Session Contents

- *Patient Assessment*
- *Catheter Selection*
- *Catheter drainage & securement devices*

Patient Assessment

Individual Patient Assessment

- Have all other methods of managing symptoms been exhausted
- Have underlying causes of bladder symptoms or incomplete emptying been Identified & treated
- History – are there any factors which will increase patients' risks associated with catheterisation
- Allergies - latex, chlorhexidine, lidocaine, products used for cleansing, adhesives
- Any previous catheter history - difficult catheterisation, complications associated with catheterisation eg infection, frequent blockages, expulsion or pain

Potential impact on the patient of catheterisation:

- Can they manage the catheter independently
- Sexuality and body image

Catheter Selection

Catheters are Medical Devices and as such HCP must have a clear understanding of the benefits and disadvantages of catheter equipment and must be familiar with the types of catheters and equipment available (RCN 2019)

Intermittent Self Catheterisation

I.S.C should always be considered the first option (EPIC 2014, NICE 2010, NICE 2015)

Maintains bladder function allowing the bladder to fill and empty

Able to monitor bladder function more readily

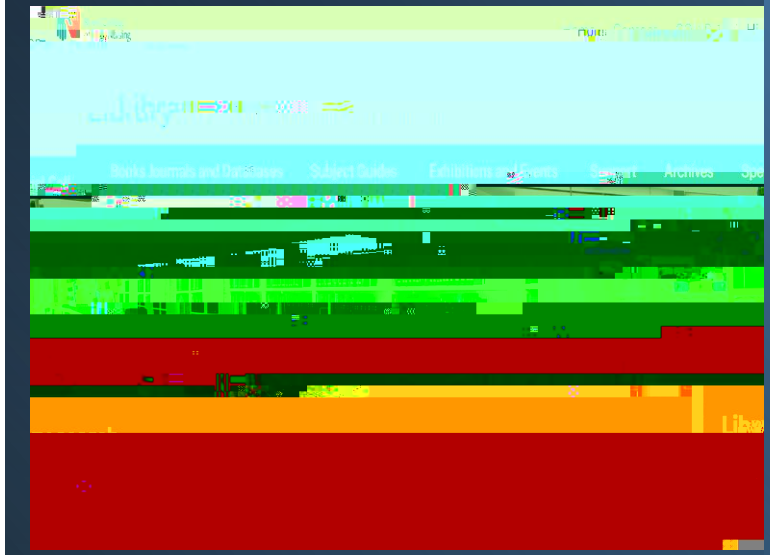
Reduced incidence of UTI (Hunt et al, 1984; Wydaele, 1988)

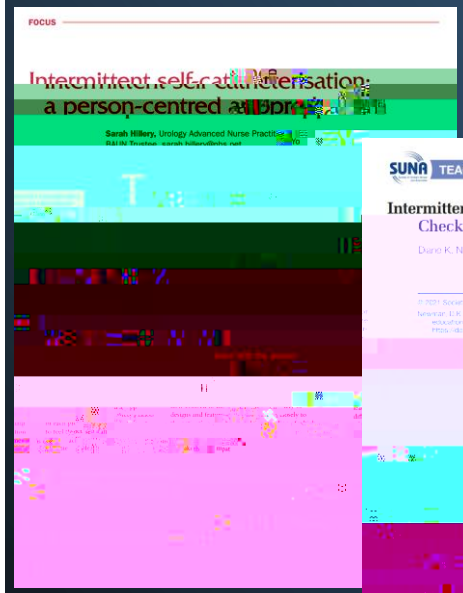
Maintains sexual function

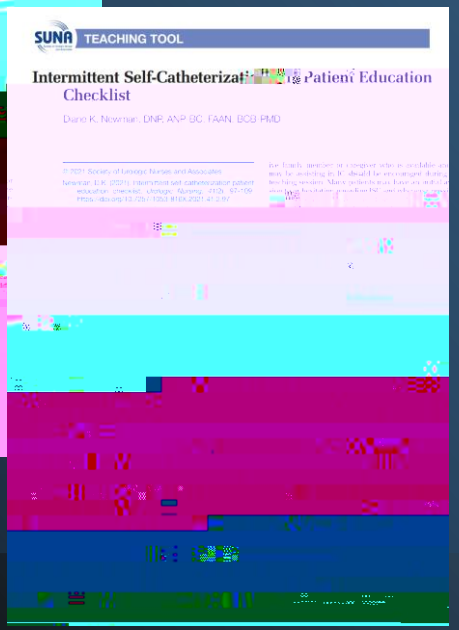
Enables patient to self manage

Patients should be given a choice of Cath

Potentially requires motivation and a degree of dexterity.







