

Adult Catheterisation and Catheter Care Guidelines

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Unique Identifier	NHSG/ACCCG/GUI/001
Approval Date:	December 2017
Review Date:	December 2019
Version:	1
New/Replacement	Replacement
Document	

This docun	Executive Sign-Off nent has been endorsed by the Executive Director of Nursing, Midwifery & AHPs
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Version History

Revision Date	Previous Revision Date	Summary of Changes (Descriptive summary of the changes made)	Changes Marked* (Identify page numbers and section heading)
30/11/2017	N/A	Extensive revision of full document	N/A

Subject (as per document registration categories):

Key word(s): catheter, catheterisation, urinary, catheter care, CAUTI, UTI

Document application: NHS Grampian

Purpose/description: this document gives up-to-date guidance on urinary catheterisation and catheter care based on the best available evidence. Its purpose is to guide catheterisation procedures and catheter care across all of NHS Grampian and the health and social care partnerships.

Policy statement: It is the responsibility of all staff to ensure that they are working to the most up to date and relevant policies, protocols, procedures and pathways.

Responsibilities for implementation: Organisational: Operational Management Team and Chief Executive Sector General Managers, Medical Leads and Nursing Leads Departmental: Clinical Leads Area: Line Manager

Responsibilities for review of this document: The Bladder and Bowel Specialist Service Manager

Document written by: (Only applicable if written by a group)

Contents

	 1.0 Introduction 1.1 Definitions 1.2 Considerations prior to catheterisation 	1
	1.3 Risks associated with urinary catheterisation 1.4 Autonomic dysreflexia	2
	1.5 Who should catheterise?1.6 Patient groups to which this document does not apply	3
2.0	Indications for catheterisation 2.1 Patient information and documentation	
3.	Catheterisation guidelines 3.1 Use of Instillagel in urinary catheterisation	6
	3.3 Initial female catheterisation procedure	8 11
	 3.5 Male catheterisation 3.6 Initial male urethral catheterisation procedure 3.7 Male urethral re-catheterisation procedure 	15
	3.8 Suprapubic catheterisation	21
	 3.10 Intermittent catheterisation	27
	3.13 Procedure for TWOC (trial without urethral catheter) in the community setting	
4.	Catheter care guidelines	
	4.1 Catheter valves	
	4.2 Procedure for inserting/changing a catheter valve4.3 Emptying urine drainage bag	
	4.4 Procedure for emptying urine drainage bag	
	4.5 Attaching night drainage bag	
	4.6 Procedure for attaching night drainage bag	
	4.7 Removal of night drainage bag	
	4.8 Procedure for the removal of night drainage bag	
	4.9 Changing a day urinary drainage bag	38
	4.10 Procedure for changing a day urinary drainage bag	
	4.11 Urinary Catheter Hygiene Guidelines	39
	4.12 Procedure for urinary catheter hygiene	39
5.0	Catheter Maintenance Solutions	41
	5.1 Procedure for administering a catheter maintenance solution	
	5.2 Collection of a catheter specimen of urine	45
	Procedure for the collection of a catheter specimen of urine	45

6.0 Problem-solving	47
6.1 Urine not draining	
6.2 Encrustation	
6.3 Catheter bypassing	48
6.4 Bladder Spasm	49
6.5 Discomfort/pain	50
6.5 Haematuria	
6.6 Non-deflation of balloon on removal of catheter	51
6.7 Signs of infection	51
7. Patient Information booklets	52
8. Linked policies	52
9. References	52
8. Distribution list	53
Appendix 1	54
Appendix 2	56
Appendix 3	57
Appendix 4	58
Appendix 5	59

NHS Grampian Adult Urinary Catheterisation and Catheter Care Guidelines

1.0 Introduction

These guidelines apply to all NHS Grampian staff where the procedure of urinary catheterisation and catheter care take place. This includes preregistered student nurses, student midwives who are under the mentorship care of registered nurses, midwives.

This document also aims to provide a uniformed process for all patients who undergo urinary catheterisation thus reducing the risk of adverse events.

An indwelling catheter should only be placed when there is a clear clinical indication. It should not stay in place longer than necessary. It is important to first consider alternatives before placing an indwelling catheter: a catheter is the last resort when other options have failed or proved to be insufficient. When clinically appropriate intermittent catheterisation is preferable to an indwelling catheter. To insert a catheter only for the comfort of nursing/care staff is irresponsible. (European Association of Urology Nurses 2012)

1.1 Definitions

Antimuscarinic: a substance that blocks the neurotransmitter acetylcholine in the central and peripheral nervous system.

ANTT - Aseptic Non-Touch Technique

Bacteraemia: the presence of bacteria in the blood. The blood is normally a sterile environment, so the detection of bacteria in the blood is always abnormal.

Catheter maintenance solutions (CMS): used to dissolve mineral deposits known as "encrustation", were originally known as bladder washouts. The term "bladder washout "is no longer used as it does not describe the product and its use correctly.

CAUTI: catheter associated urinary tract infection.

Encrustation: deposits of mineral salts on the internal and external surface of the catheter leading to occlusion of the lumen.

Haematuria: the presence of red blood cells in the urine.

Phimosis - a condition in which the foreskin of the penis cannot be pulled back past the glans

Paraphimosis - is an uncommon medical condition in which the foreskin of a penis becomes trapped behind the glans penis, and cannot be pulled back to its normal flaccid position covering the glans, causing pain and swelling.

Urinary catheter is a hollow tube that is inserted into the bladder for the purpose of draining or instilling fluids/medication into the bladder. Urinary catheterisation can be performed as an intermittent or indwelling procedure, according to individual patient needs. It may be performed via the urethra (urethral catheterisation) or via an incision into the lower abdominal wall (suprapubic catheterisation) (Pomfret 2008).

Urinary incontinence: the involuntary excretion of urine.

Urethral strictures: a narrowing of the urethra caused by injury or disease

1.2 Considerations prior to catheterisation

Urethral Catheterisation **should not be** performed without seeking medical advice on the following:-

- Patients with history of urethral stricture
- Patients with a phimosis (tight foreskin)
- Patients with a history of difficult catheterisation
- Undiagnosed haematuria or urethral discharge
- Urinary tract infection with clinical symptoms
- History of recent surgery or cancers to the lower urinary tract
- Existing catheter cannot be removed
- Small Fibrotic Bladder
- Patient with spinal cord injury at risk of autonomic dysreflexia (see "risks" below)

1.3 Risks associated with urinary catheterisation

Urinary catheterisation is an invasive procedure which carries some significant risks. Patients having a catheter inserted as part of their clinical care are at high risk of acquiring a catheter associated urinary tract infection (CAUTI). The risk of CAUTI is associated with the method and duration of catheterisation, the quality of catheter care and the person's susceptibility to infection. The commonest site for healthcare associated infection is in the urinary tract, with 43% - 56% of urinary infections being traceable to indwelling urinary catheters (Pratt 2007, Pratt et al 2014). These infections arise because a catheter may traumatise the urethra as well as providing a pathway for bacteria and other organisms to enter the bladder. The longer a catheter is in situ the higher the risk of infection.

1.4 Autonomic dysreflexia

Autonomic dysreflexia is one of the most serious life-threatening conditions that affect people with spinal cord injury at or above the level of the sixth thoracic vertebrae (QiS 2004).

Bladder problems are the most common cause of autonomic dysreflexia, as follows:

- overfull bladder
- the insertion of catheter maintenance solutions
- kidney or bladder stones
- high pressure voiding
- urinary tract infection
- blocked catheter/defective drainage system (e.g. kinked tubing or leg bag full).

Signs and symptoms include raised BP, bradycardia, pounding headache, flushing, sweating or blotching above the level of injury: pale, cold, goosebumps below the level of

injury. Treatment consists of removing the precipitating cause. If hypertension persists urgent medical intervention may be required. Most spinal injury patients have been taught and made aware of this complication.

1.5 Who should catheterise?

Urinary catheterisation shall be performed upon the instruction of a clinician and/or health care professional according to established protocols, using an aseptic technique and observing standard infection control precautions.

This can be viewed at http://www.antt.org/ANTT_Site/core_guidelines.html

Medical Staff and Registered practitioners

Medical staff on the professional register will have completed catheterisation training and must comply with their own professional standards to ensure safe practice. Medical staff in training must be supervised by the appropriate medical trainer.

Male, female and suprapubic catheterisation can be undertaken by **registered practitioners** who have completed the relevant NHS Grampian Catheter Education Programme of study or the equivalent and have been deemed competent and confident, in both theoretical and practical components, to undertake the procedure. Consideration must be given to their professional accountability and code of practice. Acquisition and demonstration of competence will be by observation and supervision within the clinical setting.

The insertion of urinary catheters by competent healthcare professionals will minimise associated trauma, pain, discomfort and catheter associated infection (NICE 2016).

Unregistered healthcare workers:

As a response to changing service needs, some clinical areas are permitting unregistered healthcare workers to carry out urethral catheterisation.

It is the line manager's responsibility to identify and clarify the additional development needs of unregistered healthcare workers and particular individuals to ensure safe and competent practice.

If an unregistered healthcare worker has been deemed competent in this skill, and their employer agrees with them to undertake this extended role, the registered nurse can agree to delegate this task to the unregistered healthcare worker but must 'take into account the context of every situation rather than focusing on activities alone' and when the insertion of an indwelling catheter is deemed as low risk (RCN 2017). The NMC (2008) has established principles, which should be adhered to by nurses when delegating to others. It stresses the need to ensure that delegation only takes place when it is in the best interests of the patient receiving the care and when a holistic assessment of need has been undertaken by the nurse who delegates the care. The nurse who delegates remains accountable for the appropriateness of the delegation and making a judgement about the supervision required by the person carrying out the delegated task. Overall the employer (NHS Grampian) has the responsibility to ensure that the persons to whom nurses may delegate tasks have the appropriate education training and skills to carry out those tasks that a nurse may be expected to delegate to them.

Student nurses:

It is appropriate that students are given opportunities to participate in various clinical skills.

- The student nurse may participate in the urethral catheterisation of female patients, and the catheterisation of male patients, under the direct supervision at all times of a registered mentor who is competent and confident in these procedures. Prior to undertaking catheterisation procedures, the student must demonstrate an appreciation of the theoretical and practical aspects underpinning the procedure of urinary catheterisation to the mentor. There is an opportunity for this to be reflected in the student's clinical skills records provided by the University. The mentor, having an up-to-date knowledge of the content of respective Urinary Catheterisation Education Programmes within NHS Grampian, and linked universities will be responsible for ensuring that the student's current level of underpinning theory reflects what is taught in the organisation.
- Student nurses **must not** participate in urinary catheterisation in acute/emergency situations and must not participate in suprapubic catheterisation reinsertion.
- Student nurses are also **not permitted to administer local anaesthetic gel** during urinary catheterisation procedures. If the use of a local anaesthetic gel is covered by a Patient Group Direction (PGD), in these situations, the registered nurse would carry out the administration.

"PGD's should only be used once the registrant has been assessed as competent and whose name is identified within each document. The administration of drugs via a PGD may **not be delegated**. Students cannot supply or administer under a PGD but would be expected to understand the principles and be involved in the process" (Standards for Medicines Management, NMC 2007).

Where a local anaesthetic gel is prescribed on a Patient Specific Direction or a Patient Medicines Administration Chart, the student under **the direct supervision** of a registered practitioner may be permitted to be involved in the administration.

"When this is done both the student and the registrant must sign the patient's medication chart or document in the notes. The registrant is responsible for delegating to the student and where it is considered the student is not ready to undertake administration in whatever form this should be delayed until such time that the student is ready" (Standards for Medicines Management, NMC 2007).

1.6 Patient groups to which this document does not apply

This guideline does not apply to children/paediatric services (refer to Grampian intranet guidelines for paediatric procedures on urinary catheterisation).

2.0 Indications for catheterisation

- Urinary retention (acute or chronic)
- Drainage of the bladder (to monitor renal function, congenital abnormalities, pre/post pelvic surgery, to empty the bladder during labour).
- Investigation (urodynamic investigation/x-ray investigation).
- Instillation (to irrigate the bladder or instill medication).
- Dilatation of a urethral stricture by insertion of a catheter.

