

Urinary Drainage – Intermittent Catheterisation

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1. Purpose

To outline recommended best practice related to safe intermittent catheterisation, including instruction on intermittent self-catheterisation (ISC) and intermittent self-dilatation (ISD).

2. Scope

- All nursing and midwifery staff employed at Auckland District Health Board (Auckland DHB)
 who have demonstrated the appropriate knowledge and skills to perform or teach intermittent
 catheterisation/dilatation.
- In the hospital setting, nursing practice dictates that intermittent catheterisation of males, as well as the teaching of intermittent self-catheterisation/dilatation of males, is only undertaken by Registered Nurses (RNs) who have received instruction and have been assessed for competence in the male catheterisation procedure.

3. Definitions

Intermittent catheterisation

- Intermittent catheterisation is the act of passing a non-retaining catheter into the bladder to drain urine via the urethra or continent urinary diversion, when normal voiding is not possible. The catheter is removed immediately after urinary drainage.
- In the hospital setting, a healthcare professional is to perform intermittent catheterisation using an aseptic technique.

Intermittent self-catheterisation/intermittent self-dilatation

- Intermittent self-catheterisation (ISC) and intermittent self-dilatation (ISD) are performed by the patient or family member/caregiver.
- For a patient or family member/caregiver performing ISC or ISD in the hospital/community setting, a clinically clean technique is to be used. In the hospital setting, a new catheter should be used each time, to reduce hospital-acquired infection/cross infection.



| Term | Definition |
|------|--------------------------------------|
| AUS | Artificial Urinary Sphincter |
| BNI | Bladder Neck Incision |
| CVA | Cerebrovascular Accident |
| DN | District Nurse |
| FR | French |
| ISC | Intermittent Self-Catheterisation |
| ISD | Intermittent Self-Dilatation |
| MS | Multiple Sclerosis |
| PVC | Poly Vinyl Chloride |
| PVR | Post Void Residual |
| RN | Registered Nurse |
| TURP | Trans Urethral Resection of Prostate |
| UTI | Urinary Tract Infection |

4. Indications for intermittent catheterisation

- To determine the presence of post void residual:
 - In the absence of a bladder scanner;
 - O Where bladder scanner findings do not match clinical picture;
 - When a bladder scanner is contraindicated (e.g. ascites, pregnancy, abdominal wound).
- To obtain a sterile urine specimen.
- To irrigate the bladder (e.g. neobladder).
- To irrigate the reservoir in patients with a continent urinary diversion.
- To drain the reservoir of urine in patients with a continent urinary diversion.
- To facilitate instillation of medication (e.g. intravesical antineoplastic agents).
- Spinal injury resulting in neurogenic bladder.
- Detrusor failure with resulting incomplete bladder emptying.
- Neurological conditions that influence bladder function (e.g. CVA, Parkinson's, MS, or Spina Bifida).
- To relieve urinary retention when the cause of urinary retention is expected to resolve within a number of days:
 - Following certain urological surgical procedures.
- To relieve urinary retention when the cause of urinary retention is expected to resolve within a few hours:
 - Post operatively
 - Immediately pre-partum
 - Immediately post-partum
 - O Medication side effects e.g. oxybutynin, amitriptyline
 - Severe constipation.
- To treat urethral strictures through regular ISD as per Urology instruction.



5. Contraindications for intermittent catheterisation

- Within six weeks of:
 - O Suspected or confirmed urethral trauma (penile tip blood, lower abdominal pain, inability to pass urine, perineal haematoma)
 - Urethroplasty
 - Radical prostatectomy
 - O Cystectomy and neo-bladder formation.

Note: Urology must be consulted.

History of AUS

Note: Urology must be contacted to deactivate artificial sphincter before catheterisation can proceed.

- Acute prostatitis.
- High intravesical pressure (these patients require a urinary catheter on free drainage to avoid renal damage).

Proceed with caution when performing intermittent catheterisation if:

- Other prostate or urethral surgery in the last four weeks (e.g. TURP, urethrotomy, BNI).
- Known urethral stricture.
- After six weeks post:
 - Urethroplasty
 - Radical prostatectomy
 - O Cystectomy and neo-bladder formation.
- Known prostatomegaly.
- History of long-term difficulty in passing urine (e.g. urinary retention, poor urinary flow).
- History of low grade urethral trauma within four weeks (e.g. traumatic catheterisation, accidental removal of catheter).
- History of difficult urethral catheterisation.

