Urinary Catheterisation Policy

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What is in this policy?
This policy highlights specific implications for clinical practice following the publication of the NICE guidelines on infection control (NICE, 2012) and the national plan requiring action to reduce healthcare acquired infection. This document sets out how University Hospitals Bristol NHS Foundation Trust (the Trust) will ensure the highest possible standard of clinical care is provided for patients, in relation to urinary catheterisation with the aim of reducing the number of healthcare acquired infections.

Document Change Control				
Date of Version	**Version Number**	**Lead for Revisions (Job title only)**	**Type of Revision**	**Description of Revision**
Jan 2007	1	Wendy Hurn	Major	New policy
May 2012	2	Wendy Hurn	Minor	Review
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Sign off Process and Dates	
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- **Stakeholder Group** can include any group that has been consulted over the content or requirement for this policy.
- **Steering Group** can include any meeting of professionals who has been involved in agreeing specific content relating to this policy.
- **Other Groups** include any meetings consulted over this policy.
- **Policy Assurance Group** must agree this document before it is sent to the **Approval Authority** for final sign off before upload to the DMS.

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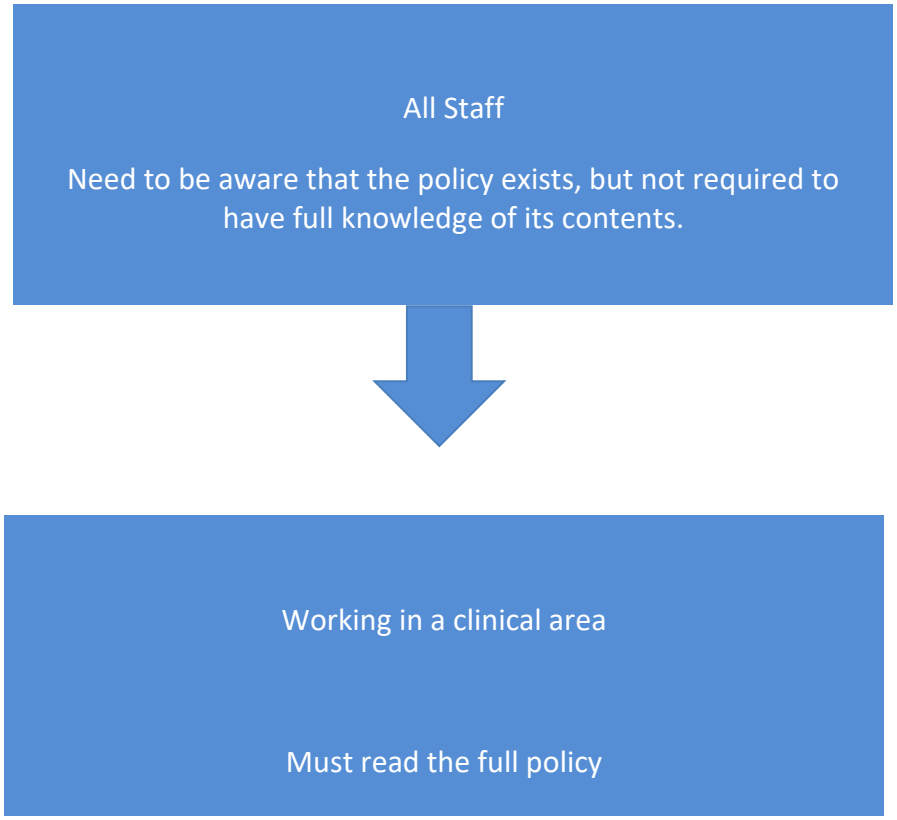
1. Do I need to read this Policy?



2. Introduction

This policy sets out standards and guidance relating to urinary catheterisation in adults and catheter care for the organisation and practitioners employed within the Trust. Urinary catheterisation is essential for the safety and comfort of patients with a number of clinical conditions but their use is widely associated with urinary tract infections and sepsis. A large proportion of healthcare-associated infections are catheter-associated urinary tract infections (CAUTI). There is a strong association between duration of catheterisation and the risk of infection. All urethral catheterisation (UC) and Supra-pubic re-catheterisation (SPR) must be carried out in line with best practice to minimise the risk of infection. Catheters must be inserted and cared for using strict aseptic technique. Indwelling catheters must be removed as soon as they are no longer required. Breaking the closed drainage system is associated with a high risk of infection and must only be carried out where there is a specific and adequate clinical indication or as indicated by the manufacturer.

3. Purpose

The purpose of this policy is to ensure the Trust meets strategic and clinical best practice standards in delivering direct patient care to patients with or who require urinary catheters and/or catheterisation. This policy also standardises the care of urinary catheters, using evidence based guidelines to ensure best practice across the Trust.

This policy will provide information to staff to ensure that male and female adult patients who have a urethral or supra-pubic catheter are catheterised safely, appropriately and in accordance with clinical need, in order to reduce catheter related infections.

4. Scope

This policy applies to all Trust staff directly or indirectly involved with urinary catheterisation/catheters.

5. Definitions

5.1 Urethral Catheter

A urethral catheter is a hollow tube inserted into the urinary bladder via the urethra, for the purpose of draining urine or instilling fluids as part of medical treatment.

5.2 Supra-Pubic Catheter

A supra-pubic catheter is a hollow tube inserted into an artificial tract in the abdominal wall, just above the pubic bone and into the dome of the urinary bladder for the purpose of draining urine or instilling fluids as part of medical treatment.

5.3 Bacteriuria

Bacteriuria is the presence of bacteria in the urine with or without associated symptoms of infection. In the absence of symptoms this is referred to as asymptomatic bacteriuria (or in the case of a patient with an indwelling catheter as catheter colonisation).

5.4 Catheter-associated Urinary Tract Infection (CAUTI)

Catheter-associated urinary tract infection (CAUTI) occurs when microbes gain access to the bladder via the outer surface of the catheter and through the lumen, causing symptoms including fever and supra-pubic tenderness. Once a catheter has been in situ for a few days, bacteriuria is almost inevitable and recurrent symptomatic urinary tract infections and sepsis is a very real risk.

5.5 Dysuria

Dysuria is pain during urination, or difficulty urinating. Dysuria is usually caused by inflammation of the urethra, frequently as a result of infection.

5.6 Urinary Tract Infection (UTI)

Urinary tract infection (UTI) involves the successful invasion, establishment and growth of microbes within the urinary system (kidney, ureter, bladder or urethra) of the host. Any factor interfering with the normal flow of urine can increase susceptibility of infection.

6. Duties, Roles and Responsibilities

6.1 Chief Nurse

(a) The chief nurse is responsible for infection prevention and control and the review of the policy and its implementation.

6.2 Heads of Nursing

(a) Heads of nursing are responsible for identifying, producing and implementing policies relevant to the Division.

(b) It is the responsibility of each head of nursing to review the audit date for catheter insertion and ongoing care and ensure appropriate actions are taken.

6.3 Matrons

(a) Matrons are responsible for ensuring that staff undertake appropriate training and that audit findings are acted upon within the clinical areas.

(b) Understanding and sharing audit findings with appropriate teams.

(c) Promote absolute compliance with good catheter practice, including asepsis and hygiene.

(d) Ensure all urinary catheters are recorded on VitalPAC or catheter care bundles, and that records of care and removal are kept up to date.

(e) Promote good practice and challenge poor practice.

6.4 Ward Sister/Charge Nurse

(a) Ensure that the policy has been cascaded across their teams and that staff are equipped to enact the policy.

(b) Ensure that staff are deemed competent and access training as required.

(c) Understand audit findings and ensure that appropriate actions are taken across their clinical environment.

(d) Ensure that staff competencies are up to date.

(e) Promote absolute compliance with good catheter practice, including asepsis and hygiene.

(f) Ensure all urinary catheters are recorded on VitalPAC or catheter care bundles, and that records of care and removal are kept up to date.

(g) Promote good practice and challenge poor practice.

6.5 All Healthcare Professionals

(a) Must adhere to the full terms and conditions of this policy.

(b) It is the responsibility of all registered healthcare practitioners undertaking urinary catheterisation to be confident and competent in doing so. The registered healthcare practitioner must take into consideration:

- Their professional body's code of conduct;
- Relevant Trust policies;
- Individuals are responsible for identifying their learning and development needs.

(c) If the registered healthcare practitioner delegates the task of insertion or ongoing care of an indwelling urinary catheter to an assistant practitioner, they are reminded that they there are at all times accountable for the delegated task. If delegating task to others it is important to ensure the non-registered staff member has received training and assessment of competence in the insertion and care of indwelling urinary catheters.

(d) Nursing assistants care for urinary catheters following appropriate training and competency assessment and under the direction/support of the registered nurse.

6.6 Responsibility for Monitoring Compliance

(a) Infection Control Group

Through audit

7. Policy Statement and Provisions

7.1 Good Practice Statements

Only use indwelling urinary catheters in patients for whom it is clinically indicated, following assessment of alternative methods and discussion with the patient e.g. intermittent catheterisation, urinary sheaths, incontinence products.

- The registered healthcare practitioner (HCP) should understand the high level of risk associated with short- and long-term catheterisation.
- Document the clinical indication(s) for catheterisation, date of insertion, expected duration, type of catheter and drainage system, and planned date of removal.
- Assess and record the reasons for catheterisation every day. Remove the catheter as soon as no longer clinically indicated.
- Indwelling urinary catheterisation is not a substitute for nursing care of the patient with urinary incontinence.

Supporting documentation for this guideline include the EPIC3 guidelines for the maintenance of short-term indwelling catheters in acute care and the Infection Control Guidelines (NICE 2012) for care of patients with long-term urinary catheters. Additionally, 'Essential steps to safe, clean care; provides a review tool (High Impact Interventions to prevent catheter related urinary tract infection) to enable self-assessment of care delivery against risk elements associated with urinary catheter care (IPS/NHSI 2017).