Given the high risk of infection indwelling catheters should be removed as soon as clinically appropriate. NHS Scotland suggests following the HOUDINI checklist, as follows:

HOUDINI checklist

Indication	Yes	No
Haematuria		
O bstruction		
Urology surgery		
Decubitus ulcer		
Input and output		
measurement		
Nursing end-of-life care		
Immobility		

If you have ticked yes to any of the above, then the patient will probably still need a urinary catheter. Remember to reassess your patients on a regular basis (by using the Health Protection Scotland for the prevention of CAUTI in acute settings).

2.1 Patient information and documentation

In all inpatient settings the **Urinary Catheter Insertion and Maintenance Bundle** (CAUTI bundle) must be used and completed daily (Appendix 1)

In addition to this any patient who has an indwelling catheter must be given the **National Urinary Catheter Care Passport** - this is a person held record issued by Health Protection Scotland (2017). The catheter passport contains patient information on catheter care, reasons for initial catheterisation, catheter details, information regarding trial without catheter and catheter changes.

This can be viewed at

http://www.hps.scot.nhs.uk/haiic/sshaip/resourcedetail.aspx?id=3234

In community settings the **NHS Grampian Catheter Insertion Record Sheet** should be used alongside the National Urinary Catheter Care Passport (Appendix 2)

3. Catheterisation guidelines

3.1 Use of Instillagel in urinary catheterisation

(Also refer to Manufacturers Guidelines)

'Lubricating gel incorporating local anaesthetic gel from a single-use container is used for both male and female catheterisation' (QIS 2004). Instillagel is a local anaesthetic lubricating gel that contains lidocaine.

Instillagel is a sterile gel containing a local anaesthetic and antiseptic, presented in a sterile package. It is used when putting a tube or instrument into a body cavity. The properties of instillagel provide localised pain relief and help reduce the risk of infection, while also giving lubrication to allow for a smooth process.

Contraindications

Instillagel must not be used

- In patients with known hypersensitivities to the active ingredients or any of the excipents
- In patients who have damaged or bleeding mucous membranes because of the risk of systemic absorption of the lidocaine hydrochloride

Warnings and cautions

- Products containing local anaesthetics should be used with caution in patients with impaired cardiac function, hepatic insufficiency and in epileptics
- Lidocaine should be used with caution in patients receiving antiarrhythmic drugs
- During the first 3 months of pregnancy, lidocaine should be used only if absolutely necessary

Please refer to the medicinal product summary for further information (www.clinimed.co.uk)

Please refer to the Protocol for the Safe Administration of Instillagel for Urinary Catheterisation by Healthcare Workers in NHS Grampian (2016)

Requirements - Initial Catheterisation

Disposable plastic apron Sterile Procedure Pack Catheters - appropriate size, length and material (catheters should always be the smallest suitable size to prevent irritation and trauma to the urethra) follow manufacturers guidelines and length of time they can stay in situ for 2 pairs of sterile gloves Cleansing agent – normal saline Local anaesthetic lubricating gel (check manufactures instructions for the amount recommended) Sterile water/pre-filled syringe (check manufacturer instructions for balloon volume), Drainage bag with straps, sleeve, stand or catheter valve (see Appendix 3) Disposal bag as per NHS Grampian Waste Management Policy Blanket or cover for upper half of body Bed protection/disposable pad Alcohol based hand rub Sharps bin

N.B Most manufacturers now have pre-filled syringe with sterile water, this avoids use of a needle and will reduce needle stick injury

Requirements – Re catheterisation

In addition to the requirements for 'Initial Female Catheterisation' you will need the following;

As above plus: -

1 pair of non-sterile gloves as per glove guidelines 1 x 10ml syringe Disposable plastic apron

Initial female catheterisation procedure 3.3

Initial female catheterisation procedure	Rational
Perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).	To reduce the risk of cross- infection
Confirm patient identity with the patient & wristband (if worn) Explain & discuss procedure with patient	To ensure correct patient identified for procedure To ensure patient understands the procedure and gives valid consent
Ensure patient privacy	Ensure patient comfort and dignity
Remove patient's lower garments. Assist into supine position with legs bent, hips flexed if appropriate. Ensure good light source is available. Place protection pad on the bed. Cover patient	To allow access for catheterisation. To contain any leakage and ensure patient comfort and dignity
Perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).	To reduce the risk of cross- infection
Put on disposable plastic apron	To reduce the risk of cross- infection from micro-organisms on uniform
Prepare work area with required equipment. Refer to the National Infection Prevention and Control Manual /ANTT guidelines.	To ensure all equipment is ready for procedure
Perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).	To reduce the risk of cross- infection
Open out sterile dressing pack using an aseptic technique. Pour normal saline into container. Open	Create a sterile field
supplementary packs e.g. gloves, gel, catheter Open out the pre-filled sterile syringe containing water and place onto the sterile field	Enables the inflation of the catheter balloon immediately following insertion
Remove cover from patient and assist into suitable position	To allow access for catheterisation
Perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).	To reduce the risk of cross- infection
Put on sterile gloves and arrange the sterile drape from pack under patient's buttocks and thighs	To create a sterile field
Using sterile swabs, Separate the labia minora so that the urethral meatus is visible	Provides better access to urethral orifice – helps to prevent labia contamination of the catheter
Using sterile swabs, Cleanse around the urethral orifice with saline using single downward strokes	To reduce risk of introducing infection to the urinary tract
NHSG/ACCCG/GUI/001 Adult Catheterisation and Catheter Care Guidelines	Version 1 December 2017

Initial female catheterisation procedure (cont)	Rational
Lubrication /anaesthetic gel must be prescribed if being used and checked for contraindications. The single use sachet of 5mg lubricating gel may be used if preferred or if an anaesthetic gel is contraindicated.	Please see NHS Grampian Protocol on the use of instillagel for urinary catheterisation.
If using anaesthetic gel slowly insert into the urethra (See NHS Grampian's protocol for the use of instillagel)	To provide local anaesthetic to the urethra.
Discard partially emptied anaesthetic syringe into sharp bin container	As per waste management policy
Wait for 5 minutes to allow maximum urethral anaesthesia (follow manufacturer's instructions) Remove and dispose of gloves	To reduce urethral trauma and patient discomfort To reduce the risk of cross- infection
Perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).	To reduce the risk of cross- infection
Apply 2 nd pair of sterile gloves	To reduce the risk of cross- infection
Position the sterile container to catch urine	Provide temporary container for urine as it drains
Open the inner cover of the catheter and expose 10cm of catheter	Facilitate the insertion of catheter
Introduce the tip of the catheter into the urethral orifice in an upward and backward direction. Advance the catheter until 5 - 6 cm has been inserted	The direction of insertion and the length of catheter inserted refers to the anatomical structure.
When urine is present advance the catheter 6–8 cm	This prevents the balloon from becoming trapped in the urethra
Inflate the catheter balloon slowly to the correct balloon volume with sterile water (as per manufacturer's instructions). Observe patient for signs of distress. Ensure urine draining	Facilitate inflation of catheter balloon
Withdraw catheter gently until resistance is felt	To ensure the catheter balloon is inflated
Attach the catheter to a sterile closed drainage system and secure with appropriate fixation device or catheter valve (see appendix 3)	To ensure correct use of device Maintain patient comfort and reduce risk of urethral/bladder neck trauma
Ensure vulva area is clean and dry	To prevent dampness which may cause discomfort or irritation to skin
Make patient comfortable	Ensure patient comfort and dignity
Measure amount of urine drained Remove gloves then apron. Dispose of equipment as	To record urine output To reduce risk of cross-infection
per current NHS Grampian waste management policy	To Reduce environmental contamination
Perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).	To reduce the risk of cross- infection

Initial female catheterisation procedure (cont)	Rational
 Record details of the catheterisation procedure in the patient's notes/catheter insertion sheet / CAUTI prevention bundle. Reason for catheterisation Type, size and length of catheter Lot/batch number Expiry date Amount of water removed/instilled Cleaning agent used Lubricating/Anaesthetic gel used, lot/batch number and expiry date Type of urine drainage system Any problems encountered with removal/insertion of catheter Signature & title of practitioner performing the procedure 	To ensure accurate and up-to- date records of the procedure are recorded in the relevant case records
 If discharging patient home please provide the following; Relevant patient leaflet and catheter passport (see section 7). 7 day supply of appropriate equipment Sufficient catheter equipment (if appropriate). Contact number of healthcare professional. Advice on how to obtain further supplies. If discharging home with catheter ensure copy of the insertion sheet/CAUTI prevention bundle is given. Inform community nurse if further support is needed. 	To ensure the patient has relevant information/supplies and is aware on how to contact the local community nursing team/other healthcare professional.

3.4 Female re-catheterisation procedure

Perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).To reduce the risk of cross- infectionConfirm patient identity with the patient & wristband (if wearing one)To ensure correct patientExplain & discuss the procedure with the patientTo ensure correct patient identified for procedure To ensure patient understands the procedure and gives valid consentEnsure patient privacyEnsure patient privacyRemove patient privacyEnsure patient comfort and dignityRemove patient privacyEnsure patient comfort and dignityRemove patient privacyTo reduce the risk of cross- infectionPerform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).To reduce the risk of cross- infection from micro-organisms on uniform ensure all equipment is ready for procedurePrepare work area with required equipment. Refer to the National Infection Prevention and Control Manual /ANTT guidelines.To reduce the risk of cross- infection from micro-organisms on uniformPerform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).Create a sterile fieldOpen out sterile dressing pack using aseptic technique. Pour normal saline into container. Open supplementary packs e.g. gloves/gel/catheter Open out the pre-filed sterile syringe containing water and place onto the sterile fieldRemove cover from patient and assist into the supine positionTo reduce the risk of cross- infectionPerform hand hygiene (in accordance with NHSTo reduce the risk of cross- infectionOpen out sterile dreme and place onto the sterile fieldEnables the inflatio	Female re-catheterisation procedure	Rational	
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Apply non-sterile gloves I o reduce the risk of cross- infection	Apply non-sterile gloves	To reduce the risk of cross- infection	

Female re-catheterisation procedure (cont)	Rational
Connect empty syringe to the catheter balloon port, withdraw the water from the balloon Gently remove the catheter observe the length of catheter removed	Deflation of the balloon allows the catheter to be removed To prevent trauma and allow for ease of insertion of new catheter
Remove syringe and dispose of syringe into sharp bin container. Take note of the amount of water removed	Safe disposal of equipment
Dispose of catheter, drainage system, gloves and apron as per current waste management policy	To reduce the risk of cross- infection
Perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).	To reduce the risk of cross- infection
Put on disposable plastic apron	To reduce the risk of cross- infection
Put on sterile gloves and arrange sterile drape from pack under the patient's buttocks and thighs	To Create a sterile field
Using sterile swabs separate the labia minora	Provides better access to urethral orifice – helps to prevent labial contamination of catheter
Cleanse around the urethral orifice with saline using single downward strokes If using anaesthetic gel slowly insert into the urethra (See NHS Grampian's protocol for the use of instillagel)	To reduce the risk of introducing infection to the urethral tract To provide local anaesthetic to the urethra.
Discard partially emptied anaesthetic into sharp bin container	As per waste management policy
Wait for 5 minutes to allow maximum urethral anaesthesia (follow manufacturer's instructions)	To reduce urethral trauma and patient discomfort
Remove and dispose of gloves	To reduce the risk of cross- infection
Perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).	To reduce the risk of cross- infection
Apply 2 nd pair of sterile gloves	To reduce the risk of cross- infection
Position the sterile container to catch urine	Provide temporary container for urine as it drains
Open the inner cover of the catheter and expose 10cm of catheter	Facilitate the insertion of the catheter
Introduce the tip of the catheter into the urethral orifice in an upward and backward direction. Advance the catheter until 5 - 6 cm has been inserted	The direction of insertion and the length of catheter inserted release to the anatomical structure.