6. Type of catheter

- One-way catheter/straight Nelaton catheter non-retaining.
 - Only one channel for drainage, has no balloon, and is available in lubricated and non-lubricated versions.
 - Not intended to remain in the bladder for a long period of time.
 - o In the hospital setting, the straight male-length Nelaton catheter is available in sizes ranging from 10 FR to 18 FR. Other sizes are available from the manufacturer.

7. Catheter material

- PVC.
 - O A clear, latex-free plastic used in Nelaton catheters (without balloon).
 - Intended for single use in the hospital setting.
 - The catheter has a large internal diameter to facilitate drainage.
 - Only straight, non-lubricated Nelaton catheters are available within the hospital setting.



- Pre-lubricated or hydrophilic-coated catheters (DilaCath, EasiCath, SpeediCath, LoFric).
 - O Coated catheters that have a lubricated hydrophilic coating.
 - Some require the addition of water to become activated.
 - Recommended for urethral dilatation (e.g. LoFric DilaCath).
 - Recommended for long-term intermittent catheterisation/dilatation in reducing the incidence of urethral stricture formation by reducing trauma to urethral surfaces (Sarica, Akkoc, Karapolat, & Aktug, 2010).
 - These catheters are sourced through the District Nursing Community Continence Service on request, however the availability of supply is not always guaranteed due to budget constraints.

8. Catheter tip design

For routine catheterisation of both males and females, a straight-tipped catheter should be used.

In male patients who are difficult to catheterise, a Coude tip catheter can be used. They have a curved tip designed to negotiate the male prostatic curve. Insert with the tip pointed upwards (in 12 o'clock position) to negotiate bulbar urethra. Insertion using a Coude tip catheter should only be performed by experienced nurses proficient in the use of this type of catheter.

9. Potential complications of intermittent catheterisation

- Urinary tract infection
- Trauma to the urethra and/or bladder
- Trauma to the channel in patients with a continent urinary diversion
- Urethral stricture formation.

Repeated urethral trauma from intermittent catheterisation can cause urethral stricture formation, which in turn increases the likelihood of traumatic catheterisation. The incidence of urethral stricture increases with duration of chronic catheterisation; most have developed following at least five years of intermittent catheterisation (Bolinger & Engberg, 2013).

10. Intermittent catheterisation of males

Note: Intermittent catheterisation of males is only undertaken by RNs who have received instruction and have been assessed for competence in the male catheterisation procedure.

10.1 Equipment required

- Procedure trolley
- Sterile catheterisation pack
- Cleaning solution sodium chloride 0.9%
- Lidocaine 2% gel syringe
- Sterile gloves (two pairs)
- Sterile Nelaton catheter (appropriate size 12-14 FR and check the expiry date)



- Sterile drainage receptacle
- Waste bag
- Incontinent sheet
- Sterigel
- Specimen container if indicated.

10.2 Procedure

| Step | Action | |
|--------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 1. | Identify patient. Explain and discuss the procedure to ensure they have a good | |
| | understanding of the procedure. | |
| 2. | Gain patient's informed consent. | |
| 3. | Check current medications and any known allergies, to prevent medication reaction. | |
| 4. | Ensure good lighting to maximise visibility. | |
| 5. | Perform hand hygiene and position patient in the supine position with the feet a little | |
| | apart. Place an incontinent sheet under the patient's buttocks. Ensure the patient is not | |
| | exposed and maintain warmth. | |
| 6. | Perform hand hygiene. | |
| 7. | Open catheterisation pack on cleaned trolley using an aseptic technique. Add catheter | |
| | and other sterile equipment and add cleansing solution to the cotton swabs. Open | |
| | specimen container if needed and place lid upwards on nearby surface. | |
| 8. | Remove cover that is maintaining patient privacy. | |
| 9. | Perform hand hygiene and put on first pair of sterile gloves. | |
| 10. | With non-dominant hand, using a folded gauze, retract the foreskin if necessary and with | |
| | dominant hand clean the penile shaft from meatus to base of penis, with forceps and | |
| | cleansing solution soaked cotton swabs, moving outwards Clean the scrotal region with | |
| the same solution. Use a new swab for each part. | | |
| 11. | | |
| | Discard the gauze. | |
| 12. | Remove gloves and perform hand hygiene. Put on second pair of sterile gloves. | |
| 13. | Apply the sterile guard, using another folded sterile gauze to handle the penis, placing it | |
| | on the sterile guard. Place the drainage receptacle on the guard between the patient's | |
| | legs. | |
| 14. | Using the sterile gauze, hold the penis upright. Cover the meatus with a small amount of | |
| | gel, then gently insert the nozzle of the lidocaine gel syringe into the meatus. Slowly instil | |
| | the gel into the urethra, maintaining the nozzle of the syringe in the meatus to prevent | |
| | the gel from leaking out. Warn the patient about the risk of stinging from the gel. Discard | |
| | the syringe. Continue to hold the penis upright for three to five minutes, with thumb and | |
| | fingers applying gentle pressure below the glans to prevent large amounts of gel from | |
| 1 5 | leaking out of the urethra. | |
| 15. | Keeping the penis upright, use the other hand to introduce the catheter slowly, until resistance is felt at the external sphincter. As the catheter passes through the sphincter, | |
| | slowly lower the penis so that it is pointing to the patient's toes. If resistance is still felt at | |
| | this point, the patient may assist the advancement of the catheter by deep breathing, | |
| | relaxing, performing a small cough, or straining gently as if trying to pass urine. | |
| 16. | If the catheter still does not pass along the length of the urethra and into the bladder | |
| 10. | in the catheter still does not pass along the length of the diethia and into the bladder | |