7.2 Decision to Catheterise

The competent healthcare professional (HCP) can make a clinical decision to undertake an initial urethral catheterisation. Initial supra-pubic catheterisation will be performed by medical staff. Ideally, indwelling catheterisation should be performed following discussion with the patient and the patient's clinical team in order that decisions regarding subsequent treatment/care can be made.

Wherever possible, intermittent (self) catheterisation should be the preferred alternative. However, if it is determined that this is unacceptable or unsafe, then indwelling catheterisation might be considered as the next best option.

7.3 Alternatives to Indwelling Urinary Catheterisation

The most common alternatives to indwelling urinary catheters are:

- External catheters for men (sheath/condom urinary sheaths).
- Intermittent ("in-and-out" or "straight") catheterisation.
- Programmed toileting.

External sheath/condom catheters lower the risk of infections and other complications of urinary catheterisation and are more acceptable to patients. When using urinary sheaths, it is important to choose an appropriate size to improve fit and adherence despite patients' movement.

Intermittent catheterisation, often used in patients with neurogenic bladder or spinal cord injury, lessens the risk of urinary tract infection. Intermittent catheterisation is preferable to indwelling urethral or supra-pubic catheters in patients with bladder emptying dysfunction. When the patient returns to the community, intermittent catheterisation enhances patient privacy and dignity, and facilitates return to activities of daily living. When in hospital, use bladder scanners to detect if a patient has insufficient quantities of urine to justify catheterisation.

Toileting programmes typically consist of a patient-specific assessment of incontinence followed by a programme of prompted voiding, habit retaining, and/or timed voiding as part of an individualised care plan. Evidence from one investigation demonstrates toileting programmes can significantly lessen risk of falls and skin breakdown.

7.4 The Indications for Indwelling Urinary Catheterisation

This includes:

Medium term (up to 28 days):

- Intra or peri-operative use (e.g. intra-operative urine output monitoring, spinal/epidural anaesthetic, genito-urinary tract surgery).
- Hourly urinary output monitoring in critically ill patients.
- Acute urinary retention (confirmed by bladder scan and residual volume measurement).
- Investigations – e.g. urodynamics; measurement or residual volumes (less invasively achieved by a portable bladder scanner).

Long term (up to 12 weeks):

- Chronic urinary retention in the symptomatic patient or bladder outlet obstruction not amenable to surgery when Clean Intermittent Self Catherisation (CISC) not a viable option.
- Management of impaired skin integrity or to assist healing of open wounds (including surgical) or sores frequently contaminated with urine.
- End of life care/dignity.
- Neurological disorders causing paralysis or loss of sensation, hypotonic bladder when CISC not a viable option.
- Patients requiring prolonged immobilisation (e.g. pelvic or spinal trauma).

Other

- When a patient insists on a catheter after discussion and understands the risk.

The use of indwelling catheterisation should not be considered routine in any of these situations. Other options should be explored first.

7.5 Consent

Informed consent to undertake an initial insertion or renewal of a catheter must be obtained verbally from the patient where possible. This consent should be recorded in the patient's clinical records or urinary catheter insertion record. If the patient does not have capacity to consent to urinary catheterisation – the Mental Capacity Act Policy must be followed.

7.6 Complications

There is a strong association between the duration of catheterisation and the risk of infection. The daily risk of acquisition of bacteriuria when an indwelling catheter is in situ is 3 – 7%. The rate of acquisition is higher for women and older persons. Bacteriuria is universal once a catheter remains in place for several weeks. Approximately 24% of bacteriuric patients will develop CAUTI, and of these, 3 – 4% develop a severe secondary infection such as a bloodstream infection.

Additional infectious complication, usually identified in patients with a chronic indwelling catheter, include bladder urolithiasis, purulent urethritis, gland abscesses and, for males, prostatitis.

Non-infectious complications may include urinary catheter obstruction, non-bacterial urethral inflammation, urethral strictures, mechanical trauma, including traumatic hypospadias in men and mobility impairment. Other complications include:

- Urethral trauma resulting in infection and possible Septicaemia/Renal Failure/Death.
- Formation of false urethral passage.
- Bladder perforation.
- Traumatic removal of catheter with balloon inflated.
- Urinary tract infection and possible Septicaemia/Renal Failure/Death.
- By-passing or urine around catheter.
- Urethral Stricture formation.
- Meatal tears.
- Encrustation and bladder calculi.
- Urethral perforation.
- Pain.
- Bleeding.
- Bladder spasm.
- Reduced bladder capacity.
- Catheter blockage.
- Latex sensitivity.
- Altered body image.

- Difficulty with sexual relations.

7.7 The Exclusion Criteria for Urethral Catheterisation

- Patient does not consent to procedure.
- Within 48 hours of prostate surgery.
- History of bacteraemia associated with catheterisation unless patient has been given appropriate antibiotic prophylaxis (discuss with Microbiologist).

7.8 Documentation

The assessment and decision to use indwelling urinary catheterisation should be clearly documented, along with the rationale, in the patient notes and on VitalPAC (Indwelling devices – urinary catheter) or the paper urinary catheter insertion record and care plan. Ongoing, documented review is a fundamental element to ensure that the catheter is considered for removal at every opportunity.

- Catheter type, length and size.
- Batch number.
- Manufacturer.
- Amount of water instilled in the balloon.
- Date and time of catheterisation.
- Reasons for catheterisation.
- Colour of urine drained.
- Any problems negotiated during the procedure.
- A review date to assess the need for continued catheterisation or date of change of catheter must be undertaken every 24 hours.
- A catheter care plan must be added to their notes and estimated date for the catheter removal should be documented.
- Ongoing plan re: ongoing catheter care.

If no urine drains, inform medical staff immediately.

7.9 Selection of Catheter

Selection is based on a number of factors:

The patient's needs, including:

- Latex allergy.
- Length of catheter.

- Type of sterile drainage bag and sampling port (orometer, 2-L bag, leg bag) or catheter valve.
- Comfort and dignity.

The need to minimise:

- Urethral trauma.
- Irritation.
- Patient discomfort.
- The anticipated duration of catheterisation.

The length of time a catheter can remain in place is guided by the manufacturer's product liability, which should always be heeded. The rational for urethral and supra-pubic catheterisation is given below.

Catheter Type	Duration	Material and Comments
Medium term	Up to 28 days	• Poly-tetra-fluoride-ethylene (PTFE) bonded latex – smoother outer surface
Long term	Up to 72 days	• 100% silicone – thin walled, better drainage capacity • Hydrogel bonded – highest compatibility with human tissue, less risk of trauma and less biofilm/encrustation formation. Should be used for patients with a latex allergy.

Suprapubic	Urethral
Specific Considerations	
Long-term (including incontinence) Sexually active Post-specific surgery Urethral trauma Some wheelchair-bound people Difficulties with urethral catheter Annual bladder ultrasound	Short-term Intermittent Post-specific surgery Difficulties with supra-pubic
Specific Care	
Strict asepsis on insertion Strict asepsis on redressing the fistula site	Strict asepsis on insertion
Specific Advantages	
Reduced risk of infection Enables sexual activity	Nurse able to carry out procedure at first insertion (where risk assessed)
Specific Disadvantages	
Altered body image Potential urine leakage from around the site Limited nursing research on subject Requires a registered medical practitioner to perform initial insertion Urethral leakage	Altered body image Impedes sexual intercourse

7.10 3-Way Catheters for bladder irrigation

For patients who require insertion of a 3 way catheter for continuous bladder irrigation, Health Care Professionals who have completed catheterisation training, competency and have regular experience of urethral catheterisation may undertake this skill. Anaesthetic gel should be prescribed and instilled due to the size of the catheter and the discomfort it causes. Irrigation fluids should be prescribed within the prn section of the drug chart. Advice should be sought from urology at NBT.

7.11 Catheter Material

- Choice of catheter material may depend on clinical experience, patient assessment and anticipated length of time the catheter is expected to be in place. Silicone catheters must be used for patients who have a latex allergy.
- The catheter packaging should be checked that the CE mark is present and that the catheter is licensed for either urethral or supra-pubic use.

7.12 Size of Catheter

For the urethral route, always choose the smallest Charriere (Ch) to provide adequate drainage. The external diameter of a catheter is measured in Charriere – one Ch equals 0.3mm, therefore 12 Charriere will equals 4mm.

As a guide for the urethral route:

- Female: 12 – 14Ch
- Male: 12 – 14Ch

Small charriere sizes allow the mucus produced by para-urethral glands in the urethra to drain away. By choosing a larger size these glands may become blocked and result in inflammation.

Avoid inserting 16Ch directly after a 12Ch, which could cause trauma following the sudden dilatation of the urethra. Therefore, larger sizes should be introduced gradually and may only be required where there is haematuria with large blood clots.

For supra-pubic use, 16Ch is commonly used and is recommended to allow for maintenance of a good tract between the abdominal wall and bladder.

7.13 Length of Catheter

For urethral route, if possible, women may be offered a female length catheter, unless they are obese or chair bound, in which case the standard length may be more suitable.

Standard (male) length should only be used in male patients. It is dangerous and potentially harmful to insert a female length into a male urethra.

Standard length catheters:

- Female – 26cm*
- Male (standard) – 43cm*

*Lengths are approximate, as manufacturers vary.

For a supra-pubic route, a standard length is the most usual, but patient preference may decide the most suitable length. Female length is acceptable providing that there is sufficient length to connect a valve or bag. Consideration needs to be given to obesity, mobility and clothing.

7.14 Balloon Size

10ml balloons should always be used for both urethral and supra-pubic routes.

30ml balloons are reserved for use in specific situations, mainly for post-prostatic surgery. They can cause bladder spasm and trigone irritation.

Balloons should always be filled with sterile water, never air (will float above the urine, preventing drainage), or tap water (contains soluble salts that can cause osmosis), or saline (crystals of salt may prevent deflation of balloon).