Female re-catheterisation procedure (cont)	Rational
When urine is present advance the catheter 6–8 cm Inflate the catheter balloon slowly to the correct balloon volume with sterile water (as per manufacturer's instructions). Observe patient for signs of distress. Ensure urine draining	This prevents the balloon from becoming trapped in the urethra Facilitate inflation of catheter balloon
Withdraw catheter gently until resistance is felt	To ensure the catheter balloon is inflated
Attach the catheter to closed drainage system and secure with appropriate fixation device or catheter valve (see appendix 3)	To Ensure correct use of device Maintain patient comfort and reduce risk of urethral bladder neck trauma
Ensure vulval area is clean and dry	To prevent dampness which may cause discomfort or irritation to skin
Make patient comfortable	Ensure patient comfort and dignity
Measure amount of urine drained Remove gloves then apron. Dispose of equipment as per current NHS Grampian waste management waste policy	To record urine ouput To reduce risk of cross-infection To Reduce environmental contamination
Perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).	To reduce the risk of cross- infection
Record details of the catheterisation procedure in the patient's notes/catheter insertion sheet / CAUTI prevention bundle - Reason for catheterisation	To ensure accurate and up-to- date records of the procedure are recorded in the relevant case records
 Type, size and length of catheter Lot/batch number Expiry date 	
- Amount of water removed/instilled	
 Cleaning agent used Lubricating/Anaesthetic gel used, 	
lot/batch number and expiry date	
 Type of urine drainage system Any problems encountered with 	
removal/insertion of catheter	
 Amount of urine drained & appearance Signature & title of practitioner performing the procedure 	

A standard length catheter must be used. Never use a female length catheter in a male patient (NPSA 2009).

Requirements – Initial catheterisation

Disposable plastic apron Sterile Procedure Pack Catheter - appropriate size, length and material (catheters should always be the smallest suitable size to prevent irritation and trauma to the urethra) 2 pairs of sterile gloves Cleansing agent –normal saline Local anaesthetic lubricating gel (check manufactures instructions for recommended amount). Sterile water/pre-filled syringe (check manufacturer instructions for balloon volume), Drainage bag with straps, sleeve, stand or catheter valve (see appendix 3) Disposal bag as per NHS Grampian Waste Management Policy Blanket or cover for upper half of body Bed protection/disposable pad Sharps bin

N.B Most manufacturers now have pre-filled syringe with sterile water, this avoids the use of a needle and will reduce needle stick injury

Requirements - re-catheterisation

Requirements In addition to the requirements for Initial Male Catheterisation you will need the following

1 pair of non-sterile gloves 1 x 10ml syringe Additional disposable plastic apron

3.6 Initial male urethral catheterisation procedure

Male catheterisation procedure	Rational
Perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).	To reduce the risk of cross-infection
Confirm patients identity with the patient & wristband (if worn) Explain & discuss the procedure with the patient Ensure patient privacy Remove patient's lower garments , assist into supine position, place protection pad on bed, cover patient, ensure good light source is available	To ensure correct patients identified for procedure To ensure patient understands the procedure and gives valid consent Ensure patient comfort and dignity To allow access for catheterisation. to contain any leakage and ensure patient comfort and dignity
Perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).	To reduce the risk of cross-infection
Put on disposable plastic apron Prepare work area with required equipment. Refer to the National Infection Prevention and Control Manual /ANTT guidelines.	To reduce the risk of cross-infection from micro-organisms on uniform To ensure all equipment is ready for procedure
Perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).	To reduce the risk of cross-infection
Open out sterile dressing pack using aseptic technique. Pour normal saline into container. Open supplementary packs e.g. gloves/gels/catheter	Create a sterile field
Open out the pre-filled sterile syringe containing water and place onto the sterile field Remove cover from the patient and assist into suitable position	Enables the inflation of the catheter balloon immediately following insertion To Allow access for catheterisation
Perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).	To reduce the risk of cross-infection
Put on sterile gloves and arrange the sterile drape across patient's thighs.	To create a sterile field
Hold the penis with a sterile swab, retract the foreskin if present and clean the glans and urethral orifice with saline	Provide access to the urethral orifice To reduce the risk of introducing infection to the urinary tract during catheterisation
Before removing the cap from the end of the anaesthetic gel syringe, free the plunger by gently pressing it	To reduce risk of gel spurting uncontrollably out of syringe

Male catheterisation procedure (cont)	Rational
Gently place the nozzle of anaesthetic gel into the urethra and slowly squeeze gel into urethra (See NHS Grampian's protocol for the use of Instillagel)	To provide local anaesthetic to the urethra.
Discard empty anaesthetic syringe into sharp bin container	As per Waste Management Policy
Wait for 5 minutes to allow maximum urethral anaesthesia (follow manufacturers guidelines) Remove and dispose of gloves	To reduce urethral trauma and patient discomfort To reduce the risk of cross-infection
Perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).	To reduce the risk of cross-infection
Apply 2 nd pair of sterile gloves Position the sterile container to catch urine	To reduce the risk of cross-infection Provide temporary container for urine as it drains
Open the inner cover of the catheter and expose 10cm of catheter	Facilitate the insertion of catheter
Grasp penis behind glans, with a sterile swab, raising it until it is almost totally extended. Maintain this hold of the penis until the catheter is inserted and urine flows.	Aid passage of catheter through prostatic urethra
Insert catheter gently into the urethral orifice, slowly advance the catheter up the urethra for 15-25cm	Facilitate entry of catheter into bladder
If resistance is felt at the external sphincter slightly increase the traction on the penis and apply gentle steady pressure on the catheter. Ask the patient to strain slightly or cough.	Aid the passage of the catheter through the prostatic urethra Relax the external sphincter
Once urine flows, advance the catheter almost to its bifurcation (Royal Marsden 2016). Inflate the catheter balloon slowly to the correct balloon volume with sterile water (according to manufacturer's instructions). Observe patient for signs of distress. Withdraw catheter slightly until resistance is felt.	Prevent inflation of catheter balloon in the urethra Facilitate inflation of catheter balloon. To reduce the risk of cross infection Prevent inflation of the balloon in the urethra To ensure catheter balloon is inflated
Attach the catheter to closed drainage system and secure with appropriate fixation device or catheter valve (see appendix 3)	To Ensure correct use of device Maintain patient comfort and reduce risk of urethral/bladder neck trauma
Ensure glans penis is clean and dry	To prevent dampness which may cause discomfort or irritation to skin

Male catheterisation procedure (cont)	Rational
Reduce or replace the foreskin Make patient comfortable Measure amount of urine drained	Prevent risk of Paraphimosis Ensure patient comfort and dignity
Remove apron and gloves. Dispose of equipment as per healthcare waste guidelines.	Prevent risk of cross-infection
Dispose of equipment as per current waste management policy	To reduce environmental contamination
Perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).	To reduce the risk of cross-infection
Record details of the catheterisation procedure in the patient's notes/catheter insertion sheet / CAUTI prevention bundle	To ensure accurate and up-to-date records of the procedure are recorded in the relevant case records
 Reason for catheterisation Type, size and length of catheter Lot/batch number Expiry date Amount of water removed/instilled Cleaning agent used Lubricating/anaesthetic gel used, lot/batch number and expiry date Type of urine drainage system Any problems encountered with removal/insertion of catheter Amount of urine drained & appearance Signature & title of practitioner performing the procedure If discharging patient home please provide the following; Relevant patient leaflet and catheter passport (see section 7). 7 day supply of appropriate equipment Sufficient catheter equipment (if appropriate). Contact number of healthcare professional. Advice on how to obtain further supplies. If discharging home with catheter ensure copy of the insertion sheet/CAUTI prevention bundle is given. Inform community nurse if further support is needed. 	To ensure the patient has relevant information/supplies and is aware on how to contact the local community nursing team/other healthcare professional.

3.7 Male urethral re-catheterisation procedure

Male re-catheterisation procedure	Rational
Perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).	To reduce the risk of cross-infection
Confirm patients identity with the patient & wristband (if worn) Explain & discuss the procedure with the patient Ensure patient privacy Remove patient's lower garments , assist into supine position, place protection pad on bed, cover patient, ensure good light source is available	To ensure correct patients identified for procedure To ensure patient understands the procedure and gives valid consent Ensure patient comfort and dignity To allow access for catheterisation. to contain any leakage and ensure patient comfort and dignity
Perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).	To reduce the risk of cross-infection
Put on disposable plastic apron Prepare work area with required equipment. Refer to the National Infection Prevention and Control Manual /ANTT guidelines.	To reduce the risk of cross-infection from micro-organisms on uniform To ensure all equipment is ready for procedure
Perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy). Open out sterile dressing pack using aseptic technique. Pour normal saline into container. Open supplementary packs e.g.	To reduce the risk of cross-infection Create a sterile field
gloves/gels/catheter Open out the pre-filled sterile syringe containing water and place onto the sterile field	Enables the inflation of the catheter balloon immediately following insertion
Remove cover from the patient and assist into suitable position	To Allow access for catheterisation
Perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).	To reduce the risk of cross infection
Apply non-sterile gloves Connect empty syringe to the balloon port of the catheter in situ, withdraw the water from the balloon	To reduce the risk of cross-infection Deflation of the balloon allows the catheter to be removed
Gently remove the catheter observing the length of the catheter removed Remove syringes and dispose of syringe into sharp bin container. Dispose of catheter, drainage system, gloves and apron as per current waste management policy	To prevent trauma and allow for ease of insertion of new catheter safe disposal of equipment to protect healthcare workers and others To reduce the risk of cross-infection

Male re-catheterisation procedure (cont)	Rational
Perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).	To reduce risk of cross-infection
Put on disposable plastic apron Put on sterile gloves and arrange the sterile drape from pack across patient's thighs.	To reduce the risk of cross-infection from micro-organisms on uniform To create a sterile field Provide access to the urethral orifice
Hold the penis with a sterile swab, retract the foreskin if present and clean the glans and urethral orifice with saline	To reduce the risk of introducing infection to the urinary tract during catheterisation
Before removing the cap from the end of the anaesthetic gel syringe, free the plunger by gently pressing it	To reduce risk of gel spurting uncontrollably out of syringe
Gently place the nozzle of anaesthetic gel into the urethra and slowly squeeze gel into urethra (See NHS Grampian's protocol for the use of instillagel)	To provide local anaesthetic to the urethra.
Discard empty anaesthetic syringe into sharp bin container	As per Waste Management Policy
Wait for 5 minutes to allow maximum urethral anaesthesia	To reduce urethral trauma
Remove and dispose of gloves	To reduce the risk of cross-infection
Perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).	To reduce the risk of cross-infection
Apply 2 nd pair of sterile gloves Position the sterile container to catch urine	To reduce the risk of cross-infection Provide temporary container for urine as it drains
Open the inner cover of the catheter and expose 10cm of catheter	Facilitate the insertion of catheter
Grasp penis behind glans, with a sterile swab, raising it until it is almost totally extended. Maintain this hold of the penis until the catheter is inserted and urine flows.	Aid passage of catheter through prostatic urethra
Insert catheter gently into the urethral orifice, slowly advance the catheter up the urethra for 15-25cm	Facilitate entry of catheter into bladder
If resistance is felt at the external sphincter slightly increase the traction on the penis and apply gentle steady pressure on the catheter. Ask the patient to strain slightly or cough.	Aid the passage of the catheter through the prostatic urethra Relax the external sphincter
Once urine flows, advance the catheter almost to its bifurcation (Royal Marsden 2016). Inflate the catheter balloon slowly to the correct	Prevent inflation of catheter balloon in the urethra Facilitate inflation of catheter balloon.
balloon volume with sterile water (according to manufacturer's instructions). Observe patient for signs of distress.	Prevent inflation of the balloon in the urethra

Male re-catheterisation procedure (cont)	Rational
Withdraw catheter slightly until resistance is felt. Attach the catheter to closed drainage system and secure with appropriate fixation device or catheter valve (see appendix 3) Ensure glans penis is clean and dry Reduce or replace the foreskin Make patient comfortable Measure amount of urine drained Remove apron and gloves. Dispose of equipment as per healthcare waste guidelines.	To ensure catheter balloon is inflated To Ensure correct use of device Maintain patient comfort and reduce risk of urethral/bladder neck trauma To prevent dampness which may cause discomfort or irritation to skin Prevent risk of paraphimosis Ensure patient comfort and dignity To record urine output Prevent risk of cross-infection
Perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).	To reduce environmental contamination
 Record details of the catheterisation procedure in the patient's notes/catheter insertion sheet / CAUTI prevention bundle Reason for catheterisation Type, size and length of catheter Lot/batch number Expiry date Amount of water removed/instilled Cleaning agent used Lubricating/Anaesthetic gel used, lot/batch number and expiry date Type of urine drainage system Any problems encountered with removal/insertion of catheter Amount of urine drained & appearance Signature & title of practitioner performing the procedure 	To ensure accurate and up-to-date records of the procedure are recorded in the relevant case records

3.8 Suprapubic catheterisation

Suprapubic catheterisation is the insertion of a catheter through the anterior abdominal wall into the bladder. The procedure is initially performed under general or local anaesthesia and should be undertaken by experienced urology/surgical staff using ultrasound imaging.

