DERBYSHIRE HEALTH COMMUNITY

Derbyshire Community Health Services Foundation Trust,

Chesterfield Royal Hospital NHS Foundation Trust

Derby and Derbyshire Clinical Commissioning Group

CONTINENCE APPLIANCE PRESCRIBING GUIDELINES

HOSPITAL GUIDELINE

CONTENTS

INTRODUCTION

Prescribing for continence products is becoming an increasingly difficult and complex process given the variety of products available. This guidance aims to help in the rational prescribing of continence products to promote good clinical practice. The appliances in the guideline are ordered via NHS Supply however it is acknowledged that a patient may be provided with a FP10 prescription and therefore the prescriber will need to refer to the community prescribing guidelines.

It is expected that prescribers will preferentially use the products listed in the guidance for routine use. Product selection has been based on cost-effectiveness, evidence of efficacy (although there is little research evidence available), manufacturers literature and practical experience of use.

REVIEW AND UPDATE

Guidelines / formularies need to be regularly updated and reviewed to ensure they meet the needs of patients. The process for reviewing and updating the guidelines included:

- Incorporation of new NICE technology appraisal and recommendations
- Responding to important new evidence relevant to the guideline
- Responding promptly to important new information on medicines safety, such as serious adverse effects
- Reviewing and updating associated decision outputs
- Ensuring timely evaluation of requests to review and reconsider the evidence
- Establishing a rolling schedule of structured guideline review

The guidelines have been updated and were previously developed by health professionals from primary and secondary care. Consideration for new products to be included within the guideline has been supported by the implementation of representative meetings which have been scheduled every quarter. The patient experience and use of the products have been considered when undertaking the review and update of this guideline. A decision - making working group identified specific products to be included in the guideline.

PRESCRIPTIONS FOR APPLIANCES

Prescriptions for appliances should be issued at the request of the patient or their carer and will not be issued if requested from a third party. Repeat requests should not be accepted from a dispensing appliance contractor; there can be significant problems related to appliance contractors ordering prescriptions on behalf of patients, such as over-ordering quantities or ordering too early, which can lead to considerable wastage. The dispensing contractor must receive the prescription prior to the delivery of items.

Prescriptions should not be issued *retrospectively* for Dispensing Appliance Contractor (DAC)

If organisations have a manufacturing sponsored nurse they should ensure that the specialist nurse is not required to recommend the sponsor's products in preference to other clinically appropriate appliances, or withhold information about other products. Furthermore, the arrangement should not require that patients are recommended to use a particular dispensing service.
Continence appliances are usually provided to patients by a prescription written by their GP or a nurse prescriber, which can then be dispensed by either:

- A Dispensing Appliance Contractor (DAC)
- A community pharmacy contractor
- A dispensing doctor

PRESCRIBING POINTS When prescribing:

- Include full details of product required to ensure the correct size, type, quantity and length (Standard or Female for catheters)
- The brand and manufacturer should be stated to ensure continuity of supply.
- DO NOT prescribe generically because of the differences between individual products
- Avoid the term 'original pack' (OP). Pack sizes differ between products and patients may receive inappropriate amounts if the quantity is not stated. The Drug Tariff (Part IXA for urethral catheters and IXB for other continence appliances) outlines the pack size available for different products.
- When new products are being tried, the smallest amount required should be prescribed to minimise wastage.

Choosing an appropriate continence product depends upon a variety of factors:

- Accurate assessment and diagnosis
- The evidence base for the effectiveness of products
- Patient choice
- The history and effect of previously used products
- Prescribers' awareness of which products are available

It should be remembered that the use of any continence appliance may significantly affect the person who has to use them (and their carers) psychologically, physically, socially and sexually. These issues should always be considered whenever a continence product is prescribed.

Assessment and diagnosis

Accurate assessment of patients with a bladder/bowel problem is vital to maximise the potential for cure or alleviation. Diagnosis must be established wherever possible, as the effective management of the bladder/bowel problem depends on the cause.1 If a diagnosis cannot be made, referral to a specialist may be appropriate.

Evidence base for products

Although there is some good evidence available on strategies for treating bladder and bowel problems, research around the appropriate use of continence products is limited and is often of poor quality. Many studies involve small numbers of patients and there are few randomised controlled trials. All nurses involved in continence care should have up to date knowledge of products available and their relative merits. The key message from these studies is that no single product suits all patients

Product use history

A full continence product history should be taken from the patient as well as details of the patient's experience with particular devices. Patient-held product records may assist continuity and increase patient involvement. Any history of allergies to products such as latex or chlorhexidine should be determined and documented, as potential allergens are often used in continence products.

Patient choice

Enabling the patient to make an informed choice when selecting products is important[2]. The choice of continence products are determined by clinical assessment and are guided by the continence prescribing guideline in the majority of cases. It is recognised that a small number of patients may need items that are not included in the guideline which may be prescribed or purchased by the patient if the product is not available on FP10. Patients' and carers' views or needs may change with experience; therefore, a regular review of product's acceptability is essential.

How are continence products regulated?

All continence products within this guidance are classified as medical devices and are regulated by the Medicines and Healthcare Regulatory Agency (MHRA). www.mhra.gov.uk. The MHRA should be informed of minor faults and discrepancies between products as per Trust Policy for Medical Devices. Anyone may report adverse incidents using the yellow card system, including patients, carers, or any healthcare professionals. The forms can be found in the BNF or can be downloaded / completed online from the MHRA website www.mhra.gov.uk/yellowcard

INDWELLING FOLEY CATHETERS

The NHS Safety Thermometer is a local improvement tool used by secondary care for measuring, monitoring and analysing harms and 'harm free' care. Catheter associated urinary tract infections (CAUTI) has been identified as one of the four harms in the NHS and it is a national requirement to record information about how many patients in your care with a urinary catheter insitu (excluding supra pubic) and how many have a CAUTI and urinary tract infection (old and new)[3].