Balloons should never be under or over filled, as misshaping of the balloon will interfere with drainage. Always follow the manufacturer's instructions.

7.15 Availability of Catheters and Other Support Products

Clinical areas may routinely stock a small supply of standard Foley catheters.

Speciality areas will hold a full stock of speciality catheters to respond to specific speciality patient needs on the ward and in theatre.

Excess quantities of stored catheters should be avoided due to the risk of damage to the product or passing the expiry date. Latex catheters harden when they are old and if inserted after the expiry date, the risk of perforating the bladder is increased.

7.16 Infection Control

CAUTI is one of the most common nosocomial infections in hospital.

Symptoms of CAUTI include:

- Fever (>38.0^{o}C).
- Supra-pubic tenderness*
- Costovertebral angle pain or tenderness*
- Otherwise unexplained systemic symptoms including:
  - Altered mental status.
  - Hypotension.
  - Systemic Inflammatory Response Syndrome (SIRS).

- Positive urine culture (although this alone without clinical symptoms is not indicative of CAUTI).

Other symptoms may be present if the catheter has been recently removed:

- Urinary urgency.
- Urinary frequency.
- Dysuria.

The risks of CAUTI can be minimised by:

- Limiting the use of indwelling catheters and ensuring prompt removal when no longer clinically indicated.
- Maintaining a closed system of drainage and using a pre-sealed drainage system.
- Avoiding routine changes of catheter bags and unnecessary emptying of bags.
- Effective hand washing techniques using the 5 moments of hand hygiene and using a fresh pair of non-sterile gloves before manipulation of the catheter or the closed system, including drainage taps.

7.17 Catheter Insertion

Catheterisation is an aseptic procedure using sterile equipment and should only be undertaken by healthcare workers trained and competent in this procedure.

Single-use lubricant is essential to minimise urethral trauma and infection.

There is no substantial evidence supporting the use of antiseptic solutions for the cleaning of the urethral meatus. Normal saline or sterile water may be used.

All catheter insertions must be recorded on VitalPAC (indwelling devices – urinary catheter) or the paper urinary catheter insertion record or care plan.

7.18 Intermittent Catheter Insertion

For intermittent catheter insertion follow the guidelines in appendix B but do not inflate the balloon. Use appropriate intermittent self-catheter and gently remove the catheter once the flow or urine stops.

7.19 Intermittent Self-Catheterisation

Intermittent self-catheterisation may be appropriate for some patients to avoid the risks associated with a long-term indwelling catheter. Intermittent self-catheterisation is taught by the urology nurse specialist via the urology outpatient department. A choice of single-use hydrophilic or gel reservoir catheters is available. However, you may need to contact the urology department at North Bristol NHS Trust (NBT) for these types of catheter.

7.20 Changing the Catheter

The principles of asepsis should apply to the procedure of urinary catheterisation, both urethral and supra-pubic.

For re-catheterisation procedures, the existing catheter should be removed, examined for encrustations and integrity and disregarded at the start of the procedure. Extreme care should be taken with supra-pubic catheter changes for those patients who are receiving anticoagulant therapy or who have blood clotting disorders.

All catheter changes must be recorded on VitalPAC (indwelling devices – urinary catheter) or the paper urinary catheter insertion record and care plan as a new episode of indwelling device.

Unless there is a need for re-catheterisation in a controlled environment, there is no rationale for the first catheter change being performed in hospital. However the first supra-pubic catheter change would be undertaken in urology outpatients.

Conversion to supra-pubic catheterisation from urethral catheterisation is not always successful for female patients, as there is a considerable risk of coincidental urethral leakage, and patients should be warned of this risk.

7.21 Patient Education

Patients (and carers) need to be involved in their care, which includes being aware of the complications of catheterisation and educated about and trained in techniques of hand decontamination, insertion of intermittent catheters where applicable, and catheter management before discharge from hospital. Prior to discharge, it is important that patients (and carers) know how to identify a potential problem and whom to contact for help. A catheter passport should be given to the patient on discharge. This will inform the patient with regards to management of their catheter at home and who to contact if there is a problem.

7.22 Ongoing Care

Catheters should be inspected a minimum of once every 12 hours.

Catheter care should be provided a minimum of once daily and more frequently when indicated.

During catheter inspection, the following should be assessed:

- General patient condition (including fever, mental state, evidence of systemic infection).
- Loin pain.
- Colour and consistency of urine (including debris, haematuria).
- Patient comfort.
- Security of catheter.

- Catheter tubing should be secured to the leg so that it avoids kinks in the tubing, traction on the bladder neck, trauma to the urethra, occlusion of the catheter lumen, or causing excessive constriction to the limb.
- Tape should not be used as catheter material could be damaged due to solvents.

7.23 Care of the Supra-pubic Site

If dressings are clinically required, they must be sterile and applied using an aseptic non-touch technique. In most cases, a dressing will not be required and patients should be encouraged to clean the site daily.

7.24 Drainage Systems and Bag Position

Urometers should be used for patients requiring hourly or two hourly urine monitoring (indication acute care).

Two litre overnight drainage bags with drainage ports are most suitable for bed-bound patients.

Hourly monitoring urometers and overnight drainage bags must be hung on a stand that prevents contact with the floor.

Leg bags should be promoted in the mobile patients to aid recovery through early unrestricted mobilisation and maximise patient dignity (where possible). Catheter valves should be encouraged to promote the maintenance of normal bladder function.

Where possible leg bags should be secured using straps or sleeves, which needs to be based on individual need. To minimise skin irritation and damage, alternate the leg on which the drainage bag is secured.

Drainage systems/bags need to be positioned below the level of the bladder to avoid hydrostatic suction, which can cause damage to the bladder mucosa. Higher rates of bacteriuria have been linked to incorrect positioning.

7.25 Drainage System Emptying

Drainage systems/bags should be emptied when three-quarters full to avoid traction on the bladder. However, the closed system should not be broken more than is necessary.

Whenever possible, patients should be encouraged to empty their own drainage bag. If this is not possible, the healthcare professional (HCP) or carer should:

- Perform hand hygiene and wear an apron and non-sterile gloves. Eye goggles may need to be considered when there is a risk of splashing.
- Use a single-use pulp product or clean disposable jug to empty urine which is then immediately disposed of.
- Contact between the tap and the container must be avoided – there is no evidence to support cleaning the tap with chlorhexidine/alcohol.

- Empty urine carefully into a bodily fluid disposal unit e.g. toilet/macerator/slop hopper.
- Ensure hands are cleaned following removal of gloves and apron.

7.26 Changing Bags

Drainage bags should only be changed when necessary (i.e. according either to the manufacturer's recommendations [generally 5 – 7 days] or to the patient's clinical need). Some catheter bags come pre-attached to catheters and have a red seal. These can be left for 14 days. Once changed, then further changes are required every seven days.

Used drainage systems should never be reconnected once they have been disconnected from the catheter. A new bag/system must always be used. The date of bag change should always be written onto the drainage bag.

7.27 Valves

These can be used as an alternative to a conventional drainage bag. As well as being discreet, they allow the bladder to resume/continue its storage function. The use of a valve during the day and continuous drainage at night has been found to be an ideal solution for many catheterised patients. Valves are appropriate for longer-term catheterised patients to prevent bladder atrophy or prior to a trial without catheter (TWOC).

7.28 Cleanliness

The patient may either take a bath or shower. The build-up of secretions at the urethral meatus should be minimised by daily routine personal hygiene. Perineal care should also be included to facilitate reduction in extra luminal contamination.

Daily nursing care using soap and water should be undertaken in the bed-bound patient or a patient unable to care for their catheter.

7.29 Fluids

Unless restricted for medical reasons, an adequate fluid intake should be encouraged per 24 hours (2 – 3 litres of fluid per day) as this maintains a flow of urine through the bladder and helps prevent constipation. There is no evidence of long-term benefit of appropriate dosage of cranberry juice with use of catheters. Furthermore, caution should be exercised for those patients taking warfarin. However, citrate-based drinks are recommended as these have been found to positively affect the pH of urine.

7.30 Catheter Problem Solving

Problem	Possible reasons and action to take
Urine does not drain	Check for mechanical obstruction – kinked tubing; occlusion by leg straps; bag higher than level of bladder Check for constipation Occlusion of catheter eyes by anaesthetic gel or bladder mucosa – gently instill sterile water/saline to clear eyes; check that leg bag is not too low

	down on the leg Consider changing the catheter and inspect for encrustation – if it is patent – consider bladder spasm as a cause Consider that the patient maybe dehydrated or in renal failure If new catheter doesn't drain – check that it's in the urethra; that the catheter is correct length and that eyelets are in the bladder
Encrustation	Main cause is struvite formation (calcium phosphate and magnesium ammonium phosphate salts); struvite forms as a result of precipitation of these salts from the urine when it becomes alkaline because of urease forming bacteria Encourage fluid intake, which include citrate-based drinks Assess 'catheter life' by observing at least three catheters; implement planned catheter changes to avoid blockage. A prescribed regime of acidic catheter maintenance solutions maybe clinically justified
Haematuria	May be caused by trauma, infection, renal/bladder pathology; if severe, seek medical help urgently. Treat for shock and monitor for clots and blockages, if occult, refer for further investigation, e.g. cystoscopy
Urine bypassing	Check for tube kinking and/or constipation If due to bladder spasm or irritation: consider anticholinergic medication; consider a smaller catheter size; check balloon size; consider catheter material (latex allergy) If due to encrustation: change and inspect catheter
Cramping pain	This should subside after 24 hours of initial insertion; if it persists, it may be bladder spasm and anticholinergic therapy should be considered
Urethral discomfort	May be due to distension of urethra by too large a catheter or by occlusion of the para-urethral glands – change to smaller catheter
Urethral discharge	During normal micturition a mucus substance is produced by the para-urethral glands (which line the urethra) to protect against ascending infection and is usually flushed away. However, in the catheterised patient, the mucus drains away through peristaltic action and gravity rather than being flushed away and can result in presence of mucus outside the urethra and on the catheter surface
Blocking due to debris in urine	Sludgy mucus type debris can block the catheter. Expert opinion suggest using a valve in this situation to encourage natural flushing of the catheter lumen
Non-deflating balloon	Check that syringe is not faulty; leave syringe for a few minutes to allow water to drain spontaneously – not forcibly as a vacuum may result in the inflation channel. If unsuccessful, discuss with doctor regarding a urological opinion. NEVER cut the valve off
Catheter rejection	If a patient pulls their catheter out with the balloon inflated due to a confused state, consider alternative methods to manage the bladder problem. On occasions, catheters may be expelled due to a combination of weak pelvic floor muscles, urethral dilation and detrusor over activity. The means of continence care should be sought
Difficulty in removing catheter	Expert opinion suggests that inflating and deflating balloon about four times and then leaving for five minutes before catheter removal can assist in easier extraction of catheter. If the catheter cannot be removed, stop and refer to the urological team in collaboration with the doctor All silicone catheters should be left for 3-5 minutes after deflating the balloon before removing. This allows the balloon to completely deflate.