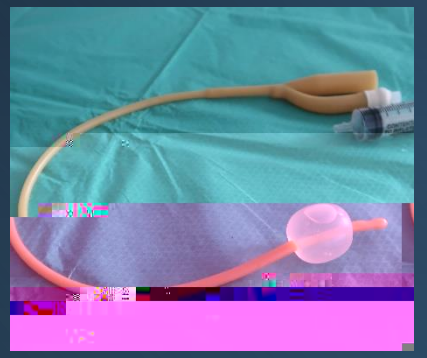
RCN Library offers access to a range of articles for further reading

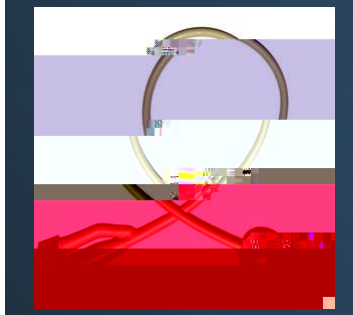
Indwelling Catheters

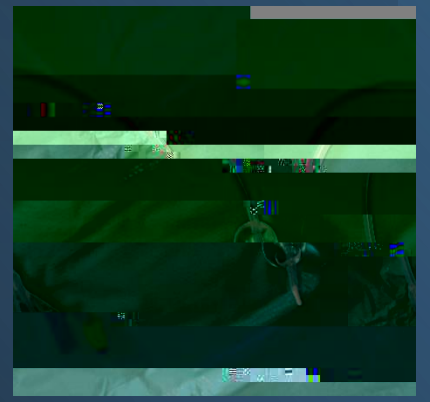
The choice of indwelling catheters should be based upon the purpose and duration of catheterisation
(Loveday et al 2014)

PVC, PTFE coated catheters (Polytetrafluorethylene)

Hydrogel coated latex
100% silicone
Hydrogel coated silicone







Tip Types

3 Way Catheters

There is a risk of harm from wrong connection of bladder irrigation to an incorrect port on a 3 way catheter.

If irrigation fluids or spigots are attached to the wrong port, the patient is at risk from the bladder being over-distended /and the bladder being unable to drain safely

Catheter Size

System of measurement to express catheter diameter is the Charriere (ch) or French Gauge (fg)

The correct size is the smallest size possible to ensure adequate drainage

Drainage Bags

Available in variety of sizes

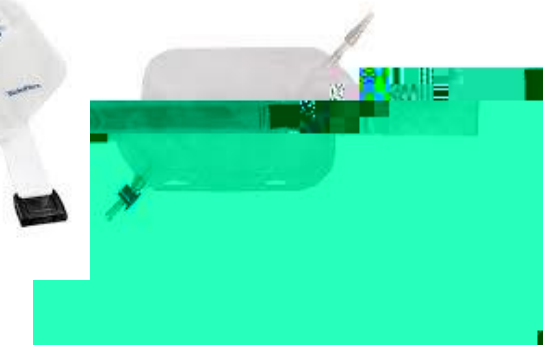
Factors to consider:

Tube length

Capacity required

Tap - Ease of Opening & Closing

Catheter Valve



Securement Devices

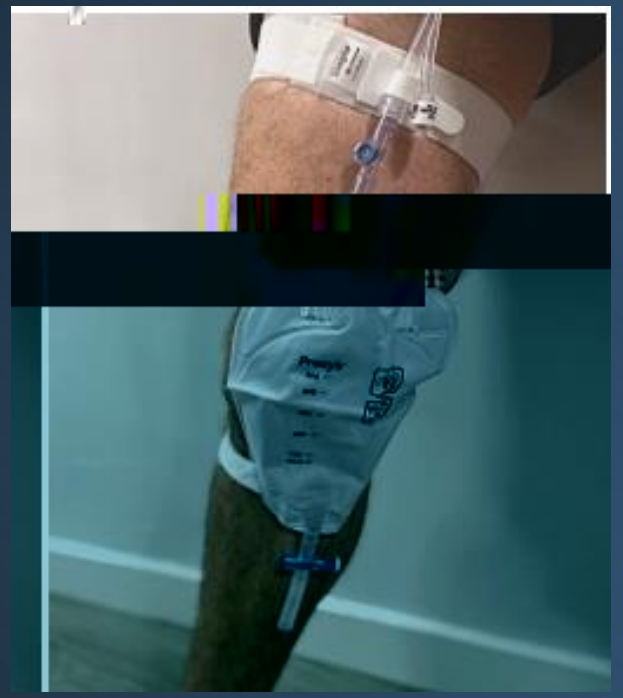
Catheters should be well secured to reduce trauma

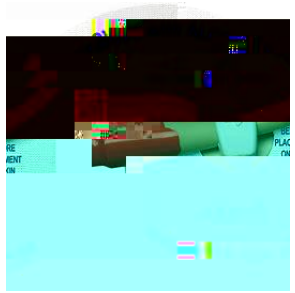
Leg bag Straps alone are not sufficient to secure the catheter