| Step | Action |
|------|----------------------------------------------------------------------------------------------|
| | with ease after two attempts, DO NOT PROCEED. Remove the catheter and contact a |
| | Urology Nurse Specialist or Urology Registrar/Consultant. Persistent or forced attempts |
| | to pass a catheter may cause urethral trauma. They can also convert a patient who is |
| | able to catheterised to one who is not. |
| 17. | Once through the external sphincter, advance the catheter with gentle steady pressure |
| | until urine drains. There may be a delay before the urine flows – this is usually due to the |
| | gel blocking the catheter. The gel is water-soluble and urine should drain within |
| | 15 to 30 seconds. |
| 18. | Take a urine specimen if indicated to rule out UTI. The initial urine drained should be |
| | discarded to eliminate the risk of false-positive cultures. |
| 19. | Leave the catheter in the bladder until the urine flow has stopped. |
| 20. | Withdraw the catheter slowly. If the flow restarts, stop removing the catheter until there |
| | is no more urine draining. Remove the catheter. |
| 21. | Clean and dry the glans penis and reposition the foreskin in uncircumcised patients. |
| 22. | Ensure the patient's skin and bed are both dry. |
| 23. | Dispose of dirty equipment and drained urine. |
| 24. | Remove gloves and perform hand hygiene. |
| 25. | Document intermittent catheterisation in patient's notes. Include reason, time and date |
| | of catheterisation; and amount of urine drained. |

11. Intermittent catheterisation of females

11.1 Equipment required

- Procedure trolley
- Sterile catheterisation pack
- Cleaning solution sodium chloride 0.9%
- Lidocaine 2% gel syringe
- Sterile gloves (two pairs)
- Nelaton catheter (appropriate size 10-12 FR and check the expiry date)
- Sterile drainage receptacle
- Waste bag
- Incontinent sheet
- Sterigel
- Specimen container if indicated
- Light source.

11.2 Procedure

| Step | Action |
|------|------------------------------------------------------------------------------------|
| 1. | Identify patient. Explain and discuss the procedure to ensure they have a good |
| | understanding of the procedure. |
| 2. | Gain patient's informed consent. |
| 3. | Check current medications and any known allergies, to prevent medication reaction. |
| 4. | Ensure good light source is available, to maximise visibility. |