7.31 Catheter Maintenance Solutions

There is minimal evidence to identify if the use of solutions provides any benefit. However, for catheters that block due to encrustation resulting in a frequency of catheter changes that is unacceptable to the patient, then a prescribed regime of an acidic catheter maintenance solution may be clinically justified for short-term use. It is not recommended to use solutions for unblocking a catheter that is no longer draining.

The principle aims of using a solution are to wash the catheter, not the bladder. The term 'bladder washout' has been superseded by the more appropriate term of 'catheter maintenance solution'. The effectiveness of acidic catheter maintenance solutions in dissolving encrustations has been demonstrated in laboratory-based studies. However, the instillation of solutions for either encrustation or debris via an indwelling catheter is not recommended as a routine measure as their efficiency has not been proven in large clinical trials. If prescribed however, they should only be used for a short period of time, using the smallest volume (50ml or less) and discontinued if not effective. Frequency of use will need to be determined on an individual patient basis.

The use of solutions can cause damage to the mucosa, causing irritation and spasm if they enter the bladder. For further guidance, please contact the urology department at North Bristol Trust.

There is no evidence to support the use of bladder irrigation, instillation or washout with a variety of antiseptic or antimicrobial agents for the prevention of CAUTI.

7.32 Urine Sampling

Routine collection of urine specimens for culture is not useful and is unnecessary unless the patient is symptomatic. When a specimen collection is justified (before starting antimicrobials), a clinically clean technique should be used, with disinfection of the needle free sample port with isopropyl alcohol 70% and chlorhexidine 2% and allowed to dry thoroughly. It is important to include systemic symptoms on the ICE Request.

- Samples should not be taken from the drainage bag or directly from the catheter.
- Urinary catheters should not be clamped as this may damage the inflation channel and prevent the balloon deflating during removal.
- There is no evidence that sending catheter tips to Clinical Microbiology is beneficial.
- Dipsticking of catheter urines is not recommended.

A catheter specimen of urine (CSU) must only be taken:

- To diagnose UTI if patient has systemic signs or symptoms consistent with a urine infection.
- As part of an MRSA screen when indicated.
- For culture before elective orthopaedic implant surgery if symptomatic.
- Prior to defined urological procedures.

A CSU must not be taken just because:

- The urine is cloudy.
- The urine in the bag is 'dipstick positive'.
- The catheter is blocked.
- The urine smells offensive.

Urine samples must be collected from the needle-free sample port of the tube to the catheter drainage bag using an aseptic technique. The closed drainage system must not be opened for the purpose of taking a sample.

7.33 Antimicrobial Cover for Catheter Insertion/Changes

Prophylaxis:

- Prophylactic antimicrobials should not be offered routinely for catheter insertion or changes.
- Antimicrobial prophylaxis should be used only in those with a history of symptomatic UTI after catheter change or who experience trauma during catheterisation.
- Antimicrobial prophylaxis is not currently recommended for patients at risk of infection, endocarditis (prosthetic heart valves, structural congenital heart disease, hypertrophic cardiomyopathy, acquired valvar heart disease with stenosis or regurgitation, previous infective endocarditis) *

*Following the publication of new research showing an increase in the incidence of infective endocarditis in the UK, NICE has launched an immediate review of their clinical guideline (CG64) on prophylaxis for effective endocarditis. Prophylaxis should not routinely be given. Check with clinical team.

Symptomatic Urinary Tract Infection:

- Antimicrobials must only be used to treat systemic infection and not bacterial colonisation of the urinary tract (bacteriuria) or colonisation of the urinary catheter.
- For those with symptomatic catheter associated urinary tract infection, send a urine sample for microscopy and culture and commence the patient on antimicrobial therapy according to the antibiotic guidelines. The catheter should be changed following commencement of appropriate antimicrobial therapy as per the culture result or antibiotic guidelines.

For further information on when antimicrobials may be required, please consult with Medical Microbiology.

7.34 Decision to Remove Catheter/Trial Without Catheter (TWOC)

The Trust requires a twice-daily review of catheters to minimise the length of time in place with the aim to reduce healthcare acquired infections and protect patients.

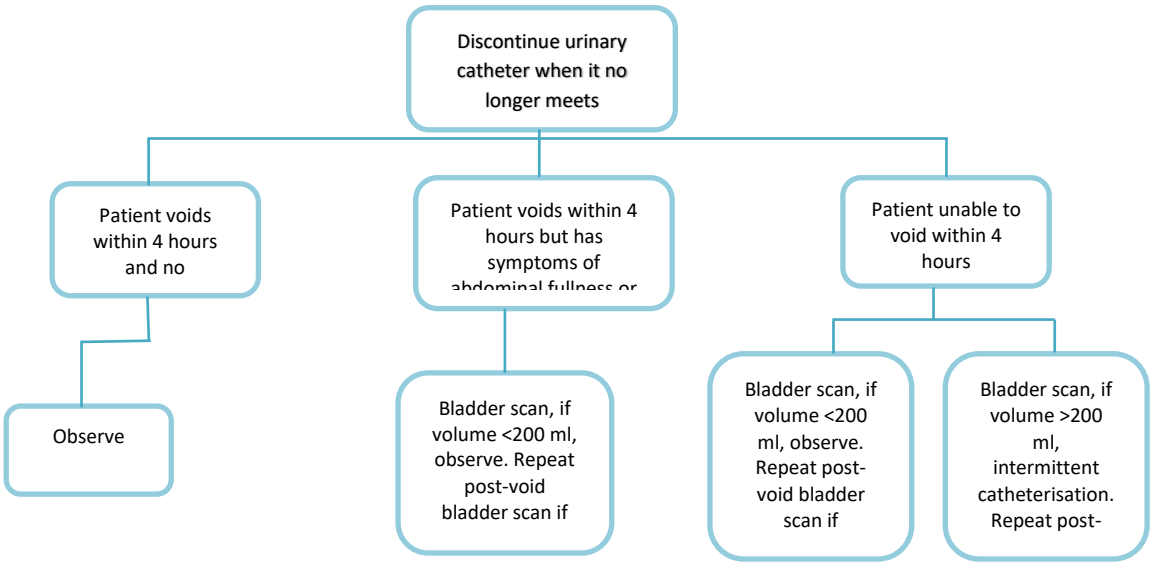
Catheters must be removed as soon as clinically possible, following individual assessment, which takes into account the patient's condition and in collaboration with the healthcare team. Both the medical and nursing team are equally responsible for reviewing the indications for catheterisation and any competent HCP can make the decision to remove a catheter in the patient's best interest.

- Removal of the catheter should be considered mandatory unless the patient's condition clearly fits into one of the categories where continued catheterisation is for clinical benefit and/or quality of life.
- Post-operatively, the catheter should be removed as soon as clinically possible.
- Attempts should be made to avoid removal of an indwelling catheter on the day of discharge or transfer from hospital.
- There is no evidence to support clamping of catheter as a way of assessing bladder tone prior to the removal of a catheter.

Following removal, this should be documented on VitalPAC, the mobile clinical software system, (indwelling devices – urinary catheter) or in the urinary catheter insertion record and the patient's condition should be monitored. A bladder scan (portable) should be performed in the first few hours to measure for post-void residual urine where patients are unable to void or have abdominal discomfort, because urine retention is possible following removal of catheter and action should be taken as necessary.

7.35 Bladder Scanner

Where a bladder scanner is available, it can be used to measure residual volume of urine to assess the need for urethral or supra-pubic catheterisation, or to monitor bladder emptying after catheter removal. The practitioner must have undergone the appropriate training before using the equipment. Bladder scanning is not essential but the preferred option as it is non-invasive. In the absence of a bladder scanner, a single use intermittent catheter may be used to measure a residual volume. If 500mls or more this may indicate a problem. Staff must be aware that bladder scanners can give false readings and clinical judgment must be used.



7.36 Discharge of a Patient with a Catheter

No patient should be discharged or transferred with an indwelling urethral catheter without a plan documenting the:

- Initial insertion reason for the catheter.
- Clinical indications for continuing catheterisation.
- Details of attempted trial without catheter.
- Date for removal or review by an appropriate clinician overseeing their care.

All discharge summaries must include these details and a clear and realistic referral pathway identified (complex catheterisation – urology, standard management and removal refer to single point of access and GP).

7.37 Adverse Events

Consideration should be given to user sensitisation to latex products, especially in those patients with Spina Bifida as they are at high risk due to repeated exposure.

Autonomic dysreflexia is a serious life threatening conditions that affects people with spinal cord injury at or above the level of the 6th thoracic vertebrae. Bladder problems are one of the most common causes of this condition and noxious stimuli must be quickly identified (overfull bladder, high pressure voiding, urinary tract infection, blocked catheter, defective drainage system (e.g. kinked tubing, overfull drainage bag) and removed.

