt removal of the catheter  
This policy has been devised to incorporate the above elements and each section has been identified for reference in the contents page. |
| Approval | The policy was sent to Nursing and Midwifery Professional Forum meeting for approval and will be reviewed in 2020 |
| Publication and dissemination | This is a new policy and will be promoted via the safecare newsletter. The policy is to be published on the Trust intranet. The urinary catheter study day will promote its policy incorporating all of the components of care. |
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Urinary Catheterisation Policy

1.0 INTRODUCTION

High quality catheter care should be accessible to all individuals presenting with a condition requiring catheterisation regardless of age, disability, gender, race, sexual orientation, religion/belief or any other factors which may result in unfair treatment or inequalities in health or employment. (Standards for Better Health - DOH 2006)

Catheters are inserted for many reasons and have an essential role to play in the care of our patients, but their use can result in serious complications.

Catheterisation is an invasive procedure that should only be carried out following an assessment of need and after considering alternative methods of management. (DOH 2006 SIGN 2006 NICE 2003)

The patient’s clinical need for catheterisation should be reviewed regularly and the urinary catheter removed as soon as possible (DOH, 2006; SIGN 2006, NICE 2003).

The decision to catheterise, selection of equipment, maintenance of a closed drainage system and agreed plan of care are all part of patient management. This policy will provide information to help staff to manage the procedure safely and competently.

It is essential that nurses are competent both in providing health education and in caring for a patient who has a urinary catheter (Bond & Harris, 2005). The nursing management of individuals requiring a urethral catheter system includes obtaining consent, appropriate selection of equipment, aseptic non-touch technique (ANTT) for catheter insertion, appropriate drainage systems and its maintenance, continuing care and removal of the catheter (Pomfret, 2006; Bond & Harris 2005).

Insertion of urinary catheters is a high impact intervention and nursing staff have the potential to significantly reduce infection rates (Saving Lives: High Impact Intervention No 6, - DOH, 2007). The presence of a urinary catheter and the duration of its insertion are contributory factors to development of a urinary tract infection. Some 60% of healthcare – associated urinary tract infections are solely related to catheter insertion (Smyth 2006). Between 2-7% of patients acquire bacteriuria with every day of catheterisation. The longer the catheter is left in place the greater the likelihood of infection (SIGN 2006). All procedures relating to urinary catheterisation and continuing catheter care must minimize the risk of infection and prevent complications so as to maintain the comfort and wellbeing of the individual receiving the care (DOH, 2006: SIGN 2006: NMC, 2008).

1.1 AIM OF POLICY

Gateshead NHS Foundation Trust has a statutory duty to have in place appropriate policies/procedural documents to comply with legislation (The Health & Social Care Act, DOH 2008).

This policy aims to aid all professionals in applying best practice for urinary catheter insertion, ongoing care and catheter removal within the setting of Gateshead Health Foundation Trust and Community Setting.

The prevention or reduction of the risk of a catheter associated urinary tract infection (CAUTI) relates to four components of care, which are, the avoidance of unnecessary urinary catheters, inserting urinary catheters using aseptic non touch technique (ANTT), maintain urinary catheters based on the recommended guidelines and daily review of
urinary catheter necessity, with prompt removal of the catheter. (The Institute for Healthcare Improvement (IHI) 2009)

The following guidance covers all aspects of routine urinary catheter management from patient selection and catheter insertion to management of urinary catheters and prevention of complications. Where a thorough assessment has been made and a urinary catheter is required, those involved in managing the catheter must carry out practices that will, as far as possible, minimise the risks to the patient.

1.2 SCOPE OF THE POLICY

Urinary catheters are inserted into patients in a number of clinical areas within the Trust by medical and nursing staff from various specialities. This policy aims to aid all healthcare professionals in applying best practice within the setting of Gateshead Health Foundation Trust, and will focus on minimising the risk of urinary tract infections in all patients with urinary catheters. It has been written using national guidelines for good practice. Both indwelling and intermittent urinary catheters are included in the scope of this policy.

This is a joint policy written between the urology service, infection prevention and control and the bladder and bowel service.

The clinical circumstances in which a child is catheterised can be very different to those of adults. They include catheterisation for investigatory purposes, and in extreme circumstances for urinary retention. Catheterisation would also be indicated in some major trauma cases or when a child is critically ill. Some children with spinal dysfunction may also use intermittent catheterisation this can either be urethral or through a surgical stoma. Although catheterisation of children in this trust is a rare event, the principles of asepsis and documentation outlined in the policy apply equally to children and young people.

This policy must be used in conjunction with:-
- Infection prevention Control Policy – Hand Hygiene IC04
- Infection Prevention Control Policy – Personal Protection Equipment IC02
- Infection Prevention Control Policy – Waste disposal and Recycling IC09
- Trust Catheter Care Standard Appendix 2
- Catheter care record Appendix 3
- Antimicrobial Guidelines for Antibiotic Prophylaxis available on Trust intranet via UK medicines information

1.3 ROLES AND RESPONSIBILITIES

<table>
<thead>
<tr>
<th>DESIGNATION</th>
<th>Roles and responsibilities</th>
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<tbody>
<tr>
<td>Chief Executive</td>
<td>The Chief Executive has ultimate responsibility for ensuring that effective systems and processes are in place to minimise the risk of infection to patients, staff and visitors.</td>
</tr>
<tr>
<td>Trust Board</td>
<td>The Trust Board has a responsibility to ensure that the risk of infection to patients, staff and visitors is minimised to its lowest potential and therefore supports the full implementation of this policy.</td>
</tr>
<tr>
<td>DESIGNATION</td>
<td>Roles and responsibilities</td>
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</tr>
<tr>
<td>Chief Executive Director of Nursing and Midwifery, and Director of Infection Prevention and Control (DIPC)</td>
<td>The Director of Nursing and Midwifery, and Director of Infection Prevention and Control has delegated responsibility for ensuring that effective systems and processes are in place to minimise the risk of infection to patients, staff and visitors.</td>
</tr>
<tr>
<td>Medical Director/DIPC</td>
<td>The Medical Director has a shared responsibility with the Director of Nursing and Midwifery for ensuring effective Clinical Governance within the organisation.</td>
</tr>
<tr>
<td>Infection Prevention and Control Team</td>
<td>Provide expert and current advice, support and guidance on all aspects of infection prevention and control. Deliver mandatory education and training to all trust employees and users in accordance with Epic2 (2007) and Epic3 (2014) guidance.</td>
</tr>
<tr>
<td>Modern Matron</td>
<td>Matrons have a responsibility for the reduction of healthcare associated infection. Responsibility to maintain high standards of infection prevention and control via clinical presence/expertise and supporting areas to achieve compliance with the weekly 5 Ward Quality Measure (WQM) Audits.</td>
</tr>
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</table>
| Ward or Department Manager | Must ensure that:  
- Appropriate personal protective equipment is available and that staff understand & comply with the PPE policy.  
- All staff attend corporate/nursing induction and annual mandatory training updates thereafter.  
- Local induction programmes and annual performance review incorporates relevant infection prevention and control for their area of practice, this includes ensuring a respirator mask fit test is undertaken if appropriate to their role.  
- Has responsible for the ward to achieving 100% for the weekly WQM audits. |
<p>| All staff – acute and community | All Trust staff has a responsibility to adhere to Trust policy and ensure that appropriate measures are taken to reduce risks associated with infection. All Trust staff has a responsibility to ensure they receive annual training in Infection Prevention and Control. |
| Urology Department | Co-ordinates and delivers educational study days for the theory of catheterisation, and practical sessions. During office hours medical and nursing staff are available for referral/consultation for patients with urological conditions complex catheter problems. |
| Bladder and Bowel Team | Assists the Urology team with education. Supports community staff with catheter related problems and advice. |</p>
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<tr>
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<th>Roles and responsibilities</th>
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<tbody>
<tr>
<td>Supplies Department</td>
<td>Supplies Department are required to top up ward and department stocks of catheter and drainage products to ensure there is a continual supply</td>
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2.0 PATIENT SELECTION AND CONSENT

Catheterisation is an invasive procedure that can cause embarrassment, physical and psychological discomfort and impact on the patients self-image. To ensure the patient is fully prepared for catheterisation it is the responsibility of the health care professional to inform the patient of the reasons and necessity for the procedure :-

- Prior to catheter insertion a full assessment of each patient must be performed. Consider the reason for urethral catheterisation, and determine whether there are any contra-indications to it.
- Explore the alternatives to catheterisation and ensure that the need for urinary catheterisation in each patient outweighs possible complications. (Essential steps DOH, 2006: EPIC National guidelines 2007, 2014)
- Explain any possible complications that could occur and provide enough information to enable the patients and carer to make an informed decision and consent to the procedure.
- Assessment of mental health or cognitive status of the patient, which may raise questions regarding the patient’s ability to give informed consent and or safety aspects. When consenting a patient, the five key principles of the Mental Capacity Act 2005 (DOH 2007b) need to be considered.
- Ensure that verbal consent and agreement is reached and the relevant information is recorded in the medical/nursing notes.
- Consent should be seen as a process, not a single event. Patients can change their minds and withdraw their consent at any time (DOH, 2005).
- A holistic assessment on each patient requiring catheterisation must be performed including assessment of manual dexterity and determine which method of catheterisation is most suitable for person.
- Where catheterisation is a routine part of an operative procedure, the practitioner performing that procedure should ensure that urinary catheterisation is recorded on the patient consent form as an “extra procedure” as per trust policy
- Where possible staff will involve the patient/relatives/carers in the decision making process around their care needs.

If the patient is to have a long term catheter inserted consider:-
- The patient’s ability to manage the catheter independently.
- Carer availability in order to manage/undertake catheter care for the patient.
- Tissue viability and preserving skin integrity

3.0 ASSESSING THE NEED FOR URINARY CATHETERISATION

Avoid catheterising patients where possible (DOH 2007a). The nurse must ensure, in consultation with the doctor, the patient and/or carer that the decision to catheterise is made for the right clinical reasons and not for the convenience of the carers.

Indications for urinary catheterisation include:

- Urine output monitoring of critically ill patients (haemodynamic monitoring)
- The patient cannot sufficiently empty his/her bladder (bladder outlet obstruction, retention)
- The patient has open wounds/pressure damage and healing is impaired by contamination of urine
- The patient has a disability that makes moving/changing very painful
- To allow bladder irrigation
- To introduce cytotoxic drugs into the bladder
• To enable bladder function tests
• If required during surgical procedure or post-operatively
• To empty the bladder before childbirth

If the patient requires an ultrasound scan of the bladder to determine residual urine, the bladder scan must be performed by a Health care professional who is competent to scan and works within the guidelines in the Trusts Ultrasound Policy.