The first planned change can be done in the community setting, either in the patient's home or the GP practice - there is no rationale for this to be changed in a hospital environment (Association of Continence Advice 2009). Suprapubic catheterisation is an aseptic procedure and can be carried out by nursing staff who have had training and are competent in this procedure.

Indications for suprapubic catheterisation

Suprapubic catheterisation offers some advantages over urethral catheterisation (Rigby 2009). The risk of patients developing urinary tract infection is reduced, as the bacterial count on the abdominal skin is less than around the perineal and perianal areas – although bacteraemia and encrustation can still occur in some patients (Simpson 2001). For some patients pain and catheter associated discomfort are reduced, whilst patient satisfaction, level of independence and sexual activity improved.

Commonly suprapubic catheters are used in the following:

- When it is not possible for a urethral catheter to be inserted i.e. strictures
- Post-operative drainage of urine after lower urinary tract/pelvic surgery and bowel surgery.
- Managing neuropathic bladder disorder.
- In some long-term conditions i.e. spinal cord injury.
- People with long-term catheters to reduce the risk of urethral infections or damage.
- -

Important information

Staff, patients and carers should be made aware that if a suprapubic catheter becomes dislodged reinsertion of a replacement catheter should be treated as a priority (RCN 2012). The new catheter requires to be inserted within 30 - 45 minutes of the removal of the old catheter as a delay can result in partial deterioration of the tract as the detrusor muscles contract.

Never remove the suprapubic catheter unless a replacement catheter is available (or it is going to be removed permanently).

Requirements - removal and reinsertion of supra pubic catheter

- Disposable apron x2
- Alcohol-based hand rub.
- Sterile procedure pack.
- Catheter appropriate size, length of material. Size should be no smaller than 16 gauge in adults, 10 ml balloon

- 1 pair of non-sterile gloves and 2 pairs of sterile gloves.
- Normal saline for cleansing.
- Sterile water/pre-filled syringe (check manufacturer instructions for balloon volume),
- Appropriate drainage bag or catheter and valve / strap /sleeve / stand.
- Lubrication. A single use sachet of 5 g plain lubricating gel should be used. If anaesthetic gel is preferred it must be prescribed.
- Blanket or cover for lower part of body. Bed protection / disposable pad.
- Disposal bag and Sharps bin

3.9 Removal and reinsertion of supra pubic catheter procedure

Removal and reinsertion of supra pubic catheter	Rational
Perform hand hygiene (in accordance with NHS	To reduce the risk of cross-infection
Grampian's hand hygiene policy).	
Confirm patients identity with the patient &	To ensure correct patients identified
wristband (if worn)	for procedure
Explain & discuss the procedure with the patient	To ensure patient understands the
	procedure and gives valid consent
Ensure patient privacy	Ensure patient comfort and dignity
Adjust the height of the bed (if appropriate) and	To aid procedure
assist the patient into the supine position	
Place the procedure pad and leave the patient	To minimise the risk of infection.
covered	To maintain dignity.
Ensure the bedside lighting is good	To enable the suprapubic site to be
	clearly seen
Perform hand hygiene (in accordance with NHS	To reduce the risk of cross-infection
Grampian's hand hygiene policy)	
Put on disposable plastic apron	To reduce the risk of cross infection
Prepare work area with required equipment.	To ensure all equipment is ready for
Refer to the National Infection Prevention and	procedure
Control Manual /ANTT guidelines.	
Perform hand hygiene (in accordance with NHS	To reduce the risk of cross-infection
Grampian's hand hygiene policy).	
Open the procedure pack ensuring that you only	Create a sterile field
touch the corners and lay it flat to create a	
sterile field	Eventues the inflation of the estimator
Open out the pre-filled sterile syringe containing	Enables the inflation of the catheter
water and place onto the sterile field	balloon immediately following
Fold back the national's hadelethes	insertion
Fold back the patient's bedclothes	To promote clean work area and maintain dignity
Perform hand hygiene (in accordance with NHS	To minimise the risk of infection
Grampian's hand hygiene policy).	
Put on non-sterile gloves	To minimise the risk of infection
Attach a syringe to the inflation channel of the	To deflate the balloon
catheter and allow spontaneous deflation of the	
balloon	
Prepare to remove the catheter by placing two	To facilitate easy removal of the
fingers of gloved hand on either side of the	catheter
catheter as close to the insertion site as possible	

	Defined
Removal and reinsertion of supra pubic catheter	Rational
Withdraw slowly and firmly rotating on the catheter at the same time to help loosen any adhesions	To facilitate easy removal of the catheter
Observe the condition of the catheter and document any abnormalities	May indicate problems such as encrustation
Note the length and angle of the catheter which was previously inserted Dispose of any equipment according to local policy (refer to the National infection prevention and control manual)	This will help guide the angle of the catheter and how far to insert it. To minimise the risk of infection and to promote a safe environment
Remove gloves and perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).	To minimise risk of infection
Apply the first pair of sterile gloves Clean around the cystostomy site with sterile swabs and normal saline. Clean away from the site of insertion with each swab. Use once only and discard	To minimise the risk of infection To cleanse the area and reduce the risk of introducing infection into the bladder
Apply anaesthetic lubricating gel to the end of the catheter taking care to avoid clogging the eyelets with the gel	Clogged eyelets may prevent urine drainage
Remove the gloves and perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy). Put on the second pair of sterile gloves.	To minimise the risk of infection
Place the sterile drape over the patient leaving	To promote a clean work area
the suprapubic area exposed	To belo reduce traume and nations
A sterile valve or drainage bag should be attached to the catheter at this point	To help reduce trauma and patient discomfort.
Insert the new catheter via cystostomy into the	To prevent the catheter tip irritating
bladder at the angle and length of catheter previously removed and then advance the	the bladder wall and preventing the catheter entering the urethra resulting
catheter by 2 – 3 cm and not more	in potential trauma.
Ensure the catheter is draining urine prior to	To ensure the catheter is in the
inflating the balloon with sterile water Inflate the balloon (as per manufacturer's	bladder before inflating the balloon. To ensure the inflated balloon is in
instructions) and withdraw the catheter slightly	the correct position
Dry area with swabs	To minimise the risk of secondary infection and skin irritation
Attach the catheter to a sterile close drainage	To allow for free drainage and
system and secure with appropriate fixation device	containment of urine.
Leave cystostomy exposed with no dressing	To reduce skin excoriation around the
unless otherwise indicated Measure amount of urine drained	site To record urine output
	· ·

Removal and reinsertion of supra pubic catheter	Rational
Remove apron and gloves. Dispose of equipment as per healthcare waste guidelines	Prevent risk of cross-infection
Perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).	To minimise the risk of cross infection
Record details of the catheterisation in the patient's notes/catheter insertion sheet / CAUTI prevention bundle Reason for catheterisation Type, size and length of catheter Lot/batch number and expiry date Amount of water removed/instilled Cleaning agent used Lubricating/Anaesthetic gel used, lot/batch number and expiry date Type of urine drainage system Any problems encountered with removal/insertion of catheter Amount of urine drained & appearance Signature & title of practitioner performing the procedure Provide patient with relevant catheter information leaflet, catheter passport and community staff contact details.	To ensure accurate and up-to-date records of the procedure are recorded in the relevant case records

3.10 Intermittent catheterisation

Definition

To insert a single use sterile catheter into the bladder to achieve regular and effective bladder emptying and to measure residual urine for the purpose of assessment.

Considerations

Intermittent catheterisation should be used in preference to an indwelling catheter if it is clinically appropriate and a practical option for the patient. It should be the preferred choice given the reduced infection risk when compared to a long term indwelling urinary catheter (Health Protection Scotland, 2012). Additionally benefits of intermittent catheterisation include: improving the quality of life and body image for the patient, allowing freedom during sexual activity, and has less demands on health care resources. In most instances the patient is taught how to carry out this procedure, however on some occasions it may be a relative or carer who undertakes the procedure. In these circumstances the registered nurse has the responsibility of ensuring that the carer has the necessary knowledge and competence to carry out the procedure and manage the catheter/drainage system. They are also accountable for the delegation of care.

A full assessment of the individual and their needs is carried out before catheterisation. This includes identifying underlying causes for bladder emptying problems. As part of this assessment consideration must be given to the following:

- The patient (or relative/carer) has sufficient manual dexterity to undertake the procedure,
- The patient (or relative/carer) has the ability to understand the procedure,
- The patient (or relative/carer) is able to identify and access the urethra,
- That there is sufficient motivation to perform the procedure.

Indications

- Retention chronic/acute
- Hypotonic/Atonic bladder
- Measure residual urine
- Incontinence management, as a last resort
- Neurological disease or neuropathic bladder
- To administer intravesical medication
- Obtain a specimen of urine
- Part of a urodynamic investigations
- Post urethrotomy for stricture therapy

Contra indications

- Medical instructions not to perform procedure
- Urethral device (urethral stent, artificial sphincter) in situ
- Patients gains sexual satisfaction
- Cultural objections
- Consent not given/obtained

Notes

- If acute or community staff are undertaking this procedure it is an aseptic technique.
- If paid carers are taught to carry out intermittent self-catheterisation, this technique is carried out as an aseptic procedure.
- If patient/ relative are carrying out the procedure on a one to one basis this is undertaken as a clean procedure

Teaching patients

- Advantages of intermittent catheterisation for patients can be independence and self-caring
- In certain circumstances relatives can be taught how to perform this technique.
- For teaching patients intermittent self-catheterisation appropriate teaching tools e.g. DVD, video and leaflets are available from Bladder and Bowel Specialist Service.
- Samples of catheters are also available from the Bladder and Bowel Specialist Service and Urology Nurses
- When patients commence intermittent self-catheterisation, urine measurements may be necessary. The volume of urine needs to be recorded to assess the time and frequency of catheterisation. The residual should be no more than 400mls and not less than 150mls. (See guidelines below). The fluid balance chart or the frequency volume chart should be used to assist with this.
- Refer also to the NHS Grampian Protocol for teaching intermittent selfcatheterisation and intermittent self-dilatation.

The frequency of catheterisation depends on individual assessment of bladder function

THESE ARE GUIDELINES ONLY

- Less than 150mls Consider stopping catheterisation
- 150-300mls Carry out catheterisation twice daily
- 300-500mls Carry out catheterisation three times a day
- Over 500mls Increase to four times daily and contact their Health Care Professional or Bladder and Bowel Specialist Service for further advice

Nurse performing procedure requirements

- Disposable plastic apron
- Sterile procedure pack
- Sterile Intermittent Catheter of appropriate size and length Follow manufacturer's instructions for use of these
- 1 pair of non sterile gloves
- 2 pairs of Sterile gloves
- Cleansing agent normal saline
- Local Anaesthetic lubricating gel if appropriate
- Disposable Bag as per NHS Grampian waste Management policy
- Container for urine e.g. disposable Jug/Urinal
- Bed protection/disposable bag
- Blanket or cover for upper half of body
- Alcohol based hand rub
- Sharps bin

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3.11 Intermittent catheterisation procedures (Nurse)

Procedure - Nurse	Rationale
Perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).	To reduce the risk of cross- infection
Confirm patient identity with the patient and wristband if wearing Explain and discuss procedure with patient Ensure patient privacy Encourage patient to empty bladder before procedure Remove patient's lower garments, assist patient into supine position, dependent on mobility. Place bed protection on bed, cover patient. Ensure good light source is available	To ensure correct patient identified for procedure To ensure patient understands the procedure and gives valid consent Ensure patient comfort and dignity To establish true residual urine measurement To allow access for catheterisation. To contain any leakage and ensure patient comfort and dignity
Perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).	To reduce the risk of cross- infection
Put on disposable plastic apron Prepare work area with required equipment	To reduce the risk of cross- infection from micro-organisms on uniform To ensure all equipment is ready
Perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).	for procedure To reduce the risk of cross- infection
Open out the sterile dressing pack using an aseptic technique, pour normal saline into container. Open supplementary packs e.g. gloves/gel/catheter Remove cover from patient and assist into suitable position	Create a sterile field To allow access for catheterisation
' Perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).	To reduce the risk of cross- infection
Put on sterile gloves and arrange sterile drape from pack Female – using sterile swabs, cleanse around the urethral orifice with saline using single downward strokes Male –Hold the penis with a sterile swab, retract the foreskin (unless circumcised) clean the shaft, glans, and urethral meatus with saline	To create a sterile field To reduce cross infection and contamination
Remove gloves and dispose of as per	To reduce the risk of cross-