Lidocaine-based lubricating gels should not be used during a catheterisation procedure in the following circumstances:

- If used they must be prescribed.
- If the patient states, they have an allergy/hypersensitivity to any of the active ingredients within the product.
- If the patient has noticeable abrasions and lesions on the penis or urethral orifice. Local anaesthetics should not be applied to a traumatised urethra as the drug may be so rapidly absorbed that a systemic, rather than a local, reaction is produced. These could include confusion, respiratory depression and convulsions; hypertension; and bradycardia (may lead to cardiac arrest).
- Nursing assessment prior to administration should include identification of patients at increased risk of systemic effects and checking for possible drug interactions.
- All medical devices and medicinal products containing chlorhexidine have been identified as being at risk for anaphylactic reaction. HCP should ensure that any known allergies are recorded in the patient notes and report any adverse events to the Medicines and Healthcare products Regulatory Agency (MHRA).

8. Standards and Key Performance Indicators

8.1 Training Requirements

All practitioners undertaking this procedure must have attended a recognised training course and be assessed as competent. Every practitioner must have evidence of at least one supervised practice with a competent assessor. All assessments must take place within 12 months of training.

Female catheterisation is a core skill in basic nursing training. Newly qualified staff should complete the female catheter competency and the assessment.

Male catheterisation is an advanced skill and can only be practised following attendance at the male catheterisation workshop and completion of the male catheter competency and assessment.

Staff (practitioners and assessors) must maintain their competence through clinical practice, personal study and retraining if competence isn't maintained.

Male and female catheterisation is a core competency for medical staff who should ensure that they are familiar with this policy and adhere to full asepsis at all times.

Competent assessors are defined as practitioners who have undergone training, workplace assessment and who practice the technique as an integral part of their clinical role. Staff entering the Trust must produce evidence of prior training and competence or be re-assessed as competent before they can undertake catheterisation in the Trust. Maintenance of competency must be reviewed at the staff member's annual appraisal.

Practitioners must also meet the competencies set out in the UH Bristol Trust's Aseptic and Aseptic Non Touch Technique competency framework.

9. References

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Quality Standard 61 (QS61)

https://www.nice.org.uk/guidance/qs61/chapter/quality-statement-4-urinary-catheters

https://www.nice.org.uk/guidance/qs77

http://www.rcn.org.uk/__data/assets/pdf_file/0018/157410/003237.pdf

https://www.nice.org.uk/guidance/cg171/resources

http://www.baun.co.uk/files/3113/8928/5791/09.45_-_Joanne_Mangall.pdf

https://www.nice.org.uk/guidance/cg148

Health and Social Care Act 2008

10. Associated Documentation

Standard Infection Control Precautions

Hand Hygiene Policy

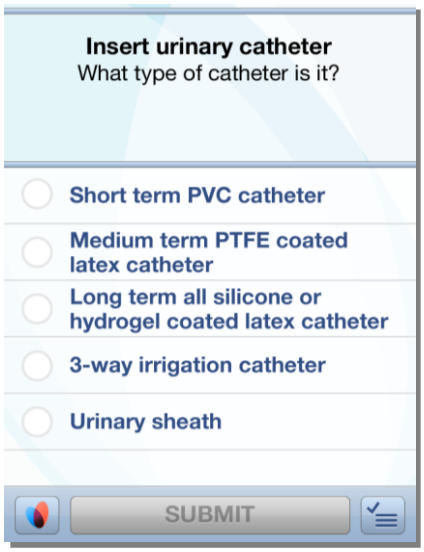
Disposal of Waste

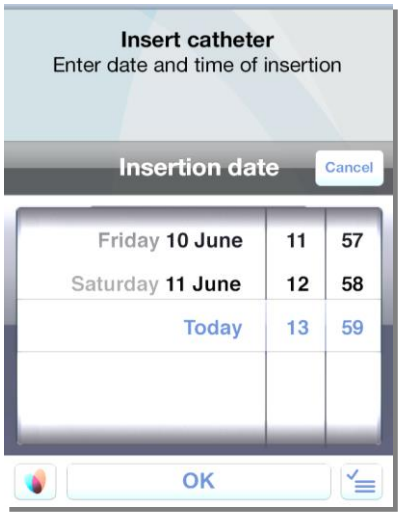
Consent Policy

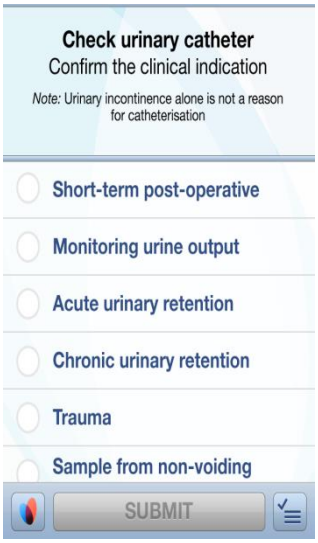
Chaperone Policy

Policy for Assessment of Mental Capacity and Determining Best Interests – Cp7i

11. Appendix A – Urinary Cather Insertion Record (VitalPAC)







NHS Improvement

IPS Infection Prevention Society

High Impact Interventions to prevent catheter associated urinary tract infection

Elements of the care process

There are two sets of actions outlined below as good practice.

a. Insertion phase

b. Routine maintenance and assessment for continuing indication phase

Insertion phase
1. Assessment for catheter indication Assessment of the need of the catheter is to be documented ensuring a clear clinical indication which includes exploring alternative options [1-3].
2. Aseptic procedure Catheterisation should follow an aseptic procedure including hand hygiene and is documented [1-3].
3. Urethral meatus The meatus should be cleaned with normal saline prior to insertion. Use a lubricant gel from a sterile single use syringe to minimise urethral trauma [1-3].
4. Catheter insertion documentation Document as a minimum the following: • date of insertion, • indication for catheterisation • catheter size • type of catheter and planned date for removal [1-3]

Routine maintenance and assessment for continuing indication phase
1. Hand hygiene Hands are decontaminated immediately before and after each episode of patient contact using the correct hand hygiene technique [1-3].
2. Personal protective equipment Wear personal protective equipment only when indicated and in accordance with local policy [1-3].
3. Assessment Daily assessment of the need of the short term urinary catheter needs to be clearly documented. Long term catheters should be reviewed regularly, at least every catheter change and documented [1-3].
4. Catheter hygiene Routine daily personal hygiene is required for meatal cleaning [1-3].
5. Routine maintenance • Do not break the connection between the catheter and the urinary drainage system unless clinically indicated. Use a separate clean/disposable container when emptying the drainage bag. • Document on the drainage bag when last changed and should be changed in line with the manufacturer's recommendation. The urinary catheter tubing and leg bag should be fixed to the patient's leg using a catheter fixing device [1-3].
6. Patient information Ensure patients and carers are given information regarding the reason for the catheter and the plan for review and removal e.g. indwelling urinary catheter passport [1-3].

Example

	Care element 1	Care element 2	Care element 3	Care element 4	All elements performed
1	✓		✓	✓	
2	✓	✓		✓	
3	✓	✓	✓	✓	✓
4	✓	✓	✓		
5	✓	✓	✓	✓	✓
Total number of times an individual element was performed	5	4	4	4	2
% when element of care was given	100%	80%	80%	80%	40%*
% of care elements performed overall	100%	80%	80%	80%	17 out of 20 or 85%*

*There should be local agreement on which measure is more useful

12. Appendix B – Schedule for Male and Female Urinary Catheterisation

Urinary Catheterisation: Male

Equipment

- Sterile catheterisation pack containing gallipots, receiver, swabs, disposable towels, pre attached bag and statlock to secure catheter.
- Disposable pads
- Sterile gloves x2 and a disposable plastic apron (In pack)
- Appropriate catheter
- Single use sterile anaesthetic lubricating jelly (In Pack)
- Universal specimen container (if required)
- Sterile water for cleaning solution (In Pack).
- Hypoallergenic tape or leg strap for tethering
- Water for injection and 10ml syringe if needed for balloon inflation (In pack).
- Drainage bag and stand or holder

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

	ACTION	RATIONALE
1	Explain and discuss the procedure with the patient	To ensure that the patient understands the procedure and gives valid consent
2	1. A) Screen the bed, or prepare the treatment room 2. B) Assist the patient to get into the supine position with the legs extended 3. C) Do not expose the patient at this stage of the procedure	To ensure patients privacy, to allow dust and airborne organisms to settle before the field is exposed To ensure the appropriate area is easily accessible To maintain the patient's dignity and comfort
3	Wash hands as per Trust hygiene policy	To reduce the risk of infection
4	Put on plastic apron	To reduce the risk of cross infection from micro-organisms on uniform
5	Clean and prepare the trolley, placing all equipment required on the bottom shelf	The top shelf acts as a clean working surface
6	Take the trolley to the patient's bedside, disturbing the screens as little as possible. Where possible catheterisation should be done in the treatment or clinical room on the ward	To minimize airborne contamination
7	Wash hands	To reduce the risk of infection
8	Open the outer cover of the catheterisation pack and slide the pack onto the top shelf of the trolley	To prepare equipment
9	Clean hands as per hand hygiene policy	Hands may have become contaminated by handling the outer packs
10	Put on sterile gloves	To reduce the risk of cross-infection
11	Place a sterile towel under the penis and place the fenestrated towel on top.	To create a sterile field
12	Wrap a sterile gauze swab around the penis. Retract the foreskin, if necessary, and clean the	To reduce the risk of introducing infection to the urinary tract during catheterisation