Derbyshire Community Health Services no longer complete the Safety Thermometer but it is a requirement that all CAUTI that have developed whilst within DCHS care are reported as an incident via the DATIX system. Careful patient assessment is essential before deciding to catheterise and alternative management options (Intermittent Self Catheterisation ISC) should be considered first in view of the complications associated with long term catheterisations[4,5]. Insertion of urinary catheters is a high impact intervention and nursing staff have the potential to significantly reduce infection rates[6]. The presence of a urinary catheter and the duration of its insertion are contributory factors to development of a urinary tract infection. Some 60% of healthcare associated urinary tract infections are solely related to catheter insertion[7] and between 2-7% of patients acquires bacteriuria with every day of catheterisation. The longer the catheter is left in place the greater the likelihood of infection[8]. All interventions relating to urinary catheterisation and continuing catheter care must minimise the risk of infection and prevent complications so as to maintain the comfort and well-being of the individual receiving the care[7.8].

The management of individuals requiring an indwelling catheter system includes obtaining consent, appropriate selection of equipment, aseptic non-touch technique (ANTT) for catheter insertion, appropriate drainage systems and its maintenance, continuing care and daily review of its necessity with prompt removal of the catheter[9]. The Chesterfield Royal Hospital have implemented the HOUDINI catheter removal protocol which ensures the timely removal of the catheter if it is not clinically indicated. In the community setting, urinary retention, the promotion of wound healing in patients with sacral sores and use in end of life care are considered the clinical indications for insertion of indwelling catheter. Catheters should never be used for the management of incontinence.

NHS improvement have developed a suite of catheter tools to use within the hospital setting including a catheter care plan, a STOP CAUTI poster, patient cauti card and a national patient catheter passport. It is envisaged that patients within the hospital setting will have access to the same appliances as recommended in the community guidelines which will help to standardise catheter care.
https://improvement.nhs.uk/resources/urinary-catheter-tools/

Best practice recommendations - the key messages:

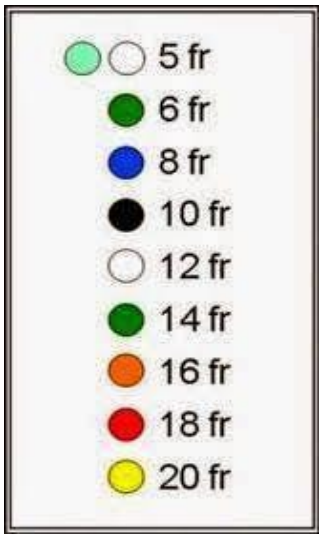
- The clinical indication for catheterisation **MUST** be documented[10]
- Always check what type of catheter has been inserted. A PTFE catheter is a 28 day catheter- the make, material, size and intended length of use are printed on the catheter funnel
- Use of a 5ml - 10ml balloon helps to minimise the risk of infection, irritation, spasm, ulceration and

stricture formation[11]

- Smaller catheters minimise urethral trauma and improve patient comfort.
  Make sure you select the correct length catheter - female or standard (see rapid response report in appendix)
- For male patients use a standard length, size 12Ch or 14Ch. For female patients use a female length, size 12Ch but standard length can be used if the patient finds this more comfortable
- To avoid problems such as bypassing, the smallest Charriere size which provides adequate drainage should be used, however a larger size is sometimes advised in urological patients
- For supra-pubic catheters use a standard length – no less than a size 16 Ch. The catheters in this guideline are licensed for both urethral and supra-pubic use.
- An all-silicone catheter should be considered as a first line choice due to the increase in latex allergy[12]
- Episodes of catheter blockage must be documented[10]. A catheter history for each patient should be developed using the appropriate tool in an attempt to prolong the length of catheter life before potential blockage. Once this is determined, the catheter should be changed before blockage is expected.
- The use of a sterile lubricating / anaesthetic gel is advocated for both male and female catheter insertions. A 6ml syringe is adequate for females and 11ml syringe for males. The catheter lubricating gel in the guidelines contains lidocaine and is chlorhexidine free. This is a new product for the guideline and was selected as severe allergic reactions to chlorhexidine have been reported
- Patients should be provided with a spare catheter in case of blockage.
- Patients requiring a long term catheter should be provided with a NHS Patient Catheter Passport and training / instruction with regards managing their own catheter.
- Patients should be provided with a hospital to home pack when discharged from a hospital setting and a completed referral to the community teams

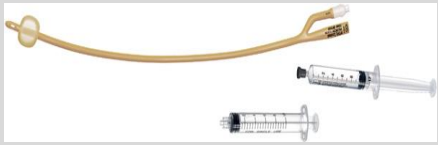
Universal colour coding for catheter sizes

There is a universal colour coding on the funnel of all catheters (nelaton and foley) which denotes the Charriere (Ch) or French gauge (Fr). The catheter brand and size of balloon is printed on the funnel. http://www.google.com/url?sa=i&rct=j&q=&esrc=s&source=images&cd=&ved=2ahUKEwjjyb-z0MHiAhVfBWMBHaS6DUwQjRx6BAgBEAU&url=http://www.mymedic.com.my/index.php?id_product%3D78%26controller%3Dproduct&psig=AOvVaw262ajKpnloWWVqrPMGeZNP&ust=1559249818010581



Foley catheters short / medium-term use (up to 28 days)

Generally inappropriate for use in primary care unless patients experience recurrent blockage necessitating frequent changes (more than 12 per year). If this type of catheter is used it must be clearly documented. When patients are discharged from an acute hospital to a community setting, it is important to check what type of catheter they have inserted, when it was inserted and why it was inserted.

Company and product	Standard / Male		Female		Comment /expected use
	Product Code	Cost	Product Code	Cost	
TELEFLEX MEDICAL Rusch PTFE Aquaflate Box of 5	FSS134 12 FSS136 14 FSS137 16 FSS138 18 FSS139 20 FSS140 22	£4.08 £4.98 £4.98 £4.98 £1.00 £1.00	FSS141 12 FSS142 14 FSS143 16 FSS144 18 FSS145 20 FSS146 22	£4.98 £4.98 £4.98 £5.12 £0.93 £0.93	For urethral and supra-pubic catheterisations 1-4 weeks average use PTFE coated latex Comes with a pre-filled syringe for balloon inflation Sizes 20 and 22 are ordered as a single unit 

Foley Catheters for Long Term Use (3 -12 weeks)

These catheters can remain in place for up to three months in many cases. The advantages will be lost by frequent changing. All catheters in the guidance are licensed for single balloon inflation only. If the patient is experiencing re occurring by-passing and problems caused by diffusion / loss of water from the balloon, please consider changing to the Sympacath aquaflate.