| Step | Action | |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 5. | Position patient in the supine position with knees bent, hips abducted and feet together. | |
| | Place a incontinent sheet under the patient's buttocks. Ensure the patient is not exposed | |
| | and maintain warmth. | |
| 6. | Perform hand hygiene. | |
| 7. | Open catheterisation pack on cleaned trolley using an aseptic technique. Add catheter | |
| | and other sterile equipment, and add cleansing solution to the cotton swabs. Open | |
| _ | specimen container if needed and place lid upwards on a nearby surface. | |
| 8. | Remove cover that is maintaining patient privacy. | |
| 9. | Perform hand hygiene and put on first pair of sterile gloves | |
| 10. | With dominant hand use forceps and cleansing solution soaked swabs to clean the labia | |
| 11 | majora from front to back in single downward strokes: one swab, one wipe. | |
| 11. | Repeat the cleaning process for the labia minora. | |
| 12. | Use the non-dominant hand to separate the labia minora so that the urethral meatus is sighted. A second person holding a torch may be required. Again using cleansing solution | |
| | soaked swabs and new forceps, clean in downward strokes from front to back: one swab, | |
| | one wipe. | |
| 13. | Remove gloves and perform hand hygiene. Put on second pair of sterile gloves. | |
| 14. | Apply the sterile guard between patient's thighs and place the drainage receptacle on | |
| | the sterile guard between the patient's thighs. | |
| 15. | Lubricate the lower third of the catheter with lidocaine gel. | |
| 16. | With non-dominant hand separate the labia minora and give gentle traction upwards to | |
| | sight the meatus. | |
| 17. | Cover the meatus with a small amount of gel. Then gently insert the nozzle of the | |
| | lidocaine gel syringe into the meatus. Slowly instil the gel into the urethra. Warn the | |
| | patient about the risk of stinging from the gel. Discard the syringe. | |
| 18. | Pick up the catheter with the dominant hand. Insert the catheter into the meatus and | |
| | gently advance the catheter along the urethra until urine flows freely. There may be a | |
| | delay before the urine flows – this is usually due to the gel blocking the catheter. The gel | |
| 10 | is water-soluble and urine should drain within 15 to 30 seconds. | |
| 19. | Should the catheter go into the vagina, leave it there as a guide and insert a new catheter above it. | |
| 20. | If the catheter still does not pass along the length of the urethra and into the bladder | |
| 20. | with ease after two attempts, DO NOT PROCEED. If this is the case, remove the catheter | |
| | and contact a Urology Consultant, Urology Registrar or Urology Nurse Specialist. | |
| | Persistent or forced attempts to pass a catheter may cause urethral trauma. They can | |
| | also convert a patient who can be catheterised to one who can not. | |
| 21. | Take a urine specimen if indicated. The initial urine drained should be discarded to | |
| | eliminate the risk of false-positive cultures. | |
| 22. | Leave the catheter in the bladder until the urine flow has stopped. | |
| 23. | Withdraw the catheter slowly. If the flow re-starts, stop removing the catheter until | |
| | there is no more urine draining. Remove the catheter. | |
| 24. | Clean and dry the genital area. | |
| 25. | Ensure the patient's skin and bed are both dry. | |
| 26. | Dispose of dirty equipment and drained urine. | |
| 27. | Remove gloves and perform hand hygiene. | |



| Step | Action | |
|------|-----------------------------------------------------------------------------------------|--|
| 28. | Document intermittent catheterisation in patient's notes. Include reason, time and date | |
| | of catheterisation; and amount of urine drained. | |

Note: If difficulty is experienced finding the urethra, the left lateral position may be of some help. Place the patient on their left side with their left leg flexed and placed forward.

Note: You can also try gently inserting a gloved finger into the vagina and feeling along the upper surface. You may locate a small mound indicating the location of the urethral meatus. This technique is particularly helpful in women with atrophic vaginal tissue.

12. Intermittent catheterisation of a continent urinary diversion

- A urinary reservoir is fashioned from the bowel or the patient's own bladder.
- The reservoir can also be called a pouch.
- A channel is created from the appendix, ureter or ileum.
- The channel connects the reservoir to the abdominal surface, with the opening on the abdominal surface called a stoma.
- The urinary diversion is continent because of the valve arrangement, which prevents urinary leakage.
- A catheter must be passed into the reservoir at regular intervals to drain the urine, usually four hourly. It may be possible to go 6-7 hours overnight.
- Examples of continent urinary diversions include Mitrofanoff, Monti, Indiana.
- If a new reservoir has been created using bowel, a male-length catheter must be used, to make sure it goes to the bottom of the reservoir. If the reservoir is not drained completely, the patient may be prone to urine infections or stone formation. Also regular washouts will be required to flush out mucus produced by the bowel.
- If the natural bladder has been used, a female-length catheter would be adequate for drainage (these are not available in the inpatient setting, only in the community).