	glans penis with Sterile water.	
13	Insert the nozzle of the lubricating jelly into the urethra. Squeeze the gel into the urethra, slowly remove the nozzle and discard the tube.	Adequate lubrication helps to prevent urethral trauma. If using an anaesthetic gel, check for allergies and it must be prescribed. An anaesthetic gel may be prescribed when using a larger catheter or if patients are very sensitive.
14	If using an anaesthetic gel. Squeeze the penis and wait approximately five minutes.	To prevent gel from escaping. To allow the anaesthetic gel to take effect
15	Discard gloves and wash hands, or use the alcohol hand gel.	To prevent the risk of infection. The procedure of cleansing the meatus could cause risk of infection
16	Wash hands and don 2nd pair of sterile gloves	
17	Gently hold the penis behind the glans, raising carefully until it is almost totally extended. Maintain gentle hold on penis until the procedure is finished	This manoeuvre straightens the penile urethra and facilitates catheterisation (Stoller 1995). Maintaining a gentle hold of the penis prevents contamination and retraction of the penis
18	Place the receiver containing the catheter between the patient's legs. Insert the catheter for 15 – 20cm until urine flows	The male urethra is approximately 18-22 cm long
19	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 cough.	Some resistance may be due to spasm of the external sphincter. Straining gently helps to relax the external sphincter
20	Either remove the catheter gently when urinary flow ceases if using an ISC catheter or: - a) When urine begins to flow, advance the catheter almost to its bifurcation (divides into two). b) Gently inflate the balloon according to the manufacturer's directions, having ensured that the catheter is draining properly beforehand c) Support the catheter by using a specially designed support. 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	Advancing the catheter ensures that it is correctly positioned in the bladder Inadvertent inflation of the balloon in the urethra causes pain and urethra trauma To maintain patient comfort and to reduce the risk of urethral and bladder neck trauma
21	Ensure that the glans penis is clean and then reduce or reposition the foreskin	Retraction and constriction of the foreskin behind the glans penis (paraphimosis) may occur if this is not done
22	Make the patient comfortable. Ensure the area is dry	If the area is left wet or moist, secondary infection and skin irritation may occur
23	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 urinary catheter routinely changed
24	Dispose of equipment in a clinical waste bag and seal the bag before moving the trolley	To prevent environmental contamination
25	Remove PPE and wash hands	
26	Make sure patient's clothing and bedding is appropriately arranged. Take back to bed area if appropriate and arrange bed curtains	To ensure privacy and dignity
27	Record information on VitalPAC (indwelling devices – urinary catheter) or the paper urinary catheter insertion record and care plan	To provide a point of reference or comparison in the event of later queries
28	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

Urinary Catheterisation: Female

Equipment

- Sterile catheterisation pack containing gallipots, receiver, low-linting swabs, disposable towels, pre-attached catheter and bag and stat lock for securing.
- Disposable pads
- Sterile gloves x2 and I disposable plastic apron
- Appropriate catheter
- Single use sterile plain lubricating jelly
- Universal specimen container (if required)
- Sterile water for cleaning solution
- Hypoallergenic tape, stat lock or leg strap for tethering
- Water for injection and 10ml syringe if needed for balloon inflation
- Drainage bag and stand or holder

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

	ACTION	**RATIONALE**
1	Explain and discuss the procedure with the patient	To ensure that the patient understands the procedure and gives her valid consent
2	Prepare treatment/clinical room or patient's bed area	To ensure patient's privacy. To allow dust and airborne organisms to settle before the sterile field is exposed
3	Assist the patient to get onto their side with the uppermost leg supported with a pillow.	To enable genital area to be seen
4	Do not expose the patient at this stage of the procedure	To maintain the patients dignity and comfort
5	Ensure that a good light source is available	To enable genital area to be seen clearly

6	Wash hands as per hand hygiene protocol	To reduce the risk of cross infection
7	Put on a disposable apron	To reduce the risk of cross infection from microorganisms on uniform
8	Prepare the trolley, placing all equipment required on the bottom shelf	To reserve top shelf for clean working surface
9	If necessary take the trolley to the patient's bedside, disturbing the screens as little as possible	To minimise airborne contamination
10	Wash hands	
11	Open the outer cover of the catheterisation pack and slide the pack onto the top shelf of the trolley	To prepare equipment
12	Using the aseptic non-touch technique, open the supplementary packs	To reduce the risk of introducing infection into the urinary tract
13	Remove the cover that is maintaining the patient's privacy and position a disposable pad under the patient's buttocks	To ensure urine does not leak onto the bedclothes
14	Clean hands, wear PPE and put on sterile gloves	Hands may have become contaminated by handling outer packs
15	Place sterile towels across patients thighs	To create a sterile field
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. Ensure the 'clean' hand does not come into contact with the valval skin	This manoeuvre provides better access to the urethral orifice and helps prevent labial contamination of the catheter
17	Clean around the urethral orifice with Sterile water cleaning solution, using single downward strokes	Inadequate preparation of the urethral orifice is a major cause of infection following catheterisation. To reduce the risk of cross infection
18	Insert the nozzle of the lubricating jelly into the urethra. Squeeze the gel into the urethra, remove the nozzle and discard the tube	Adequate lubrication helps to prevent urethral trauma. The use of a local anaesthetic minimises the patient discomfort
19	Place the receiver containing the catheter between the patients legs	To provide a temporary container for urine as it drains
20	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 the positioned just behind the urethral orifice. This then acts as a guide so the catheter can be correctly positioned. Advance the catheter until 5 – 6cm has been inserted	The direction of insertion and the length of catheter inserted should bear relation to the anatomical structure of the area
21	A) Advance the catheter 6-8cm B) Inflate the balloon according to the manufacturer's directions, having ensured that the catheter is draining adequately	This prevents the balloon from becoming trapped in the urethra Inadvertent inflation of the balloon within the urethra is painful and causes urethral trauma

	C) Withdraw the catheter slightly and connect it to the drainage system D) support the catheter by using a specially designed support Ensure that the catheter does not become taut when patient is mobilising. Ensure the catheter lumen in not obstructed by the fixation/support device If using overnight collection 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	To maintain patient comfort and to reduce the risk of urethral and bladder neck trauma
22	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
23	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
24	Dispose of equipment in a clinical waste bag and seal the bag before moving the trolley	To prevent environmental contamination
25	Remove PPE and wash hands	
26	Make sure patient's clothing and bedding is appropriately arranged. Take back to bed area if appropriate and arrange bed curtains	To ensure privacy and dignity
27	Record information on VitalPAC (indwelling devices – urinary catheter) or the paper urinary catheter insertion record and care plan	To provide a point of reference or comparison in the event of later queries
28	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 if appropriate	To ensure patient is well hydrated, and prevent or recognise complications occurring from catheterisation

Care plan

HOUDINI - make that catheter disappear

Name: ADD STICKER
DOB:
NHS number:

Clinical indication

Haematuria- clots and heavy
Obstruction/catheterised by a urologist (retention) –
Bladder scan amount: mL
Urology/gynaecology/perianal surgery/prolonged surgery
Decubitus ulcer - to assist the healing of a perianal/sacral wound in an incontinent patient
Input/output – monitoring accurate < hourly or acute kidney injury when oliguric
Nursing at the end of life
Immobilisation – neurogenic bladder – unstable fracture or neurological impairment (where all other methods of toileting are contraindicated)
Other

In patients with dementia or delirium, always avoid indwelling urinary catheters – even – if there is a strong indication for insertion and consider the use of intermittent self/carer catheterisation.

Verbal consent given	Yes	No	NA
If unable to consent, MCA best interests completed	Yes	No	NA
Admitted with passport/existing catheter	Yes	No	NA
Patient advice leaflet given/information explained and given	Yes	No	NA
Passport/card given	Yes	No	NA
Confirmed latex allergy (if yes, use all silicone catheter)	Yes	No	NA

Insertion

Date and time of insertion:
Print name and role of person responsible for catheter insertion decision:
Signature:

Aseptic non touch technique used including hand hygiene	Yes	No	
Urethral meatus/genitals cleaned with normal saline pre procedure	Yes	No	
Foreskin replaced	Yes	No	NA

Type of catheter: Reference number: Size:	ADD STICKER Always use the smallest size of catheter that will be effective. In females insert the catheter 2.5cm beyond the point of urine flow before inflating the balloon, to help prevent urethral trauma.

Sterile anaesthetic lubrication used	mL
Residual amount	mL
Balloon type/mL in balloon	
Catheter securing device used	
Drainage bag used	yes ☐ no ☐ type:
Date of use and expiry on catheter bag	
Expected duration/date of removal	
If patient has a catheter assessed as long term or retention unknown cause then referral to other health professionals considered: yes ☐ no ☐ NA ☐	

Don't inflate balloon pre insertion or until urine drains.

Care plan

Name:
DOB:
NHS number:

ADD STICKER

Catheters in for more than 48 hours double the chance of CAUTI.

The risk of CAUTI increases 3-7% for each day the IDC remains in place.

Suspect a CAUTI? Don't dipstick the urine in a patient with an indwelling urinary catheter. Send a sample using the needle free sampling port using ANTT. Do not use bladder washouts routinely.

Day and date	Circle your answer: Continued indication	Meatal cleansing (genital area)	Hand hygiene and clean gloves used	Emptied into a clean container	Catheter secure, bag below the bladder, tube not kinked	Connection not broken – closed sterile circuit or valve use	Hydration encouraged	Constipation managed
1	HOUDINI(O)	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
Notes								
2	HOUDINI(O)	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
Notes								
3	HOUDINI(O)	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
Notes								
4	HOUDINI(O)	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
Notes								
5	HOUDINI(O)	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
Notes								
6	HOUDINI(O)	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
Notes								
7	HOUDINI(O)	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
Notes								
8	HOUDINI(O)	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
Notes								
9	HOUDINI(O)	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
Notes								
10	HOUDINI(O)	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
Notes								

Name:
DOB:
NHS number:

ADD STICKER

Trial without catheter

When there is no longer a rationale for an indwelling urinary catheter consider a trial without catheter (TWOC) – ensure that blood urea and electrolytes are within a normal range for the patient prior to proceeding.