Company and product	Standard / Male		Female		Comment /expected use
	Product Code	Cost	Product Code	Cost	
TELEFLEX MEDICAL Rusch Brillant Aquaflate Box of 5 	FSS172 12 FSS173 14 FSS174 16 FSS176 18 FSS177 20	£9.54 £11.63 £11.63 £11.63 £2.40	FSS178 12 FSS179 14 FSS180 16 FSS181 18 FSS182 20	£9.54 £11.63 £11.63 £12.00 £2.14	For urethral and supra pubic use 3–12 weeks average use All-silicone catheter that comes with a pre-filled syringe for balloon inflation. Reported problems have been water loss from the balloon causing deflation

Company and product	Standard / Male		Female		Comment / expected use
	Product Code	Cost	Product Code	Cost	
TELEFLEX MEDICAL Rusch Sympacath Aquaflate Box of 5 	FSS150 12 FSS152 14 FSS161 16 FSS165 18 FST709 20 FST704 22	£11.76 £14.34 £14.34 £14.34 £11.70 £11.70	FSS166 12 FSS168 14 FSS169 16 FSS171 18	£14.34 £14.34 £14.34 £14.34	For urethral and supra pubic use 3 – 12 weeks average usage A hydrogel coated latex catheter and comes with a pre-filled syringe for balloon inflation

SILVER COATED CATHETERS

Silver catheters should only be used with specialist advice from the Continence Service

Basic research and development, validation and in-use evaluations have shown benefits,[14] however; this has evaluated only the short term use[15] and is not appropriate for continued use in primary care. Recent evidence suggests that the silver coated catheters may delay or prevent the onset of bacteriuria but there was insufficient evidence to indicate whether they reduce the risk of CAUTI[9,16].

Additional Items Required for Catheterisations

Sterile lubricants for catheter insertion

Optilube Active CHC is a sterile lubricant containing a local anaesthetic for the urethral mucosa. It can prevent injury to the urethra and as a consequence reduces the subsequent risk of urethral damage. Its use is advocated for catheterising both male and female patients. Single use containers also reduce infection risk. The sterile lubricant has been specifically selected for the guideline as it is chlorhexidine free and negates the risk of anaphylactic reactions.

***Medical Devices Agency (MDA) Alert 17 December 2014 warns products containing chlorhexidine have a risk of anaphylactic reaction**

In most cases the 6ml product should be used when treating females and the 11ml product when treating males. Different volumes may be used if clinically indicated. Extra caution should be exercised if using more than 11mls as the risk of side effects from the ingredients increases. It is not recommended to use more than 22mIs for a single interventions.

Company and product	Size	Product Code	Cost	Comment / expected use
OPTIMUM MEDICAL Optilube Active CHG Chlorhexidine free Box of 100 	1x 6ml 1x 11ml	**FST887** **FST888**	£83.64 £94.80	Sterile catheter lubricant gel For females For males Contains Lidnocaine 2% Takes 3-5 minutes to take effect

Company and product	Size	Code	Cost	Comment / expected use
Crest Medical LTD Blue Dot  **RICHARDSON HEALTHCARE** Softdrape Sterile wound pack Suitable for catheterisation Pack of 20	20ml pod x 25 Small Medium Large	MRB1140 **EJA045** **EJA046** **EJA047**	11p each £8.53 £8.53 £8.53	Irrigation fluid 0.9% Sodium Chloride solution for urethral cleansing prior to catheter insertion Each pack contains: 1 x sterile gloves 1 x sterile sheet 1 x waste disposal bag 1 x paper dressing towel 5 x non woven swabs

Company and product	Size	Code	Cost	Comment / expected use
OPTIMUM MEDICAL Optilube 1 pack of 150 sachets	5 gram sachets	**FTM306**	£4.27	Sterile lubricating Jelly for clinical procedures Individual patient use. 

Intermittent Self Catheterisation (ISC) - Nelaton catheters

ISC is the preferred method for managing urine retention and must be considered as an alternative to a urinary indwelling catheter. Intermittent self-catheterisation (ISC) is a well-established and accepted form of management for neuropathic bladder dysfunction and other causes of incomplete emptying[15]. It may also be used to prevent stricture reoccurrence following stricture surgery and is referred to as intermittent self-dilatation (ISD). Performing ISC protects the upper urinary tract from reflux and reduces the threat of encrustation and infection[16]. Age should not prevent ISC being considered as an option for patients as it is suggested that ISC is a safe and valuable procedure for older people with significant post void residuals.[17] Patients with manual dexterity problems may find these catheters difficult to use but there are various aids available that can facilitate easier handling.

Patients should always be encouraged to try to pass urine prior to insertion of the catheter and general points regarding the need for hygiene apply equally with this technique. Patients should be taught to avoid touching the catheter tip. How many catheters a patient uses depends on the medical reason for ISC and can range from 1-5 catheters daily to 1-2 catheters weekly. If ISC has been commenced whilst in hospital, the patients are usually discharged home on a specific size, which should not be altered without consultation. 5-6 packs should be enough for a month's supply (30 catheters per pack- 150 catheters per month and full packs should be prescribed as they cannot be split. If ordering more than 6 packs per month - please liaise with the Continence Advisory Service regarding patient management.

There is a variety of intermittent catheters available and the majority are hydrophilic which requires water adding to the catheter to activate the coating. The catheters on the guideline are recommended for routine use for males and females however patient assessment is advocated and the correct catheters selected on clinical need.

