Great Western Hospitals NHS
NHS Foundation Trust

Male Catheterisation Pre-course Work Book

2014

Name ……

Job Role…. ……

Department ……

Course Date……

Our Values
Service Teamwork Ambition Respect

Table of Contents

Aim

- This work book is designed to equip you with the knowledge and skills to enable you to attain trust competency in male catheterisation

Learning made easy....

Step 1

- Read the workbook and complete the pre-course assessment on training tracker (TT).
- When the TT assessment has been completed, print off your certificate and bring to the session.
- Failure to attend with your certificate will mean that you will be unable to complete the study day and will need to re-book.

Step 2 - Support from your manager/mentor

- Prior to applying, ensure that your manager/mentor would like you to learn and practice this/these skill(s).
- It is hoped that during your appraisal you have reflected upon those existing skills and experiences you have acquired within your current role, and have now secured support for your further development from your clinical manager.
- On completion of this workbook, your clinical manager is required to sign the relevant section of the competency. This demonstrates their continued support for your role development regarding Male Catheterisation.
- Please ensure that you send a copy of your completed Competency to The Academy to ensure you are entered onto Electronic Staff Records.

Step 3 - Getting help to learn

- Identify a practice supervisor/assessor to help you achieve competency.
- You should contact a suitable practice supervisor/assessor within your work area, who will be able to guide and support you as you develop your knowledge and skills.
- The person(s) you choose must themselves be an expert and active practitioner in Male Catheterisation and be have a current Male Catheterisation competency.
- Formal contact with this person should be negotiated, allowing you to plan your development, review your progress, discuss and resolve any area of difficulty or uncertainty.

Step 4 - Ensuring compliance with local guidelines and professional practice

- Ensure you have accessed, read and understood your health care organisation guidelines/policies relating to Male Catheterisation and any national guidelines that have been adapted for use in your clinical area

Step 5 – Maintaining Competence

- This competency needs to be updated every two years with the current competency available on the intranet, you will need to:
    - Read through updated competency and the relevant policies and guidelines.
    - Perform the procedure for Male Catheterisation observed by a competent practitioner.
    - Print off the competency, complete the 3.1 Competency Standard Form and keep the original for your own records, photocopy two and send one to the Academy and give one to your Manager.

Objectives

- State key aspects of relevant policies and procedures and protocols in relation to male catheterisation
- Discuss main differences between male and female catheterisation and special considerations for a male
- Identify the advantages, disadvantages and contra indications for male catheterisation.
- Identify the correct procedure for male catheterisation in line with trust competency

Legal aspects

- Must be registered practitioner, or an Emergency Department Assistant or band 4 Assistant Practitioner
- Must work within The Trust's Scope for Enhancing the Scope of Professional Practice
- NMC code of conduct / HCPC Code must be applied
- Must have competency so that you are covered under the Trust's vicarious liability
- Gain informed consent and seek assistance if patient is not able to give consent
- Use products correctly (check expiry dates, length of use for drainage bags, fit for purpose)

- Adhere to trust policies and procedures
- Documentation in nursing notes

This workbook aims to assist the learner to understand the requirements in the following areas relating to male urethral catheterisation:

- Accountability
- Legal Responsibility
- Negligence
- Vicarious Liability
- Reasonable Care
- Valid Consent
- Local policies and procedures
- Implications for the practitioner

- All healthcare practitioners must be aware of the professional issues related to performing a new skill such as Male urethral catheterisation. This ensures a safe and effective procedure for all parties concerned.
- As professionals, healthcare practitioners are accountable for their actions and must adhere to the stated principles of their professional bodies.

Accountability

There are four areas of accountability:

1. Criminal Law (for example manslaughter by gross negligence)
2. Civil Liability (e.g. action for negligence)
3. Professional Liability
4. Accountability to Employer

Nursing and Midwifery practitioners should refer to the Nursing and Midwifery Council (NMC)'s: The Code: Standards of conduct, performance and ethics for Nurses and midwives (2008).
Other health care professionals have an equal code of conduct which will provide clear and robust guidelines.

Duty of care

- Healthcare practitioners owe a legal duty of care to their patients.
- The duty of care is a legal status which is held by registered practitioners when they are involved in planning, delivering and evaluating care.
- The duty of care is passed from one shift to another, one department to another so that someone is accountable for the patient or client at all times.
- The duty of care is only relinquished if the patient is handed over, transferred out, discharged home (as a care episode has ended) or if they die.
- The Standard of Care which applies is that of a responsible body of practitioners in the relevant speciality. Two practitioners who are level in rank should display and possess similar levels of skills and knowledge (The Bolam test).

- Responsible means just that, it is not equal to accountability. It does not necessarily mean the 'majority' and it will be measured by the knowledge at the time the event took place. Non-registered practitioners can assume responsibility as they are aware of their actions and limitations.
- If a practitioner breaches their duty of care and in doing so causes actual harm to a patient, the patient may be entitled to compensation.

Negligence

Negligence requires three conditions to be satisfied:

1. The practitioner owed the patient a duty of care
2. A breach of that duty has occurred
3. As a result of this breach, harm has been caused to the claimant.

Vicarious Liability

- An employer will bear vicarious responsibility for the acts and omissions of its employees unless they are on a 'frolic of their own'. i.e. acting outside the normal course of their duties. It would be extremely unusual for an employer of a healthcare practitioner to avoid vicarious responsibility for the acts of the practitioner done in the course of his or her duties.
- All NHS clinical and nursing practitioners are subject to NHS indemnity. Under this the NHS takes responsibility for legal proceedings brought against an employee arising from their NHS activities.
- An employer can also be held to be directly liable where the standard of care owed by the Trust to the patient has been breached. For example by failing to supply sufficient or properly qualified staff.
- It is recommended that all staff also have personal insurance via a professional body e.g. RCN, RCM, BMA, HPC

Reasonable Care

The Standard of Care

- Healthcare practitioners must attain the standard of a responsible body of practitioners professing the particular speciality under scrutiny (This is known as the Bolam Test). What amounts to a "responsible body" must withstand logical analysis.
- This can be measured using the Bolam Principle which is a legal template for measuring ability of medical/clinical practitioners. This was based on a case from 1957 where Mr Bolam, a psychiatric patient was injured due to one doctor's inexperience (look it up on the internet)

The same standard of care applies to an emergency situation.

Example:

A nurse witnessing a road traffic accident will be required to stop and offer help to the standard of a responsible practitioner trained in this procedure, whether or not she is experienced in doing so.

Inexperience
In law, the same standard of care is expected of an inexperienced practitioner as of an experienced practitioner. A newly, qualified nurse or Midwife, for example, will be required to attain the same standard of competence as an experienced nurse.

Orders
Where a healthcare practitioner receives an order regarding treatment and carries it out without due consideration they may be breaching the duty of care. It is rarely a defence to claim to be merely following orders. The practitioner must show that the action was reasonable having regard to approved practice to be expected from a practitioner trained in the procedure.