Healthcare Waste policy	infection
Procedure – Nurse (continued)	Rationale
Perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).	To reduce the risk of cross- infection
Apply pair of sterile gloves	To reduce the risk of cross- infection
Dependent on catheter used follow the manufacturers instructions Female – Insert anaesthetic gel (if used) into the urethra (follow manufacturer's instructions), WAIT FOR 5 MINUTES then insert catheter into the urethral orifice, slowly advance the catheter up the urethra, in an upward and backward direction. Advance the catheter until 5-6cm has been inserted. Make sure urine drains into a disposable container. When the urine stops flowing ask the patient to strain a little and try and push out any remaining urine. To remove the catheter, rotate slowly and gently. If at any stage more urine starts to flow, wait until it finishes before removal.	Prevent trauma to urethra.
Male – Hold the penis with a sterile swab, raise until it is almost fully extended. Insert the anaesthetic gel (if used and follow manufacturers instructions) into the urethral orifice, WAIT FOR 5 MINUTES then grasp penis behind glans, with a sterile swab, raise until it is almost fully extended, insert the catheter gently into the urethral orifice, slowly advance the catheter up the urethra for 15- 25cm. If resistance is felt at the external sphincter increase the traction on the penis, ask the patient to cough and apply gentle pressure on the catheter. When urine begins to flow advance the catheter a further 4-5cm. For removal of catheter follow female procedure as above.	To prevent trauma to urethra. To allow drainage of urine from bladder
Female/Male Make patient comfortable Measure the amount of urine drained	Ensure patient comfort and dignity Accurate measurement of urine in bladder
Dispose of urine, catheter and equipment as per NHS Grampian policy. Policy Remove gloves then apron and dispose of as per current Waste management Policy	To reduce the risk of cross- infection To reduce the risk of cross- infection To reduce environmental

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	contamination
Procedure – Nurse (continued)	Rationale
Perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).	To reduce the risk of cross- infection
 Record Reason for catheterisation details of the procedure in the patient notes/catheter insertion sheet Code number ZML 997 Catheter, type, size, length Lot/batch number Expiry date Cleansing agent if used Lubricating/Anaesthetic gel used, lot/batch number and expiry date Any problems encountered with insertion/removal of catheter Amount of urine drained Signature and title of practitioner performing procedure Provide patient with Relevant catheter information leaflet Catheters for discharge home Contact number of Health care Professional 	For accurate record-keeping To encourage patient to become independent with the procedure

3.12 Protocol for trial without catheter (TWOC) for patients in the community

Inclusion criteria

- Acute urinary retention
- Post transurethral resection of prostate (TURP)
- Laser prostate surgery
- Urethral surgery
- Post surgical procedure retention
- No clinical rationale for catheterisation
- Post gynaecological surgery

Extra consideration

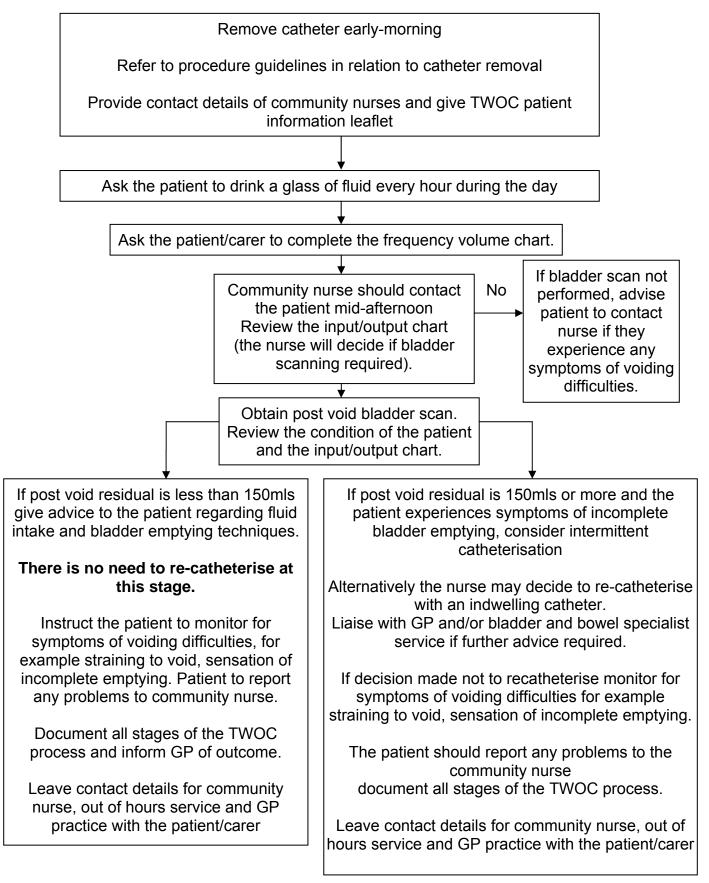
- Symptomatic urinary tract infection (must have symptoms not just positive urinalysis). Treat infection, ensure treated and then arrange community TWOC.
- Bladder and prostate carcinoma should only be considered a relative contraindication if the prostate or bladder cancer caused that specific catheterisation to be DIFFICULT. In this situation discussion with the urology department or GP is advised and a community TWOC may still be appropriate.
- A community TWOC is appropriate if the patient only has a history of prostate or bladder cancer and the catheterisation was straightforward.
- Unless the patient has an absolute contraindication (see below) and the patient's history does not indicate any problems with the catheterisation then a TWOC in the community is highly likely to be appropriate.
- Constipation: patients who are constipated will require treatment for their constipation prior to TWOC.

Absolute contraindications

- Radical prostatectomy within the last three months.
- Patients who experience significant problems with insertion of this catheter (required multiple attempts by specialist or additional instrumentation to place the catheter, history of haemorrhage in previous catheterisation). These patients would have to be discussed with consultant first.
- Patients, who are not alert, orientated or have poor cognitive function. These
 patients to be discussed with the GP and special arrangements can be made for
 TWOC in the community if after discussion this is appropriate and in the patient's
 best interest.
- Patients who withhold consent for TWOC in the community.
- Patients who are unable to alert district nurses if any difficulties on the day of TWOC.

3.13 Procedure for TWOC (trial without urethral catheter) in the community setting

(Refer to TWOC protocol and locate bladder scanner)



4. Catheter care guidelines

4.1 Catheter valves

Definition

A catheter valve is a small, discreet plastic appliance, similar to the outlet tap of the urine drainage bag, which may be attached to the outlet of an indwelling urethral or suprapubic catheter as an alternative to a leg bag

Catheter valves can be used in a number of situations following careful assessment, including:

- Benign prostatic hypertrophy when awaiting surgery or unsuitable/unwilling to have surgery.
- Post operative voiding dysfunction, especially following urological, gynaecological or hip surgery.
- Prior to removal of catheter in short-term situation.
- Patients capable of self-care regarding bladder drainage.
- Patients with suprapubic catheter who find bag positioning problematic

Advantages

- Maintenance of bladder capacity over a period of time.
- Retention of bladder tone and enhanced return to normal pattern of voiding post catheter removal.
- May reduce infection rate due to "flushing" action when catheter released.
- Discreet in use.
- Decreased risk of trauma to the bladder, bladder neck and urethra due to reduction of traction on the catheter from leg bag is more than 2/3 full.
- Greater freedom in social and leisure activities.

Indications

The decision to use a catheter valve must be made by medical/nursing staff. The patient should be fully assessed when considering the use of a catheter valve and must have:-

- Bladder capacity of a minimum of 200mls
- Cognitive awareness of the need to drain the bladder at regular intervals to avoid over distension of the bladder
- Sufficient dexterity to manipulate the device /sufficient vision to manipulate device
- Ability to comply with manufacturer's recommendations

Note: a patient without bladder sensation or cognitive awareness may have the catheter valve managed by a carer who has received instruction on the use of the device for the individual patient.

Advice on the frequency of drainage should be based on individual need following assessment of bladder function by an appropriate medical/nursing professional taking account of fluid intake and output. Usual advice is to drain the bladder 2 - 3 hourly if the patient has reduced bladder sensation. A frequency volume chart will assist with this. Catheter fixation devices and overnight drainage bags may be used if required.

Contraindications

- Reduced bladder capacity
- Uncontrolled Detrusor Instability
- Ureteric Reflux and Renal Impairment

4.2 **Procedure for inserting/changing a catheter valve**

- Disposable plastic apron
- pairs of non sterile disposable gloves as per glove policy
- Sterile catheter valve
- Disposal bag as per NHS Grampian Waste Management Policy
- Alcohol based hand rub
- Container for urine (**kept for this purpose only**) e.g. Measuring jug/urinal

Procedure	Rational
Perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).	To reduce the risk of cross-infection
Confirm patient identity with the patient and wristband (if wearing) Explain and discuss procedure with patient Encourage patient to empty bladder before procedure Ensure patient privacy Assist patient into a suitable position.	To ensure correct patient identified for procedure To ensure patient understands procedure and gives valid consent To establish true residual urine measurement Ensure patient comfort and dignity Maintain patient comfort and dignity
Perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).	To reduce the risk of cross-infection
Put on disposable plastic apron and non-sterile gloves Release the valve and empty urine into jug or urinal Measure amount of urine drained Dispose of urine as per waste management policy Remove and dispose of gloves Perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).	To reduce the risk of cross-infection Reduce environmental contamination Provide legal record To reduce the risk of cross-infection To reduce the risk of cross-infection To reduce the risk of cross-infection
Put on 2 nd pair of non-sterile gloves Open the catheter valve pack from the outlet end Remove the old valve. Discard onto paper or into disposal bag Immediately insert the new valve into the end of the catheter ensuring that no hand contact is made with the end being inserted Ensure the valve is left in the closed position Remove gloves then, apron, dispose of equipment as per current waste management policy	To prevent the risk of cross-infection Maintain sterility of valve To reduce the risk of cross-infection To reduce the risk of cross-infection Ensure containment of urine To reduce the risk of cross-infection

Procedure	Rational
Perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).	To reduce the risk of cross-infection
Record details of procedure the urine drained, date of change, type of valve and valve batch/lot no. and expiry date in patient record	For accurate record-keeping
Ensure the patient (or carer) has written information and Health Care Professional's contact number Follow manufacturer's guidelines and ensure patient or carer knows how to operate and maintain valve	Ensure patient/carer can access advice

4.3 Emptying urine drainage bag

Definition

To empty and dispose of urine from drainage bag

Indications

- To dispose of urine
- To monitor urinary output
- To prevent reflux to kidneys. (Leg bag should be emptied when two third full)

Requirements

Disposable plastic apron Non-sterile disposable gloves Clean container for urine (**kept for this purpose only**) E.g. measuring jug/urinal Tissue/Paper towel Disposal bag as per NHS Grampian Waste Management Policy Alcohol based hand rub

4.4 Procedure for emptying urine drainage bag

Follow manufacturer guidelines on emptying, as this will vary

Procedure	Rationale
Perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).	To reduce the risk of cross- infection
Explain and discuss procedure with patient	To ensure patient understands procedure and gives valid consent
Ensure patient privacy Put on disposable plastic apron and gloves	Ensure patient comfort and dignity To reduce the risk of cross- infection
Place container below outlet of drainage bag, open tap and drain urine NB – care should be taken to avoid contact	To dispose of urine To prevent reflux to kidneys
between the drainage tap and container Close tap of drainage bag Dry off excess urine from outlet with tissue/paper towel and dispose of as per Healthcare Waste Policy	To ensure containment of urine Reduce environmental contamination
Make patient comfortable Measure urine if required, and record on completion of procedure	Ensure patient comfort and dignity Provide legal record
Dispose of urine as per NHS Grampian Waste Management Policy	To reduce the risk of cross- infection
Wash container as per policy (Hospital - disposable containers are available and may be used and disposed of as per Policy)	To reduce the risk of cross- infection
Remove gloves then apron as per NHS Grampian Waste Management Policy	To reduce the risk of cross- infection
Perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).	To reduce the risk of cross- infection
Record amount of urine drained on completion of procedure	Provide a legal record
4.5 Attaching night drainage hag	

4.5 Attaching night drainage bag

Definition

To attach an additional drainage bag to the existing day time collection system

Indications

To allow free drainage of urine overnight when output exceeds capacity of leg bag and to maintain closed drainage system (see Appendix 3).