For Male Use- please order as a non-stock item

Company and product	Product Code	Pharmacy PIP code	Cost	Comment / expected use
MANFRED SAUER iQ Cath 21 with internal water sachet Box of 30 	iQ2104-10 iQ2104-12 iQ2104-14 iQ2104-16 iQ2104-18	372-5421 324-7400 324-7418 324-7426 372-5413	£47.06	Hydrophilic catheter with integrated water sachet Known as a pathfinder and ideal for men with enlarged prostates, urethral strictures, false pockets and difficult catheter insertions Soft, bendy tip which navigates problematic urethras

Company and product	Male 40cm		Female		Comment / expected use
	Cost	Code	Cost	Code	
WELLSPECT HEALTHCARE Lofric / Lofric Classic Box of 30 catheters 		40cm		15cm	PVC free Single use hydrophilic low friction catheter Requires water adding to the catheter before use to activate lubricant coating Female catheters are available in two lengths 15cm-20cm Patient/product information booklets available from the Continence Advisory Service
	£34.92	FST80910	£38.16	FST78608	
	£34.92	FST81012	£34.92	FST39310	
	£34.92	FST81114	£34.92	FST39512	
	£34.92	FST81216	£34.92	FST82014	
	£34.92	FST81318		20cm	
			£34.92	FST39610	
			£34.92	FST39712	
			£34.92	FST39814	

Sterile catheter leg drainage bags

Leg bags are suitable for the collection of urine from indwelling catheters or sheaths. Designed for daytime use, they vary in capacity and can be worn in different positions (thigh, knee and calf). Leg bags differ in outlet taps, connectors, length of inlet tubes and inclusion of attachment straps.

The quality of the tap on drainable appliances is important and patient capabilities on opening and closing the tap must be assessed before deciding on which bag to prescribe.

It is recommended that the ProSys bags (CliniSupplies) are to be considered as first line choice. The sterile gloves provide assurance that the potential risk of infection is minimised during leg and night bag changes.

The bag has a robust ridged connector to ensure that the bags do not become accidently disconnected. The bags for use in the hospitals have a plastic backing for infection control purpose.

The ProSys leg and night drainage bags are no longer available to order via NHS supply chain. Please see the document - PGN13 ‘Placing a Catalogue Requisition’ for details of how to order. The ordering code for the drainage bags are detailed below.

PGN13 Placing A Catalogue Requisition

Company and product CLINISUPPLIES	Tap	Inlet tubing	Volume	Code	Cost	Comments / Expected use
 **Box of 10**	Lever Tap	Short	500ml	**FST484** PH500S-LT	£9.20	Up to 5-7 days use Sterile leg bags with one pair of sterile gloves A ridged connector and a needle free sample port
		Long	500ml	**FST498** PH500L-LT	£9.20	
	T- tap	Short	500ml	**FST486** PH500S+	£10.48	Overnight connection tube Non-return valve to prevent backflow of urine Plastic backing 10 pair of elastic and velcro straps included per box of 10 bags Hospital to home packs available Tel: 0800 0854957
		Long	500ml	**GDW082** PH500L+	£9.08	

Company and product CLINISUPPLIES	Size	Product Code	Cost	Comment / expected use
Elasticated leg bag straps 	One size	**GDW126**	£9.66	Cotton strap with silicone leg grip Pack of 10

Non sterile, single use drainable night bags (To be used once only)

The drainage bags are connected to the leg bag and are used in conjunction with a stand. The position of the bag should be below the bladder level to enhance gravity induced drainage, but no more than 30cm below as the negative created may cause a suction effect to the bladder mucosa, which may increase the likelihood of catheter blocking.[20]

Company and product CLINISUPPLIES	Tap	Volume	Product Code	Cost	Comment /expected use
ProSys Non sterile drainable night bag Pack of 10 	Slide	2000mls	**PHSU2**	£3.06	Single use For use on hospital wards and residential/nursing homes or when the patient does not have access to own bathroom Connected to a leg bag Slide tap designed to ensure that the bag cannot be reused Recommended for use with a sheath or a urinal
PrpSys **sterile** drainable night bag 	Lever	2000mls	**FST484** **PH2000-LT**		For use when not using a leg bag Only to be used if connected directly to the catheter i.e. urine monitoring, urology wards, during surgery Changed every 5-7 days Sterile gloves available in the packet

Company and product CLINISUPPLIES	Product Code	Cost	Comment/ expected use
ProSys night bag stand 	**FST501**	£20.88	Collapsible 3 way night bag stand Box of 12

Catheter support and fixation strap

Company and product CLINISUPPLIES	Size	Product Code	Cost	Comment / expected use
Catheter retainer strap Box of 5 	Short 40cm Adult 50 cm Abdominal 85cm	**FUX075** **FUX076** **FUX077**	£7.80 £9.24 £10.56	It is extremely important that both the leg bag and catheter are both supported. A catheter retainer strap is to be used for every patient with an indwelling catheter to prevent trauma and reduce the risk of infection Patients and carers should be educated on the correct fitting of the retainer strap

Catheter bag support

Company and product CLINISUPPLIES	Size	Code	Cost	Comment / expected use
ProSys leg bag sleeve Packs of 4 	Small Leg circum 24-40cm Medium Leg circum 36-50cm Large Leg circum 40-65cm	**FST851** **FST852** **FST853**	£2.52 £3.50 £4.18	Washable support system Leg straps are often not correctly used and the sleeve may be comfortable to wear Measurement of the patients leg is essential to ensure a correct fitting Worn on the thigh

Catheter Valves

May be used by patients (or carer) with long-term catheters that have sufficient manual dexterity to turn a valve to empty the bladder when required; this avoids the need for a day bag. The patient must have cognitive awareness and adequate bladder capacity to utilise these systems. This product should not be used without assessment of bladder function by an appropriate health professional. Please seek advice from a specialist nurse or a consultant urologist before prescribing a valve.