Local Policies and Guidance
As far as is reasonable, local policies and procedures should be followed. However, in rare circumstances there may be reasons why a particular policy is inappropriate and it may be justifiable not to follow procedure. Where a practitioner does not follow usual practice but the actions were in accordance with the standard of reasonable care, there is no breach of duty.

It is recommended that where a policy is not followed, the practitioner records what was done and why the circumstances justified a modification from usual practice.

Consent

Adult mentally competent patients have an absolute right to decide whether to accept or refuse treatment.

Information to be provided before consent
Before consent is provided a patient should receive some explanation of the treatment to be undertaken. The explanation should be in line with that which would be provided by a responsible body of practitioners. Where a patient asks questions they should be answered fully. How much detail should be given depends on the particular circumstances.

For male urethral catheterisation, it is recommended that before consent can be given, an individual should be aware of the reason for having a male urethral catheter inserted, what is involved and how long it will take.

Forms of Consent

Consent can be given verbally, can be in writing or can be implied through conduct.

Verbal consent should be recorded in the patient's notes and should be limited to those procedures where there is little risk.

Who may provide consent?

Consent cannot be given by proxy. Where an adult patient is mentally incapable of giving his consent, no one (including the court) can give consent on his/her behalf. Treatment in such a case may lawfully be provided by a healthcare practitioner where the treatment is in the best interests of the patient.

Those with parental responsibility for a child will usually have the legal power to give or withhold consent for a child's treatment, unless they conflict with the interpretation of those providing care about the child's best interests

Consent by children under 16 years of age depends upon the child's ability to understand the nature and the implications of the treatment. The ability to understand has to be determined by the medical practitioner or the relevant health professional.

As a result of the Mental Capacity Act 2007, practitioners will be obliged to assess the capacity of all patients whom they believe do not have capacity to consent to or refuse treatment. Having established a patient lacks capacity the practitioner will be obliged to act in that patient's best interest.

Who should request consent?

Consent must be taken by a practitioner who is both capable of performing the procedure and is able to explain the risks and benefits.

Elements of Consent

For valid consent, the following elements must be satisfied:

- **Capacity**: Ensure that the patient/client is capable of giving consent. Adults are always assumed to be competent unless demonstrated otherwise.
- **Voluntary**: An individual must be free to choose. Consent must be given without coercion.
- **Informed**: Patients are entitled to receive sufficient information in a way they can understand about the proposed treatment, the possible alternatives, and any substantial risks so they can make a balanced judgment
- **Specific**: The consent given must be specific to the situation
- **Current**: Giving and obtaining consent is usually a process, not a one off event. Patients can change their minds and withdraw consent at any time. If there is any doubt, you should double check with the patient what their current wishes are.

Local Policies and Procedures

- Local policy and procedures may be found to support male urethral catheterisation in every area or on the intranet

- The policies may have variances but should be followed. They will include information on training, catheterisation equipment, the type of the Anaesthetic, antiseptic, lubricating gel and aftercare pertaining to the local environment.

- It is the responsibility of the practitioner to follow local policy and procedure guidelines, or discuss any deviations with the author of such guidelines.

- Standards for competence will also be issued by each Trust. These must be followed to ensure completion and confirmation of competence.

Implications for the practitioner

In practice these issues mean that a practitioner should:

- Check that he/she has the training and supervision identified by local policy before carrying out the procedure.

- Feel competent to carry out the procedure. Justifying competence can be achieved by keeping a log of supervised practice and training. Ensuring reflective practice and critical analysis.

- Carry out the procedure in accordance with the local policy.

- Keep up to date with changes in practice and use his/her skill regularly.

- Never attempt male urethral catheterisation unless he/she is confident with all aspects required to be considered, before, during and after the procedure.

- Always refer to an experienced colleague before male urethral catheterisation procedure if he/she is unsure.

- Follow the NMC guidance and recommendations.

- Registered Nurses must comply with the NMC's Code of Professional Conduct (2008). This Code has been designed to provide a clear framework for logical development of practice. The code emphasises the need for application of knowledge and the exercise of professional judgement and skill (see section 6). Responsibility and accountability are placed on the individual. The Code also advises nurses to acknowledge personal skill and take steps to remedy any deficits.

- Operating Department Practitioners, Assistant Practitioners and Emergency Department Assistants must comply with the Health and Care Professions Councils(HPCP) Standards of Conduct, Performance and Ethics (2008)

- Doctors must comply with the General Medical Council's Code of Conduct (2011)

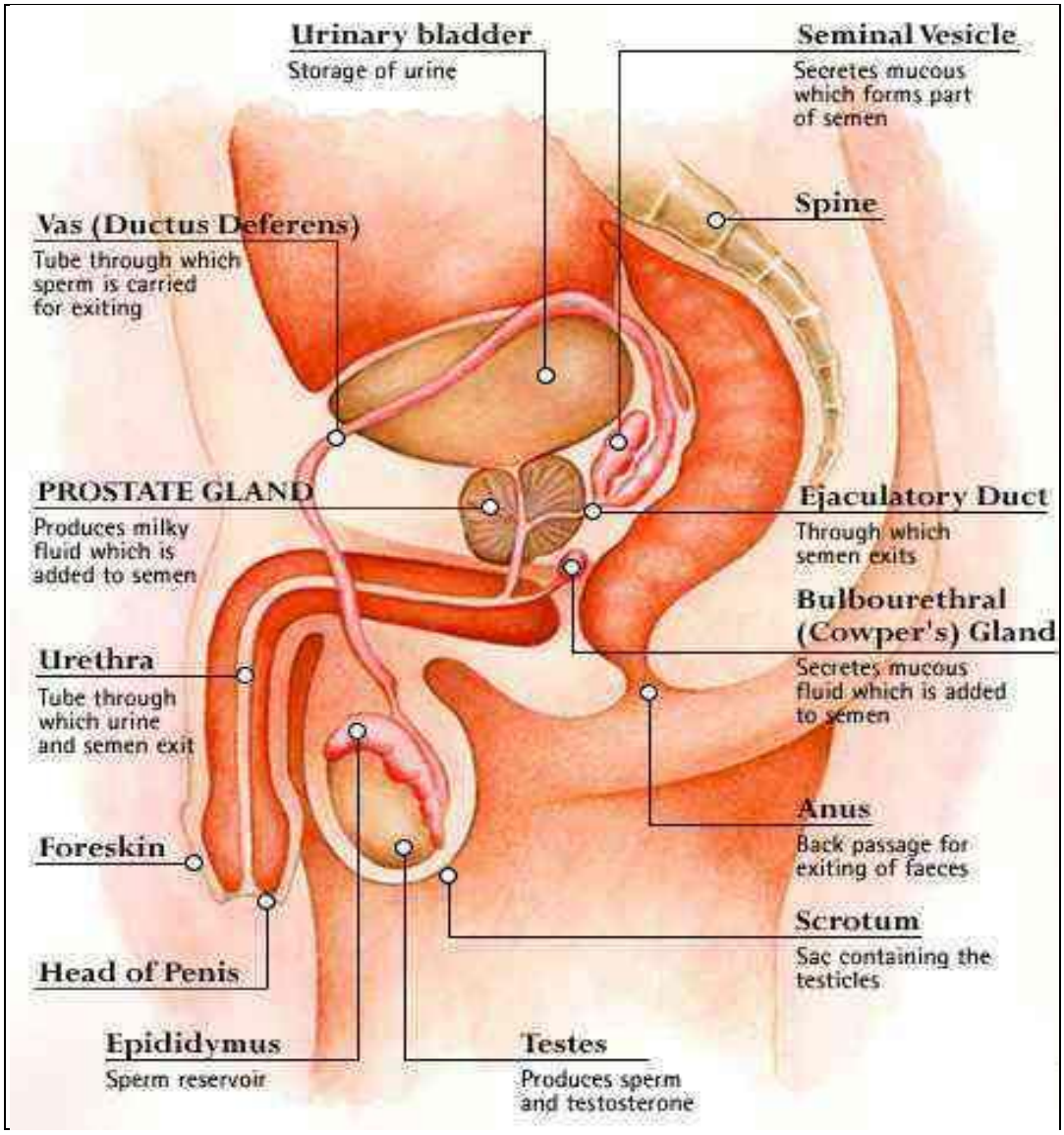
- Ensure that the procedure is fully documented in the records