3.1 Allergies – the practitioner must be aware of all known allergies that the patient may have including latex, lidocaine or chlorhexidine

3.2 Risk of haematuria – The practitioner performing the catheterisation must be aware of any risks of haematuria, including current anticoagulant medication, recent catheter related trauma, recent urinary tract surgery, cancer of the bladder or prostate, urethral/meatal bleeding or blood clots in urine.

3.3 Potential causes of increased risk of serious complications linked to CAUTI

• Patients aged over 65 years
• History of diabetes
• Suprapubic catheter (may indicate complex urinary tract problems)
• Currently taking steroids
• Single functioning kidney
• Currently taking antibiotics for UTI
• History of UTI while catheterised.

3.4 Patients with an increased risk of possible serious complications from CAUTI –

• Patients with artificial heart valve
• History of UTI while catheterised
• Patients who are immunosuppressed
• Patients who have had organ transplant

4.0 METHODS OF URINARY CATHETERISATION AND REASON FOR USE

Following assessment the best approach to catheterisation management takes account of the clinical need and anticipated duration-life of the catheter (Pomfret, 2007).

Patient preference and potential risk of infection should also be considered. Intermittent catheterisation should be used in preference to an indwelling catheter if it is clinically appropriate and a practical option for the patient (Winder, 2008).

4.1 Intermittent catheterisation (ISC)

Intermittent catheterisation should be considered first, as there is a reduced risk of CAUTI than with an indwelling catheter. Indications for use of ISC are:-

• Relief and management of acute or chronic retention of urine
• Incomplete bladder emptying
• To empty the contents of the bladder before or during childbirth
• Estimation of residual urine - in the absence of bladder scanner
• For bladder management in neurological disease, i.e. paralysis, spinal cord injury, multiple sclerosis, stroke etc.
• Management of urethral stricture
4.2 Criteria for Urethral catheterisation

- To empty the contents of the bladder before or after abdominal, pelvic or rectal surgery
- To allow irrigation of the bladder
- To bypass an obstruction
- To relieve acute retention of urine
- To relieve chronic retention of urine, if symptomatic or renal function is compromised (RCN 2008)
- Haemodynamic monitoring
- To instil medication into the bladder
- To enable investigations to be performed e.g. urodynamic studies
- For patient comfort/dignity in end of life care (RCN 2008)
- To relieve incontinence when no other means is practicable
- To maintain skin integrity
- Patient has open wounds/pressure damage and healing is impaired by contamination of urine
- Patient has a disability that makes moving or changing position painful
- To empty the bladder before childbirth

4.3 Criteria for Suprapubic catheterisation

- Trauma of the pelvis or urinary tract
- Patient choice in patients who require long term catheterisation e.g. for sexual activity, dignity, comfort etc.
- Following pelvic, gynaecological or urological surgery
- Urinary retention or voiding problems caused by prostatic obstruction, infection, urethral stricture or where urethral catheterisation is not possible (RCN 2008)
- Neurological disease i.e. multiple sclerosis, spinal code injury, paralysis.

Contraindications to Suprapubic catheterisation include:-

- Haematuria
- Known history of bladder tumour
- Prosthetic devices or material in the lower abdomen (RCN 2008)

5.0 SELECTION OF APPROPRIATE EQUIPMENT

Urinary catheters, drainage bags, catheter valves, straps etc. are medical devices and should therefore always be stored and used in accordance with manufacturer’s instructions (RCN 2008).

The selection of a catheter should reflect the needs of the individual patient and the expected duration of catheterisation. The decision to catheterise a patient is the responsibility of the person performing the catheterisation, remembering that in law “being told to do something” is no defence. However, the choice of catheter and drainage system usually involves close collaboration with the patient and practitioner following the RCN guidelines (RCN 2008).

5.1 Catheter size

An important guiding principle is to choose the smallest size catheter necessary to meet the patients’ needs (RCN 2008).
The Charriere size or French Gauge is the external diameter of the catheter. Select the smallest size that will allow effective drainage. Catheters should be comfortable, easy to insert and remove and must minimize secondary complications such as tissue inflammation, encrustation and colonisation by microorganisms (Pomfret 2007; Robinson, 2006).

- 5 Ch for a child under 6 months
- 6-8 Ch for a male child over 6 months
- 8 Ch for a female child over 6 months
- 12-14 Ch for adults to drain clear urine
- 14-16 Ch for adults to drain infected urine or urine which contains sediment or debris. A size 16 to be used for patients admitted in urinary retention.
- Some urological patients may need a larger catheter to drain haematuria and blood clots (Pratt et al 2007)
- Use the correct amount of sterile water in accordance with manufacturer’s instructions to inflate the balloon as distortion may occur, leading to irritation and trauma to the bladder wall. For adults a 10ml balloon is usually recommended. Urological patients may require larger volumes (Pratt et al 2007). In children a 5 ml balloon is used.
- Use the correct length catheter - female length catheters should only be used for female patients who are ambulant and BMI within normal range (RCN 2008). In male patients standard length catheters must always be used. The standard length may also be used in women who are overweight, use a wheelchair or nursed in bed, as a longer length catheter will optimize the patients care and minimize the risk of complications.

### 5.2 Catheter material

When selecting the most appropriate catheter material it is important not only to determine how long the catheter is to remain in situ and patient comfort, but also which material best to resist infection and blockage. Whichever catheter material is chosen, sooner or later, encrustation may develop. No catheter material is totally resistant to this problem, although some materials are more resistant and take longer to encrust than others (Pomfret, 2006)

For urethral and supra-pubic catheters the choice of catheter material and French Gauge (FG) and or Charriere (CH) size will depend on an assessment of the patient’s individual characteristics and predisposition to encrustation and blockage.

- Polyvinyl chloride (PVC/plastic) catheters are generally used for intermittent catheterisation.
- Polytetrafluoroethylene (PTFE) coated catheters should only be used for patients who are to be catheterised for less than 28 days.
- Hydrogel coated or 100% silicone catheters should be used for patients who are to be catheterised for more than 28 days.
- Patients who are allergic to latex should only be catheterised with PVC plastic or 100% silicone catheters.
- Within Gateshead NHS Foundation Trust the catheters available on the wards are:
  - Short term use (Up to 28 days) PTFE coated catheters standard and female length Charriere sizes 12, 14, and 16
  - Long term use (up to 12 weeks) All silicone catheters standard and female length Charriere sizes 12, 14, and 16.
• Manufacturer’s instructions should be adhered to at all times, and only catheters designated for specific, supra-pubic, urethral or intermittent catheterisation use should be used.
• A selection of specialist catheters will be held in Accident and Emergency Department Queen Elizabeth Hospital. The use of specialist catheters should be discussed with medical staff or urology staff, prior to use.

5.3 Selection of collection systems

All indwelling catheters should be connected to a sterile closed drainage system or valve. A closed drainage system should be selected for continuous catheter drainage and the selection should reflect the assessed needs of the individual with particular attention to comfort and dignity.

Care must be taken when assessing for a leg / waist bag or valve and the following should be taken into consideration:

• If there is a history of venous or arterial supply problems to the legs, then leg straps must not be used. Alternatives to this would be to use a waist suspended bag or a sleeve or valve. It is important that no one who has ischemia is supplied with straps as this can cause necrosis and death. Where in doubt a Doppler assessment of circulation must be undertaken.
• Manual dexterity – can they use the tap / slide safely on their own.
• Cognitive function – is the client/ carer able to comply with the instructions, can they carry out emptying safely, are they aware how often they need to empty the bag, or is there a carer who could empty the bag for them?
• The drainage bag should be positioned below the level of the patient’s bladder. Night drainage bags should be connected to a stand that prevents the bag from coming into contact with the floor.
• The closed system should never be broken except for good clinical reason e.g. changing the catheter bag in accordance with manufacturer’s instructions (Pratt et al 2007).
• Drainage bags should be emptied in accordance with individual patient needs to maintain free drainage, prevent reflux and maintain the dignity and comfort of the patient (Pratt et al 2007).
• Healthcare staff emptying drainage bags should decontaminate their hands in accordance with Trust Hand Hygiene Policy and wear appropriate personal protective equipment (PPE).
• When emptying the drainage bag a separate clean container should be used for each patient. When emptying the drainage bag avoid contact between the drainage tap and the container (Pratt et al 2007).
• Drainage bags should be changed in accordance with manufacturer’s instructions.
• Bags that are damaged, leaking or contain an accumulation of debris or have been disconnected should be changed immediately.
• Leg drainage bags should be attached using straps, sleeves or other suspensory arrangement as designed and recommended by manufacturers.

5.4 Catheter Valves

• Catheter valves can be used as an alternative to a leg bag. This has the benefit of allowing the bladder to maintain its normal filling and emptying cycle.
• Catheter valves should only be used for patients who have sensation of bladder fullness and/or sufficient mental cognisance and physical functioning to ensure bladder is emptied in accordance with valve manufacturers’ recommendations.
• Catheter valves are prescribed on an individual patient basis and likewise are single use items of equipment. If they are removed from the urinary catheter for any reason they must be discarded and not re-used even on the same patient (RCN 2008: DOH, 2006).
• There are several catheter valves available and with some, continuous drainage overnight is an option. (Please refer to individual manufacturer guidelines for further information about same)
• Drainage bags and catheter valves should be changed in accordance with manufacturer’s instructions usually a maximum of seven days

6.0 INSERTION OF URINARY CATHETERS

6.1 Setting

Catheterisation is an invasive procedure which must be carried out ANTT. (Appendix 1)

Insertion should be performed in a clean clinical area such as a treatment room. In ward areas if the patients bed space is to be used for the procedure it should be performed during a period of reduced activity when possible, to minimise the risk of infection.

6.2 Catheter insertion

Prior to catheterisation the patient should be assessed for infection risk factors e.g. Methicillin Resistant Staphylococcus Aureus (MRSA) positive or previous positive status. Prophylactic antibiotics should be considered as per antimicrobial guidelines.