Requirements

- Disposable plastic apron
- Non-sterile disposable gloves
- Night drainage bag
- Night drainage bag holder
- Disposal bag as per NHS Grampian Waste Management Policy
- Alcohol based hand rub

Follow instructions from manufacturers as emptying of these can vary

4.6 **Procedure for attaching night drainage bag**

Procedure	Rationale
Perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).	To reduce the risk of cross-infection
Explain and discuss procedure with patient Ensure patient privacy Put on disposable plastic apron and gloves	To ensure patient understands the procedure and gives valid consent Ensure patients comfort and dignity To reduce the risk of cross-infection
Remove cap of night drainage bag and insert tubing into the outlet of leg bag/catheter valve ensuring no hand contact with exposed end of drainage bag	To reduce the risk of cross-infection
Open tap of leg bag/catheter valve Leg bag may either	To allow urine to drain into night bag
 a) Remain loosely attached to leg b) Remove straps and position leg bag on the bed 	a) To reduce traumab) Provide patient comfort
Attach night drainage bag to holder	To reduce hydrostatic pressure and reduce risk of cross-infection
Make patient comfortable Dispose of cap from night drainage bag tubing as per NHS Grampian Waste Management policy	ensure patient comfort and dignity To reduce the risk of cross- infection
Remove gloves then apron and dispose of gloves and apron as per NHS Grampian Waste Management policy	To reduce the risk of cross-infection
Perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).	To reduce the risk of cross-infection

4.7 Removal of night drainage bag

Definition

Disconnection and disposal of night drainage bag and urine.

Indications

- To dispose of urine drained overnight
- To re-establish day-time drainage system of urine

Requirements

- Disposable plastic apron
- Non-sterile disposable gloves
- Tissue/paper towel
- Disposal bag as per NHS Grampian Waste Management Policy
- Alcohol based hand rub

4.8 Procedure for the removal of night drainage bag

Procedure	Rationale
Perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).	To reduce the risk of cross-infection
Explain and discuss procedure to patient Ensure patient privacy Put on disposable plastic apron and gloves Close tap of leg bag/catheter valve Disconnect night drainage bag Dry off excess urine on leg bag/catheter valve tap with tissue/paper towel, dispose of as per NHS Grampian Waste Management Policy	To ensure the patient understands the procedure and gives valid consent Ensure patient comfort and dignity To reduce the risk of cross-infection Prevent leakage of urine Maintain closed drainage system Prevent environmental contamination
Re-attach leg straps/sleeves to leg bag, secure catheter Make patient comfortable Measure urine if required and record on completion of procedure	Reduce the risk of urethral and bladder neck trauma Maintain patient comfort and dignity Provide legal record
Drain overnight bag as per manufacturers instructions Dispose of overnight drainage bag As per NHS Grampian Waste Management Policy	Dispose of urine and prevent environmental contamination To reduce the risk of cross-infection
Remove gloves then apron and dispose of as per NHS Grampian Waste Management Policy	To reduce the risk of cross-infection
Perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).	To reduce the risk of cross-infection
NHSG/ACCCG/GUI/001 Adult Catheterisation and Catheter Care Gu	Version 1 idelines December 2017

4.9 Changing a day urinary drainage bag

Definition

To replace the existing Urinary Drainage Bag

Indications

- To comply with manufacturer's recommendations
- To reduce risk of infection

Requirements

- Disposable plastic apron
- Non-sterile disposable gloves
- Sterile Urinary Drainage Bag
- Catheter fixation device
- Tissue/Paper towel
- Disposal bag as per NHS Grampian Waste Management Policy
- Alcohol based hand rub

4.10 Procedure for changing a day urinary drainage bag

Procedure	Rationale
	To reduce the risk of cross-infection
Perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).	
Explain and discuss procedure with patient	To ensure patient understands the procedure and gives valid consent
Ensure patient privacy	Ensure patient comfort and dignity
Put on plastic apron and disposable gloves Open the drainage leg bag pack	To reduce the risk of cross-infection
Remove catheter straps/sleeve/stand	To allow change of drainage bag
Place tissue/paper towel on flat surface	Prevent leakage of urine onto bed/chair Reduce risk of cross-infection
under urine drainage bag Remove cap from sterile bag	Prepare for re-connection of drainage
Remove dap nom deme bag	bag
Disconnect bag from catheter – lay on	
tissue	
Immediately attach sterile drainage bag ensuring that there is no hand contact with exposed end of catheter	To reduce the risk of cross-infection
Ensure the tap is in the closed position	Reduce environmental contamination
Secure the urine bag using catheter fixation device	Reduce risk of urethral and bladder neck trauma
Make patient comfortable	Ensure patient comfort and dignity
Measure urine if required and record on	Provide legal record
completion of procedure. Document date of	
bag change Dispose of urine as per NHS Grampian	To reduce the risk of cross-infection
Waste Management Policy	

Procedure (continued)	Rationale
Dispose of urinary drainage bag as per NHS	To reduce the risk of cross-infection
Grampian Waste Management Policy Remove gloves then apron as per NHS	To reduce the risk of cross-infection
Grampian Waste Management	
Perform hand hygiene (in accordance with	To reduce the risk of cross-infection
NHS Grampian's hand hygiene policy).	

4.11 Urinary Catheter Hygiene Guidelines

Definition

- Cleansing of catheter entry site to reduce risk of infection

Indications

- To reduce risk of infection

Equipment requirements

- Warm water
- Disposable cloth/wipes
- Unperfumed soap
- Disposable plastic apron and Non-sterile latex disposable gloves
- Disposable bag
- Towel

4.12 Procedure for urinary catheter hygiene

Procedure	Rationale
Perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).	To reduce the risk of cross- infection
Explain procedure to patient	Ensure patient understands
Provide privacy to patient	procedure and gives consent Maintain patient comfort and dignity
Patient to remove lower clothing – assist if required	To allow access for washing
Place protective towel under patients buttocks Collect and prepare equipment	
Perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).	To reduce the risk of cross- infection
Apply disposable apron and gloves	To reduce the risk of cross- infection
Wash around and away from the entry site of catheter, use warm water with a disposable cloth and unperfumed soap, rinse thoroughly and dry area with disposable cloth	To reduce the risk of cross- infection

Procedure (continued)

Rationale

Male – Gently retract the foreskin, wash and dry. Replace foreskin Female – Wash from front to back to ensure bacteria from the anus does not enter the urethra Supra-pubic – If dressing required please follow the dressing procedure A daily shower or bath is recommended WARNING – DO NOT USE TALC OR CREAMS UNLESS PRESCRIBED Remove and dispose of apron and gloves in appropriate clinical waste stream Perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).

To reduce the risk of crossinfection To reduce the risk of crossinfection

Notes:

- Procedure can be carried out in bed/bathroom
- Drainage bag can be left on, but empty drainage bag before shower/bath
- The patient should have daily shower/bath if appropriate
- Avoid perfumed shower gel/foam bath/talc/creams. Avoid antiseptic agents unless prescribed by Practitioner
- Empty leg bag when ⅔ full
- Change leg bag every 5-7 days as per manufacturers guidelines
- A new night bag should be applied every night

5.0 Catheter Maintenance Solutions

Administering a catheter maintenance solution.

This procedure should be carried out following a full assessment of the patient by a nurse who has had training and is competent in this procedure.

Administration of catheter maintenance solution requires breakage of the closed drainage system increasing the risk of introducing infection.

Clinical evidence for the use of Catheter Maintenance Solution is **limited** and should only be used in specific conditions. There is some evidence that catheter maintenance solution causes damage to epithelial lining of the bladder (QIS 2004) and therefore should be used only in specific circumstances and with caution.

Definition

Instillation of a solution into an indwelling catheter

Indications – only to be used in the following

- To minimise encrustation and the associated trauma this can cause to the lower urinary tract on catheter removal.
- To prolong the life of a catheter by preventing blockage and avoid trauma of recatheterisation
- To remove any obstruction in the catheter
- Antibiotic solutions are not effective in treating catheter associated urinary tract infections.
- N.B refer to NHS Grampian Formulary

Caution is advised in the following – check patients medical notes

- A past medical history of haematuria
- Bladder cancer
- Bladder fistula
- Recent radiotherapy of the lower urinary tract
- Urological surgery
- Urinary tract infection
- Infection to organs related to the lower urinary tract
- Allergies

Catheter maintenance solutions **should not** be used in patients with spinal cord injuries at risk of autonomic dysreflexia (QiS 2004)

Types uses and frequency

Use appropriate Catheter Maintenance Solution by identifying likely cause of blockage

• Solution G 3.23% Citric Acid Catheter Maintenance Solution (pH 4)

First line treatment for the prevention and treatment of catheter encrustation and crystallisation. Solution G helps to dissolve struvite crystals which form on catheter tip. Where urinary pH is greater than 7.5 (i.e. alkaline), which is an ideal environment for crystal formation. To be instilled once weekly to once daily according to manufacturer's instructions.

• Solution R 6% Citric Acid Catheter Maintenance Solution (pH2)

Second line treatment for dissolving persistent encrustation and crystallisation if Solution G is unsuccessful.

Unblock an encrusted catheter and minimise trauma on removal of catheter. Instill until blockage is relieved, according to manufacturer's instructions. Can cause potential mucosal irritation

• Sodium Chloride 0.9% Catheter Maintenance Solution

Used for the removal of clots and other debris in the catheter or bladder. It does not dissolve catheter encrustation or reduce catheter associated infection and has limited value as a catheter maintenance solution

Please note that infection control recommendation is that the closed catheter drainage system should not be opened more than once a week. If a solution is administered more frequently it must be because the benefit to the patient is greater than the risk of infection involved in opening the drainage system. The use of a bladder infusion kit should be considered for those patients requiring administration of bladder maintenance solutions, as this maintains a closed drainage system thus reducing infection risks.

Requirements for administering a catheter maintenance solution

- Drug administration sheet
- Prescribed catheter maintenance solution follow manufacturers guidelines
- Sterile bag/catheter valve
- Disposable plastic apron
- 2 pairs non-sterile gloves
- Container of hand hot water
- Bed protection/disposable pad
- Disposal bag as per NHS Grampian Waste Management Policy
- Watch/clock
- Alcohol based hand rub

5.1 Procedure for administering a catheter maintenance solution

Procedure	Rationale
Perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).	To reduce the risk of cross-infection
Confirm patient identity with the patient and wristband (if wearing) Explain and discuss the procedure with patient Ensure patient privacy Remove patient's lower garments, assist into supine position. Place bed protection on bed,	To ensure correct patient identified for procedure To ensure patient understands the procedure and gives consent Ensure patient comfort and dignity To contain any leakage and ensure patient comfort and dignity

cover patient with blanket	
Procedure (continued)	Rationale
Perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).	To reduce the risk of cross-infection
Put on disposable plastic apron and gloves Place the solution in hand hot water	To reduce the risk of cross-infection To minimise risk of bladder spasm on introduction of the solution
Drain leg bag, measure urine if required and dispose of as per NHS Grampian Waste Management Policy	Reduce risk of cross-infection
Remove gloves and perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).	Reduce risk of cross-infection
Apply gloves Remove outer packaging of solution pack and discard into disposal bag – (follow manufacturers instructions)	Reduce risk of cross-infection
Close the clip on the solution pack	To prevent fluid loss when the connection port is opened
Remove the security ring on the solution pack connection port	
Loosen cap on solution pack but do not remove. Place on bed protection	To prevent risk of cross infection by not exposing until ready to connect to catheter
Remove catheter bag or valve from the catheter and dispose as per NHS Grampian Waste Management Policy (or follow manufactures instructions if using a bladder infusion kit)	
Remove the cap from the solution pack and insert connection port firmly into the catheter. ENSURE NO HAND CONTACT IS MADE WITH THE CONNECTION PORT	To reduce risk of cross-infection
Open the clip on solution pack	To allow the solution to enter the catheter
Drain the solution into the catheter by gravity. DO NOT SQUEEZE THE SOLUTION PACK – SEE NOTES - FOLLOW MANUFACTURERS GUIDELINES If the solution is to be retained close the clip for the specified time. Lay the bag on the bed protection and cover the patient When the solution is to be removed open the clip to allow the solution to drain back into the bag	To avoid damage to the bladder mucosa

Broodure (cont)	Patianala
Procedure (cont) Disconnect the solution bag and connect a new sterile urine drainage bag or catheter valve	Rationale Resume closed drainage system to reduce risk of infection
Apply catheter fixation device	For patient comfort and to avoid drag on the catheter bag and catheter which could cause trauma in the lower urinary system
Remove gloves then apron and dispose of all equipment as per current waste management policy	To reduce risk of cross-infection To reduce environmental contamination
Perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).	To reduce risk of cross-infection
Record details of the procedure on the prescription sheet and in patients' notes/catheter maintenance sheet Date and time Reason for instillation Type of solution Batch number and expiry date Outcome Follow up Signature of practitioner performing procedure	To provide a legal record
Provide patient with contact number of health care professional	

Notes:

- A catheter lumen holds 4-5mls of fluid therefore small volumes of 10-20mls should be instilled
- A solution should be introduced by gravity **not pressure** to avoid damage to the delicate mucosa of the bladder.
- Solution R (6% citric acid) can be instilled once weekly to once daily if Solution G (3.23% citric acid) has been tried and failed to resolve the blockage.
- First time catheter blockage with no evidence of cause of blockage, the catheter should be removed, examined and the urine tested to explore the cause of the blockage. The findings should be recorded. This then will give the basis for obtaining a prescription for a catheter maintenance solution.
- If a catheter blocks with struvite crystals, formed in alkaline urine, regular pH monitoring should be undertaken, to predict future blockages. An individual maintenance programme can then be planned

It is recommended that 3-5 consecutive catheters should be observed before commencement of catheter maintenance solutions.