Prevent excessive traction and movement of the catheter

Decrease risk of obstruction of urine flow (Lo et al 2014)

Always ensure the catheter is not placed under the thigh as this will obstruct urine flow





Catheter Insertion and Care

The main routes for bacteria are via the tip of the catheter on insertion, intraluminal, extraluminal, connection between the

Hand Hygiene & Standard Precautions

Cornerstone of preventing Infections

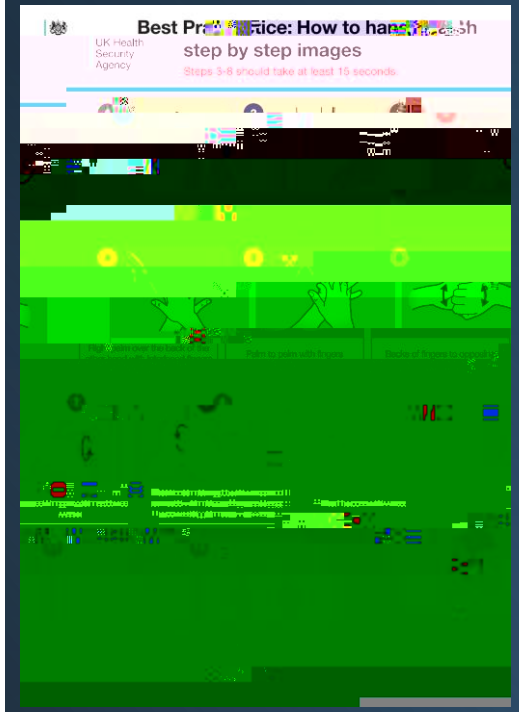
Hand hygiene performed before & after any contact with the catheter *(IPC 2023, NICE 2012)*

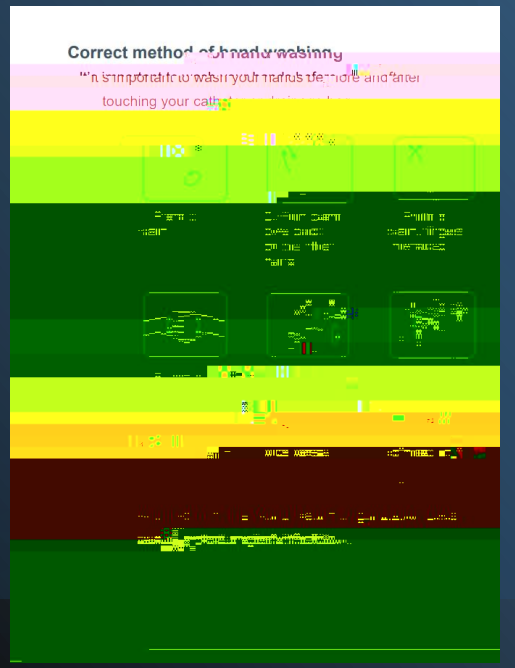
Apron & gloves should be worn when performing any catheter care

Use of gloves is not a replacement for hand hygiene

Patients & family should also be educated in the importance of hand hygiene *(NICE 2012)*

National Infection Prevention and Control Manual (2023) offers best practice guide to hand washing.
NHS England Catheter Passport contains a guide to handwashing for patients and carers