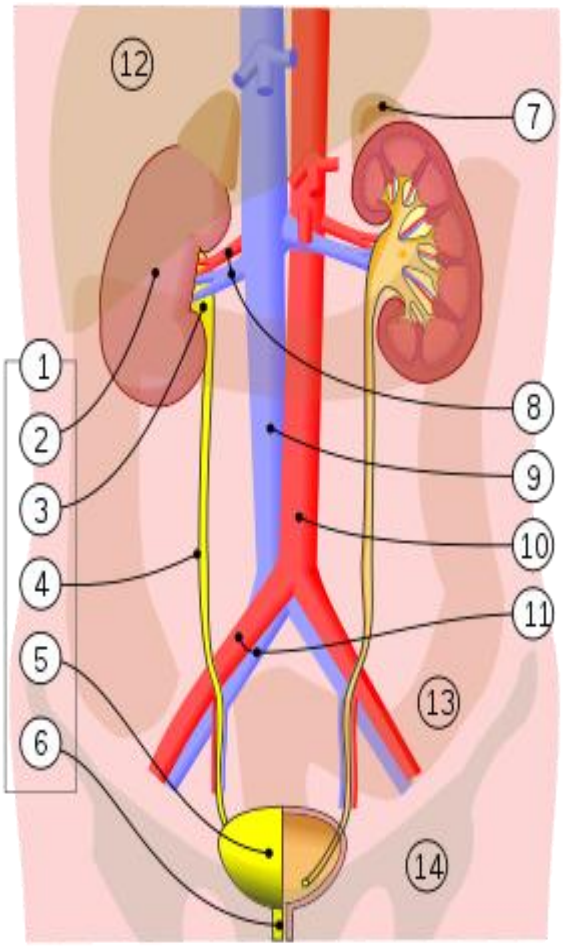
NMC (2010) recommends that:

- Documentation should provide clear evidence of the care planned, the care delivered and the information shared
- Good record keeping is a mark of a skilled and safe practitioner
- Good record keeping helps to protect the welfare of patients and clients.

Anatomy and Physiology of the

Male reproductive and urinary system





1. Human urinary system
2. Kidney
3. Renal pelvis
4. Ureter
5. Bladder
6. Urethra
7. Adrenal gland
8. Renal artery and vein
9. Inferior Vena Cava
10. Abdominal aorta
11. Femoral artery and vein
12. Liver
13. Colon
14. Pelvis

The kidneys

Each person has 2 kidneys, located at the rear of the abdominal cavity in the retro-peritoneum.

The kidneys receive blood from the paired renal arteries and drain into the paired renal veins

Kidneys have homeostatic functions such as the regulation of electrolytes (Na, K, Ca), maintenance of acid-base balance, and regulation of blood pressure.

They serve the body as a natural filter of the blood, and remove wastes which are diverted to the urinary bladder. In producing urine, the kidneys excrete wastes such as urea and ammonium; the kidneys also are responsible for the re-absorption of water, glucose, and amino acids.

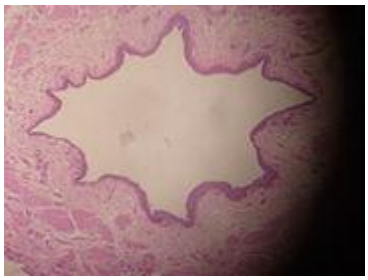
The kidneys also produce hormones including calcitriol (vitamin D), renin , and erythropoietin.

Average human produces: **1.5 litres urine / 24 hours** (effected by medication/ fluid status)

The ureters

In human anatomy, the **ureters** are muscular tubes that propel urine from the kidneys to the urinary bladder. In the adult, the ureters are usually 25–30 cm (10–12 in) long and approx 3-4 mm in diameter.

In humans, the ureters arise from the renal pelvis on the medial aspect of each kidney before descending towards the bladder on the front of the psoas major muscle. The ureters cross the pelvic brim near the bifurcation of the iliac arteries (which they run over). This "pelvi-ureteric junction" is a common site for the impaction of kidney stones (the other being the ureterovesical valve). The ureters run posteroinferiorly on the lateral walls of the pelvis. They then curve anterior medially to enter the bladder through the back, at the vesico-ureteric junction, running within the wall of the bladder for a few centimetres. The backflow of urine is prevented by valves known as ureterovesical valves.



The ureteric lumen is star-shaped. Like the bladder, it is lined with transitional epithelium, and contains layers of smooth muscle, thereby being under autonomic control.

The epithelial cells of the ureter are stratified (in many layers), are normally round in shape but become squamous (flat) when stretched. The lamina propria is thick and elastic (as it is important that it is impermeable).

There are two spiral layers of smooth muscle in the ureter wall, an inner loose spiral, and an outer tight spiral. The inner loose spiral is sometimes described as *longitudinal*, and the outer as *circular*, (this is the opposite to the situation in the gastrointestinal tract). The distal third of the ureter contains another layer of outer longitudinal muscle.

The adventitia of the ureter, like elsewhere is composed of fibrous connective tissue, that binds it to adjacent tissues.

The bladder

In human anatomy, the **urinary bladder** is the organ that collects urine excreted by the kidneys before disposal by urination. A hollow muscular, and distensible (or elastic) organ, the bladder sits on the pelvic floor. Urine enters the bladder via the ureters and exits via the urethra.

In males, the base of the bladder lies between the rectum and the pubic symphysis. It is superior to the prostate, and separated from the rectum by the recto-vesical excavation.