Contraindications:

Reduced bladder capacity
Must not be used for patients post radical prostatectomy and bladder reconstruction
No bladder sensation
Cognitive impairment

Insufficient manual dexterity to operate the catheter valve

Company and product CLINISUPPLIES	Code	Cost	Comment / expected use
ProSys Catheter Valve Box of 5 	**FSS1042**	£1.44	Provide a discreet alternative to using leg bags. For use with indwelling catheters only Helps to imitate normal bladder function Has a ridged connector Recommended change every 5-7 days

Catheter Maintenance Solutions

The use of catheter maintenance solutions still remains controversial and should not be used routinely for every patient who has an indwelling catheter. Please read information provided in the Appendix before making a decision to commence patients on catheter maintenance solutions.

Company and product	Code	Cost	Comment / expected use
B Braun Medical Urotainer Sodium Chloride 0.9% 	**FST5523 - 50ml** **FST5524 - 100ml**	£39.72 £39.72	Clinical indication - To be used as a mechanical flush when there is debris or blood clots Box of 10 Single chamber for use
Uro-Tainer PHMB 	**FB99965 100ml**	£3.46	Clinical Indication- Provides a mechanical flush together with bacterial decolonisation Contains 0.02% polihexanide Hypo allergenic, non toxic
Uro -Tainer Twin Suby G 3.25% citric acid	**FST521**	£54.36	Clinical Indication - Used to reduce/resolve crystallisation and encrustation in the catheter A twin chamber system containing 2 x 30mls

 Uro-Tainer Twin Solutio R Citric acid 6% 	**FST872**	£54.36	Recommended regime following assessment is from once weekly to twice daily depending on the severity of the case. Instill for 5-10 minutes per chamber **Not for routine use** Clinical Indication recommended prior to catheter changes and also for persistent blockers Used to dissolve persistent crystallisation in the blocked catheter or can be instilled 5-10 minutes prior to catheter removal to minimise trauma 2x30ml pouches **Not for routine use**

Urinary Sheaths / External Catheters

Sheaths must be fitted by an appropriately trained health professional and referral to a specialist should only be made for patients with fitting difficulties.

Generally, problems encountered relate to poor skin preparation, poor fitting and the inappropriate choice of product. This may result in: increased susceptibility to urinary tract infections sores on the end of the penis, and/or damage to the surrounding skin caused by some adhesives. Sheaths can be left in place for 24 hours.

Assessment

The success of urinary sheaths relies heavily upon correct assessment. It is suggested [21] that patients must meet the following criteria:

- A non retracted penis
- Healthy unbroken skin
- No risk of sheath being pulled off
- Reasonable mental awareness, eyesight and manual dexterity or adequate carer availability

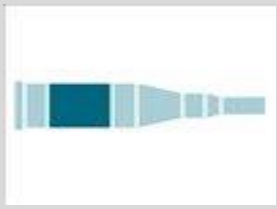
Sizing

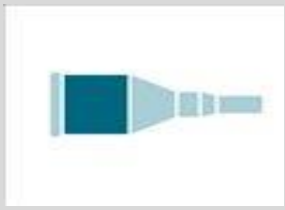
Patients should be measured to determine the size required. One of the main reasons for sheaths disconnecting prematurely is incorrect sizing. Each company provides individual fitting guides and sheath sizes vary from company to company.[22] Each time a brand new sheath is used, the patient must be measured with the company's own fitting guide and the fitting guide discarded after use. The size is measured around the shaft of the penis, not the glans. A small sheath may constrict the penis and a large sheath may kink, leak or disconnect .[23] The length required also requires consideration, too long a sheath will roll off and shorter sheaths are available to prevent this occurring.

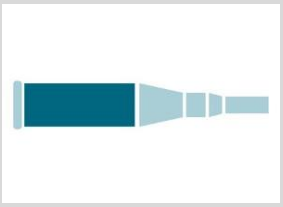
If the patient's penis measures less than 3cm in length, it is unlikely that a sheath device will be suitable and an alternative method of management may be required. A Clinical Nurse Specialist can provide advice regarding this.

Trial packs of the chosen sheaths and measuring devices are available from the Continence Advisory Service. Manfred Sauer P-Sure is a sheath selected for use within the community setting but unfortunately is not available to order via NHS supplies. Sample packs and measuring aides are available for the hospitals - please telephone 01604595696

Please ensure that the chosen sheath is working effectively before prescribing. Generally, one pack of 30 should be adequate for one month.

Company and product CLINISUPPLIES	Size	Product Code	Cost	Comment / expected use
STANDARD 	24mm 28mm 31mm 35mm 40mm	FUX059 FUX060 FUX062 FUX063 FUX064	£3.54	Pack of 5 Sample packs available Apply and hold for 60 seconds to activate adhesive Can be left in place for 24 hours Transparent for skin visibility

Company and product	Size	Product Code	Cost	Comment / expected use
POP ON 	24mm 28mm 31mm 35mm 40mm	FUX065 FUX066 FUX067 FUX068 FUX069	£3.54	For a shorter retracted penis Pack of 5 

Company and product	Size	Product Code	Cost	Comment / expected use
WIDE BAND 	24mm 28mm 31mm 35mm 40mm	FUX070 FUX071 FUX072 FUX073 FUX074	£3.54	Wider band of adhesive Pack of 5 

ANAL PLUG

Discuss with a Clinical Nurse Specialist if considering using an anal plug.

Can be used for patients with faecal incontinence but most suitable for patients with a neurogenic condition and associated impaired rectal sensation. Adequate bowel management to clear bowels must be instigated prior to use.