12.1 Equipment required

- Procedure trolley
- Sterile catheterisation pack
- Cleaning solution sodium chloride 0.9%
- Lidocaine 2% gel syringe
- Non-sterile gloves (one pair)
- Sterile gloves (two pairs)
- Sterile gauze squares
- Extra sterile gauze to cover the stoma
- Non-irritating tape
- Sterile Nelaton catheter (16Fr recommended for reservoirs fashioned with bowel)
- Waste bag
- Sterigel
- Specimen container if indicated



12.2 Procedure

| Step | Action | |
|----------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|--|
| 1. | Identify patient. Explain and discuss the procedure to ensure they have a good | |
| | understanding of the procedure. | |
| 2. | Gain patient's informed consent. | |
| 3. | Check current medications and any known allergies, to prevent medication | |
| | reaction. | |
| 4. | Ensure good light source is available, to maximise visibility. | |
| 5. | Perform hand hygiene and position patient in the semi-reclined position. Ensure | |
| | the patient is not exposed and maintain warmth. | |
| 6. | Perform hand hygiene. | |
| 7. | Open catheterisation pack on cleaned trolley using an aseptic technique. Add | |
| | catheter and other sterile equipment, and add cleansing solution to the cotton | |
| | swabs. Open specimen container if needed and place lid upwards on a nearby | |
| _ | surface. | |
| 8. | Remove cover that is maintaining patient privacy. | |
| 9. | Perform hand hygiene and put on non-sterile gloves. Remove gauze dressing over | |
| 4.0 | stoma if present and discard. | |
| 10. | Remove non-sterile gloves, perform hand hygiene and don first pair of sterile | |
| 11 | gloves. | |
| 11. | Clean stoma with cleansing solution-soaked swabs, using a circular motion from | |
| stoma opening outward. 12. Blot stoma dry with sterile gauze. | | |
| 13. | Blot stoma dry with sterile gauze. Remove gloves and perform hand hygiene. Put on second pair of sterile gloves. | |
| 14. | Drape the sterile guard around and under stoma, and place the drainage | |
| 14. | receptacle on the sterile guard. | |
| 15. | Lubricate the lower third of the catheter with lidocaine gel. | |
| 16. | Gently insert the tip of the Nelaton into the stoma until urine drains into the | |
| 10. | receptacle. If resistance is felt whilst inserting, gently twist the Nelaton until it | |
| | slides in. The Nelaton should never be forced. | |
| 17. | Advance the catheter a further 6-8cm. | |
| 18. | Take a urine specimen if indicated. The initial urine drained should be discarded | |
| | to eliminate the risk of a false-positive culture. | |
| 19. | Leave the catheter in place until the urine flow has stopped. | |
| 20. | Withdraw the catheter slowly. If the flow re-starts, stop removing the catheter | |
| | until there is no more urine draining. Repeat this process until the catheter is | |
| | completely removed from the stoma. | |
| 21. | Clean and dry stoma and peristomal skin. If required, apply a sterile gauze square | |
| | over stoma and secure with tape. | |
| 23. | Ensure the patient's skin and bed are both dry. | |
| 24. | Dispose of dirty equipment and drained urine. | |
| 25. | Remove gloves and perform hand hygiene. | |
| 26. | Document intermittent catheterisation in patient's notes. Include reason, time | |
| | and date of catheterisation; and amount of urine drained. | |



13. Teaching intermittent self-catheterisation (ISC) and intermittent self-dilatation (ISD)

Note: In line with the purpose and scope of this document (see <u>Section 1</u> and <u>Section 2</u>), the objective of teaching ISC and ISD is to ensure this is taught safely with optimal outcome for the patient.

Note: Teaching ISC and ISD to male patients must only be undertaken by RNs who have been assessed for competence in the male catheterisation procedure.

13.1 Indications

For ISC

 Patients who have been identified as having urinary retention with a PVR persistently greater than 200 mL, or as discussed with the Urology team. This is dependent upon individual bladder capacity, and indication and risk of UTI. Some patients maintain good health with a PVR of > 200 mL – this would need to be a team decision based upon clinical assessment.

For ISD

• Treating urethral strictures through regular dilatation as per Urology instruction.

13.2 Contraindications for ISC/ISD

- Patients with poor manual dexterity.
- Patients with poor vision. Patients with limited vision may be able to learn by touch.
- Patients with poor cognitive function, as patients need to have a good understanding of why they need to perform ISC/ISD, the plan, and expected outcomes.
- Patients who are not motivated to perform ISC/ISD.
- Patients who are obese may find ISC/ISD difficult.
- Care givers can be taught how to perform ISC/ISD to support the patient.