The detrusor muscle is a layer of the urinary bladder wall made of smooth muscle fibers arranged in spiral, longitudinal, and circular bundles. When the bladder is stretched, this signals the parasympathetic nervous system to contract the detrusor muscle. This encourages the bladder to expel urine through the urethra.

For the urine to exit the bladder, both the autonomically controlled internal sphincter and the voluntarily controlled external sphincter must be opened. Problems with these muscles can lead to incontinence. If the amount of urine reaches 100% of the urinary bladder's capacity, the voluntary sphincter becomes involuntary and the urine will be ejected instantly.

The urinary bladder usually holds 300-350 mls of urine; a full adult bladder holds about 500mL of urine, 15 times its empty volume. Not all specialists accept these values, some say a urinary bladder can hold about 1000 mls, but it is different from person to person. As urine accumulates, the rugae flatten and the wall of the bladder thins as it stretches, allowing the bladder to store larger amounts of urine without a significant rise in internal pressure.

The desire to urinate usually starts when the bladder reaches around 125% of its working volume. At this stage it is easy for the subject, if desired, to resist the urge to urinate. As the bladder continues to fill, the desire to urinate becomes stronger and harder to ignore. Eventually, the bladder will fill to the point where the urge to urinate becomes overwhelming, and the subject will no longer be able to ignore it. Since the urinary bladder has a transitional epithelium, it does not produce mucus.

The urethra

In the human male, the urethra is about 8 inches (20 cm) long and opens at the end of the penis. The urethra provides an exit for urine as well as semen during ejaculation.

There is inadequate data for the typical length of the male urethra, however studies suggest that the average length is 22.3 cm ranging from 15 cm to 29 cm.

The length of a male's urethra, and the fact it contains a prominent bend, makes catheterization more difficult. The integrity of the urethra can be determined by a procedure known as retrograde urethrogram

The urethra is divided into four parts in men, named after the location:

The intramural *(pre-prostatic) part* is situated inside the urinary bladder. It is 0.5 to 1.5 cm long, depending on the fullness of the bladder

Prostatic part (through the prostate).There are several openings (1) the ejaculatory duct receives sperm from the vas deferens and ejaculate fluid from the seminal vesicle (2) several prostatic ducts where fluid from the prostate enters and contributes to the ejaculate (3) the prostatic utricle, which is merely an indentation. These openings are collectively called the verumontanum.

The membranous part (through the pelvic diaphragm) A small (1 or 2 cm) portion passing through the external urethral sphincter. This is the narrowest part of the urethra. It is located in the deep perineal pouch. The ducts of the bulbourethral glands (Cowper's gland) enter here.

The prostatic and intramural parts have a transitional epithelial lining, the membranous and cavernous parts have a stratified columnar epithelium, while the external urethral orifice is lined by stratified squamous epithelium

The Prostate gland

- Stores and secretes prostatic fluid that usually constitutes 25-30% of the volume of the semen (along with spermatozoa and seminal vesicle fluid.)
- The prostate also contains some smooth muscles that help expel semen during ejaculation
- Controls the flow of urine during ejaculation. A complex system of valves in the prostate, sends the semen into the urethra during ejaculatory process and a prostate muscle called the sphincter seals the bladder, thereby preventing urine entry into the urethra.
- If the prostate grows too large, it may constrict the urethra and impede the flow of urine, making urination difficult and painful and in extreme cases completely impossible.
- In men over 50, up to 1 in 3 may have enlarged prostate glands

Secretions

- Prostatic secretions vary among species. They are generally composed of simple sugars and are often slightly alkaline.
- In human prostatic secretions, the protein content is less than 1% and includes proteolytic enzymes, prostatic acid phosphatase, and prostate-specific antigen. The secretions also contain zinc with a concentration 500-1,000 times the concentration in blood.

Regulation

- To work properly, the prostate needs male hormones (androgens), which are responsible for male sex characteristics.
- The main male hormone is testosterone, which is produced mainly by the testicles. Some male hormones are produced in small amounts by the adrenal glands. However, it is dihydrotestosterone that regulates the prostate.

Possible indications for catheterisation

- Tumour / injury causing spinal cord compression
- Trauma (pelvic/spinal injury)
- Acutely unwell (Diabetic Keto-acidosis, Left Ventricular Failure, Acute Renal Failure etc.)
- Retention following surgery – sometimes due to pain but also due to incomplete anaesthetic reversal
- Neurological (Multiple Sclerosis, Parkinson's)
- Incontinence / retention secondary to constipation, where faecal loading prevents urination.

- Instillation of medication particularly chemotherapy in conjunction with bladder or prostate cancer treatment.
- Irrigation using saline where haematuria with clots is present.
- Any other condition where accurate fluid balance is vital to the patient's well-being and homeostasis.
- Stroke (caution as this is not advised as first line ; the brain may recover its ability to control urination but the presence of a catheter may confuse the neurological pathway and delays discharge)
- Dementia (carefully assess if this is the best solution)
- As a last resort, to maintain dignity
- End of life care, if appropriate

Assessing the patient

Make a thorough assessment of the patient. This could include:

- Discussion about effect on body image and sexuality
- Consider psychological needs (cultural, sexual, embarrassment)
- Offer male or female practitioner
- Offer chaperone (for patient or for nurse) and document if refused

- Lower urinary tract history (hypospadius / epispadias, recent UTI)
- Prostatism (not within 2 weeks of prostate surgery)
- Surgical history (IVAB cover if metalwork)
- Allergies (e.g. latex, lidocaine)
- Stroke (must be last resort)
- Consider type of catheter needed

If catheterisation is indicated, you must:

- Gain informed consent from the patient
- Gain permission to proceed from medical staff if an inpatient or discuss with GP/Senior Nurse if in the Community

Choosing the catheter

These catheters were designed by Frederic Foley, a surgeon working in Boston, Massachusetts, in the 1930s, when he was a medical student.

His original design was adopted by C. R. Bard, Inc. of Murray Hill, New Jersey, who manufactured the first prototypes and named them in honour of the surgeon.

Materials

Type	Maximum In-dwell time	Other details
Plastic	Up to 7 days	Also used as material of choice for intermittent catheterisation
PTFE (Poly-Tetro Fluoroethylene)	Up to 28 days	Latex bonded with Teflon™
Hydrogel™	Up to 12 weeks	Latex with Hydrogel™ coating
Latex coated with Silicone	Up to 12 weeks	
100% Silicone	Up to 12 weeks	Suitable for latex allergy

Sizes and types

There are 2 lengths available:

- Standard 40cm (also known as male but can be used for a female)
- Short 20cm (also known as female and **NEVER** used in males)

Charriere size (gauge) – choose the smallest size for a free flow of urine (also referred to as French size (Fr.))