• The procedure for inserting urethral and intermittent catheters is detailed in APPENDIX 4 & 5.
• Catheterisation is a skilled procedure and should therefore only be performed by healthcare staff competent in the skill of catheterisation.
• For patients with urethral or penile trauma requiring catheterisation – this should be done by an experienced health care professional only
• Creating a cystostomy, and inserting a first time supra pubic catheter is a surgical procedure and should only be performed by an experienced medical professional.
• The patient must be catheterised using ANTT in accordance with Trust policy to minimise the risk of infection.
• Meatal cleansing - Cleanse the genitalia and urethral meatus with Octenalin. (NICE 2012).
• Local anaesthetic lubricant gel as per trust policy e.g. Instillagel® should be used prior to female and male catheterisation unless the patient has a known allergy to lidocaine or the use is contra-indicated. For patients who are allergic to lidocaine or chlorhexidine the catheter should be lubricated with a sterile water soluble lubricant gel before insertion. The use of local anaesthetic gel reduces the risk of urethral trauma. It should be administered in accordance with BNF prescribing recommendations, 6mls for female patients and 10mls for male patients. Any adverse effects or related problems should be recorded in the patient’s notes. Anaesthetic lubricating gels require a signed prescription or previously agreed patient group directive for community staff.
6.3 **Collection of urine samples** (Appendix 7)

- Catheter specimen of urine (CSU) should be sent for culture and sensitivities if the patient is unwell, as part of a septic screen or has symptoms of a urinary tract infection (UTI). CSU should also be taken prior to planned catheter change/removal of a catheter insitu for 7 days or longer as per antimicrobial guidelines.
- The CSU must be collected before antibiotics are administered.
- Healthcare personnel who are collecting urine samples from a catheterised patient should decontaminate hands and wear PPE in accordance with Trust policy.
- All urine samples required for testing should be collected from the sampling port on the catheter drainage bag in accordance with manufacturer’s instructions. Collection of a catheter specimen of urine is a clean procedure requiring hand washing and PPE in accordance with Trust policy.
- Prior to collection of a urine sample, the sampling port should be cleaned using a 70% alcohol with 2% chlorhexidine wipe allowing cleaning for 30 seconds and a drying time of 30 seconds. This should be repeated at the end of the procedure.
- Record on the laboratory request that the urine sample is a CSU, clinical reason for collection and any current or proposed antibiotic.

6.4 **Documentation for insertion of a urinary catheter**

A record of catheterisation should be made within the medical and nursing notes.

The catheter care document must also be completed and inserted into the nursing notes. (APPENDIX 3)

The following must be documented.

- Patient consent
- Date/Time of catheterisation
- Reason for catheterisation
- Allergy status
- Cleaning fluid used
- Lubricant type and batch number
- Type of catheter – manufacturer and material
- Size (Ch)
- Length
- Lot No
- Expiry date
- Volume of water in the balloon
- Residual volume drained
- Any abnormality in the urine observed e.g. presence of haematuria, debris etc.
- If urine dip stick is performed, the reason and result
- If catheter specimen of urine (CSU), if sent for culture, the reason and result
- Action taken if no urine drained. **Never inflate the catheter balloon unless urine is draining.**
- Any problems or adverse event during or following the procedure
- If Antibiotic prophylaxis is used and the reason for use.
- Date of planned review/ catheter removal or catheter change
- Signature and status of healthcare professional carrying out procedure
7.0 CATHETER MAINTENANCE

- The need for the catheter should be assessed on a daily basis and the drainage and condition of the patient and the catheter must be documented in the nursing/medical notes.
- Indwelling catheters should be connected to a sterile closed drainage system or catheter valve (DOH, 2006).
- Catheter valves should not be used without assessment of bladder function by an appropriate nurse/medical practitioner.
- Contraindications for use of a catheter valve, is indicated in patients with reduced bladder capacity, no bladder sensation, detrusor over-activity, ureteric reflux, renal impairment, cognitive impairment and insufficient manual dexterity to operate catheter valve (Van den Eijkel & Griffiths 2006; Sabubba et al 2005).
- Healthcare personnel should ensure that connection between the catheter, valve and or urinary drainage system is not broken except for good clinical reasons. For example changing the catheter valve, drainage bag in line with current research and evidence based practice and or the manufacturer’s recommendations. (DoH, 2006: NICE 2003).
- Once the drainage bag and or catheter valve has been disconnected from the catheter, it must be discarded and replaced with a new sterile replacement (NICE 2003).
- Healthcare personnel must decontaminate their hands using liquid soap and water or alcohol based hand rub and wear a new pair of clean non sterile gloves before handling/touching a patient’s catheter.
- Carers and patients managing their own catheters must wash their hands before and after handling/touching the catheter.
- Urine samples must be obtained from a sampling port using an aseptic technique. Never sample directly from the urinary catheter or drainage bag (Pratt et al 2006).
- Drainage bags which attach direct to an indwelling catheter/system must be sterile and may remain in place for 7 days in accordance with manufacturer’s recommendations or be changed earlier if damaged or leaking or when there is an accumulation of sediment (RCN 2008: DOH, 2007).
- Nursing staff must record the date of change of the catheter valve and or drainage bag in the patient’s catheter care document record.
- Urinary drainage bags should normally be positioned below the level of the bladder (the only exception to this being a sporran suspension system such as the Rusch Belly Bag which is worn around the waist and is used for some patients with both urethral and supra pubic catheters)
- All drainage bags used must not be in direct contact with the floor (DOH, 2007; NICE 2003).
- A link system should be used to facilitate overnight drainage to keep the original system intact.
- The urinary drainage bag should be emptied frequently enough to maintain urine flow and prevent reflux and should be changed when clinically indicated (DOH, 2007 & Pratt et al 2007).
- The urethral meatus should be washed daily to assist in the prevention of a bacteraemia. While in hospital antimicrobial body wash OCTANISEAN is currently recommended.
- Each patient should have an individual care regime designed to minimize the problems of blockage and encrustation.
- The tendency for catheter blockage should be documented in each newly catheterized patient.
- All patients should have a periodic review of this care plan to monitor effectiveness of the treatment/management. At a minimum this review should be done 3 monthly (DOH, 2006: SIGN, 2006).
Bladder instillations or washouts must not be used to prevent catheter associated infection (Pratt et al 2007: SIGN, 2006: NICE 2003). If catheter washouts are required after full assessment, refer to APPENDIX 6. Catheters should be changed only when clinically necessary or according to the manufacturer’s current recommendations (DOH, 2007). Prior to catheter change the antimicrobial guidelines must be referred to for prophylaxis and the patient’s infection risk factors considered e.g. MRSA status/clostridium difficile. (APPENDIX 8).

7.1 Catheter washout

- Systematic review of the evidence has failed to demonstrate any beneficial effect of bladder instillation, irrigation or washout with a variety of antiseptic or antimicrobial agents in preventing catheter associated infections. (Pratt et al 2007). Routine catheter washouts using antiseptic solutions should not be undertaken.
- Irrigation, instillation and washouts may be indicated during urological surgery or to manage catheter obstruction. Patients who repeatedly have blocked catheters due to encrustation may benefit from an acid washout solution such as Solution G (Pratt et al 2007) used in accordance with BNF recommendations. A one month trial should be instigated and if there is no improvement, use Solution R for one month in accordance with BNF recommendations, if still no improvement it should then be discontinued. (APPENDIX 6)
- During office hours medical, urology nursing staff and community bladder and bowel staff are available for referral/consultation for patients with urological conditions and complex catheter problems.

8.0 REMOVAL OF A URINARY CATHETER – TRIAL WITHOUT CATHETER (TWOC)

- Urinary catheters should ideally be removed as soon as possible following a thorough assessment and review of the patient’s bladder problems and clinical need.
- Consultation regarding the removal of the catheter must be taken in collaboration with the patient and health care staff responsible for their care.
- Where assessment/review indicates that a catheter may be safely removed then the individual’s bladder emptying/filling function and general condition should be carefully monitored and action taken if problems arise.
- This procedure must be performed by a trained, competent person.
- Catheter removal is a clean procedure requiring hand-washing and the use of appropriate PPE.
- To deflate the balloon, the syringe should be attached, then allow the balloon to deflate - do not pull the syringe plunger as this may create a vacuum or balloon cuff making removal difficult. (RCN 2008). Urinary catheters should ideally be removed as soon as possible following a thorough assessment and review of the patient’s bladder problems and clinical need.
- If the catheter is insitu for 7 days or longer and electively planning a trial without catheter (TWOC) a CSU should be obtained prior to removal and antimicrobial guidelines referred to.

8.1 Indications for trial without catheter (TWOC)

- To ascertain voiding function
- To prevent continued catheter usage when it is no longer needed
- Patient choice
- A risk assessment should be undertaken prior to a trial without catheter. This should include medical status, infection history, antibiotic indications, skin integrity,
diabetes, cardiac status, history of nocturnal polyuria, cognitive status, mobility and dexterity status and social status.

- The patient’s ability to consent/co-operate is an important factor when planning a TWOC.
- Refer to appendix 9 for removal of a urinary catheter.

### 8.2 Timing of TWOC

There is currently no evidence to support removing catheter at any particular time i.e. midnight removal or early morning removal. Factors which should be considered include:

- Availability of appropriate healthcare professionals to assess success or failure of TWOC.
- Ensuring that appropriate healthcare professionals will be available if the patient is unable to void urine.
- Patient preference.
- Patients with nocturnal polyuria (passing more urine during the night than during the day) may not pass urine within eight hours of catheter removal, if catheter removed early morning.

### 8.3 Problematic catheter removal

- Ensure the patient is relaxed and bladder/ urinary sphincter is not in spasm, allow the patient time to relax for a few minutes.
- If balloon cuff formation suspected, re-inflate catheter balloon with 2-3 mls of water (EAUN 2005).
- If catheter still cannot be removed seek more experienced help.
- Problem - Unable to deflate the catheter balloon - This is a rare complication. Never cut the catheter or try to burst the balloon by over-inflating it with water. If the balloon fails to deflate follow the following steps (EAUN 2005).
  1. Place a syringe in the inflation valve and leave for 20-40 minutes, the balloon may deflate during this time.
  2. If channel obstruction is suspected due to crystal formation, squeeze the visible catheter tubing to try to displace the crystals.
  3. If you are still unable to deflate the catheter balloon radiological assistance should be sought. An ultrasound scan is needed to ensure that the catheter balloon is deflated and if necessary the balloon can be deflated supra pubically by a trained radiology healthcare professional.

### 8.4 Documentation for removal of a urinary catheter

- Date and time of catheter removal should be recorded in the urinary catheter record document with the reason for removal.
- Document if the balloon was fully deflated, noting if the catheter tip and balloon were intact and any encrustation or debris was visible on the catheter tip.
- Any adverse event during or following the procedure e.g. pain or urethral bleeding etc.
- Time of review of voiding pattern
- Signature and status of healthcare professional removing the catheter.

### 8.5 Failure to void following removal of urinary catheter.

- Success or failure of TWOC should be assessed using a bladder scanner to measure ultrasound residual urine volume within eight hours of catheter removal.
• In the community liaise with the Bladder and Bowel Team to carry out the bladder scan following TWOC.
• If the patient develops retention of urine, drain the bladder as soon as possible to prevent anxiety, pain and bladder damage associated with acute/chronic retention of urine.
• If TWOC fails consider teaching the patient for ISC. Refer to the urology nurse specialists or bladder and bowel team if support is required.
• If the patient has urinary incontinence, continence assessment should take place and management with appropriate continence aids should be initiated.

8.6 Disposal of waste
The disposal of clinical waste from catheter care procedures should adhere to the Trust waste disposal policy.