Company and product	Size	Code	Cost	Comment /expected use
COLOPLAST LTD Peristeen Anal Plug Box of 20 	Small Large	**GCT075** **GCT076**	£42.38 £41.52	For use with faecal incontinence Can be used for up to 12 hours

Urinal Systems

Manufacturer BEAMBRIDGE MEDICAL	Appliance	Code	NHS supply code	Cost	Comment / expected use
Bridge urinal no tap		**6-18**	**FWV015**	£21.00	Female urinal with handle requires connection to a drainage bag, can be used seated or in bed
Bridge urinal with tap		**6-18T**	**FWV032**	£21.00	Female urinal with handle, additional tap provides the option for connecting a drainage bag. Total useable unit volume without a bag 400ml
Lady Jug		**6- 45**	**FWV074**	£22.61	Designed for women to use in bed and serves as an alternative to the Bridge Urinal.
Lady Funnel		**6-40**	**FWV073**	£21.00	Designed for women to use out of bed. It is recommended that the woman sits on the edge of a chair/bed or stands and holds the funnel in place.
The Beambridge Saddle		**6-26**	**FWV053**	£21.00	Specifically designed for women to use in bed or chair,

Male draining jug/ bottle closed end Male draining jug no tap Male draining Jug with tap	   	**6-51** **6-50** **6-50T**	**FWV159** **GPB742** **GPB741**	£21.00 £21.00 £21.00	sitting up or lying down This product has a closed end and does not drain; it will require emptying after each void. Total volume 750ml. Male urinal bottle for use as a receptacle 450mls Male Jug for connection to drainage bag Male jug with tap for the option to connect a drainage bag. Total useable unit volume without a bag 400ml

Manufacturer BEAMBRIDGE MEDICAL	Appliance	Code	NHS Product Code	Cost	Comment / expected use
Male funnel Male funnel short	 	**6-35** **6-37**	**FWV062** **FWV074**	£20.10 £20.09	Designed for use in bed and out of bed. For men with sufficient mobility and continence, the funnels can be used to help as a director when urinating into a toilet. Suitable for men with retracted penis Both funnels can be connected directly to a drainage bag. The short funnel can be used as a non spill adapter for the draining jug

Appendix I

PATIENT EDUCATION AND SUPPORT

Good quality, comprehensive information on products should be given to all patients to whom they are prescribed. Advice may be supported by written patient information designed for each product type. Patients should also be given information on the patient groups that offer support in this area.

Derbyshire Continence Advisory Service
Alfreton Primary Care Centre
Church Street
Alfreton
Derbyshire
DE55 7BD
Tel: 01773 546868
Continence.advisoryservice@nhs.net

Bladder and Bowel Foundation
SATRA Innovation Park
Rockingham Road
Kettering
Northants NN16 9JH
Tel: 01536 533255 Fax 01536 533240
Email: info@bladderandbowelfoundation.org
Web address: www.bladderandbowelfoundation.org

The Gut Trust
Unit 5
53 Mowbray Street
Sheffield
S3 BEN
Tel: 0114 272 3252
Email: info@guttrust.org.uk
Web: www.guttrust.org

NICE ANTIMICROBIAL GUIDANCE FOR CATHETERS https://www.nice.org.uk/guidance/ng113

PUBLIC HEALTH ENGLAND Urinary tract infection diagnostic flow chart
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/795340/PHE_UTI_diagnostic_flowchart.pdf

NHS IMPROVEMENT CATHETER DOCUMENTS https://improvement.nhs.uk/resources/urinary-catheter-tools/

Appendix II

Use of prophylaxis antimicrobials during catheter manipulation in the community setting

*Catheter manipulation refers to insertion, removal or change of a urinary catheter

Unintentional expulsion of urinary catheter with the balloon inflated
Prophylaxis antibiotic treatment is not indicated unless the patient is undergoing peritoneal dialysis or is immunocompromised.

Routine administration of antimicrobial agents to cover urinary catheter insertion is NOT INDICATED in the community. However, if the patient is actively suffering SYMPTOMS of urinary tract infection (a positive urine culture in the absence of symptoms of infection is NOT an indication) at the time of catheterisation, then they should receive one dose of ciprofloxacin OR gentamicin for prophylaxis and a further 5 days of an appropriate oral antibiotic changed if necessary when the culture and sensitivity results are available. – see details***** below.

In patients at risk of endocarditis, NICE guideline 2008 recommended that routine antibiotic prophylaxis for urinary catheterisation are no longer required. However, if these patients are already on antimicrobial treatment for a urinary tract infection, or if infection is suspected, ensure that their antibiotic regime covers organisms likely to cause endocarditis, prior to catheter insertion or removal. For further advice, contact the consultant microbiologist.

Asymptomatic patients requiring antimicrobial prophylaxis for urinary catheterisation:

- The patient has had a febrile illness on previous catheter insertion
- It is within 6 weeks of a post-operative orthopaedic prosthetic insert / removal or 24 hours before an orthopaedic prosthetic insert[22.23]
- The patient is undergoing peritoneal dialysis
- The patient is immunocompromised and is not already on antibiotics
- The patient has been identified with MRSA

NICE antimicrobial guidance (2018) recommends that antibiotic prophylaxis should also be considered for patients who:

- Have a history of symptomatic urinary tract infection after catheter change
- Experience trauma during catheterisation (frank haematuria after catheterisation or 2 or more attempts of catheterisation)

*****The choice of antibiotic will be guided by recent urine culture results or, if no information is available, administer a single dose of ciprofloxacin 500mg orally 1 to 2 hours before catheter insertion OR a single dose of 80-120mg gentamicin IV/ IM just before the procedure. For advice on patients identified with MRSA please contact Consultant Microbiologist for gentamicin sensitivities.

NB; ciprofloxacin should be avoided in patients at high risk of developing C.Difficile disease (please refer C.Difficile high risk criteria including patients with GDH +ve results).

If a single dose of oral ciprofloxacin is given to non high risk patient, follow the community UTI guideline for the rest of the course of antibiotics and await culture results.

Appendix III

Advice for patients with urinary catheters and symptomatic urinary tract infection

NICE (2018) antimicrobial recommendations for management of a catheter-associated urinary tract infection

A catheter-associated urinary tract infection (CAUTI) is a symptomatic infection of the bladder or kidneys in a person with a urinary catheter, the longer a catheter is in place, the more likely bacteria will be found in the urine; after 1 month nearly all people have bacteriuria and antibiotic treatment is not routinely needed for asymptomatic bacteriuria in people with a catheter.