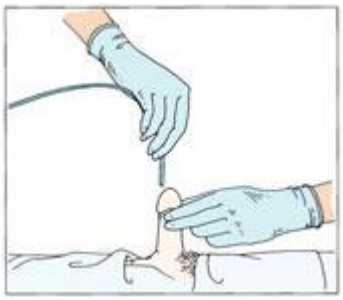
- 1cH =1/3mm and is the external diameter so a 12cH catheter is 0.33 x 12 = 4mm in diameter
- Sizes start at 5cH and go up 28cH
- Types include straight and coude (meaning “elbow” or “bent” in French, used for when a known enlarged prostate is present)
- One way (rarely used), two way (standard) or three way (for irrigation) are available.

Filling the balloon

- Balloon fill – normally 10mls, larger in some specialised catheters (30ml) and smaller in paediatric sizes (5ml)
- Fill volume is always indicated on the catheter packaging. Never overfill or under fill the balloon as this invalidates the product and can cause complications
- Balloon fills from one side first so must use exact recommended amount to ensure smoothness and no irritation
- Must be sterile water (saline causes crystallisation and air will cause the balloon to float and not sit still so is very irritant)
- Glycine is now added to the inflation water to try to prevent water escaping form the balloon as a result of osmosis
- Never deflate/inflate more than twice as this invalidates the product

Considerations for Insertion

- Length of urethra between 17 and 20cm (possibly longer)– insert fully to bifurcation
- Position penis at 90 degrees



- Prostate gland (may be contraindication)
- **Cleansing thoroughly, particularly under foreskin**

- Phimosis – replace foreskin. Failure to do so can cause a very painful tightening of the foreskin which, if is it not possible to put it back, may need emergency surgery

- Pain – Please use an Anaesthetic, antiseptic, lubricating Gel.

Lubrication

Anaesthetic Antiseptic Lubricating Gels

(Instillagel™ or Optilube™ or Cathejell™)

Instillagel™ or Optilube™ or Cathejell ™ is a sterile gel containing a local anaesthetic and antiseptic presented in a sterile package.

Active ingredients are (in each 100 grams):-

- Lidocaine Hydrochloride (Local anaesthetic) 2.000g
- Chlorhexidine Gluconate Solution (Antiseptic) 0.250g
- Methyl Hydroxybenzoate (E218) (Antiseptic) 0.060g
- Propyl Hydroxybenzoate (E216) (Antiseptic) 0.025g

in a gel made with Hydroxyethylcellulose, Propylene Glycol and Purified Water.

What the gel does

The gel is used when putting a tube or instrument into a body cavity. It contains a local anaesthetic to prevent pain and antiseptics to reduce the risk of infection getting in, while lubricating to make the process smooth.

Before the gel is used

The gel is contra-indicated if:-

- If patient has ever had a reaction to a local anaesthetic
- Patient has previous allergic response or hypersensitive reaction to E216 and E218 (also called parabens) or any of the other ingredients
- If the gel will be in contact with damaged membranes

Care should be taken when using Anaesthetic Antiseptic Lubricating Gels:

- If patient has any cardiac history or is on cardiac medication
- If patient has hepatic problems
- Diagnosed epilepsy

After using the gel

As the patient may feel a little sleepy, advise not to drive or use machinery

How the gel is used

The gel is available in two sizes - 6ml, 11ml and 12.5 mls depending on the product manufactuerer.

At least 11mls of gel is recommended for males due to length of the urethra

Usually the complete contents of the size suitable for the procedure will be used. The syringe is removed from its sterile package by tearing off the backing paper.

If using Instilligel™ or Optilube™or Cathejell™**, BEFORE REMOVING THE BLUE CAP** from the end of the syringe, free the plunger by gently pressing it and then remove the cap. If using Cathejell, twist and break the applicator tip by using a vigorous downward stroke into the bottom of the sterile blister pack. **DO NOT BREAK BY HAND.** Insert the nozzle into the opening of the area to be anaesthetised and press the plunger slowly to push out the gel. The anaesthetic takes about 4 to 5 minutes to work after the gel has been used.

Has the gel any side effects?

Patient might feel some discomfort just after the gel is used, but this stops as soon as the anaesthetic starts to work. Most people find that there are no problems after the gel has been used but there may be a slight soreness when the effect of the local anaesthetic has worn off.

Storage of the gel

The gel should not be used after the expiry date shown on the package. Store below 25 degrees centigrade.

The syringe is for single use only. If the complete contents are not used, the syringe and remaining gel must be thrown away.

Prescribing

This gel must be prescribed or given under a Patient Group Direction. Patient Group Directives are found on the Hospital Intranet.

Agents used for hand disinfection

- **Alcohol based products**.

  • Most efficient agents for reducing the number of bacteria on the hands of personnel.
  • Recommended for routine decontamination of hands in all clinical indications - except when visibly soiled.
  • Not effective against spores so should not be used for patients with Clostridium difficile

- **Antiseptic soaps and detergents are the next most effective method.**

- **Soap and water.**

  • When hands are visibly soiled
  • Hands have come into contact with body fluids
  • When caring for someone with *Clostridium difficile* infection or unexplained diarrhoea and/or vomiting.
  • Working where there is an outbreak of diarrhoeal disease
  • After glove use
  • After visiting the toilet

  Remember to:

  • Clean under ring, if worn
  • dry hands thoroughly
  • Maintain skin condition by using hand moisturiser provided
  • Report any skin problems to your line manager

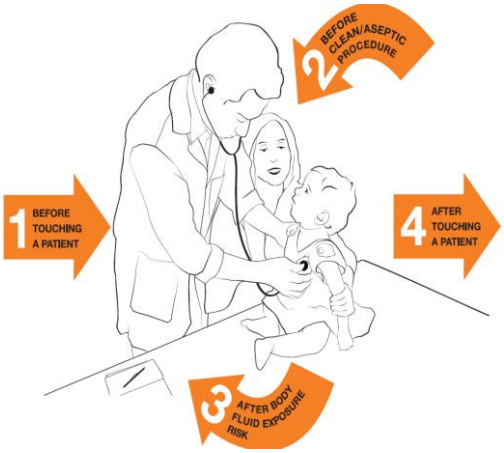
My 5 Moments for Hand Hygiene

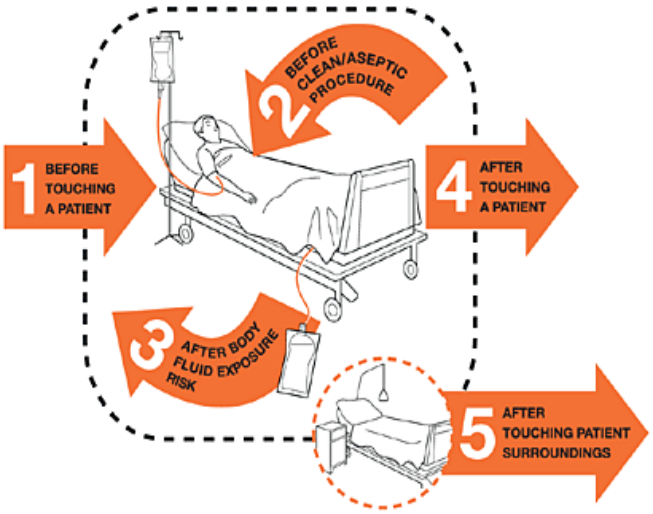
The My 5 Moments for Hand Hygiene approach defines the key moments when health-care workers should perform hand hygiene.