If the patient is on alpha blockers for acute urinary retention, please make sure that they have been used for the recommended period before TWOC.

Patients with nocturnal polyuria may only pass small amounts of urine during the day as their diuresis is predominantly at night. It is important that the success of the TWOC is not based solely on bladder diaries and residual urine volumes must be considered.

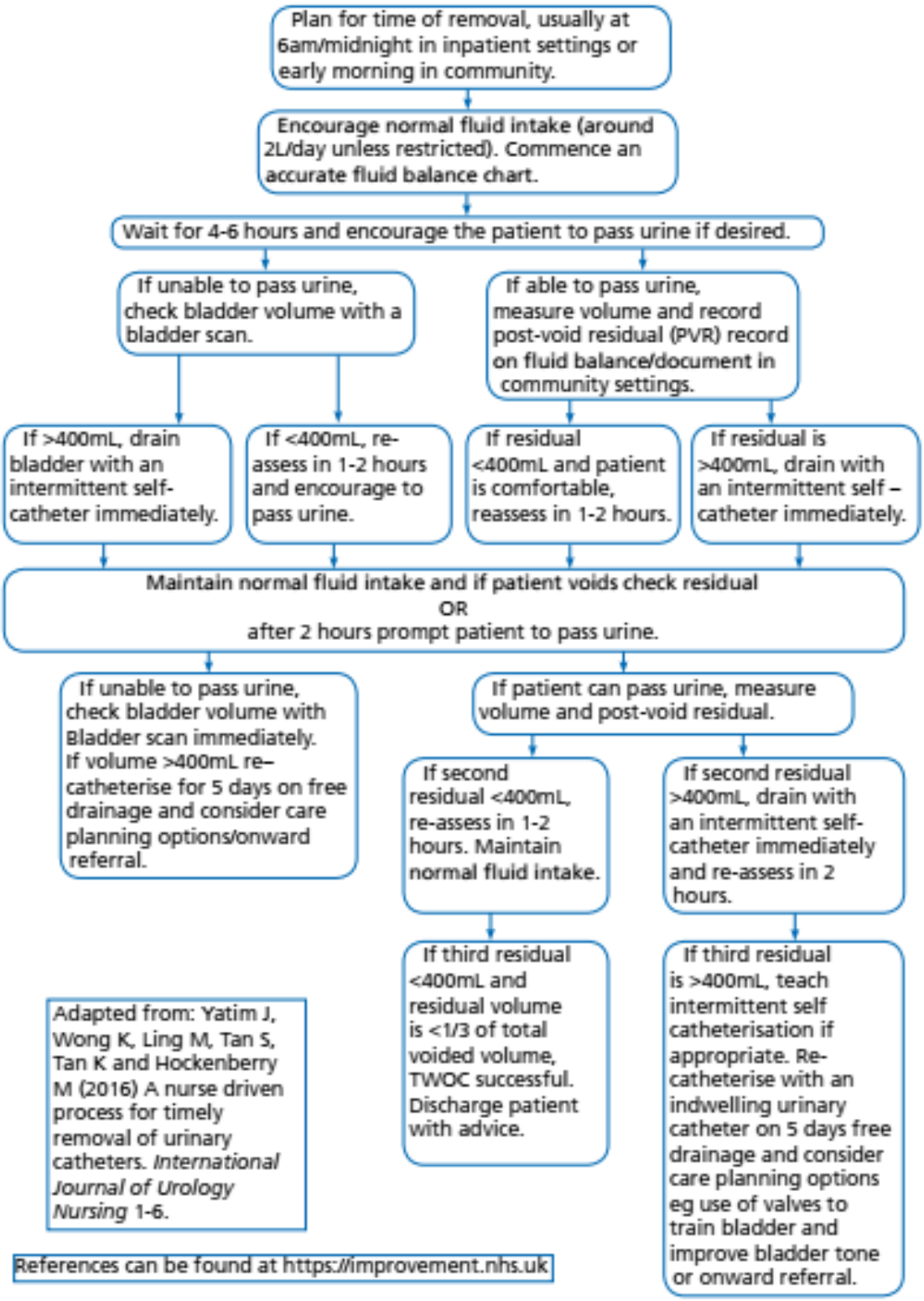
Patients with neurological conditions such as multiple sclerosis may need to fill their bladders to a high capacity before they can initiate a good detrusor contraction to fully empty the bladder. Voiding on request may result in artificially poor emptying and specialist advice may be required.

Consider planning for a TWOC to improve bladder tone consider the use of a catheter valve to promote tone.

If your patient fails a TWOC, consider teaching them or a carer intermittent self-catheterisation.

Date of TWOC	
Outcome	pass ☐ fail ☐
If re-catheterised was catheter passport started?	yes ☐ no ☐
Ensure sufficient supplies	yes ☐ no ☐
Ensure referral to onward services	(for review by?)
Notes:	
Signature:	Designation:

Trial without catheter (TWOC) flowchart



Adapted from: Yatim J, Wong K, Ling M, Tan S, Tan K and Hockenberry M (2016) A nurse driven process for timely removal of urinary catheters. *International Journal of Urology Nursing* 1-6.

References can be found at https://improvement.nhs.uk

Indwelling urinary catheter card

Reason for catheterisation: HOUDINI (O) ☐

Date of initial insertion: ☐

Where this took place: ☐

Site: suprapubic ☐ /urethral ☐

Size: ☐ ch

Type: 28 days PTFE ☐ /12 week all silicone ☐ /hydrogel ☐

Length: female ☐ /standard ☐

Date of planned trial without catheter: ☐

Name: NHS

☐

NHS number: ☐

GP practice: ☐

Phone: ☐

Community nurse phone:

☐

Out of hours: 111

Carry this card with you at all times and present it at appointments.

To stop CAUTI don't catheterise

Haematuria – clots and heavy
Obstruction – mechanical urology
Urology/gynaecology/perianal surgery/prolonged surgery
Decubitus ulcer – to assist the healing of a perianal/sacral wound
Input output monitoring
Nursing at the end of life
Immobilisation due to unstable fracture/neurological deficit

If there's no indication, make that catheter disappear...

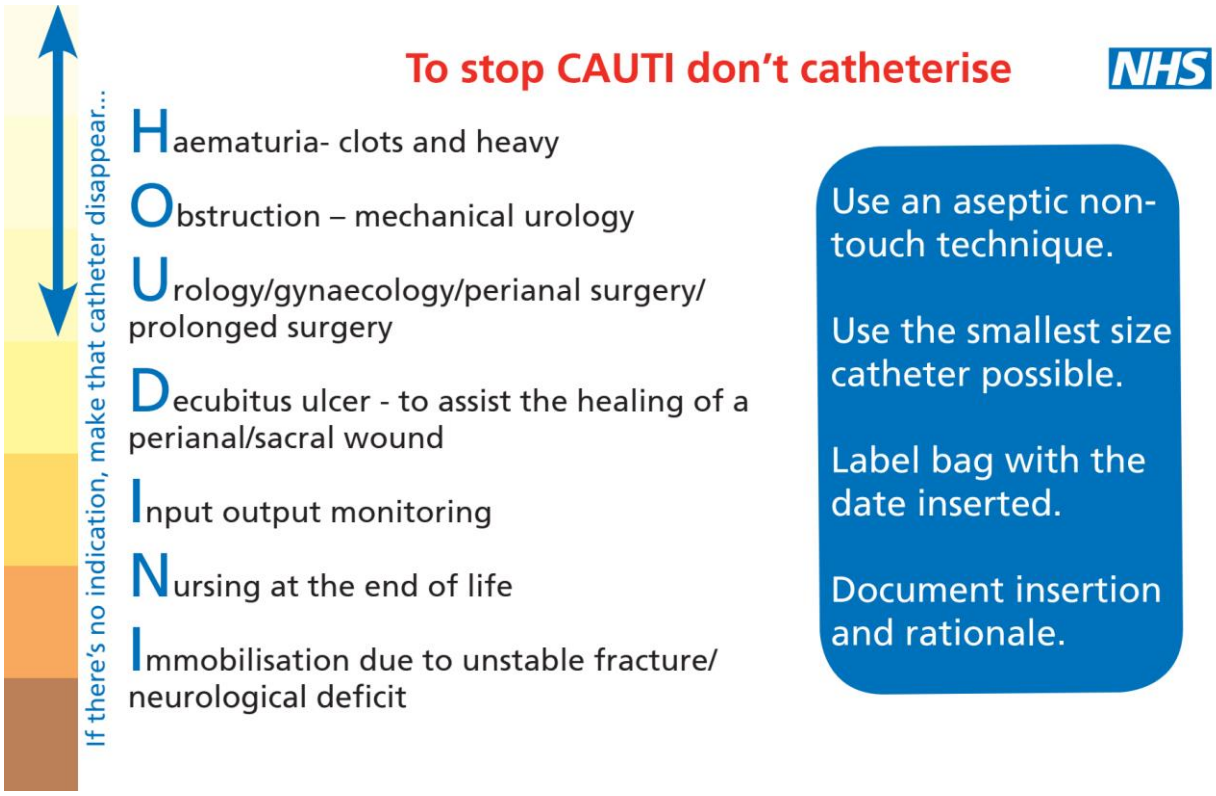
Catheter maintenance

- Maintain a closed sterile drainage system.
- Keep the catheter secure.
- Keep the bag below the bladder and off the floor.
- Maintain uninterrupted flow.
- Empty bag regularly.

Catheter top tips

- Remove post operatively within 24 hours.
- Assess the need for the catheter daily if an inpatient (at planned intervals for others) and document.
- Advise/provide peri-urethral care with soap and water, 3 times a day and after each bowel movement.
- Use an aseptic non-touch technique.
- Use the smallest size catheter possible.
- Document insertion and rationale.
- Label bag with the date inserted.