- Consider removing or, if this cannot be done, changing the catheter as soon as possible in people with a catheter-associated UTI if it has been in place for more than 7 days[8,32,33].
- Do not allow catheter removal or change to delay antibiotic treatment.
- Obtain a urine sample before antibiotics are taken. Take the sample from the catheter or via a sampling port if provided, and use an aseptic technique.
- If the catheter has been changed, obtain the sample from the new catheter.
- If the catheter has been removed, obtain a midstream specimen of urine.
- Send the urine sample for culture and susceptibility testing, noting a suspected catheter-associated infection and any antibiotic prescribed.
- Offer an antibiotic to people with catheter-associated UTI, taking into account the previous urine culture and susceptibility results, severity of symptoms and the risk of developing complications, which is higher in people with known or suspected structural or functional abnormality of the genitourinary tract, immunosuppression, or previous antibiotic use, which may have led to resistant bacteria.
- When urine culture and susceptibility results are available: review the choice of antibiotic and change the antibiotic according to susceptibility results if the bacteria are resistant, using narrow-spectrum antibiotics wherever possible.
- Reassess people with catheter-associated UTI if symptoms worsen at any time, or do not start to improve within 48 hours of taking the antibiotic, taking account of other possible diagnoses, any symptoms or signs suggesting a more serious illness or condition, such as sepsis
- Advise people with catheter-associated UTI about drinking enough fluids to avoid dehydration.

Public Health England (2018) recommends the following:

- **Do not treat asymptomatic bacteriuria in those with indwelling catheters**
  Treatment does not reduce mortality or prevent symptomatic episodes, but it does increase side effects and resistances[29,30]
- Only send urine for culture in catheterised patients if features a systemic infection[8,31,33]. However, always: - exclude other sources of infection[8]. The diagnosis of catheter associated urinary tract infection (CAUTI) can be difficult in people with indwelling catheters. Check that the catheter drains correctly and is not blocked
- Consider need for continued catheterisation and remove the catheter if not clinically indicated
- Do not give antibiotic prophylaxis for catheter changes unless history of symptomatic UTIs due to catheter change or patient has previously experienced a traumatic catheter change[34,35]

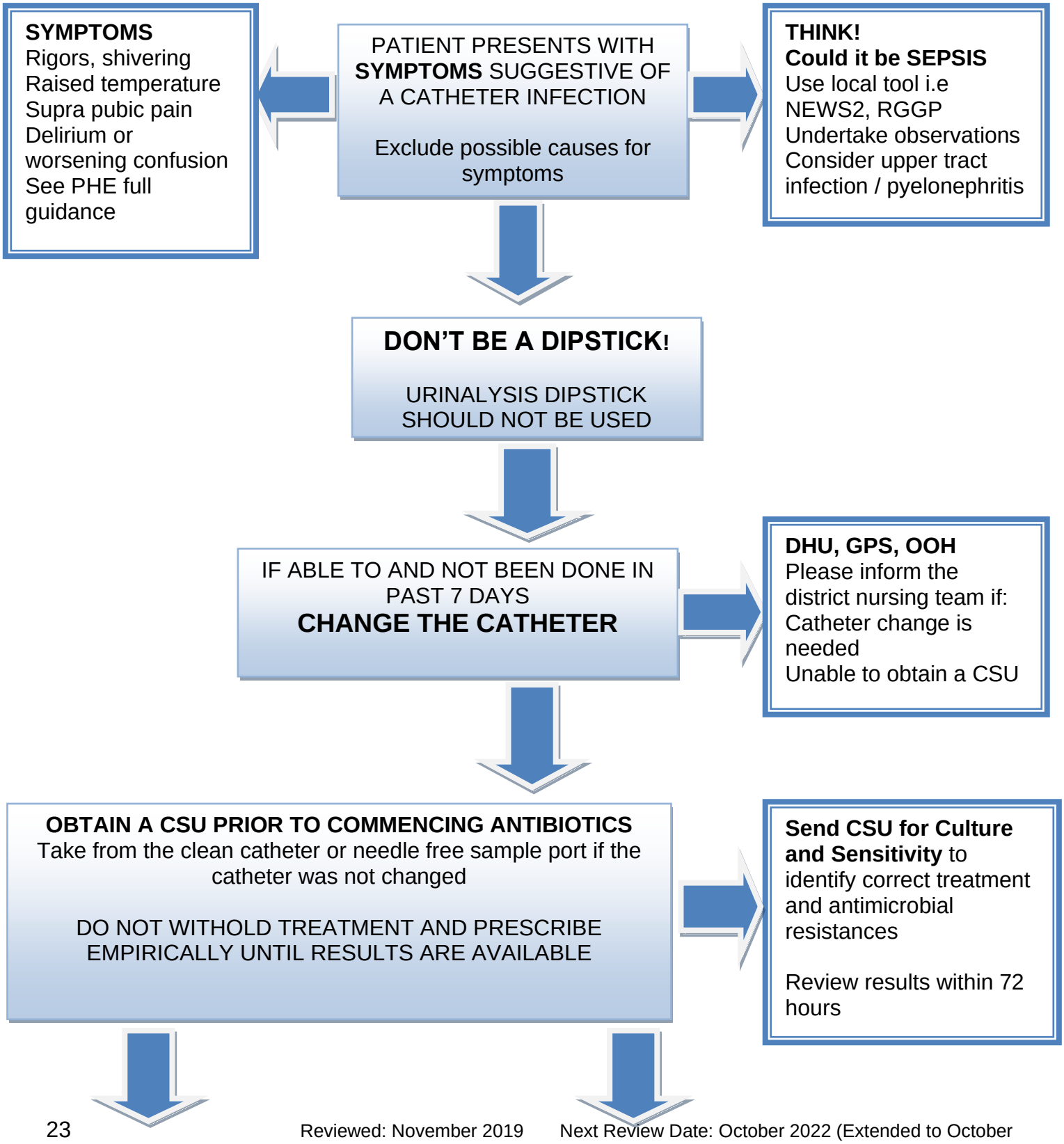
Key points to remember:

- Dipstick testing **should not be used** to diagnose UTI in catheterised patients[36]. Urine dipstick tests are unlikely to be useful so should not be used in catheterised patients as the test will always give a positive dipstick