This evidence-based, field-tested, user-centred approach is designed to be easy to learn, logical and applicable in a wide range of settings.

This approach recommends health-care workers to clean their hands

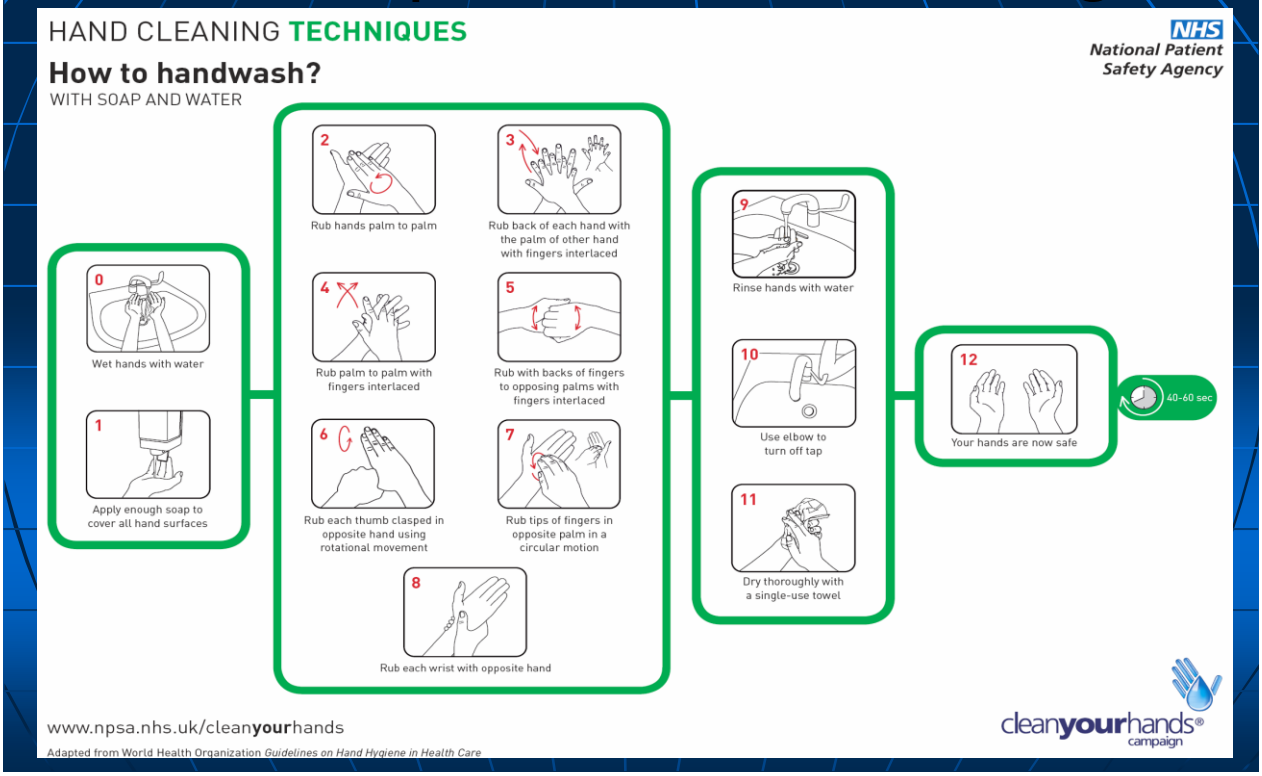
1. **Before touching a patient**
2. **Before clean/aseptic procedures**
3. **After body fluid exposure/risk**
4. **After touching a patient**
5. **After touching patient surroundings**



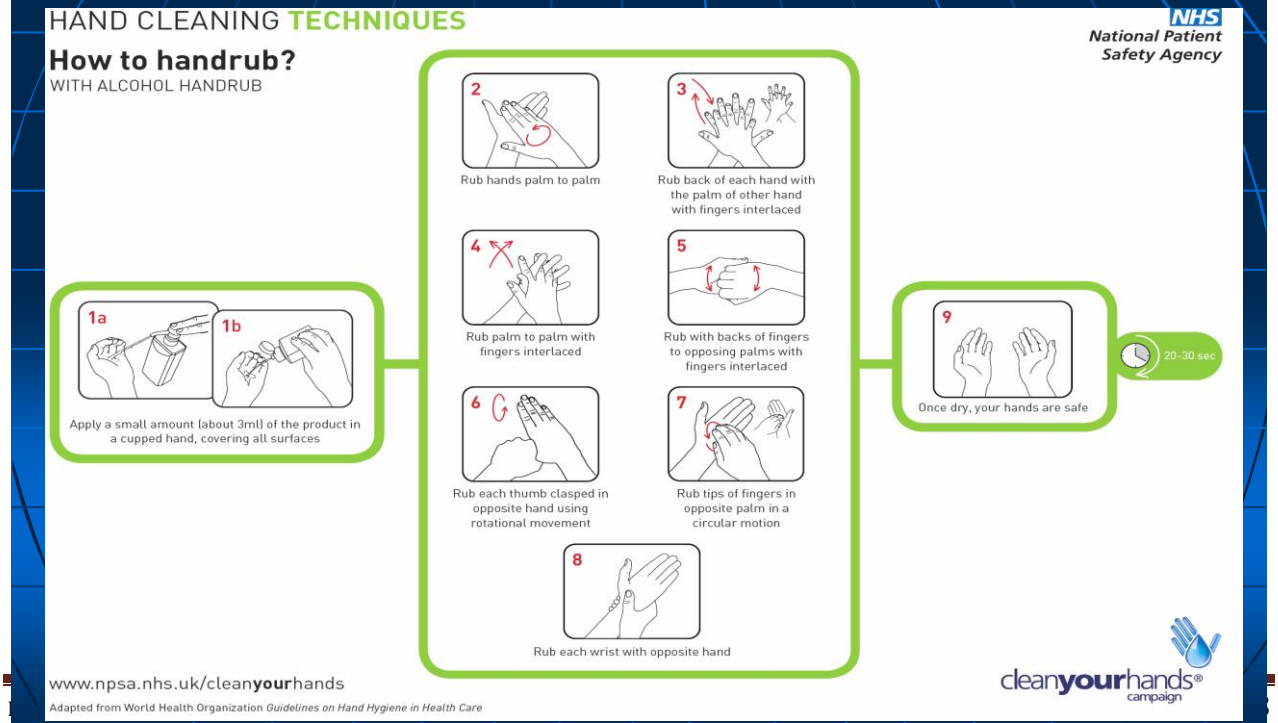


From the World Health Organisation (WHO)'s "guidelines on hand hygiene"

Technique for hand washing



Technique for applying gel



Gloves and Hand Hygiene

When to Wear Gloves!