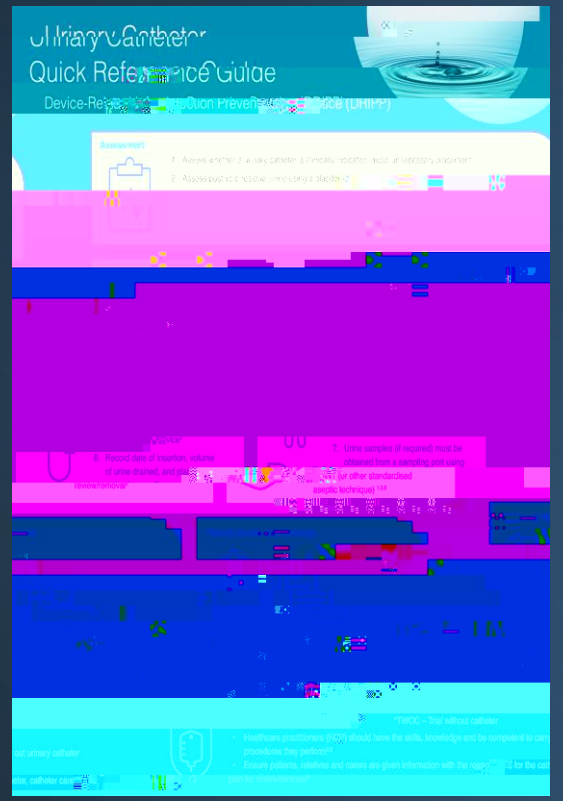


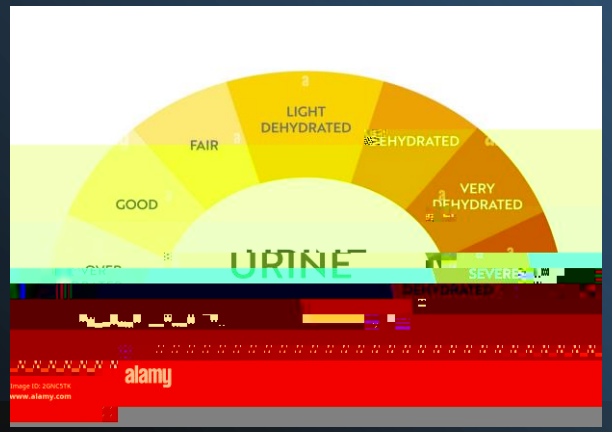
Emptying the Drainage Bag

Royal College of Nursing
Bladder and Bowel Forum

- *Hand Hygiene before & after emptying the bag* *(NICE 2014, Loveday et al 2014, IPS 2017)*
- *Single Use non-sterile gloves and Apron*
- *Empty frequently enough to maintain urine flow* *(NICE 2014)*
- *Don't allow the bag to become too full (2/3 full)* *(NICE 2014, Loveday et al 2014, IPS 2017)*
- *Clean the tap before & after opening in accordance with local policy* *(IPC 2023)*
- *Avoid contact between the tap and jug when emptying* *(NICE 2014)*
- *Use a Separate, clean container for each patient* *(NICE 2014)*
- *Monitor urine concentration/output - if any concerns escalate*

DRIPP Quick Reference guide (Device Related Infection Prevention Practice) Evidence based quick reference guide to catheter care





Changing the Drainage Bag

Royal College of Nursing
Bladder and Bowel Forum

A record should be kept of date of next bag change

Most drainage bags are licensed for use for up to 7 days

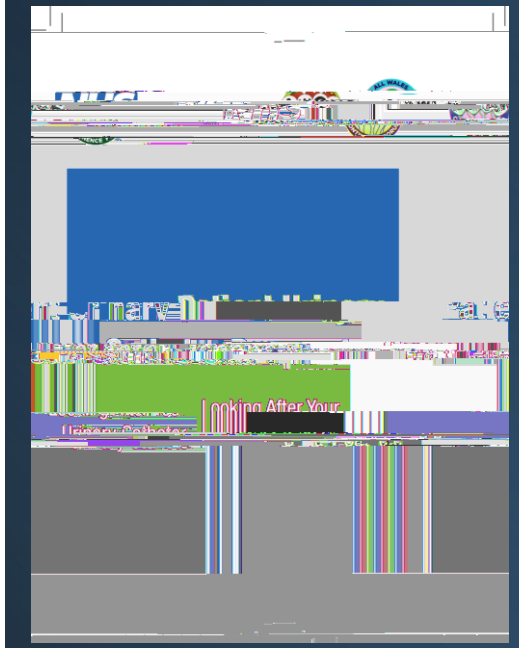
Hand Hygiene before & after

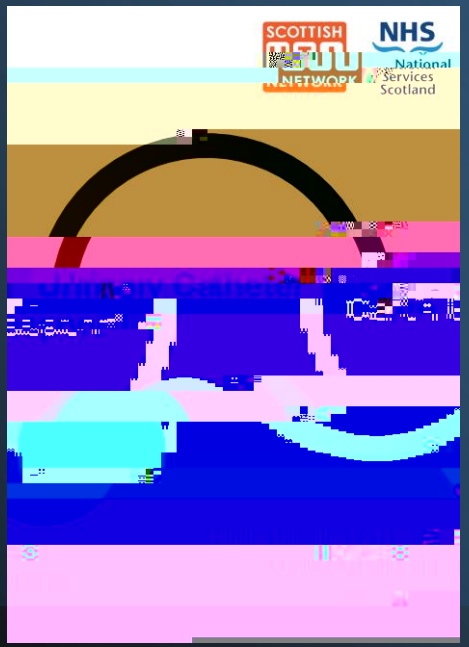
Royal College of Nursing
Bladder and Bowel Forum

Encourage adequate hydration –

The highest risk factor for CAUTI is duration of catheterisation

Patient Education





Documentation

Catheter Insertion

Brand, catheter name, material, tip type, catheter length, Charrière size, balloon size, batch number, expiry date (usually found on a sticker on the catheter packaging)

Lubricant/anaesthetic gel used

The reason for catheterisation, change & ongoing need for catheterisation

That the patient understands the process and verbally consents.

Where the individual lacks capacity, the reasons why it was in the persons best interests must be recorded.