• 13.3 Frequency

For ISC

- For patients with complete urinary retention, ISC is performed four to six times per day OR to maintain total bladder urine volumes <400-600 mL (total bladder volume = volume voided + residual urine drained during ISC).
- When commencing ISC it is important to record the amount of urine voided and the volume of urine drained via ISC. This helps guide the frequency of ISC that is required. Renal function is also taken into account.
- The below table is a guideline only when clinician instructions are not available

| Residual bladder volumes | Frequency of catheterisation |
|--------------------------|------------------------------|
| Unable to void | Four to six times per day |
| PVR >500 mL | Three to four times per day |
| PVR 300-500 mL | Two to three times per day |



| Residual bladder volumes | Frequency of catheterisation |
|----------------------------------|--------------------------------------------------|
| PVR 200 -300 mL | One to two times per day |
| PVR <200 mL on three consecutive | Stop and reassess. May need to do ISC one to two |
| occasions | times per week |

For ISD

• Frequency as per Urology instruction.

13.4 Catheter care for ISC/ISD

In hospital and residential care setting

A new catheter should be used each time, to reduce hospital-acquired infection/cross infection.

In patient's own home

- The Nelaton catheter can be used for up to a maximum of seven days or six uses, whichever comes first.
- Catheters should be cleaned thoroughly after each use using these steps:
 - Rinse the catheter to ensure the eye of the catheter is not blocked. If using a pre lubricated/hydrophilic catheter, avoid rubbing the surface of the catheter as this will reduce the lubrication for next use.
 - O Wash the catheter in warm water.
 - o Rinse under running tap water.
 - O Shake the catheter to remove residual water do not pat dry.
 - Store in a clean, dry, sealed container such as a sealed plastic container, or in a clean snap lock plastic bag.
 - O Clean the container at least once a week with warm soapy water and dry thoroughly.
 - o If using a snap lock plastic bag a new bag needs to be used following each clean.
- Pre-lubricated catheters and hydrophilic coated catheters (i.e. activated with water) can be reused for up to a maximum of seven days or three uses, whichever comes first. Extra water soluble lubricant may be required for the third use.
- If the patient is prone to frequent documented UTIs and has a lowered immunity, a new catheter is recommended to be used each time.
- For frequent UTIs alone, the patient's technique, environment and ISC frequency should first be reviewed.

14. Considerations in teaching intermittent self-catheterisation for females

14.1 Prior to procedure

- Give patient a copy of 'Your Guide to Self-Catheterisation (For Women)' booklet to read available as a patient information booklet on the Urology Intranet.
- Assess patient's understanding of the booklet, answering any questions and gaining verbal consent for teaching to proceed.
- Ensure a private and culturally safe environment, such as a procedure room where the patient is not likely to be disturbed.



A mirror may be required for self-examination of the genitalia in order to identify the urethral
meatus. Ongoing use of a mirror may not be required once the patient is familiar with the
procedure.

14.2 Equipment

- Nelaton plastic (PVC) catheter, size 10-12 FR for catheterization (If performing ISC for irrigating a neobladder, a larger FR catheter may be needed for draining mucus.)
- Receptacle for urine, e.g. jug
- Water-soluble gel for lubrication
- Cleaning wipe such as damp tissue paper
- Bag for rubbish.

14.3 Nurse instruction/assistance to patient in conjunction with 'Your Guide to Self-Catheterisation (For Women)' booklet

| Step | Action |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. | Void prior to performing ISC. |
| 2. | Perform hand hygiene. |
| 3. | Prepare equipment, setting everything up on a clean, easily accessible surface. Place the receptacle appropriately to collect urine. |
| 4. | Lubricate the insertion end of catheter, i.e. lubricating about 1/3 of the catheter. |
| 5. | Position themselves in a way that is comfortable – either lying or sitting down with the mirror propped against something, or standing with one leg up on a chair and mirror on seat of chair. |
| 6. | Wash the genital area with the cleaning wipes, wiping gently front to back. Part the labia minora, in order to sight the urethral meatus. One wipe then discard, repeating as required. Discard cleaning wipes into the rubbish bag. |
| 7. | Perform hand hygiene again. |
| 8. | Pick up catheter with dominant hand (picking it up in the middle of the catheter), ensuring the insertion end does not come into contact with anything. |
| 9. | Use non-dominant hand to part the labia, in order to sight the urethral meatus. Then gently insert the insertion end of the catheter into the urethra. Push the catheter in gently until urine flows out the catheter. Hold the catheter in position and let the urine flow into the receptacle. Leave the catheter in the bladder until the urine has stopped draining. |
| 10. | When the flow of urine has stopped, slowly withdraw the catheter. If further urinary drainage occurs, pause and wait until the flow of urine stops. Repeat this process, withdrawing the catheter until it is out of the urethra. Discard the catheter in the rubbish bag. Dry perineal area and dispose of dirty equipment and drained urine. |
| 11. | Perform hand hygiene. |