- If you are likely to come across any blood or body fluid you should wear gloves.
- You should put gloves onto decontaminated hands immediately before the procedure requiring their use and you should remove them immediately after the procedure.
- You must then decontaminate your hands before touching anything else.

Why Wash Your Hands?

It's important to wash your hands after glove removal because:

- You can contaminate your hands while removing the gloves
- Some gloves leak and hands can become contaminated as a result
- The substances that cause latex allergy will be removed.

Aprons

- Correct use of plastic aprons is also important in protecting yourself and preventing cross infection.
- Aprons are single use and must be changed between patients.
- You must use an apron to protect your uniform and clothing from body fluids and micro organisms.
- You can easily change an apron but you are unlikely to have a change of uniform or clothes available.
- Your apron will also protect patients from any micro organisms you may have picked up on your uniform.
- Use an apron when:
    - there is a risk that your uniform or clothes may be contaminated with blood or body fluids
    - your uniform is in close contact with patients or patient care equipment

Positive Patient Identification

Between February 2006 and January 2007 the National Patient Safety Agency (NPSA) received nearly 25,000 reports of patients being mismatched to their care. Ensuring that patients receive the right care is essential if their treatment successful and timely, it also reduces the risk that a patient will be harmed as a result of receiving the wrong treatment.

To positively identify a patient, staff should check the patient for 3 identifiers:

- Full name (First name and surname)
- Date of birth;
- Hospital number

For staff working in the community the address would need to be checked and for residential homes it would be important to check the patient's identity verbally and with the residential home staff.

Gathering your equipment

- Catheterisation pack (inc. gloves) or sterile dressing pack
- Catheter
- Anaesthetic, antiseptic, lubricating gel
- Normal saline for cleansing meatus or soap and water if in patient's home
- Sanicloth for cleansing tear strip on saline sachet, if using.
- Water for injections for balloon inflation (if not using pre-filled catheter)
- Catheter leg bag and straps
- Catheter bag hanger or stand

Possible complications

Complication	Action	Notes
Infection	Strict Aseptic no touch Technique, use of anaesthetic, antiseptic, lubricating gel.	Very high risk. Increases morbidity rate by a factor of 3
Length of hospital stay increased	Avoid catheterisation if possible	Trial without catheter may or may not successful
Trauma	Use smallest catheter, lubrication and gentle technique	
Pain on insertion	Stop. Seek medical advice or advice of senior nurse	May be underlying physiological reason as to why this occurs.
Resistance on insertion	Increase penile traction, ask patient to strain or cough.	
Pain on inflating the balloon	Stop. Seek medical advice or advice from senior nurse	The balloon may not be in free fluid space so needs to be re-positioned.
Strictures	Do not force, seek medical advice or advice from senior nurse	
Detrusor muscle spasm	Stop. Seek medical advice or advice from senior nurse If spasms become problematic, consider prescribing of anti-cholinergic drugs e.g. oxybutinin	Reacts to the foreign body. Can prevent flow or cause by-passing
Bleeding	Seek immediate medical advice or advice of senior nurse	Catheterisation may not have caused this but any bleeding needs investigating.
Erection	Stop. Allow the patient to rest, delay the procedure.	Not usually a sexual response. Simply in response to touch.

Insertion procedure

▪ Gain permission to proceed from medical staff if an inpatient or discuss with GP/Senior Nurse if in the Community
▪ Positively identify your patient ▪ Gain patient's consent
▪ Asks patient to wash their genital area if able or assist if unable
▪ Wash hands
▪ Opens catheter pack and lay out contents
▪ Apply sterile gloves
▪ Position sterile towel in place over legs and lap area
▪ Pull back foreskin (if not circumcised) and clean with normal saline (if using)
▪ Expel small amount of gel for lubrication of catheter tip, onto sterile field
▪ Hold penis at 90 degrees and slowly insert anaesthetic, antiseptic lubricating gel explaining that it might sting / be cold
▪ If the patient is able ask them to hold the penis at 90 degrees to the body for 4 minutes, if patient unable, assist.
▪ Remove gloves and wash hands or apply alcohol gel
▪ Apply clean sterile gloves
▪ Insert catheter almost to bifurcation
▪ Wait for urine flow to start
▪ Inflate balloon with 10mls sterile water (stop if pain present)
▪ Gently pull back catheter until slight resistance is felt
▪ Connect bag using non-touch technique without pulling on catheter
▪ Pull foreskin forward (if not circumcised) into usual position
▪ Clean off any excess gel

- Dispose of waste into appropriate bag or bin. Restore environment.
- Document in patient's notes and Catheter care record

Please note that if you are inserting a male urinary catheter at a patient's home, only drain off

1 litre at a time as draining more can cause shock and collapse to the patient

Documentation

Document in nursing notes:

- Consent from patient
- Record discussion with senior nurse, doctor or GP
- Date, time and reason inserted
- Type, size, batch number and manufacturer of catheter
- Type, volume and expiry date of lubricant
- Lubricant should be prescribed for the patient or if using a Patient Group Directive, this should be stated
- Amount used for balloon inflation
- Amount drained, including colour and clarity
- Date for latest removal of catheter

Document on the patient's catheter care record:

Patient's catheter care record

Great Western Hospitals NHS
NHS Foundation Trust

URINARY CATHETER CARE RECORD

Aim: To reduce the incidence of urinary tract infections related to indwelling urethral catheters (DH 2007)

Place catheter insertion sticker here or document:	Circle Insertion reason:	Name:
Date of insertion: / /	Acute Retention / Chronic Retention / Trauma	Hospital Number:
Circle type of catheter: short term / long term/ suprapubic	Peri-operative / Monitor Output / Replacement	Date of Birth:
Size of catheter: ..... ch	Other - please state:	Ward:
Residual volume: ..... mls		

Increasing risk of catheter associated UTI

This Care Record must be completed once every 24 hours (preferred time determined by nurse manager)

	Date	Time (24 hour clock)	Check catheter still required	Catheter hygiene (soap & water)	Aseptic sampling Y / N / NA	Correct drainage bag position	Date catheter bag on day 1. Change on day 5-7	Change to night bag Y / N / NA	Signature	Printed Name
Day 1			Yes / No	Yes / No		Yes / No				
Day 2			Yes / No	Yes / No		Yes / No				
Day 3			Yes / No	Yes / No		Yes / No				
Please assess if your patient still requires a urinary catheter								Always challenge the need for catheterisation and catheter usage (DH 2007)		
Day 4			Yes / No	Yes / No		Yes / No				
Day 5			Yes / No	Yes / No		Yes / No	Yes / No			
Day 6			Yes / No	Yes / No		Yes / No	Yes / No			
Day 7			Yes / No	Yes / No		Yes / No	Yes / No			

At Day 7: If catheter still in situ discuss clinical reason with medical staff and document plan for removal.	Reason for continued need:
Nurse / Doctor signature: **Print Name:** **Date:** **Time:**	**Date removed:** Comment:

Does the patient have signs of a catheter-associated UTI? CAUTI must be at least two of the following criteria:	Pyrexia > 38°C or chills	New flank or suprapubic pain or tenderness	Change in character of urine	Worsening of mental or functional status	If so, see 'Action Box' on reverse

Great Western Hospitals NHS
NHS Foundation Trust

URINARY CATHETER CARE BUNDLE

CAUTI Action Plan: If patient is suspect of having a CAUTI please:	1. Perform urinalysis (from sample port) using ANTT technique. 2. Send catheter specimen of urine to microbiology, stating the UTI clinical symptoms (eg pyrexial, burning pain etc.) 3. Inform Doctor so that antibiotics can be prescribed (make sure you take the sample prior to commencement of antibiotics). 4. Remove catheter if no longer clinically required. If catheter is due for change then the replacement will require antibiotic therapy cover. 5. Explain to patient and or next of kin your findings and proposed treatment.