9.0 CARE OF PATIENTS ADMITTED TO HOSPITAL WITH AN INDWELLING CATHETER
• When a patient is admitted into hospital with an indwelling urinary catheter insitu from the community, the nurse must ensure that the ward staff obtains a copy of the patient’s urinary catheter care plan. The insertion date & reason for catheter must then be recorded on the urinary catheter record document.
• CSU should be obtained as part of MRSA screen if no infection is suspected, or for culture and sensitivity if the patient is unwell with unknown cause or suspected CAUTI.
• If the patient is unable to provide the information the hospital staff should contact the patients General Practitioner or district nurse to obtain the following information:-
  Reason for the catheter
  Date of catheterisation
  Proposed date of catheter change
  Any problems experienced during catheterisation
  Any prescribed catheter maintenance solutions.

10.0 DISCHARGE/TRANSFER OF PATIENT FROM HOSPITAL
• When a catheterised patient is discharged/ transferred from hospital, the discharging nurse must ensure that the patients district nurse is informed so that she can visit the patient within 24 hours of discharge and that the patient/carer receives:-
  Transfer summary sheet.
  Education and training in the ongoing care of the catheter at home or care home
  Individualised information relating to the ongoing care and management of the catheter
  Sufficient Catheter equipment (including equipment for catheterisation) for 7days following discharge
  Ensure the patient has a completed copy of the Gateshead NHS Foundation Trusts patient information leaflet – ‘Patient catheter record and care booklet.

10.1 Patient/carer education
1. The aim of patient/carer education is to reduce the risk of complications and common problems of catheterisation. Patients/carers should be given written information to support information given verbally.
2. Patients and their carers should be educated about and trained in the correct technique of hand hygiene.
3. Attention should be paid to personal hygiene using soap and water, particularly around the urethral meatus, and the catheter tube there is no evidence to support the use of antiseptic solutions (Pratt et al 2007)

4. Patients and their carer’s should also be advised that the maintenance of a closed drainage system is central in reducing the risk of catheter associated infection. It is therefore important to keep manipulation of the closed system to a minimum; this includes unnecessary emptying, changing the draining bags or taking samples all urine.

5. Patients and carers should be instructed in the correct use of the support devices for the drainage bags, and given advice to empty catheter leg bags when no more than three quarters full. This will help prevent trauma, discomfort and haematuria

6. If the patient uses a leg drainage bag and needs to be attached to a 2 litre drainage bag overnight, a non-drainable bag should be used.

7. It must also be reiterated that all drainage bags are prescribed for individual patient use and are single use items of equipment. Once disconnected, the drainage bag must be discarded to reduce the risk of infection (Essential Steps - DOH, 2006; EPIC National Guidelines - Pratt et al 2007).

8. Advice should be given to patient/carer on how to store and dispose of catheter equipment appropriately in the home.

9. Avoidance/treatment of constipation

10. Ensuring drainage equipment is secured below the height of the bladder avoiding kinks in tubing.

11. Ensuring catheter bag is emptied frequently enough to avoid urine reflux.

12. Unless medically contraindicated, a daily minimum of 1500mls of fluid intake should be encouraged.

11.0 HEALTHCARE PROFESSIONALS EDUCATION

Education and training for those involved in catheter care is aimed at promoting safe practice and enhancing quality of life for the patient. The structure for gaining competence in catheterisation should therefore be as follows:

- All managers will be aware of the contents of this policy and will ensure that their staff have read and understood the procedures and processes relating to catheter care.
- Training will take place in two parts. All Gateshead NHS Foundation staff prior to catheterising patients must attend a “Theory of Catheterisation” Workshop and have an assessment of competence in the workplace. See section 11.1 for competent persons.


The aim of attendance at Theory of Catheterisation Workshop is to ensure that healthcare professionals will gain a theoretical knowledge and understanding in all aspects of catheterisation. This will include:

- Legislation, local policy, guidelines and governance issues
- Recognition of competence or incompetence and when to seek advice
- Anatomy and physiology of the urinary tract
- Infection control issues
- Issues of consent
- Indications for Catheterisation
- Contraindications and precautions
- Complications of catheterisation
- Types of catheterisation i.e. urethral, supra-pubic, intermittent
- Selection of catheters and drainage equipment
• Care of a catheterised patient including minimising risk of catheter associated infection, collection of a CSU, catheter blockage and patient/carer education
• Observe model/manikin being catheterised
• Undertake supervised catheterisation on a manikin
11.2 Part 2: Assessment of competence

- Supervision of catheterisation of a minimum of three patients or until able to catheterise patients without direct supervision.
- A record of supervision of practice and assessment of competence should be maintained. Once competence is achieved this should be held in staff personal records held by their manager with a copy kept for their own record in their professional portfolio.
- Healthcare professionals who are competent and experienced at catheterisation, with a recognised teaching and assessment qualification may become a mentor and assess catheterisation competence.

11.3 Maintenance of knowledge and competence

- All healthcare professionals who perform urinary catheterisation as part of their role are required to maintain their competence in the skill & remain up to date with practice.
- Formal updating and assessment of healthcare professionals’ knowledge and competence can be requested by themselves or their manager at any time, if any question of deficit in competence arises.
- Newly employed healthcare staff who can demonstrate evidence of attendance at an equivalent workshop within the previous three years, must be assessed as competent, by supervision of catheterising a minimum of one patient prior to catheterising patients without direct supervision. A record of supervision and assessment of competence should be maintained. Once competence is agreed, this should be held in staff personal records held by their manager with a copy kept for their own record in their professional portfolio.

12.0 PROCESS FOR MONITORING AND AUDIT

The implementation and application of this policy will be monitored by the weekly 5 quality ward measures for urinary catheters. The results will be monitored by the ward managers and modern matrons for the individual areas and reviewed at safecare meetings.

Any discrepancies with compliance to policy will be addressed promptly with the relevant managers and clinical staff concerned.

Any amendments to the policy will be agreed via the safecare council.

13.0 ABBREVIATIONS

Catheter associated urinary tract infection (CAUTI)
Catheter specimen of urine (CSU)
Department of Health (DOH)
Healthcare associated infection (HCAI)
Lower urinary tract (LUT)
National institute for clinical excellence (NICE)
Personal protective equipment (PPE)
Primary care trust (PCT)
Royal College of Nursing (RCN)
Trial without catheter (TWOC)
Trust wide governance committee (TWGC)
Urinary Tract infection (UTI)
Aseptic non touch technique (ANTT)
14.0 REFERENCES

- Gateshead Health NHS Trust: *Hand hygiene policy IPC no 4 (2009)*
- Gateshead Health NHS Trust: *Personal protective equipment policy IPC no 2 (2009)*
- Gateshead Health NHS Trust: *Adult Antimicrobial Guidelines for secondary Care (2009)*


EPIC guidelines: *Urinary Catheter Management (2007)*


### APPENDIX 1

**ANTT © procedure for catheterisation**

<table>
<thead>
<tr>
<th>Step</th>
<th>Image</th>
<th>Description</th>
</tr>
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</table>
| 1    | ![Image](image1.png) | Clean prep zone: 
  - Clean hands with alcohol hand rub or soap & water |
| 2    | ![Image](image2.png) | Clean trolley according to local policy |
| 3    | ![Image](image3.png) | Gather equipment onto bottom shelf |
| 4    | ![Image](image4.png) | Wash hands as per policy |
| 5    | ![Image](image5.png) | Apply apron (clean hands if contaminated between Steps 3 & 4) |
| 6    | ![Image](image6.png) | Open catheter pack & position waste bag |
| 7    | ![Image](image7.png) | Open equipment onto critical aseptic field using non-touch technique (NTT) |
| 8    | ![Image](image8.png) | Prepare equipment using non-touch technique (NTT) |
| 9    | ![Image](image9.png) | Apply aseptic field drapes over genitals & clean urethral orifice with normal saline & gauze |
| 10   | ![Image](image10.png) | Insert lubricating gel |
| 11   | ![Image](image11.png) | Dispose gloves - clean hands - apply sterilised gloves |
| 12   | ![Image](image12.png) | Insert catheter using NTT by touching only the plastic wrapping |
| 13   | ![Image](image13.png) | Clean trolley according to local policy |
| 14   | ![Image](image14.png) | Inflate balloon using NTT |
| 15   | ![Image](image15.png) | Attach collection bag using NTT |
| 16   | ![Image](image16.png) | Dispose of waste & gloves |
| 17   | ![Image](image17.png) | Clean hands with soap & water immediately |
| 18   | ![Image](image18.png) | Proceed directly to dirty utility zone |
| 19   | ![Image](image19.png) | Clean hands with alcohol hand rub or soap & water |

**Prep patient** - 
- Apply waterproof pad & gown.
- Ask patient to lift gown pre step 9.
In conjunction with this care standard, all staff must comply with Hand Hygiene Policy IPC no 4; Personal Protective Equipment IPC no 2. Microbial guidelines for catheterisation, Nursing procedure for urethral catheterisation, procedure for taking a specimen of urine and the removal of urethral catheter. All staff must complete the catheter record document and file it in the patients’ notes.

**Before catheterisation,**
- All alternatives to catheterisation should be considered and the need for catheterisation must be recorded on the urinary catheter record document, using the catheter criteria as reference.
- Explain to the patient the need for the urinary catheter, the procedure for inserting a catheter and any possible complications that could occur.
- Ensure that the patients’ privacy and dignity is maintained throughout the procedure and hospital stay.
- Antimicrobial guidelines for catheter removal/insertion should be adhered to, refer to antimicrobial policy.
- The catheter will be inserted by a practitioner who has undergone training in catheterisation and is competent in performing the procedure.
- Staff will wear appropriate protective equipment and perform full hand hygiene prior to catheterisation.
- Perform catheterisation using aseptic non-touch technique as per Trust policy and documented in the urinary catheter record.

**Ongoing care of a urinary catheter,**
- Position the catheter drainage bag below the level of the bladder but NOT in contact with the floor.
- A sterile drainage system for urine drainage will be used and continuously connected.
- The catheter site will be cleaned daily during the patients personal hygiene needs with soap and water or other recommended product for the patient e.g. Octenisan.
- Explain/teach the patient/carer to perform daily care, maintaining/changing the drainage system. Reinforce this information to the patient/carer with the written information leaflet. This is on the trust intranet, trust documents & patient information leaflets.
- Review the need for a urinary catheter on a daily basis and document the need in the nursing/medical records.
- Change the drainage system using an aseptic non-touch technique (ANTT) in line with manufacture recommendations i.e. 7 days. Document date of change in the catheter record document.
- If infection is suspected or patient is MRSA positive a sample of urine is to be obtained from the sampling port using an ANTT and sent to the laboratory (refer to procedure for how to obtain sample).
- If urinary catheter remains insitu on discharge, inform district nurse and supply seven days of drainage bags, and one replacement urinary catheter. Ensure that the catheter insertion date is included in the discharge summary.