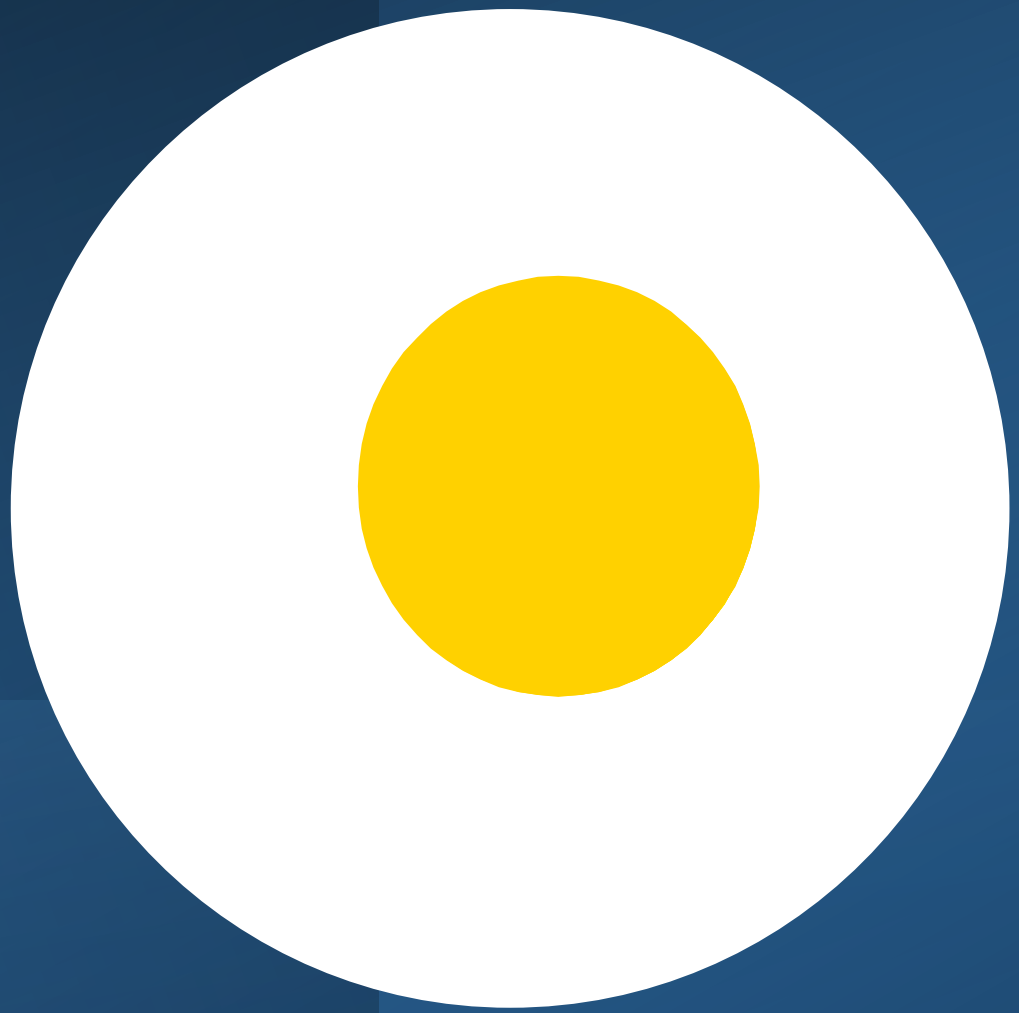
Meatal or genital abnormalities observed.

If the insertion was easy or difficult

Steps taken to overcome difficulties with insertion

Volume of urine drained; colour & any debris noted (RCN 2019)

Questions?



References

Association for Professionals in Infection Control and Epidemiology (2014). Guide to Preventing Catheter Associated Urinary Tract Infections. https://apic.org/guide-to-preventing-catheter-associated-urinary-tract-infections-2014

European Association of Urology Nurses (2012) Evidence-Based Guidelines for Best Practice in Urological Health care: Catheterisation

References

Newman, D. K. Intermittent Self-Catheterisation Patient Education Checklist. Urologic Nursing, Mar/Apr2021; 41(2): 97-109. 13

Symptoms of CAUTI (EAU 2022)

Fever and rigors

Altered mental status (new onset or worsening confusion/delirium)

Malaise or lethargy (in the absence of other cause)