Note: If catheter is accidently inserted into the vagina or contaminated in any way, a new catheter should be used in the hospital setting. If in the patient's home, the catheter should be cleaned as per catheter care instruction included in the 'Your Guide to Self-Catheterisation (For Women)' booklet. Following cleaning another attempt at catheterising can be made.



15. Considerations in teaching intermittent self-catheterisation/dilatation for males

15.1 Prior to procedure

- Give patient a copy of 'Your Guide to Self-Catheterisation (For Men)' booklet to read, available as a patient information booklet on the Urology Intranet.
- Assess patient's understanding of the booklet, answering any questions and gaining verbal consent for teaching to proceed.
- Ensure a private and culturally safe environment, such as a procedure room where the patient is not likely to be disturbed.

15.2 Equipment

- Nelaton plastic (PVC) catheter:
 - o For catheterisation size 12-14 FR
 - For irrigation of a neobladder, a larger FR catheter may be needed for draining mucus
 - o For dilatation size 16-20 FR.
- Receptacle for urine e.g. jug.
- Water soluble gel for lubrication, or lidocaine gel syringe.
- Cleaning wipe such as damp tissue paper.
- Bag for rubbish.

Note: Pre-lubricated or hydrophilic catheters, such as DilaCaths, are not available in the hospital setting. These catheters are obtained through the District Nursing Community Continence Service on request, however the availability of supply is not always guaranteed due to budget constraints. For teaching purposes in the hospital setting, Nelaton catheters can be used.

15.3 Nurse instruction/assistance to patient in conjunction with 'Self-Catheterisation (for Men)' booklet

| Step | Action |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. | Void first if performing ISC. |
| 2. | Perform hand hygiene. |
| 3. | Prepare equipment, setting everything up on a clean, easily accessible surface. Place receptacle appropriately to collect urine. |
| 4. | If using water soluble gel sachets, lubricate the insertion end of catheter, i.e. lubricating about 1/3 of the catheter. |
| 5. | Hold the penis with non-dominant hand. If not circumcised, draw back foreskin. |
| 6. | Clean the end of the penis with the cleaning wipe, wiping gently from the centre outwards. One wipe then discard, repeating as required. Discard cleaning wipes into the rubbish bag. |
| 7. | Perform hand hygiene again. |
| 8. | Hold the penis almost upright with non-dominant hand using sterile gauze. |
| 9. | If using a lidocaine gel syringe, pick up lidocaine gel syringe with dominant hand and cover the meatus with a small amount of gel, then gently insert the nozzle of the lidocaine gel syringe into the meatus. Slowly instil the gel into the urethra, maintaining the nozzle of the syringe in the meatus to prevent the gel from leaking out. Discard the syringe. Continue to hold the penis upright for three to five minutes with non-dominant |



| Step | Action |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | hand, with thumb and fingers applying gentle pressure below the glans to prevent large amounts of gel from leaking out of the urethra. |
| 10. | Use dominant hand to pick up the catheter (picking it up in the middle of the catheter), ensuring the insertion end does not come into contact with anything. |
| 11. | Gently insert the insertion end of the catheter into the urethra. |
| 12. | When resistance is felt, stop. |
| 13. | Take a few slow deep breaths, and then hold the penis downwards, and with gentle steady pressure to continue to insert the catheter into the urethra until urine starts to drain out the catheter. |
| 14. | Hold the catheter in position and let the urine flow into the receptacle. Hold the catheter in the bladder until the urine has stopped draining. |
| 15. | When the flow of urine has stopped, slowly withdraw the catheter. If further urinary drainage occurs, pause and wait until the flow of urine stops. Repeat this process, withdrawing the catheter until it is out of the urethra. Discard the catheter in the rubbish bag. |
| 16. | Return the foreskin forward if uncircumcised. Dry penis and dispose of dirty equipment and drained urine. |
| 17. | Perform hand hygiene. |

Note: Instruct patient never to use force when inserting the catheter. Jerky movements of the catheter can cause spasm of the sphincter muscles and the catheter may not be able to be passed. If the catheter will not go into the bladder, abandon the attempt and try again later.