**Urinary catheter removal,**
- If the urinary catheter has been insitu for 7 days or greater or patient is MRSA positive, then refer to the antimicrobial guidelines prior to catheter removal.
- Ensure that the patient is able to pass urine and does not have high post void residual urine. The bladder scanner may be used to aid this assessment. If the patient has not passed urine review with the multidisciplinary team.
- If further investigation and treatment is needed, refer the patient to the urology nursing team.

**References:-**
- Urethral Catheterisation. Royal Marsden Manual of Clinical Nursing; Chapter 24. Procedures; Mallet and Bailey
- Institute for Healthcare Improvement (2010)
Catheterisation:
If the need for urinary catheterisation does not meet the insertion criteria on the catheter record then alternatives should be evaluated and used.

- Prior to catheterisation the area should be cleaned using Octenilin.
- A sterile anaesthetic lubricant as per trust policy should be inserted into the urethral meatus for all patients.
- The catheter must be inserted using an aseptic non-touch technique.
- Connect the catheter to a sterile, closed drainage system. The patient should be assessed for an appropriate urinary drainage system.
- Complete the urinary catheter record.

Ongoing care:
- A sterile continuous drainage system is used and changed inline with manufacture recommendations. The date must be recorded in the section on the catheter record.
- The drainage system should be evaluated for appropriate use and may be changed prior to 7 days. The date of system change must always be documented in the catheter record.
- The drainage bag must be positioned below the level of the patient’s bladder.
- The catheter site must be cleaned daily with the patient’s routine hygiene needs.
- The drainage bag should be emptied using an aseptic non-touch technique into a single use container.
- The catheter should be removed at the earliest opportunity when the criteria are no longer met. The need for the catheter should be reviewed and documented on a daily basis.
- If the patient is suspected/symptomatic of a urinary tract infection, has sepsis of unknown cause or is MRSA positive then a sample of urine should be obtained via the sampling port using an aseptic non-touch technique and sent to the laboratory for culture and sensitivity.

Removal:
- Prior to removal if the catheter has been in situ for 7 days or more send CSU prior to planned removal date, antimicrobial guidelines should be referred to.
- The catheter should be removed using an aseptic non-touch technique.
- Catheter care record must be updated.
- The patient should be observed to ensure passing adequate volumes of urine.
- If re-catheterisation is required the above must be repeated.
- Refer to urology team if further investigation is required.
**Urinary catheter record.**

Document the reason for catheter insertion on the catheter record from the urinary catheter criteria:

- Urine output monitoring of critically ill patients (hemodynamic monitoring)
- The patient cannot sufficiently empty his/her bladder (bladder outlet obstruction, retention)
- The patient has open wounds/pressure damage and healing is impaired by contamination of urine
- The patient has a disability that makes moving/changing very painful
- To allow bladder irrigation
- To introduce cytotoxic drugs into the bladder
- To enable bladder function tests
- If required during surgical procedure or post-operatively
- To empty the bladder before childbirth

<table>
<thead>
<tr>
<th>Date</th>
<th>Reason for catheter insertion</th>
<th>Type of catheter</th>
<th>Balloon size</th>
<th>Lubricant type/amount and batch number</th>
<th>Catheter inserted aseptically</th>
<th>Sign and Print name</th>
<th>Date and reason for changing/removing catheter</th>
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Sterile drainage system must be changed in-line with manufacture recommendations i.e. every 7 days

<table>
<thead>
<tr>
<th>Date of drainage bag change</th>
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<th>Date of drainage bag change</th>
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APPENDIX 4

PROCEDURE FOR INSERTION OF MALE URETHRAL CATHETER

Where possible urinary catheterisation should be performed in the treatment/dressings room when carrying out in the hospital setting.

Prior to catheterisation the trolley must be cleaned with detergent and disinfectant wipe i.e. cliiniwipes.

Trolley for urethral catheterisation

Top shelf
Sterile Cath-it catheter pack in

Bottom Shelf
1. Sterile gloves x 2 pairs
2. Appropriate catheter
3. Sterile lubricating jelly (Instillagel)
4. Octenilin
5. Specimen pot
6. Water for injection and 10ml syringe if needed for balloon inflation
7. Drainage bag and holder

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<tr>
<th>ACTION</th>
<th>RATIONALE</th>
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<tbody>
<tr>
<td>1</td>
<td>Explain and discuss the procedure with the patient</td>
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<tr>
<td>2</td>
<td>Prepare treatment/clinical room or patients bed area.</td>
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<tr>
<td>3</td>
<td>Assist the patient to get into the supine position with knees bent, hips flexed and feet resting about 60cm apart.</td>
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<tr>
<td>4</td>
<td>Do not expose the patient at this stage of the procedure.</td>
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<tr>
<td>5</td>
<td>Ensure a good light source is available.</td>
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<tr>
<td>6</td>
<td>Wash hands as per hand hygiene policy.</td>
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<tr>
<td>7</td>
<td>Put on disposable apron.</td>
</tr>
<tr>
<td>8</td>
<td>Clean and prepare the trolley, placing all equipment required in the bottom shelf.</td>
</tr>
<tr>
<td>9</td>
<td>If necessary take the trolley to the patients bedside disturbing the screens as little as possible. Where possible catheterisation should be done in a treatment or clinical room.</td>
</tr>
<tr>
<td>10</td>
<td>Wash hands as per hand hygiene policy.</td>
</tr>
<tr>
<td>11</td>
<td>Open the outer cover of the catheterisation pack and slide the pack onto the top shelf of the trolley.</td>
</tr>
<tr>
<td>12</td>
<td>Using ANTT open the supplementary packs.</td>
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<tr>
<td>13</td>
<td>Remove the cover that is maintaining the patients privacy and position a disposable pad under the patients buttocks.</td>
</tr>
<tr>
<td>14</td>
<td>Wash hand as per hand hygiene policy, wear PPE and put on sterile gloves.</td>
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<tr>
<td>15</td>
<td>Place sterile towels across the patient thighs</td>
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</table>
and under buttocks.

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<tr>
<td><strong>16</strong></td>
<td>Wrap a sterile gauze swab around the penis. Retract the foreskin, if necessary, and clean the glans penis with the appropriate solution.</td>
</tr>
<tr>
<td></td>
<td>To reduce the risk of introducing infection to the urinary tract during catheterisation</td>
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<tr>
<td><strong>17</strong></td>
<td>Insert the nozzle of the lubricating jelly into the urethra. Squeeze the gel into the urethra, remove the nozzle and discard the tube. Massage the gel along the urethra.</td>
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<tr>
<td></td>
<td>Adequate lubrication helps to prevent urethral trauma. Use of a local anaesthetic minimizes the discomfort experienced by the patient.</td>
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<tr>
<td><strong>18</strong></td>
<td>Squeeze the penis and wait approximately 5 minutes</td>
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<tr>
<td></td>
<td>To prevent anaesthetic gel from escaping. To allow the anaesthetic gel to take effect</td>
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<tr>
<td><strong>19</strong></td>
<td>Discard gloves and wash hands</td>
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<td></td>
<td>To prevent the risk of infection. The procedure of cleansing the meatus could cause risk of infection</td>
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<tr>
<td><strong>20</strong></td>
<td>Wash hands and don sterile gloves</td>
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<tr>
<td><strong>21</strong></td>
<td>Grasp the penis behind the glans raising it until it is almost totally extended. Maintain grasp of penis until the procedure is finished.</td>
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<td></td>
<td>This manoeuvre straightens the penile urethra and facilitates catheterisation (Stoller 1995) Maintaining a grasp of the penis prevents contamination and retraction of the penis.</td>
</tr>
<tr>
<td><strong>22</strong></td>
<td>Place the receiver containing the catheter between the patients leg. Insert the catheter for 15 – 20cms until urine flows</td>
</tr>
<tr>
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<td>The male urethra is approximately 18cms long</td>
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<tr>
<td><strong>23</strong></td>
<td>If resistance is felt at the external sphincter, increase the traction on the penis slightly and apply steady gentle pressure on the catheter. Ask the patient to strain gently as if passing urine</td>
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<td>Some resistance may be due to spasm of the external sphincter. Straining gently helps to relax the external sphincter.</td>
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<tr>
<td><strong>24</strong></td>
<td>Either remove the catheter gently when urinary flow ceases or:- (a) When urine begins to flow, advance the catheter almost to its bifurcation. (b) Gently inflate the balloon according to the manufacturers directions, having ensured that the catheter is draining properly beforehand (c) Withdraw the catheter slightly and attach it to the drainage system (d) Support the catheter by using a specially designed support, e.g. Simpla G-Strap. Ensure that the catheter does not become taut when the penis becomes erect. Ensure that the catheter lumen is not occluded by the fixation device. If using overnight urine collecting bag, position the catheter below the level of the bladder on a clean stand that prevents any part of the catheter drainage system coming into contact with the floor.</td>
</tr>
<tr>
<td></td>
<td>Advancing the catheter ensures that it is correctly positioned in the bladder Inadvertent inflation of the balloon in the urethra causes pain and urethral trauma. To maintain patient comfort and to reduce the risk of urethral and bladder neck trauma.</td>
</tr>
<tr>
<td><strong>25</strong></td>
<td>Ensure that the glans penis is clean and then reduce or reposition the foreskin</td>
</tr>
<tr>
<td></td>
<td>Retraction and constriction of the foreskin behind the glans penis (paraphimosis) may occur if this is not done</td>
</tr>
<tr>
<td><strong>26</strong></td>
<td>Make the patient comfortable. Ensure the area is dry</td>
</tr>
<tr>
<td></td>
<td>If the area is left wet or moist, secondary infection and skin irritation may occur</td>
</tr>
<tr>
<td><strong>27</strong></td>
<td>Measure the amount of urine</td>
</tr>
</tbody>
</table>
|   | To be aware of bladder capacity for patients who have presented with urinary retention. To monitor renal function and fluid balance. It is not necessary to measure the amount of urine if the patient is having the
| 28 | Dispose of equipment in an orange plastic clinical waste bag and seal the bag before moving the trolley | To prevent environmental contamination. Orange is the recognised colour for clinical waste |
| 29 | Remove PPE and wash hands | |
| 30 | Make sure patients clothing and bedding is appropriately arranged. Take back to bed area if appropriate and arrange bed curtains. | To ensure privacy and dignity |
| 31 | Record information in relevant documents; this should include reasons for catheter insertion, as per policy | To provide a point of reference or comparison in the event of later queries. |
| 32 | File catheter record into patients nursing notes | To provide a point of reference or comparison in the event of later queries. |
| 33 | Ensure the patient is well informed about their catheter and understands the need for good hygiene, adequate fluid intake and the use of supportive devices. Continue to monitor fluid balance if appropriate | To ensure patient is well hydrated, and prevent or recognise complications occurring from catheterisation. |
PROCEDURE FOR FEMALE URETHRAL CATHETERISATION

Prior to catheterisation the trolley must be cleaned with detergent and disinfectant wipe.