Flank pain

Back Pain

Acute haematuria

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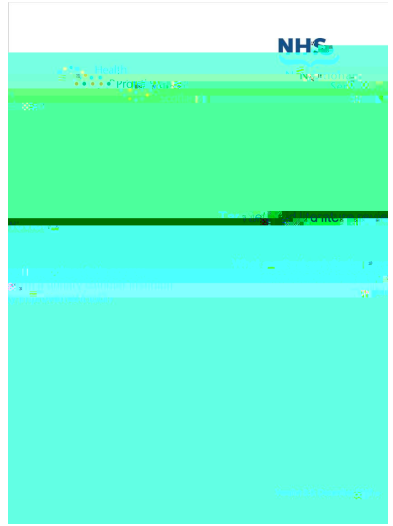
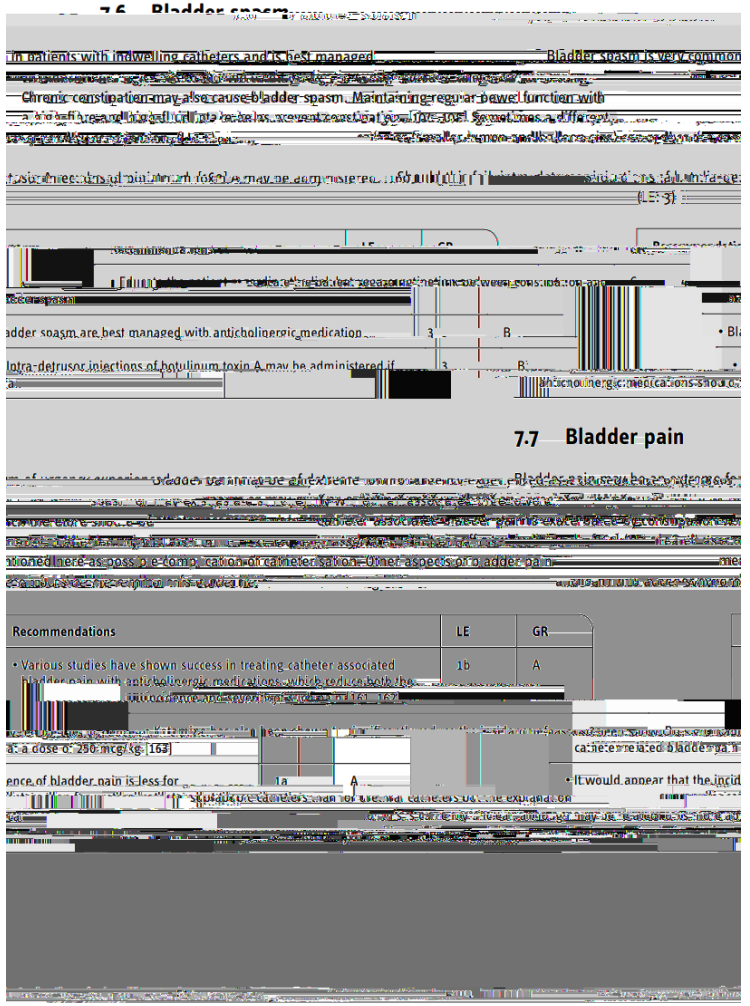
- Insertion/change of catheter
- Catheter Care
- Removal/Renewal of bags
- Emptying of bag
- Urine sampling



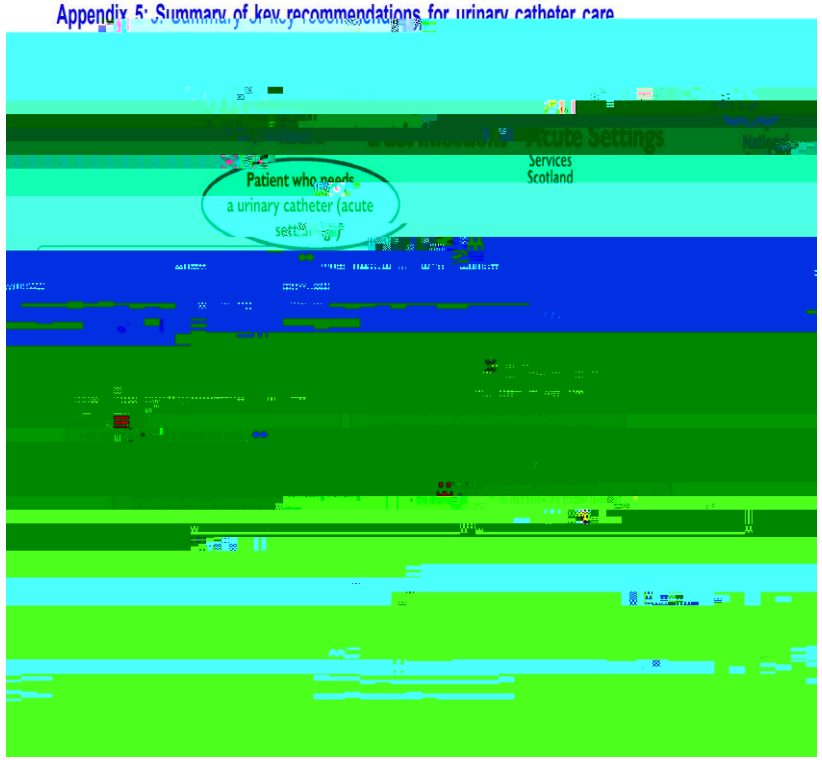
The presence of a catheter allows bacteria to adhere to its surface and multiply, leading to colonisation and the formation of a biofilm. (Barford & Coates 2008)