5.2 Collection of a catheter specimen of urine

Breaking the closed drainage system to obtain a urine sample increases the risk of catheter related infection. The use of drainage bags incorporating a sample port removes the need to break the closed system.

Definition

The collection of a specimen for examination from a patient with an indwelling urinary catheter

Indications

To exclude infection Routine urinalysis

Requirements

- Disposable plastic apron
- 1 pair of non-sterile gloves
- Syringe
- Disposal bag as per NHS Grampian waste Management Policy
- Specimen pack with completed laboratory form as per guidelines
- Medicated swab -70% Isopropyl Alcohol
- sharp bin container
- Alcohol based hand rub

Procedure for the collection of a catheter specimen of urine

Procedure	Rationale
Perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).	Reduce risk of cross-infection
Confirm patient identity with the patient and wristband (if wearing) Explain and discuss procedure with patient Ensure patient privacy Put on disposable plastic apron and non-sterile	To ensure correct patient identified for procedure To ensure patient understands the procedure and gives valid consent Ensure patient comfort and dignity Reduce risk of cross-infection
gloves Clean the access point with a swab saturated with 70% Isopropyl Alcohol allow to dry for 30 seconds – thoroughly Insert syringe into the sampling port of the leg bag (follow manufacturer's instructions) and	Reduce risk of cross-infection To obtain sterile specimen
withdraw urine Place the specimen into the boric acid container up to the marked line. After closing, invert the container several times and label container correctly. COMMUNITY Place in plastic container and then in clear sealed bag.	To ensure only organisms for investigation are preserved To activate the inhibitor To ensure accurate identification of the specimen
HOSPITAL Place in a double pocketed specimen	

bag

Procedure (continued)	Rationale
Make patient comfortable Dispose of syringe in sharp bin container	Ensure patient comfort and dignity For the safe disposal of equipment to protect healthcare workers and others
Remove gloves then apron as per current waste management policy	To reduce the risk of cross-infection
Perform hand hygiene (in accordance with NHS Grampian's hand hygiene policy).	To reduce the risk of cross-infection
Record details of procedure in patients notes/catheter record sheet	To provide a legal record

6.0 Problem-solving

6.1 Urine not draining

Signs:

- No urine in the leg bag
- Patient has abdominal discomfort
- Catheter is by-passing
- Patient has urgency to pass urine

NB Patients with a spinal cord lesion above the mid-thoracic level can be affected by a syndrome known as autonomic dysreflexia (see Section 1.5). If suspected urgent medical advice must be sought.

Check for:

- If the patient has been recently catheterised, check that the catheter is in the bladder and not in the urethra
- Kinked tubing
- Tap on the leg bag is open if attached to a night drainage bag
- Leg straps are not covering the inlet valve of leg bag
- Leg bag is below level of bladder
- The patient is not constipated
- The eyes of the catheter may be blocked by the bladder mucosa (the leg bag can be raised above the level of the bladder for 10-15 seconds to release the eyes of the catheter from the bladder mucosa)
- May be blocked by debris

Possible causes:

- Constipation
- Reduced fluid intake
- Medical history prostate disease, tumour, calculi
- Unsuitable choice of catheter material
- Inappropriate size of catheter

Possible Solutions:

- Check patient's notes for causes of any previous blockages
- Ensure leg bag is emptied when two thirds full
- Advise minimum fluid intake of 2 litres
- Treat constipation advise on appropriate diet
- Inspect the catheter for signs of encrustation. If there are crystals visible in the catheter lumen monitor the pH of the urine (normal 4.5-7.5)
- Cranberry juice/capsules (use with caution, should not be used if patients are prescribed warfarin) may help to reduce the pH of the urine and resist encrustation
- Establish any pattern of blockages by accurate record keeping
- If suspected that the catheter is blocked by debris, gentle flush of catheter with normal saline maintenance solution.
- Try standing the patient up and walking around.

6.2 Encrustation

Signs:

- No urine in the leg bag
- Patient has abdominal discomfort, pain and bladder spasm
- Catheter by-passing
- Patient has urgency to pass urine
- Crystals visible in catheter/leg bag
- Increase in pH of urine

Possible causes:

- Reduced fluid intake
- Poor diet
- Infection
- Medication
- Medical condition

Possible Solutions:

- Minimum fluid intake of 2 litres
- Cranberry juice (use with caution, not to be used if patient is prescribed warfarin)
- Advise on appropriate diet
- Test urine for infection (see section 5.2, collection of a catheter specimen of urine)
- Inspect the catheter for signs of encrustation. If there are crystals visible in the catheter lumen monitor the pH of the urine
- Check the patient's notes for medication prescribed that may alter the pH of the urine
- Establish any pattern of blockages/encrustation by accurate record keeping
- Catheter Maintenance Solutions should be used only as a treatment, not as a preventative measure.

6.3 Catheter bypassing

Signs:

- Urine leaking onto clothing/bedding

Check for:

- As per section on "urine not draining"

Possible causes

- Catheter blocked
- Under inflation of balloon and/or incorrect positioning of drainage system
- Bladder spasm/instability
- Traction on leg bag
- Constipation
- Infection

Possible Solutions

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- Review size/length of catheter
- Review catheter material
- Consider use of antimuscarinic medication (bladder spasm)
- Use of catheter accessories i.e. straps/sleeve
- Check fluid intake and dietary fibre intake
- Treat constipation
- Test urine for infection obtain catheter specimen of urine using the sampling port
- Check drainage bag is in correct position i.e. below level of the bladder
- See catheter Encrustation solution section

6.4 Bladder Spasm

Signs:

- Patient has abdominal discomfort, pain and bladder spasm
- Catheter by-passing
- Expulsion of catheter (Balloon intact)

Check for:

- The patient is not constipated
- Kinked tubing
- Tap on the leg bag is open if attached to a night drainage bag
- Leg straps are not covering the inlet valve off the leg bag
- Leg bag is below level of bladder

Possible Causes:

- Traction on leg bag
- Constipation
- Reduced fluid intake
- Allergy to catheter material
- Catheter too large
- Under inflation of balloon
- Infection
- Neurological conditions
- Overactive bladder

Possible Solutions:

- Treat constipation
- Advise minimum fluid intake of 2 litres
- Cranberry juice (use with caution, should not be used if patient is prescribed warfarin))
- Review size/length of catheter
- Review material of catheter
- Check drainage of leg bag Ensure leg bag is emptied when two thirds full
- Use of catheter accessories e.g. straps/sleeve
- Test urine for infection
- Cnsider the use of antimuscarinic medication (see NHS Grampian Joint Formulary)

6.5 Discomfort/pain

Possible Causes

- The eyelets of the catheter may be occluded by urotheluim due to hydrostatic suction
- If the patient has been recently catheterised, check that the balloon is in the bladder and not in the urethra
- Catheter too large
- Allergy to catheter material
- Traction on leg bag
- Infection
- Constipation
- Valve port and inflation channel may be compressed? faulty valve mechanism

Possible Solutions

- Raise the drainage bag above the level of bladder for 10-15 seconds only
- Review size/length of catheter
- Review material of catheter
- Check drainage of leg bag- ensure leg bag is emptied when two thirds full
- Test urine for organisms that could be causing infection
- Treat constipation
- If pain persists refer to Medical Staff
- Check no external compression problems valve port should always be aspirated slowly, if done forcefully, the valve mechanism may collapse

6.5 Haematuria

Signs:

Blood in urine bag

Possible Causes:

- Trauma/pulling of catheter post catheterisation
- Infection
- Renal calculi
- Prostatic enlargement
- Cancer

Possible Solutions:

- Observe output and document severity of haematuria
- Encourage fluid intake
- Use of catheter accessories e.g. straps/sleeve
- Review size/length of catheter
- Review material of catheter
- Test urine for organisms that could be causing infection
- Refer to Medical Staff if it persists

6.6 Non-deflation of balloon on removal of catheter

Possible causes:

- Exclude constipation
- Valve port and balloon inflation channel may be compressed
- Faulty valve mechanism

Possible solutions:

- Check no external compression problems
- Valve port should always be aspirated slowly, if this is done forcefully, the valve mechanism may collapse
- If attempts fail to deflate balloon, medical advice must be sought, cutting of the catheter along its length is not safe practice and may result in retraction of the catheter into the bladder
- Do not attempt to burst the balloon by introducing more water/air
- Try leaving the syringe in situ for a few minutes. The water may seep out over a period of time
- Refer to Medical Staff for advice

6.7 Signs of infection

Any patient who has a urinary catheter is at risk of an infection

Signs:

- Fever not caused by other medical condition i.e. sore throat
- Pain/burning on passing urine
- Persistent passing of blood in urine
- Offensive smell
- Cloudy, thick urine

Possible Solutions

- See decision aid on the diagnosis and management of suspected urinary tract infection in people with indwelling catheters (Scottish Antimicrobial Prescribing Group 2016) - see appendix 4
- Remove and replace catheter if urinary tract infection is confirmed by laboratory
- Monitor pH of urine
- Advise a minimum Fluid intake of 2 litres
- Cranberry juice/capsules (use with caution, not to be used if patient is prescribed warfarin)
- Closed drainage system Change leg bag weekly
- Change night bag daily
- Good personal hygiene

Antimicrobial therapy is not indicated unless the patient has evidence of systemic infection, i.e. pyrexia, loin pain, raised white cell count or acute confusion in the elderly. Smelly or cloudy urine, or catheter blockage are not indications for antimicrobials (NHS Grampian Staff Prescribing Guidance for the Empirical Treatment of Infection in Primary Care, August 2017)

7. Patient Information booklets

The following patient information booklets are available on NHS Grampian Guidelines (under Urology) and on request from the Bladder and Bowel Specialist Service:

- Your Catheter.
- Intermittent Self Catheterisation.
- Suprapubic Catheter
- Trial Removal Of Catheter
- Exercises For The Pelvic Floor Muscles
- Pelvic Floor Muscle Exercises For Men
- What I Need To Know About Urinary Tract Infections
- Pelvic Organ Prolapse
- How To Keep Your Bladder Healthy
- Training Your Bladder: Exercises To Do At Home

8. Linked policies

- NHS Grampian Waste Management Policy 2017
- Health Care Associated Infection Policy for Staff Working In NHS Grampian 2016
- NHS Grampian Protocol for the Safe Administration of Instillagel for Urinary Catheterisation of Adults by Health Care Workers 2016
- NHS Grampian Protocol for Teaching Intermittent Self Catheterisation
- NHS Grampian Staff Prescribing Guidance for the Empirical Treatment of infection in Primary Care August 2017

9. References

- ANTT. (2016). *The ANTT Clinical guideline for indwelling urinary catheterisation*. http://www.antt.org/ANTT_Site/core_guidelines.html
- European Association of urology nurses. (2012). *Catheterisation indwelling catheters in adults urethral and suprapubic*. http://nurses.uroweb.org/wp-content/uploads/EAUN_Paris_Guideline_2012_LR_online_file.pdf

Health Protection Scotland. (2017). Urinary catheter care passport (person held record). http://www.hps.scot.nhs.uk/haiic/sshaip/resourcedetail.aspx?id=3234