<table>
<thead>
<tr>
<th>Action</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Explain and discuss the procedure with the patient</td>
<td>To ensure that the patient understands the procedure and gives her valid consent</td>
</tr>
<tr>
<td>2 Prepare treatment/clinical room or patients bed area</td>
<td>To ensure patients privacy. To allow dust and airborne organisms to settle before the sterile field is exposed</td>
</tr>
<tr>
<td>3 Assist the patient to get into the supine position with knees bent, hips flexed and feet resting about 60cm apart</td>
<td>To enable genital area to be seen</td>
</tr>
<tr>
<td>4 Do not expose the patient at this stage of the procedure</td>
<td>To maintain the patients dignity and comfort</td>
</tr>
<tr>
<td>5 Ensure that a good light source is available</td>
<td>To enable genital area to be seen clearly</td>
</tr>
<tr>
<td>6 Wash hands as per hand hygiene protocol</td>
<td>To reduce the risk of cross infection</td>
</tr>
<tr>
<td>7 Put on a disposable apron</td>
<td>To reduce the risk of cross infection from microorganisms on uniform</td>
</tr>
<tr>
<td>8 Prepare the trolley, placing all equipment required on the bottom shelf</td>
<td>To reserve top shelf for clean working surface</td>
</tr>
<tr>
<td>9 If necessary take the trolley to the patients bedside, disturbing the screens as little as possible</td>
<td>To minimise airborne contamination</td>
</tr>
<tr>
<td>10 Wash hands</td>
<td></td>
</tr>
<tr>
<td>11 Open the outer cover of the catheterisation pack and slide the pack onto the top shelf of the trolley</td>
<td>To prepare equipment</td>
</tr>
<tr>
<td>12 Using ANTT open the supplementary packs</td>
<td>To reduce the risk of introducing infection into the urinary tract</td>
</tr>
<tr>
<td>13 Remove the cover that is maintaining the patients privacy and position a disposable pad under the patients buttocks</td>
<td>To ensure urine does not leak onto the bedclothes.</td>
</tr>
<tr>
<td>14 Clean hands, wear PPE and put on sterile gloves</td>
<td>Hands may have become contaminated by handling outer packs</td>
</tr>
<tr>
<td>15 Place sterile towels across the patients thighs</td>
<td>To create a sterile field</td>
</tr>
<tr>
<td>16 Using gauze swabs, separate the labia minora so that the urethral meatus can be seen. One hand should be used to maintain labial separation until catheterisation is completed</td>
<td>This manoeuvre provides better access to the urethral orifice and helps prevent labial contamination of the catheter.</td>
</tr>
<tr>
<td>17 Clean around the urethral orifice with the appropriate cleansing solution, using single downward strokes</td>
<td>Inadequate preparation of the urethral orifice is a major cause of infection following catheterisation. To reduce the risk of cross infection.</td>
</tr>
<tr>
<td>18 Insert the nozzle of the lubricating jelly into the urethra. Squeeze the gel into the urethra, remove the nozzle and discard the tube</td>
<td>Adequate lubrication helps to prevent urethral trauma. The use of a local anaesthetic minimises the patient discomfort.</td>
</tr>
<tr>
<td>19 Remove gloves and wash hands</td>
<td>Preparation of the patient could result in infection if the gloves are not changed</td>
</tr>
<tr>
<td>20 After washing hands put on sterile gloves</td>
<td>To reduce the risk of infection</td>
</tr>
<tr>
<td>21 Place the receiver containing the catheter between the patients legs</td>
<td>To provide a temporary container for urine as it drains</td>
</tr>
</tbody>
</table>
22. Introduce the tip of the catheter into the urethral orifice in an upward and backward direction. If there is any difficulty in visualising the urethral orifice due to vaginal atrophy, the index finger of the ‘dirty’ hand may be inserted into the vagina and the urethral orifice can be palpated on the anterior wall of the vagina. The index finger is then positioned just behind the urethral orifice. This then acts as a guide so the catheter can be correctly positioned. Advance the catheter until 5 – 6 cms has been inserted.

The direction of insertion and the length of catheter inserted should bear relation to the anatomical structure of the area.

23. (a) Advance the catheter 6-8 cms
(b) Inflate the balloon according to the manufacturers directions, having ensured that the catheter is draining adequately
(c) Withdraw the catheter slightly and connect it to the drainage system
(d) Support the catheter by using a specially designed support e.g. Simpla G-strap.

This prevents the balloon from becoming trapped in the urethra
Inadvertent inflation of the balloon within the urethra is painful and causes urethral trauma
To maintain patient comfort and to reduce the risk of urethral and bladder neck trauma.

24. Make the patient comfortable and ensure the area is dry

If the area is left wet or moist, secondary infection and skin irritation may occur

25. Measure the amount of urine

To be aware of bladder capacity for patients who have presented with urinary retention. To monitor renal function and fluid balance. It is not necessary to measure the amount of urine if the patient is having the catheter routinely changed.

26. Dispose of equipment in an orange plastic clinical waste bag and seal the bag before moving the trolley

To prevent environmental contamination.

27. Remove PPE and wash and dry hands.

28. Ensure the patients clothing or bedding is appropriately arranged. Draw back the curtains, return patient to ward area

To ensure privacy and dignity

29. Record information in relevant documents as per policy

To provide a point of reference or comparison in the event of later queries

30. Ensure the patient is well informed about their catheter and understands the need for good hygiene, adequate fluid intake and the use of supportive devices. Continue to monitor fluid

To ensure the patient is well hydrated and prevent or recognise complications occurring from catheterisation.
Note:- Beware of patient having a vaso-vagal attack which is caused by the vagal nerve being stimulated. This results in a slowing down of the heart rate leading to a syncope faint. If this happens lie the patient down in the recovery position and inform medical staff.

CHECKLIST FOR PROBLEMATIC DRAINAGE

- Ensure tubing is not kinked
- Check drainage bag is below the level of the bladder
- Prevent overfilling of the leg bag/overnight bag – empty when ½ - ¾ full.
- Check for constipation and treat as necessary
- Suspected urinary tract infection – CSU treat as necessary as per antimicrobial guidelines
- Debris/mucous in urine – consider saline washout to rinse away the blockage
- Encrustation noted on removal of catheter – If patient is on long term catheterisation – re-catheterise, monitor urine pH. If urine pH is raised (alkaline) consider acidic catheter maintenance solution.
- Blood in urine – after catheterisation small amounts of blood may be seen, monitor and inform medical staff if bleeding persists or increases in volume.
- Bladder spasm: –
  Ensure the amount of water in the catheter balloon is correct.
  (Over or under filling of the balloon can cause the catheter tip to deviate to one side and irritate the trigone or bladder wall.)
  ▪ check the catheter is not blocked
  ▪ consider anticholinergic therapies
APPENDIX 5

PROTOCOL FOR INTERMITTENT CATHETERISATION

If procedure is performed by a member of the healthcare team, then it must be performed as an aseptic technique. The Healthcare member must wear personal protective clothing as appropriate and procedure must adhere to hospital policy for urethral catheterisation.

If procedure is carried out by the patient or carer then it is a clean procedure.

**Intermittent self-catheterization (ISC)**

This is not a new technique, although it has become noticeably more popular in recent years.

The procedure involves the episodic introduction of a catheter into the bladder to remove urine. After this the catheter is removed, leaving the patient catheter-free between catheterizations. In hospital this should be a sterile procedure because of the risks of hospital-acquired infection. However, in the patient’s home a clean technique may be used (Wilson 1998; Lapides et al. 2002). Catheterization should be carried out as often as necessary to stop the bladder becoming over distended and to prevent incontinence (Bennett 2002). How frequent this is depends on the individual but may vary from once a week, to once a day to four to six times a day.

The advantages of intermittent catheterization over indwelling urethral catheterizations include improved quality of life, as patients are free from bulky pads or indwelling catheters and drainage bags, greater patient satisfaction and greater freedom to express sexuality. In addition, urinary tract complications are minimized and normal bladder function is maintained (Webb et al. 1990; Bakke & Malt 1993; Chai et al. 1995; Bakke et al. 1997; Getliffe 1997).

Patients suitable for intermittent self-catheterization include:

- Those with a bladder capable of storing urine without leakage between catheterizations
- Those who can comprehend the technique
- Those with a reasonable degree of dexterity and mobility to position themselves for the procedure and manipulate the catheter
- Those who are highly motivated and committed to carry out the procedure (Colley 1998)
- Those who have a willing partner to perform the technique (i.e. if agreeable to both).
- Patients who have developed post-operative urinary retention. (Post-operative urinary guidelines are currently in production)

**OBJECTIVES**

The health care professional will:-

- See those patients who condition would benefit from performing ISC.
- Make sure the patient is sufficiently dextrous and motivated to perform the procedure
- Ensure the patient is fully counselled and aware of the reason for performing the procedure and any possible alternatives to this treatment.
- Ensure the patient is aware of possible complications which can occur when performing ISC and that they are aware of the consequences of non-compliance/concordance.
- Ensure the patient is able to perform ISC using a clean technique and is fully aware of the treatment regime.
- Ensure the patient is aware of how to lubricate the catheters and any requisites for storage.
- Ensure the patient is offered a variety of catheters and delivery services.
- Follow up the patient on a regular basis to ensure continued concordance with treatment.
- Identify any changes to patients condition and treat/investigate as appropriate

PRIOR TO DISCHARGE FROM THE WARD/DEPARTMENT

The health care professional will:-
- Ensure that the patient is competent performing ISC.
- Ensure that the patient has an adequate supply of catheters.
- Arrange home delivery service if necessary.
- Arrange follow up appointment.
- Give out information booklets and nurse contact numbers.
- Arrange community follow up if appropriate.
- Contact District nursing Service to arrange a home visit within 24 hours.
- Give discharge letter to patient, copy for patient to give to District Nurse, copy to be sent to GP

ISC PATHWAY

- All patients will be seen by a health care professional and full explanation given re the reason for ISC, and possible other treatment options available.
- The HCP will assess patient dexterity and show and explain the catheters most suitable for the individual.
- The HCP will show the patient the DVD presentation on intermittent self-catheterisation and answer any queries or concerns they may have.
- The HCP will assist patient through the 1st catheterisation, explaining anatomy and procedure throughout. She will identify any aids which will be of benefit to the patient during the procedure.
- The patient is required to repeat the procedure and therefore must remain on the ward/in the clinic until they have drunk sufficiently to repeat the ISC. (the patients may leave the clinic and return when they have a full bladder)
- The HCP will observe the patient performing ISC and offer encouragement and advice throughout.
- The HCP will ensure the patient has a full understanding of the equipment and hygiene issues surrounding ISC, and the methods of receiving further supplies of equipment.
- If successful and the patient feels competent the HCP will arrange follow up by the appropriate team. This may be urology, gynaecology, or the continence or district nursing service as appropriate.