- Collect urine from the catheter tubing using the sample port (not from the bag) and place in a preservative-containing bottle or refrigerate, and transfer as soon as possible to laboratory for culture
- Prescribe antibiotics as recommended by NICE / Derbyshire antimicrobial guidance until sensitivities are available
- Report as an incident on Trusts patient safety management system i.e. DATIX
- Review choice of antibiotic with progress and culture results within 72 hours.
- Antibiotic prophylaxis are not recommended for the prevention of symptomatic CAUTI

Appendix IV

FLOWCHART FOR MANAGEMENT OF A CATHETER ASSOCIATED URINARY TRACT INFECTION



REVIEW
THE ON GOING NEED FOR THE CATHETER
Consider alternative management like ISC
Review hygiene practices and catheter care
Check appliances are in line with Prescribing Guidelines
Consider use of a catheter valve
Review bowel management
Review hydration

DCHS STAFF
Report CAUTI on **DATIX**

MAKE SURE YOU SELECT THE CORRECT SIZE CATHETER

Shorter catheters **(20-26cm)** are for females only.

Standard catheters **(40-45cm)** can be used for males and females.

Female only catheters can cause severe trauma and haemorrhage if used in males.

For further information, go to **www.npsa.nhs.uk/rrr**

NHS
National Patient Safety Agency
National Reporting and Learning Service

Appendix VI

CATHETER MAINTENANCE SOLUTIONS [28,29,30]

Introduction

The use of catheter maintenance solutions is controversial as clinical evidence for the use of catheter maintenance solutions is limited. Many of the research papers involve a small number of patients, raising questions about the general application of findings to wider patient groups. Therefore the decision to use a catheter maintenance solution must involve careful consideration of the potential risks and benefits of such an intervention for each individual patient and include the consent of the patient.

Potential benefits

Use of the appropriate catheter maintenance solution can:

- Reduce the build up of mineral deposits or remove debris and aim to reduce the frequency of catheter blockage and the need for re-catheterisation
- Minimise urothelial damage by removing encrustation prior to catheter removal.

Potential risks

- There is evidence that all catheter maintenance solutions cause mucosal trauma within the bladder due to the physical process of administration. This damage may be worse if the solution used is acidic or if any force is used during administration e.g. via a syringe.
- The risk of infection increases each time the closed catheter system is broken into.
- Catheter maintenance solutions may be employed when re-catheterisation is indicated, increasing the interventions and delaying appropriate treatment.
- Catheter maintenance solutions should not be used in patients with spinal injury due to the possibility of autonomic dysreflexia
- Pain and discomfort on administration.

Assessment of Catheters

- Carry out a full patient assessment to ensure that a catheter maintenance solution is required, as catheters can block for a variety of reasons including constipation, patients position in a bed or chair, bladder spasm and the drainage system being kinked or raised above the level of the bladder.
- In a first time blockage, where there is no evidence of the cause of the blockage, the catheter should be removed, examined, and the urine tested to explore the possible causes of blockage. The findings should be recorded.
- Check the p H of the urine. Normal is 6-7 slightly acidic. If the p H is alkaline then encrustation is the most likely cause of the catheter blocking. Weekly pH monitoring should be undertaken and documented to predict future blockages. An individual maintenance programme can then be planned.
- Only use catheter maintenance solutions where there is a clear indication to do so (see table) and the risk of introducing infection outweighs the benefit.
- Always warm the solution to body temperature (37c) prior to instilling. To warm the solution it is suggested the container be placed in a jug of warm water to bring it up to body temperature. This is to prevent the bladder going into spasm if the solution is too cold.
- It is suggested that the use of containers that allow gentle agitation may be more effective than instilling the product for a long period of time, as agitation appears to dissolve the encrustation.

- As the bladder size decreases on catheterisation, it is better to use a smaller volume of maintenance solution. It is suggested that as little as 15 mls can be used to gently bathe the lumen and the tip of the catheter[27].
- If the patient experiences pain or discomfort on administration then treatment should be stopped. For these clients the only option is to change the catheter frequently to prevent encrustation building up.
- Regular opening of a closed drainage system is likely to cause infection .Therefore the closed drainage system must be changed after every treatment. If an instillation is deemed essential where possible it should coincide with the change of a leg bag
- Always record reasons for catheter changes in the care plan and patient's notes. By recording details correctly patterns of blockage can be clearly identified and action can be taken at an early stage to ensure that the catheter remains patent.
- Where a catheter maintenance solution is used the effect of the treatment should be assessed and ongoing care planned accordingly .Continued use of such a product can only be justified if the patients care plan can clearly demonstrate regular evaluation of the product use and that demonstrable action can be seen .
- Catheter maintenance solutions should not be used to prevent catheter associated infection.
- Consideration should be deployed if a patient's blockage is occurring more often as a referral to a urologist may be necessary.

Choice of Solution

Solution	Product Licence	Recommended regimen	Practice Notes/Cautions
Sodium chloride 0.9%	Mechanical flushing debris (blood, mucus, pus) from the catheter.	As required , usually when leg bag is changed	Will not dissolve crystal formation. The use of normal saline is not recommended if a catheter is regularly blocking due to encrustation
PHMB	Mechanical flushing debris, mucus and light haematuria	As required , usually when leg bag is changed	Contains polyhexanide which is an antimicrobial to help reduce bacteria colonization of the catheter
Solution G Citric acid 3.23% (pH 4)	For the dissolution of struvite crystals which form on the catheter tip under alkaline conditions (pH 7.5-9.5).	Once weekly to a maximum of twice daily depending on severity of the case.	Charting of urinary pH over time will allow development of an individual catheter care plan.
Solutio R Citric acid 6% (pH 2)	Stronger citric acid solution for more persistent crystallization particularly prior to catheter removal	Once weekly to a maximum of twice daily depending on severity of the case.	Strongly acidic – potential mucosal irritation. This should be used only after Solution G has been tried and has not been effective. Minimise use as far as possible Can be used just prior to catheter removal to dissolve any crystals on the tip of the catheter which may cause trauma on removal[24]

Appendix VII

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