Aim for light coloured wee


To stop CAUTI don't catheterise
NHS
If there's no indication, make that catheter disappear...
Haematuria- clots and heavy
Obstruction – mechanical urology
Urology/gynaecology/perianal surgery/ prolonged surgery
Decubitus ulcer - to assist the healing of a perianal/sacral wound
Input output monitoring
Nursing at the end of life
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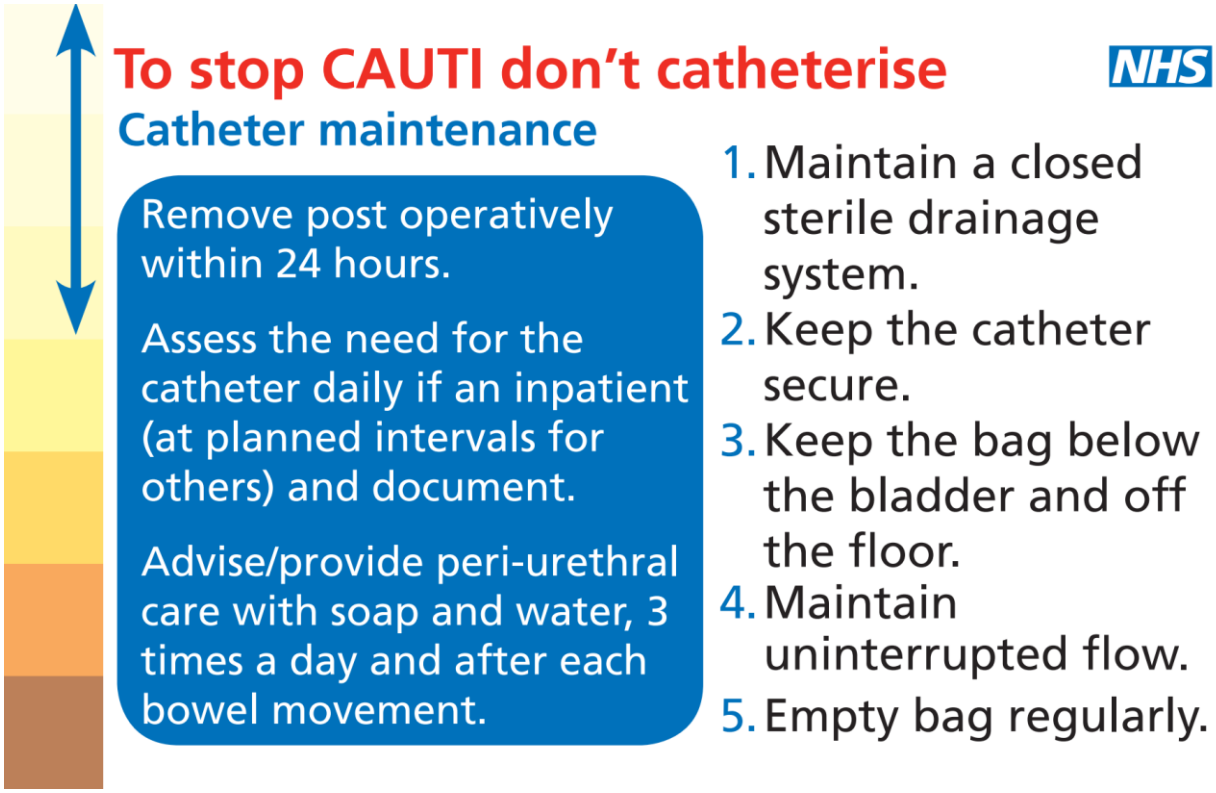
To stop CAUTI don't catheterise
NHS
Catheter maintenance
Remove post operatively within 24 hours.
Assess the need for the catheter daily if an inpatient (at planned intervals for others) and document.
Advise/provide peri-urethral care with soap and water, 3 times a day and after each bowel movement.
1. Maintain a closed sterile drainage system.
2. Keep the catheter secure.
3. Keep the bag below the bladder and off the floor.
4. Maintain uninterrupted flow.
5. Empty bag regularly.

Guidance

Hand hygiene for 5 moments
Before touching patient
Before clean/aseptic technique
After body fluid exposure
After touching patient
After touching patient surroundings

Sampling
Perform aseptically via the catheter port

Catheter manipulation (any action which involves touching the catheter system)
Examination gloves must be worn to manipulate a catheter, and manipulation must be preceded and followed by hand decontamination

Maintain a closed system
Connection between catheter and drainage bag must not be broken except for good clinical reason e.g. changing drainage bag
Single use non-drainable night bag may be used at night

Recording
Record urinary output on fluid chart if 41appropriate
Encourage good fluid intake
Report poor output, (adequate output is 0.5ml per kg of patient's body weight per hour e.g. 33mls if patient weighs 66kgs)
Report any changes in colour e.g. blood

Self-Management of hygiene and emptying
Following education and help if appropriate

After removal of catheter
Ensure patient is within easy reach of a toilet or voiding receptacle
Monitor intake and output, ensure patient is comfortable and fells that the bladder is empty after voiding
Record episodes of incontinence

13. Appendix C – Monitoring Table for this Policy

The following table sets out the monitoring provisions associated with this Policy.

Objective	Evidence	Method	Frequency	Responsible	Committee
Ensure best practice and	Audit bi annually of compliance	Audit. Monthy	Monthly and bi annually.	Deputy Director Infection	Infection Control Group

Objective	Evidence	Method	Frequency	Responsible	Committee
patient safety	with policy.	collection of data onto National data.		Prevention & Control.	
Ensure best practice and patient safety	Monitoring of levels of infection	Report to Infection Control Group capture system	Quarterly.	Deputy Director Infection Prevention & Control.	Infection Control Group

14. Appendix D – Dissemination, Implementation and Training Plan

The following table sets out the dissemination, implementation and training provisions associated with this Policy.

Plan Elements	Plan Details
The Dissemination Lead is:	Joanna Coles
Is this document: A – replacing an expired policy, B – replacing an alternative policy, C – a new policy:	A
Alternative documentation this policy will replace (if applicable):	[DITP - Existing documents to be replaced by]
This document is to be disseminated to:	Trust-wide
Method of dissemination:	Email
Is Training required:	Yes
The Training Lead is:	Joanna Coles

Additional Comments
[DITP - Additional Comments]

15. Appendix E – Document Checklist

Checklist Subject	Checklist Requirement	Document Owner's Confirmation
Title	The title is clear and unambiguous:	Yes
	The document type is correct	Yes
Content	The document uses the approved template:	Yes
	The document contains data protected by any legislation	Yes

Checklist Subject	Checklist Requirement	Document Owner's Confirmation
	All terms used are explained in the 'Definitions' section:	Yes
	Acronyms are kept to the minimum possible:	Yes
	The 'target group' is clear and unambiguous:	Yes
	The 'purpose and scope' of the document is clear:	Yes
Document Owner	The 'Document Owner' is identified:	Yes
Consultation	Consultation with stakeholders (including Staff-side) can be evidenced where appropriate:	Not Applicable
	The following were consulteUHBristols Legal Department and IRMG	N/A
	Suitable 'expert advice' has been sought where necessary: IRMG	Yes
Evidence Base	References are cited:	Yes
Trust Objectives	The document relates to the following Strategic or Corporate Objectives:	[DCL - Trust Objectives]
Equality	The appropriate 'Equality Impact Assessment' or 'Equality Impact Screen' has been conducted for this document:	Not Applicable
Monitoring	Monitoring provisions are defined:	[DCL - Monitoring provisions are defined]
	There is an audit plan to assess compliance with the provisions set out in this procedural document:	[DCL - There is an audit plan]
	The frequency of reviews, and the next review date are appropriate for this procedural document:	Yes
Approval	The correct 'Approval Authority' has been selected for this procedural document:	Yes

16. Appendix F - Equality Impact Assessment (EIA) Screening Tool

Query	Response

What is the main purpose of the document?	The purpose of this policy is to ensure the Trust meets strategic and clinical best practice standards in delivering direct patient care to patients with or who require urinary catheters and/or catheterisation. This policy also standardises the care of urinary catheters, using evidence based guidelines to ensure best practice across the Trust.
Who is the target audience of the document (which staff groups)? Who is it likely to impact on? (Please tick all that apply.)	Add ☑ or ☒ Staff Patients Visitors Carers Others

Could the document have a significant **negative** impact on equality in relation to each of these characteristics?	YES	NO	Please explain why, and what evidence supports this assessment.
Age (including younger and older people)		✓	
Disability (including physical and sensory impairments, learning disabilities, mental health)		✓	
Gender reassignment		✓	
Pregnancy and maternity		✓	
Race (includes ethnicity as well as gypsy travelers)		✓	
Religion and belief (includes non-belief)		✓	
Sex (male and female)		✓	
Sexual Orientation (lesbian, gay, bisexual, other)		✓	
Groups at risk of stigma or social exclusion (e.g. offenders, homeless people)		✓	
Human Rights (particularly rights to privacy, dignity, liberty and non-degrading treatment)		✓	

Will the document create any problems or barriers to any community or group? NO

Will any group be excluded because of this document? NO

Will the document result in discrimination against any group? NO

If the answer to any of these questions is YES, you must complete a full Equality Impact Assessment.

Could the document have a significant **positive** impact on inclusion by reducing inequalities?	YES	NO	If yes, please explain why, and what evidence supports this assessment.
Will it promote equal opportunities for people from all groups?		✓	
Will it help to get rid of discrimination?		✓	
Will it help to get rid of harassment?		✓	
Will it promote good relations between people from all groups?		✓	
Will it promote and protect human rights?		✓	

On the basis of the information / evidence so far, do you believe that the document will have a positive or negative impact on equality? (Please rate by circling the level of impact, below.)

Positive impact						**Negative Impact**
Significant	Some	Very Little	NONE	Very Little	Some	Significant

Is a full equality impact assessment required? NO

Date assessment completed: 17/04/19.....

Person completing the assessment: Joanna Coles.....