Catheter Insertion Actions	Catheter Ongoing Care
Catheter needed? Avoid if possible. • Explain and discuss procedure with patient. • Obtain verbal consent & document.	**Personal protective equipment.** • Gloves and aprons are single-use items and should be removed and discarded immediately after the care activity. • Eye/face protection is indicated if there is a risk of splashing with blood or body fluids.
Catheter selection. • Select the smallest possible size - be gender specific ○ **Female 10-12ch and Male 12-14ch** • Short-term catheters : Latex (PTFE) catheters last up to 28 days. • Long-term catheters : Silicone-coated catheters last up to 12 weeks.	**Hand hygiene.** • Decontaminate hands before and after each patient contact. • Use correct hand hygiene procedure.
Hand hygiene. • Decontaminate hands before and after each patient contact. • Use correct hand hygiene procedure.	**Catheter hygiene.** • Clean catheter site daily with soap and water. • If the catheter bag becomes disconnected, replace with a new bag.
Clean the urethral meatus. • Prior to insertion of catheter • With sterile normal saline • Use sterile anaesthetic lubricating jelly	**Sampling.** • Monitor and observe urine for signs of infection. • Perform sampling aseptically via the designated needle-free catheter port.
Aseptic technique. • Apron, gloves and sterile dressing pack should be used for insertion of invasive devices.	**Drainage bag position.** • To prevent contamination, the drainage bag should be above floor level, with the tap tucked up. • To prevent reflux, the drainage bag should be below the level of the bladder and emptied when half full.
Select and maintain a sterile, closed drainage system. • Consider leg bag (plus night bag) combination to optimise patient mobility. • Consider flip-flo catheter valve to mimic normal bladder filling / emptying cycle, unless medically contra-indicated.	**Catheter manipulation.** • Examination gloves should be worn to manipulate a catheter, and manipulation should be preceded and followed by hand decontamination.
Patient education. • Educate patient/carers re catheter care; ensure they know why they have been catheterised. • Encourage adequate fluid intake unless medically contra-indicated.	**Catheter needed?** • Discuss plan for continued use of catheter with medical team • Agree criteria for its removal and remove as soon as possible.

References: DH (2007) Saving Lives: reducing infection, delivering clean and safe care. High Impact Intervention No 6 Urinary catheter care bundle, www.clean-safe-care.nhs.uk

Ongoing Catheter care

1. Hand Hygiene

Hands are decontaminated immediately before and after each episode of patient contact using the correct technique for Hand Hygiene (WHO 5 Moments and NPSA 'Clean your hands Campaign)

2. Catheter Hygiene

Catheter site cleaned twice a day with soap and water
Catheter is emptied twice a day into a clean container
Educating patient about good catheter hygiene is essential. For patient's at home include teaching of self care including changing leg bags, flipflo and frequency, to patient and /or carer and to not wash through night bags and reuse

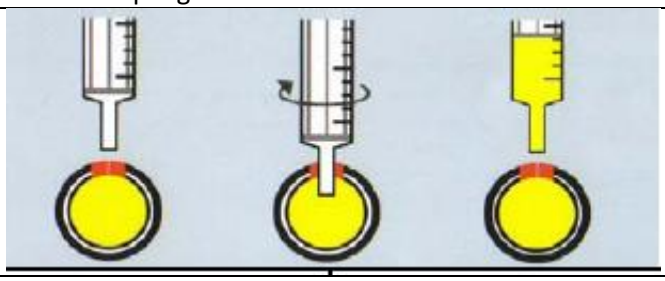
3. Sampling

All sampling is taken via the Catheter sampling port using aseptic non touch technique.

Procedure for collection of a Catheter Stream of Urine (C.S.U.)

Equipment :

Disposable gloves and apron
Sterile 5 ml syringe
Swab impregnated with 70% isopropyl alcohol and 2 % Chlorohexidine
Sterile urinary collection bottle
Microbiology request

Procedure	Rationale
Wash hands with soap and water, before and after collection of specimen	Prevent cross infection
Wear disposable gloves and apron	Standard universal precautions
Inform the patient of the procedure and why the specimen needs to be taken.	To gain informed consent
Swab the Needle free sampling port with the impregnated swab, wait until area is dry.	To minimise the risk of introducing microbes into the closed catheter system
Insert luer slip 5 ml syringe into bung on sampling port. Turn syringe clockwise in place. Slowly draw out required amount of urine.	Always check manufacturer's instructions to identify type of sampling port
Remove syringe from sample port and decant into sterile sampling bottle	Avoid contamination of urine sample through external sources
	
Dispose of syringe in clinical waste bin. Swab the sample port with alcohol swab, wash hands and make patient comfortable	Standard universal precautions
Label the specimen container and ensure the microbiology request is completed correctly at the patient side. Document the procedure. Follow up and document results and discuss with senior staff or medical team	Record what tests have been requested Optimise patient treatment and care to avoid repetition

1. Drainage bag

Above floor but below bladder level to prevent reflux or contamination.
Closed drainage system intact or only disconnected as per manufacturer's instructions

2. Catheter Manipulation

Non-sterile gloves worn when manipulating a catheter, decontaminate hands pre and post procedure

3. Catheter needed

Review need for catheter in line with Catheter Care Record
If the catheter is no longer needed, document the reason why along with date and time of removal and name and signature of staff member

Bibliography

- Royal Marsden Manual of clinical nursing procedures (8th edition)(2011)
- Trust Policy -Framework for Enhancing the Scope of Professional Practice
- Infection control policies
- Record keeping guidelines
- Mental Capacity Act (2005 & 2010)
- Epic3 guidelines (2014)
- Consent Policy (2007)
- Nursing and Midwifery Council (NMC) – Guidelines for records and record keeping (2008)
- Nursing and Midwifery Council (NMC) – The code: Standards of conduct, standards and ethic for nurses and midwives (2008)
- Department of Health (DOH) DOH Website www.doh.gov.uk
- Skills for Health - www.skillsforhealth.org.uk
- Royal College of Nursing (2012) Catheter Care : RCN guidance for Nursing