Intermittent self-catheterization

Procedure guidelines for patients

Equipment

- Mirror (for female patients).
- Appropriately sized catheters for male/female patients.
- Lubricating gel.
- Clean container (e.g. plastic envelope) for catheter.

<table>
<thead>
<tr>
<th>FEMALE INTERMITTENT SELF CATHETERISATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Action</strong></td>
</tr>
<tr>
<td>1 Wash hands using soap and water</td>
</tr>
<tr>
<td>2 Take up a comfortable position, depending on mobility (e.g. sitting on the toilet, standing with one)</td>
</tr>
<tr>
<td>Step</td>
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<td>------</td>
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<tr>
<td>3</td>
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<td>9</td>
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<td>10</td>
</tr>
<tr>
<td>Action</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>1 Wash hands using soap and water</td>
</tr>
<tr>
<td>2 Take up a comfortable position, depending on mobility (e.g. sitting</td>
</tr>
<tr>
<td>on the toilet, standing with one foot on toilet seat, lying in bed)</td>
</tr>
<tr>
<td>3 Clean glans penis with soap and water. If the foreskin covers the</td>
</tr>
<tr>
<td>penis it will need to be held back during the procedure</td>
</tr>
<tr>
<td>4 Open catheter packaging or container as per manufacturer’s</td>
</tr>
<tr>
<td>instructions. If using a coated catheter pre-soak as per</td>
</tr>
<tr>
<td>manufacturer’s instructions.</td>
</tr>
<tr>
<td>5 Hold the penis in the non-dominant hand, upwards towards your</td>
</tr>
<tr>
<td>stomach. Standing in front of a mirror is useful for men with a</td>
</tr>
<tr>
<td>large abdomen</td>
</tr>
<tr>
<td>6 Hold the catheter with the dominant hand, being careful not to</td>
</tr>
<tr>
<td>touch the part of the catheter entering the body, and gently insert</td>
</tr>
<tr>
<td>it into the opening of the urethra. Advance the catheter into the</td>
</tr>
<tr>
<td>bladder. There will be a change of feeling as the catheter passes</td>
</tr>
<tr>
<td>through the prostate gland and into the bladder. It may be a little</td>
</tr>
<tr>
<td>sore on the first few occasions only. If there is any resistance,</td>
</tr>
<tr>
<td>do not continue, withdraw the catheter and contact your</td>
</tr>
<tr>
<td>urology/continence/district nurses.</td>
</tr>
<tr>
<td>7 Drain the urine into the toilet or suitable container. When the</td>
</tr>
<tr>
<td>urine stops flowing slowly remove the catheter, halting if more</td>
</tr>
<tr>
<td>urine starts to flow.</td>
</tr>
<tr>
<td>8 Before removing the catheter from the urethra put a finger over the</td>
</tr>
<tr>
<td>funnel end of the catheter and then remove the catheter from the</td>
</tr>
<tr>
<td>urethra.</td>
</tr>
<tr>
<td>9 Hold the catheter over the toilet or suitable container and remove</td>
</tr>
<tr>
<td>finger from the funnel end to release the trapped urine.</td>
</tr>
<tr>
<td>10 Dispose of the catheter in a suitable receptacle. In the community</td>
</tr>
<tr>
<td>- wrap in newspaper or plastic bag and dispose in the domestic</td>
</tr>
<tr>
<td>waste bin. If in hospital dispose the catheter in a lidded orange</td>
</tr>
<tr>
<td>clinical waste bin.</td>
</tr>
<tr>
<td>10 Wash hands with soap and water.</td>
</tr>
</tbody>
</table>
APPENDIX 6

URINARY CATHETER MAINTENACE SOLUTIONS

It is acknowledged that catheter blockage can lead to inappropriate referral to Accident and Emergency departments and increases pressure on community nursing case loads.

There are a variety of reasons why catheters block and these include both bladder spasm and constipation however the most common cause of blockage is from urease producing bacteria which deposits bio films and encrustation on the external surface of the catheter and within the lumen of the catheter (Getliffe, 1994). These deposits not only cause pain and discomfort to the client, but also contribute to increased nursing costs in time and travel.

It is considered that at least 50% of clients with a long term catheter (that is defined as a client who has had a catheter in situ for over 12 weeks) will at some time experience blockage of the catheter due to encrustation of the catheter. (Getliffe and Dolman 1997).

For clients whose catheter regularly blocks, that is who have more than 3 emergency catheter changes in 8 weeks due to encrustation, or where visible sediment is seen then the use of a Catheter Maintenance Solution (Formerly called a bladder washout) regime is an acceptable form of management. (Getliffe 1997 in Getliffe and Dolman 1997)

Types of Maintenance Solutions

1. Normal Saline

Normal saline can be used to irrigate catheters that block with either pus, blood clots or debris. It is very effective for clients with reconstructed bladders where there is a large amount of mucous produced. Normal saline will not dissolve encrustation but works by gently washing out the lumen of the catheter. The use of normal saline is not recommended if a catheter is regularly blocking due to encrustation.

2. Solution G (3.2% citric acid) :( Also known as Suby G)

Solution G works by dissolving the crystals formed by urease producing bacteria. Solution G contains Magnesium Oxide this has been incorporated to prevent bladder irritation due to the acidic nature of the solution. This solution has been extensively trialled.

3. Solution R (6% solution of citric acid)

Solution R is effective at dissolving severe encrustation due to its acidic nature. This should be used only after Solution G has been tried and has not been effective. It can also be used just prior to catheter removal to dissolve any crystals on the tip of the catheter which may cause trauma on catheter removal. This solution has been extensively trialled.

N.B. There are a few clients who cannot tolerate the use of catheter maintenance solutions. These clients usually complain of pain and discomfort on instillation of the solution. For these clients the only option is to change the catheter frequently to prevent encrustation building up. These clients should be discussed with the Medical staff/urology nurse specialists/continence advisor.
CATHETER MAINTENANCE REGIMES

There are a variety of maintenance regimes suggested in the literature. However it is suggested that catheter closed drainage systems are not opened too often. Therefore daily washouts would be discouraged in the long term and a 2-3 times a week regime followed where this treatment is considered necessary for a short period of time and then washouts discontinued or used weekly where appropriate.

POINTS TO REMEMBER WHEN USING CATHETER MAINTENANCE SOLUTIONS

1. Check the pH of the urine. If the pH is alkaline (6.9 and 9) then encrustation is the most likely cause of the catheter blocking. In these cases a maintenance solution would be recommended. Best practice indicates that urine should be tested weekly to monitor the pH. Use Litmus paper.

2. Always warm the solution to body temp 37c prior to instilling. To warm the solution it is suggested the container is placed in a jug of warm water to bring it up to body temperature. The water should be at a temperature which you are to able to comfortably place your hand in. This is to prevent the bladder going into spasm if the solution is to cold. NB do not use boiling water from the kettle.

3. Ensure correct aseptic technique when undertaking urinary catheter maintenance.

4. Use 2 smaller washouts of 30-50mls and not one 100ml washout. Choose the dispensing pack to suit the needs of the client. Remember there is some evidence to suggest that gentle agitation may be more effective than instilling the product for a long period of time, as agitation appears to dissolve the encrustation.

5. Record reasons for urinary catheter changes in the care plan and clients notes. By recording details correctly patterns of blockage can be clearly identified and action can be taken at an early stage to ensure that the catheter remains patent.

6. There appears to be little effect in increased fluid intake for catheterized clients and vitamin C in large doses should no longer be encouraged or recommended.

7. Cranberry must be used with caution, as there is little empirical evidence that it helps. However it works for some patients; please remember that Cranberry must not be used with any client on anti-coagulant therapy (MDA circular 2004) as this increases the INR and causing an increased risk of bleeding.

Step 1
The HCP will ensure the following:
1. Only a trained HCP will perform the procedure.
2. Solution has been prescribed by a medical officer/nurse prescriber and that the local drug policy is followed.
3. Catheter care plan should clearly state reason for use of solution/regime.
4. A full assessment of the patient’s condition will be made prior to installation of the prescribed solution.
5. The principles of asepsis will be observed.
6. Only pre-packed sterile systems are to be used.
7. Sterile gloves will be worn.
8. Comfort and safety of the patient will be ensured.
9. Accurate records will be kept.

Step 2
Prepare equipment.
Step 3
Procedure will be fully explained to the patient/carer/relative.

Step 4
Wash hand and put on sterile gloves.

Step 5
Instil solution according to manufacturer’s instructions.

Step 6
Attach new drainage bag.

Step 7
All clinical waste to be disposed of safely.

Step 8
Wash hands following procedure.

Step 9
Records to be updated.
Procedure for obtaining a catheter specimen of urine

ProSys needle free sample port
How to use the ProSys Needle Free Sample Port

• Wash hands and apply appropriate personal protective equipment (PPE), apron and gloves as a minimum.
• Kink the inlet tube approximately 75mm (3”) below the sampling port then wait until enough urine has collected underneath the port.
• Clean the surface of the sampling port with 2% chlorhexidine & 70% alcohol wipes for 30 seconds and allow to dry for 30 seconds.
• Using aseptic non-touch technique insert the barrel of an empty syringe into the sampling port.
• Withdraw desired volume of urine.
• Send the sample of urine in the container with boric acid preservative (red topped) to the laboratory for processing and un-kink the drainage tubing once procedure completed to allow drainage.
SAFECARE ALERT
Changing a Urinary Catheter:
Indications for Antimicrobial Prophylaxis

As highlighted from a previous Safecare Alert issue No 20 recent practice has indicated some confusion as to the role of antimicrobial prophylaxis prior to removal or changing a urinary catheter. Compliance with the following best practice will ensure that the risks associated with urinary catheter device management are minimised for patients. This may prevent a potential bacteraemia for this patient group.

❖ When to give Antimicrobial Prophylaxis
Antimicrobial prophylaxis should be routinely given if a urinary catheter has been in place for 7 days or greater before it can be removed and/or a new catheter reinserted. Patients who are or have previously been colonised with MRSA should also be considered for prophylactic antibiotic cover. If a patient has a negative urine culture result within the previous 48 hours, no antimicrobial prophylaxis is required.

❖ What to Prescribe

• Patient has a known urinary tract infection identified by a culture result within the last 7 days

Administer at least 24 hours treatment with an appropriate oral antimicrobial prior to removal and/or reinsertion of a new urinary catheter

• The situation is urgent and no culture result is available

Administer empirical treatment:

GENTAMICIN 160mg IV given as a single dose 30 minutes prior to procedure
(If patient weighs less than 55kg give GENTAMICIN 120mg IV as a single dose)
Or
If venous access is difficult or not appropriate:
*CIPROFLOXacin 750mg Oral 60 – 90 minutes prior to procedure

• Do not use Ciprofloxacin in patients with a history of Clostridium difficile associated diarrhoea or with a history of MRSA colonisation/infection and use with caution in the elderly, especially women. Discuss an alternative agent with a Medical Microbiologist.