- NICE. (2016). Health Care Associated Infections
- NMC. (2016). The code: professional standards of practice and behaviour for nurses and midwives. https://www.nmc.org.uk/globalassets/sitedocuments/nmc-publications/nmc-code.pdf

- NMC. (2015). Standards for medicines management. https://www.nmc.org.uk/standards/additional-standards/standards-for-medicinesmanagement/
- NPSA. (2009). Female urinary catheters causing trauma to adult males. http://www.nrls.npsa.nhs.uk/resources/?EntryId45=59897
- Nursing and Midwifery Council. (2007). Standards for Medicines Management. *NMC, London*, 1–62. http://scholar.google.com/scholar?hl=en&btnG=Search&q=intitle:Standards+for+medicines+management#5
- Pratt R. (2007). National evidence-based guidelines for preventing healthcare associated infections in NHS hospitals in England. *Journal of Hospital Infection*, *65*, S1–S65.
- Promfret I. (2008). Indwelling catheter: friend or foe. *Journal of Community Nursing*, 22(7), 17.
- QiS. (2004). Urinary catheterisation and catheter care, best practice statement. http://www.healthcareimprovementscotland.org/previous_resources/best_practice_sta tement/urinary_catheterisation__care.aspx
- RCN. (2012). Catheter care: RCN guidance for nurses. https://www.rcn.org.uk/professional-development/publications/pub-003237
- RCN. (2017). Accountability and Delegation: a guide for the nursing team.
- Rigby D. (2009). An overview of suprapubic catheter care in community practice. *British Journal of Community Nursing*, *14*(7), 278–284.
- Scottish antimicrobial prescribing group. (2016). *decision aid the diagnosis and management of suspected urinary tract infection in people with indwelling catheters*.
- Simpson L. (2001). Indwelling urethral catheters. Nursing Standard, 15(46), 47–53.
- The Royal Marsden NHS Foundation Trust. (2016). The Royal Marsden Hospital Manual of Clinical Nursing Procedures (9th edition).. https://doi.org/10.1111/j.1365-2648.2005.03356_1.x

National infection prevention and control manual http://www.nipcm.hps.scot.nhs.uk/

8. Distribution list

All nursing leads (acute and community). Practice education facilitators All charge nurses and community nurse leads Infection control team Clinical Governance leads Global NHS Grampian email with link to NHS Grampian clinical guidelines page.



URINARY CATHETER INSERTION & MAINTENANCE BUNDLE (5a)



ENSURE ALTERNATIVES TO INDWELLING URINARY CATHERISATION HAVE BEEN CONSIDERED

Indwelling Urinary Catheter Insertion Bundle Gaugemls water in balloon (*	e: Date Time N.B. use smallest gauge and recommend 10mls water in balloon unless clinically indicated).		
Catheter Label & Instillagel	Alternatives to urethral catheterisation considered & clinical reason cumented	Yes No	
Batch number	Aseptic technique performed at insertion	Yes No	
	Catheter of smallest gauge & balloon filled to recommended level	Yes No	Patient label
	Urethral meatus cleaned with sterile saline & sterile lubricant used	Yes No	
	Aseptic technique maintained when connecting catheter to closed drainage	Yes No	
	Signed Expected Date for Remo	val	

Clinical indication for urethral urinary catheterisation			Long term urethral urinary catheter (>28 days)				Short term urethral urinary catheter (≤28 days)		
Please insert Yes (Y) or No (N) and any comments or deviations in each box daily	DAILY Catheter Day 1	DAILY Catheter Day 2	DAILY Catheter Day 3	DAILY Catheter Day 4	DAILY Catheter Day 5	DAILY Catheter Day 6	DAILY Catheter Day 7	Comments	
1. Does patient still require Indwelling Urinary Catheter? (State reason)									
2. Is the urinary catheter continuously connected to drainage system and changed in line with manufacturer's recommendations?									
3. Meatal Hygiene been performed?									
4. Is the drainage bag emptied when clinically indicated using a clean disposable container for each patient?									
Is hand hygiene performed immediately prior to access or manipulation of the indwelling urinary catheter?									
6. Is the drainage system kept below bladder level and tap not in contact with any surface e.g. floor?									
Signature on completion (Initials) & Date									

SPSP Version 1.5.2 Feb 2016 NHSG/ACCCG/GUI/001 Adult Catheterisation and Catheter Care Guidelines

For definition of CAUTI please see over

Version 1 December 2017 - 54 -



URINARY CATHETER INSERTION & MAINTENANCE BUNDLE (5a)



ENSURE ALTERNATIVES TO INDWELLING URINARY CATHERISATION HAVE BEEN CONSIDERED

Please insert Yes (Y) or No (N) and any comments or deviations in each box daily	DAILY Catheter Day 8	DAILY Catheter Day 9	DAILY Catheter Day 10	DAILY Catheter Day 11	DAILY Catheter Day 12	DAILY Catheter Day 13	DAILY Catheter Day 14	Comments	
1. Does patient still require Indwelling Urinary Catheter? (State reason)									
2. Is the urinary catheter continuously connected to drainage system and changed in line with manufacturer's recommendations?									
3. Meatal Hygiene been performed?									
4. Is the drainage bag emptied when clinically indicated using a clean disposable container for each patient?									
5. Is hand hygiene performed immediately prior to access or manipulation of the indwelling urinary catheter?									
6. Is the drainage system kept below bladder level and tap not in contact with any surface e.g. floor?									
Signature on completion (Initials) & Date									
Does Patient fulfil criteria below? Urinary Catheter insitu or has it been removed within the previous 48 hours CAUTI defined as: Temp <36°c or >37.9°c OR 1.5> baseline on 2 occasions in last 12 hours and 1 or more of the following: 0 Shaking chills (rigors)		If Yes: Record as Outcome Measure on Datix W Ref No:				Date Indwelling Urinary Catheter Removed:			
0 New costovertebral (central lower b 0 New onset or worsening delirium (c AND: on antibiotics for treatment of UTI							Reasons for Removal:		

Refer to Urinary Catheterisation and Catheter Care Guidelines



CATHETER INSERTION RECORD SHEET

Patient's Name	
Date of Birth/CHI	
Date of Initial Catheterisation	
Reason for Catheterisation	
Plan Review Date	
Patient Consent Obtained	
Catheter Care Advice Booklet Given	

Catheter Care Advice Booklet Given

	DATE/TIME		DATE/TIME		DAT	E/TIME	DATE/TIME	
	CATHETER		CAT	HETER	CAT	HETER	CATHETER	
	Urethral	Supra-Pubic	Urethral	Supra-Pubic	Urethral	Supra-Pubic	Urethral	Supra-Pubic
CATHETER DETAILS								
Size								
Length								
Lot/Batch Number								
Expiry Date								
Amount of Water Instilled								
Amount of Water Removed				_				
Problems with removal	YES 🗖	NO 🗖	YES 🗖	№ 🗖	YES 🗖	ио 🗖	YES 🗖	NO 🗖
Problems with insertion	YES 🗖	№ 🗖	YES 🗖	№ 🗖	YES 🗖	ио 🗖	YES 🗖	№ 🗖
Any Comments								
	INSTILLAGEL		INSTILLAGEL		INST	ILLAGEL	INSTILLAGEL	
	Amount Used		Amount Used		Amount Used		Amount Used	
	F = 6mls	M = 11mls						
	Other		Other		Other		Other	
Lot/Batch Number								
Expiry Date								
Print Name								
Signature								

CATHETER SECUREMENT DEVICES

Appendix 3

When a patient has an indwelling catheter in situ it is important to use a securement device to:-•Secure Catheter

- Prevent it being pulled
- Prevent erosion
- Prevent by-passing

Always ensure you follow the manufacturer's guidelines on the use of these:-All of these are available on prescription <u>www.isdscotland.org</u>

LEGSTRAPS - CLINISUPPLIES



Code – P10LS Pack of 5 supplied with leg bag •They should not be too tight •They should not leave a mark on the calf or thigh

G-STRAP - COLOPLAST



Code - 383003 Abdomen 90cm Code -383001 Adult 50cm

URISLEEVE - BARD



Code 150111 – Small Code 150121 – Medium Code 150131 – Large Code 150141 – Extra Large Pack of 4 Come in different sizes – measure thigh Follow manufacturer's instruction for washing

STATLOCK FROM BARD



Code - FOLO102DT

CLINIFIX TUBE HOLDER



UGOFIX CATHETER CLIP

Code - 3004



IF YOU REQUIRE FURTHER ADVICE PLEASE E-MAIL

Grampian.inveruriecas@nhs.net

April 2017

NHSG/ACCCG/GUI/001 Adult Catheterisation and Catheter Care Guidelines Version 1 December 2017 - 57 -

Scottish Medicines Consortium





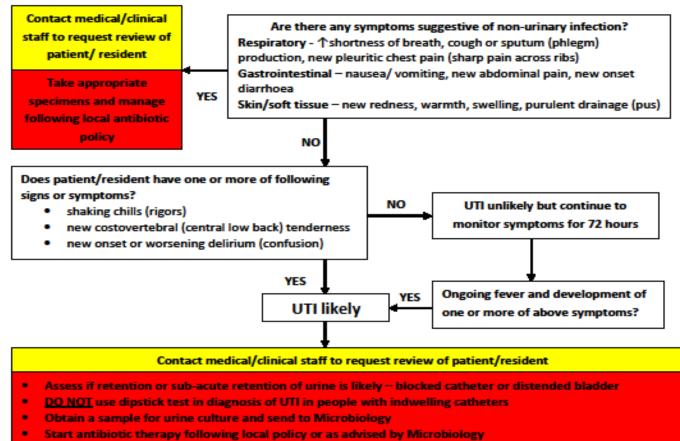
DECISION AID FOR DIAGNOSIS AND MANAGEMENT OF SUSPECTED URINARY TRACT INFECTION (UTI) IN PEOPLE WITH INDWELLING CATHETERS

This flowchart has been designed to help nursing and care staff and prescribers manage catheterised patients/residents with urinary tract infection.

If a patient/resident has a fever (defined as temperature > 37.9°C or 1.5°C increase above baseline occurring on at least 2 occasions in last 12 hours) this suggests they have an infection.

Hypothermia (low temperature of <36°C) may also indicate infection, especially in those with co-morbidities (heart or lung disease, diabetes). Some patients/residents may also have non-specific symptoms of infection such as abdominal pain, alteration of behaviour or loss of diabetes control. The information overleaf provides good practice points and evidence sources for prescribers.

Yellow action boxes provide advice for nursing and care staff. Red action boxes provide advice for nursing staff and prescribers (medical and non-medical).



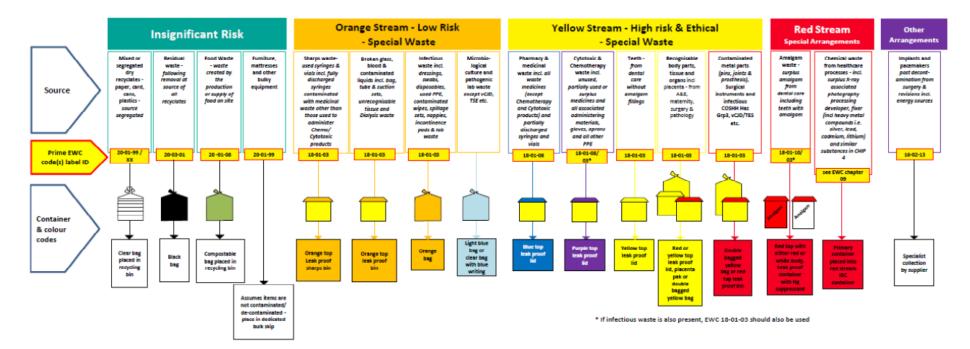
- Remove and replace urinary catheter. Consider the ongoing need for a long term catheter in consultation with specialists.
- Consider use of analgesia (paracetamol or ibuprofen) to relieve pain
- Consider admission to hospital if patient has fever with chills or new onset hypotension (low blood pressure)
- Review response to treatment daily and if no improvement of symptoms or deterioration, consider admission to hospital or an increased level of care
- Ensure urine culture results are reviewed when available in order to streamline antibiotic therapy

SAPG July 2016 Review date: July 2018



Segregation And Handling of Healthcare Wastes

Generic guidance only. Each operational unit to undertake a waste management risk assessment in association with boards' Waste Management Officer.



Segregation Chart - Ver.02 Sep-16

NHSG/ACCCG/GUI/001 Adult Catheterisation and Catheter Care Guidelines Version 1 December 2017 - 59 -