Note: While learning ISC/ISD, or if there has been recent surgery to the area, it is advisable to use lidocaine gel. However, after seven to 10 days, water-soluble lubrication gel sachets can be used to coat the catheter, rather than instilling the gel into the urethra.

Note: If catheter is being inserted for intermittent self-dilatation, instruct patient to insert the catheter almost to the hilt, hold it in place for a few seconds and then withdraw the catheter slowly. In the community, pre-lubricated or hydrophilic catheters without a drainage hole may be used for intermittent self-dilatation.

16. Preparing for discharge from hospital

16.1 Patients returning to their own home

- Upon discharge, all patients should be given a supply of catheters and gel for at least three to five days, ideally two weeks if possible, until the District Nursing Community Continence Service can arrange ongoing supplies.
- Complete an online referral to the appropriate District Nursing Community Continence Service documenting clearly the ongoing management plan for ISC/ISD and requesting the ongoing supply of catheters. **Document the initial catheter supplies provided in the referral**.
- Inform patients that ongoing supplies of catheters will come from the District Nursing Community Continence Service, but patients will need to purchase water soluble gel. The GP can prescribe these.



- If patient requires pre-lubricated or hydrophilic catheters,, state this in the referral to the District Nursing Community Continence Service. However, the availability of supply is not always guaranteed due to budget constraints.
- Documentation of technique assessment, reason for ISC/ISD and ISC/ISD frequency, is to be clearly outlined within the referral.

16.2 Patients returning to, or being admitted to, a residential facility

- Upon discharge, all patients should be given sufficient supplies to enable the residential facility to order the appropriate products, i.e. at least three to five days, ideally two weeks if possible.
- Staff at the residential facility should be informed of the patient's technique assessment, reason for ISC/ISD, ISC/ISD frequency and supplies of catheters required.
- If patient requires pre-lubricated or hydrophilic catheters, , inform staff at residential facility.

16.3 All patients being discharged

- Ensure patient has information booklet.
- Document discharge plan and action taken in clinical notes.
- Follow guidelines as per catheter care instruction included in the 'Self-Catheterisation (For Men)' booklet. Instruct patient to remain well hydrated with a regular fluid intake, ensuring the urine looks a pale yellow colour throughout the day.
- Instruct patient that for any difficulties inserting the catheter, they need to contact the District Nursing Service.
- Instruct patient to maintain a good daily fluid intake of approximately two litres unless contraindicated, to prevent urinary tract infections.
- Instruct patient on recognising signs of a urinary tract infection:
 - Feeling unwell and fatigued
 - Loss of appetite
 - Nausea or vomiting
 - Fever +/- chills and shakes
 - o Bladder pain
 - Lower-back ache
 - o Cloudy urine with offensive smell
 - o Blood in the urine
 - If patient passing urine urethrally dysuria/urgency/frequency.
- If a UTI is suspected the patient must contact their GP.
- For patients with a continent urinary diversion, the stoma may produce a little mucus and if required a small dressing may be placed over the stoma to absorb the mucus. A dressing may also be used to prevent friction from clothes.

17. Supporting evidence

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18. Associated documents

- Hand Hygiene Infection Prevention
- Informed Consent



- Medication Administration
- Medications Allergies & Adverse Reactions (ADRs): Identification, Documentation & Reporting
- Standard Precautions Infection Control
- Urethral Catheter Management
- Waste Management
- Your Guide to Self-Catheterisation (For Men)
- Your Guide to Self-Catheterisation (For Women)

19. Disclaimer

No guideline can cover all variations required for specific circumstances. It is the responsibility of the health care practitioners using this Auckland DHB guideline to adapt it for safe use within their own institution, recognise the need for specialist help, and call for it without delay, when an individual patient falls outside of the boundaries of this guideline.

20. Corrections and amendments

The next scheduled review of this document is as per the document classification table (page 1). However, if the reader notices any errors or believes that the document should be reviewed **before** the scheduled date, they should contact the owner or <u>Document Control</u> without delay.