❖ Documentation
Antimicrobial prophylaxis should be prescribed on the once only section of the drug prescription chart and the rationale for treatment documented in the patient’s medical notes. Always follow current Trust policy for urinary catheter management.

Dr D M Beaumont
Medical Director

Mrs G MacArthur
Director of Nursing and Midwifery
APPENDIX 9  
PROCEDURE FOR REMOVAL OF URINARY CATHETER

There is no evidence to suggest that any time of day is more beneficial for removing a urinary catheter, (see catheter policy.)

**Equipment**

Trolley with:

1. Dressing pack containing galley pot and gauze and absorbent pad
2. Disposable gloves/PPE
3. Needle and syringe for urine specimen, specimen pot if CSU is indicated.
4. Syringe for deflating balloon
5. Octenilin.
6. Clinic al waste bag

<table>
<thead>
<tr>
<th>Action</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong></td>
<td>Explain the procedure to the patient and inform him or her of potential post catheter symptoms, i.e. urgency, frequency and discomfort which may be caused by irritation of the urethra by the catheter. Explain the fluid requirements once the catheter has been removed. Ensure the patient is not constipated Check documentation to determine the amount of water in the catheter balloon</td>
</tr>
<tr>
<td><strong>2</strong></td>
<td>Prepare the clinical room or bed area Ensuring patients privacy and dignity is maintained at all times.</td>
</tr>
<tr>
<td><strong>3</strong></td>
<td>Wash hands and wear PPE</td>
</tr>
<tr>
<td><strong>4</strong></td>
<td>Correctly position patient on bed and adjust clothing as necessary Place absorbent pad under buttocks.</td>
</tr>
<tr>
<td><strong>5</strong></td>
<td>Wearing PPE as per catheter policy, take a catheter specimen of urine if appropriate</td>
</tr>
<tr>
<td><strong>6</strong></td>
<td>Clean the urethral meatus using as per catheter insertion procedure</td>
</tr>
<tr>
<td><strong>7</strong></td>
<td>Release the support from the leg drainage bag if appropriate</td>
</tr>
<tr>
<td><strong>8</strong></td>
<td>Using syringe withdraw water from catheter balloon</td>
</tr>
<tr>
<td><strong>9</strong></td>
<td>Ask patient to breathe in then out; as patient exhales, gently but quickly, remove the catheter. Male patients should be warned of discomfort as the deflated balloon passes through the prostate gland.</td>
</tr>
<tr>
<td><strong>10</strong></td>
<td>Clean meatus, make patient comfortable and tidy away equipment as per Trust policy</td>
</tr>
<tr>
<td><strong>11</strong></td>
<td>Wash hands; remove PPE and record catheter removal in patient’s notes. Record on fluid</td>
</tr>
</tbody>
</table>
Symptoms should resolve over the following 24–48 hours. If not further investigation may be needed. Encourage patient to exercise and to drink 2–3 litres of fluid per day.

If patient is unable to void contact medical staff, discuss options for treatment. Re-catheterisation or intermittent catheterisation may be necessary.

Discuss treatment plan with medical staff and patient or carer and refer to appropriate services if necessary.

After removal of the catheter

<table>
<thead>
<tr>
<th>Problem</th>
<th>Cause</th>
<th>Suggested action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dysuria</td>
<td>Inflammation of the urethral mucosa</td>
<td>Ensure a fluid intake of 2-3 litres per day. Advise the patient that dysuria is common but will usually be resolved once the micturition has occurred at least three times. Inform the medical staff if the problem persists.</td>
</tr>
<tr>
<td>Retention of urine</td>
<td>Could be lack of fluids/constipation. Other reasons need to be explored if retention continues.</td>
<td>Encourage patient to increase fluid intake. Offer the patient a warm bath. If retention becomes painful patient may need re-catheterised. Assess patient for consideration of intermittent catheterisation.</td>
</tr>
<tr>
<td>Urinary tract infection</td>
<td></td>
<td>Encourage a fluid intake of 2-3 litres per day. Collect a specimen of urine if the patient is symptomatic. Follow antimicrobial guidelines.</td>
</tr>
</tbody>
</table>
Suprapubic catheterization does offer some advantages over urethral catheterization. There is a reduction in the risk of patients developing urinary tract infection, as the bacterial count on the abdominal skin is less than around the perineal and perianal areas, although bacteriuria and encrustation still occur in susceptible patients (Winn 1998; Simpson 2001). Urethral integrity is retained and it allows for the resumption of normal voiding after surgery. Clamping the suprapubic catheter allows urethral voiding to occur, and the clamp can be released if voiding is incomplete. Pain and catheter-associated discomfort are reduced. Patient satisfaction is increased as, for some, their level of independence is increased and sexual intercourse can occur with less impediment (Hammarsten & Lindquist 1992; Barnes et al. 1993; Fillingham & Douglas 1997; Wilson 1998).

Caring for a suprapubic catheter is the same as for a urethral catheter. Immediately following insertion of a suprapubic catheter, aseptic technique should be employed to clean the insertion site. Dressings may be required if secretions soil clothing, but they are not essential. Once the insertion site has healed (7–10 days), the site and catheter can be cleaned during bathing using soap, water and a clean cloth (Fillingham & Douglas 1997).

Change of SP catheters is an aseptic non touch technique and where possible should be done in a clinical/treatment room rather than at the patients bedside.

This procedure must be used in conjunction with the Gateshead NHS Trust Catheter policy.

**NB**

First SP catheter change should only be done at times when there are facilities and medical staff available to carry out SP insertion if necessary.

Where the catheter is being changed for the first time care must be taken to ensure that the new catheter is inserted immediately the existing catheter is removed. The stoma and tract formed by the catheter may close very quickly, in these cases the procedure should be performed by 2 healthcare professional to ensure that once the catheter is removed the 2nd health care professional is ready to insert another catheter as soon as possible.

<table>
<thead>
<tr>
<th>ACTION</th>
<th>RATIONALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Discuss reason for catheter removal or change. Risk assess patient as per catheter policy</td>
<td>To ensure that the procedure is in best interest of patient</td>
</tr>
<tr>
<td>2 Assess need for antimicrobial prophylaxis as per catheter policy</td>
<td>To reduce the risk of CAUTI and possible sepsis for patient</td>
</tr>
<tr>
<td>3 Explain the procedure to the patient/carers</td>
<td>To ensure patient is fully informed and can give informed consent for the procedure</td>
</tr>
<tr>
<td>4 Prepare the environment</td>
<td>To reduce the risk of airborne infection</td>
</tr>
<tr>
<td>5 (a) Screen the bed, or prepare the treatment room</td>
<td>To ensure patients privacy. To allow dust and airborne organisms to settle before the field is exposed.</td>
</tr>
<tr>
<td>(b) Assist the patient to lie down with the legs extended</td>
<td>To ensure the appropriate area is easily accessible</td>
</tr>
<tr>
<td>(c) Do not expose the patient at this stage of the procedure</td>
<td>To maintain the patient’s dignity and comfort</td>
</tr>
<tr>
<td>6 Wash hands as per Trust hygiene policy</td>
<td>To reduce the risk of infection</td>
</tr>
<tr>
<td>7 Put on plastic apron</td>
<td>To reduce the risk of cross infection from micro-organisms on uniform</td>
</tr>
<tr>
<td>8 Clean and prepare the trolley, placing all equipment required on the bottom shelf</td>
<td>The top shelf acts as a clean working surface</td>
</tr>
<tr>
<td>9 Take the trolley to the patients’ bedside, disturbing the screens as little as possible. Where possible change of supra-pubic catheter should</td>
<td>To minimize airborne contamination</td>
</tr>
<tr>
<td>Step</td>
<td>Action</td>
</tr>
<tr>
<td>------</td>
<td>--------</td>
</tr>
<tr>
<td>10</td>
<td>Wash hands</td>
</tr>
<tr>
<td>11</td>
<td>Open the outer cover of the catheterisation pack and slide the pack onto the top shelf of the trolley</td>
</tr>
<tr>
<td>12</td>
<td>Using the aseptic non touch technique open the supplementary packs</td>
</tr>
<tr>
<td>13</td>
<td>Remove cover that is maintaining the patients privacy and position a disposable pad under the patients side</td>
</tr>
<tr>
<td>14</td>
<td>Clean hands as per hand hygiene policy</td>
</tr>
<tr>
<td>15</td>
<td>Put on sterile gloves</td>
</tr>
<tr>
<td>16</td>
<td>Using octenilin clean around the stoma and down the catheter tubing. Estimate the length of catheter that is in the patients body</td>
</tr>
<tr>
<td>17</td>
<td>Using a syringe remove the water from the catheter balloon, discard syringe into clinical waste bag.</td>
</tr>
<tr>
<td>18</td>
<td>Using non dominant hand to gently apply pressure to the skin around the catheter, press down while applying gently and form pressure to the catheter. It may be useful to turn the catheter while removing it.</td>
</tr>
<tr>
<td>19</td>
<td>Place sterile gauze over stoma site</td>
</tr>
<tr>
<td>20</td>
<td>Discard catheter and drainage bag.</td>
</tr>
<tr>
<td>21</td>
<td>Wash hands and change gloves</td>
</tr>
<tr>
<td>22</td>
<td>Clean around stoma site using sterile saline</td>
</tr>
<tr>
<td>23</td>
<td>Insert 11mls of instillagel as per manufacturers instruction</td>
</tr>
<tr>
<td>24</td>
<td>Insert the catheter into the stoma and follow the tract formed by the previous catheters. You may feel slight resistance as the catheter enters the bladder. Once urine drains or the estimated length of the previous catheter has been achieved, continue to insert catheter for a further 5 cms.</td>
</tr>
<tr>
<td>25</td>
<td>Inflate the catheter balloon as per manufacturers instruction</td>
</tr>
<tr>
<td>26</td>
<td>Withdraw the catheter gently until resistance is felt</td>
</tr>
<tr>
<td>27</td>
<td>Attach drainage bag to catheter. Make sure catheter bag is supported appropriately</td>
</tr>
<tr>
<td></td>
<td>Action Description</td>
</tr>
<tr>
<td>---</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>28</td>
<td>Ensure patients’ clothing and bedding is replaced and that they are comfortable</td>
</tr>
<tr>
<td>29</td>
<td>Dispose of waste</td>
</tr>
<tr>
<td>30</td>
<td>Remove PPE and wash hands</td>
</tr>
<tr>
<td>31</td>
<td>Document procedure in patients records as per catheter policy</td>
</tr>
</tbody>
</table>