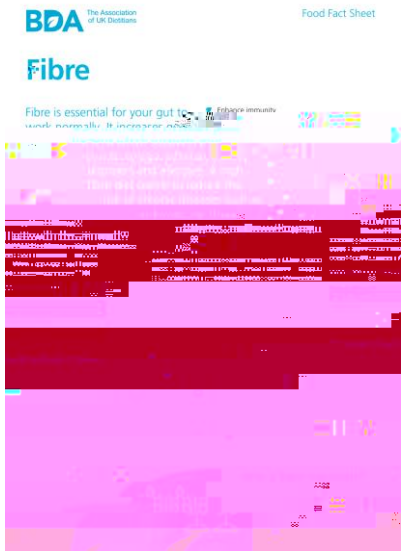
Use a separate clean container for each patient, avoid contact with the drainage tap and the container *(NICE 2014, Loveday et al 2014, HII 2017)*

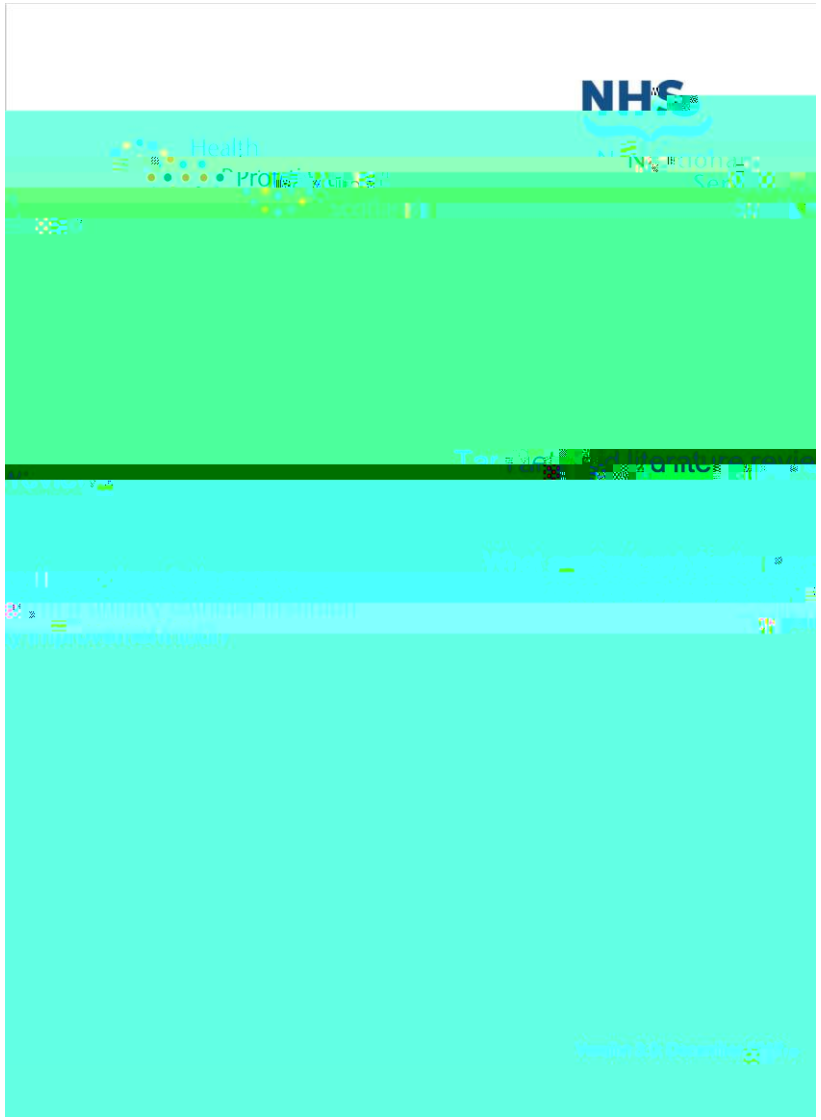
Trouble Shooting Guidelines



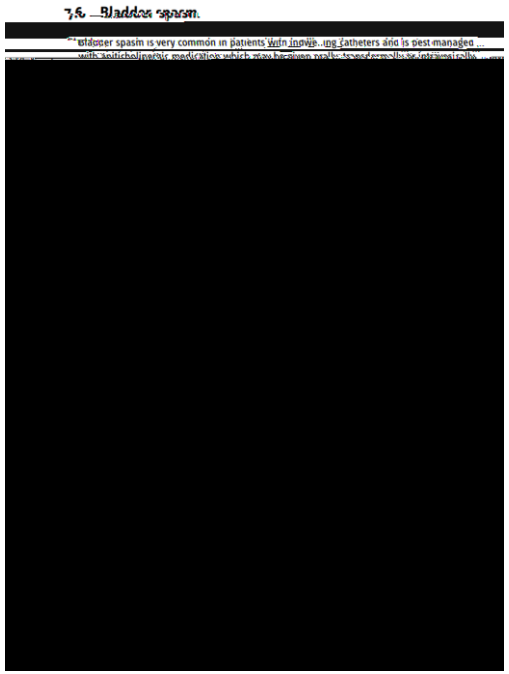
Appendix 5: Summary of key recommendations for urinary catheter care

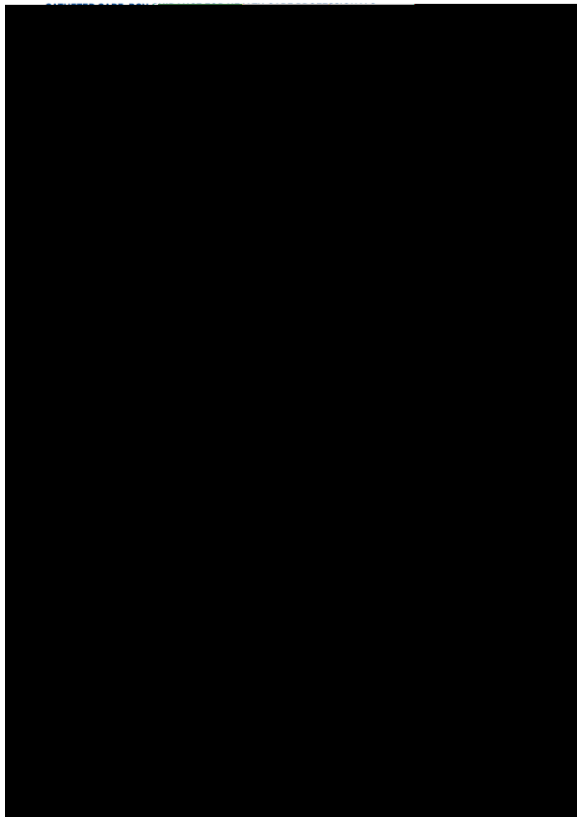
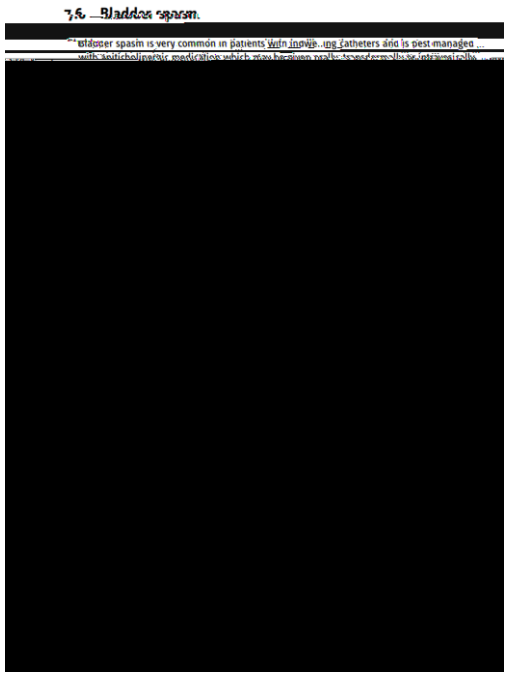
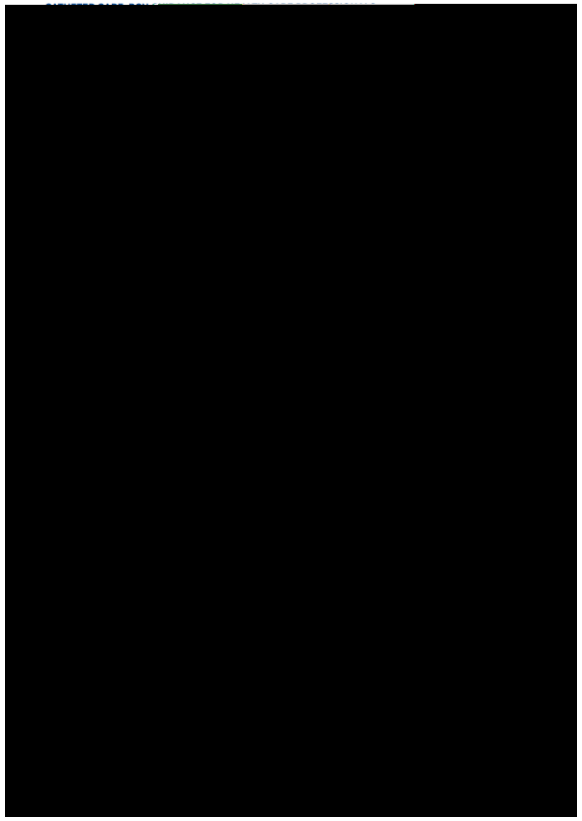






Catheter Removal





Catheter Removal