

Adults and Communities Division

Listening into Action



Clinical Handbook



*Best Care
Healthy Communities*

Instructions on how to lock your screen rotation

iOS

Swipe up from the bottom of the screen and click on the padlock button.

Android

Swipe down from the top of the screen and click on the 'Auto-rotate' button until it says 'Portrait'

Birmingham Community Healthcare NHS Foundation Trust Clinical Handbook

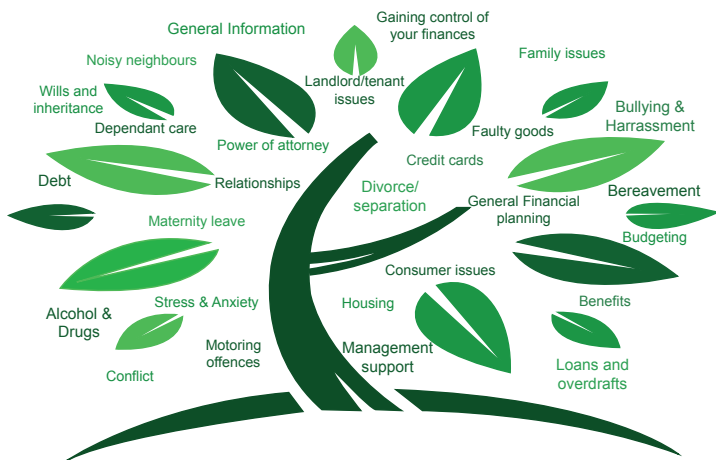
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Health and Wellbeing

Care first provides confidential, impartial advice and support 24 hours a day, 365 days a year. The service is free for you to access whenever you need. You don't need to ask permission from your manager or organisation before contacting Care first.

The care first service can be accessed online or via telephone or typetalk and minicom for people with hearing difficulties. There are also interpreter services for 150 languages.

<http://nww.bhamcommunity.nhs.uk/about-us/divisions-and-directorates/workforce-and-organisational-development/equality-and-od/health-wellbeing/>



Are you having a difficult time and feel you need some advice on any of these issues and more? Our counselling and information service is free and confidential.

Online support
www.carefirst-lifestyle.co.uk
Username: bchcnhs Password: trust

Care first

information and support 24/7

0800 174319

www.carefirst-lifestyle.co.uk



Sepsis / NEWS2

COMMUNITY SEPSIS SCREENING TOOL

AGE 12 +

Is there an End-of-Life/ Advanced Care Plan / Ceiling of Care in place? If yes, consider this before deciding if escalation/ treatment is appropriate?

01 START THIS CHART IF THE PATIENT LOOKS UNWELL OR HAS ABNORMAL PHYSIOLOGY

RISK FACTORS FOR SEPSIS INCLUDE:

- Age > 75
 Impaired immunity (e.g. diabetes, steroids, chemotherapy)
 Recent trauma / surgery / invasive procedure
 Indwelling lines / IVDU / broken skin

02 COULD THIS BE DUE TO AN INFECTION?

LIKELY SOURCE:

- Respiratory
 Brain
 Urine
 Surgical
 Skin / joint / wound
 Other
 Indwelling device

SEPSIS UNLIKELY, CONSIDER OTHER DIAGNOSIS

03 ANY RED FLAG PRESENT?

- Objective evidence of new or altered mental state
 Systolic BP \leq 90 mmHg (or drop of >40 from normal)
 Heart rate \geq 130 per minute
 Respiratory rate \geq 25 per minute
 Needs O₂ to keep SpO₂ \geq 92%
 Non-blanching rash / mottled / ashen / cyanotic
 Recent chemotherapy
 Not passed urine in 18 hours (<0.5 ml/kg/hr if catheterised)

RED FLAG SEPSIS START BUNDLE

04 ANY AMBER FLAG PRESENT?

IF UNDER 17 & IMMUNITY IMPAIRED TREAT AS RED FLAG SEPSIS

- Relatives concerned about mental status
 Acute deterioration in functional ability
 Immunosuppressed
 Trauma / surgery / procedure in last 8 weeks
 Respiratory rate 21-24
 Systolic BP 91-100 mmHg
 Heart rate 91-130 or new dysrhythmia
 Temperature $<36^{\circ}\text{C}$
 Clinical signs of wound infection

1 SAME DAY ASSESSMENT BY GP/ TEAM LEADER

2 IS URGENT REFERRAL TO HOSPITAL REQUIRED?

3 AGREE AND DOCUMENT ONGOING MANAGEMENT PLAN (INCLUDING OBSERVATION FREQUENCY AND PLANNED SECOND REVIEW)

NO AMBER FLAGS = ROUTINE CARE / CONSIDER OTHER DIAGNOSIS

COMMUNITY NURSING RED FLAG BUNDLE:

THIS IS TIME-CRITICAL - IMMEDIATE ACTION REQUIRED:

DIAL 999 AND ARRANGE BLUE LIGHT TRANSFER

COMMUNICATION: Ensure communication of 'Red Flag Sepsis' to crew. Advise crew to pre-alert as 'Red Flag Sepsis'. Where possible a written handover is recommended including observations and antibiotic allergies.

Useful link

<https://sepsistrust.org/professional-resources/education-resources/%20>

SEPSIS IS A RARE BUT SERIOUS CONDITION THAT CAN LOOK JUST LIKE FLU, GASTROENTERITIS OR A CHEST INFECTION.

SEEK MEDICAL HELP URGENTLY IF YOU DEVELOP ANY ONE OF THE FOLLOWING:

- S** LURRED SPEECH
- E** XTREME SHIVERING OR MUSCLE PAIN
- P** ASSING NO URINE (IN A DAY)
- S** EVERE BREATHLESSNESS
- "I** FEEL LIKE I MIGHT DIE"
- S** KIN MOTTLED OR DISCOLOURED



**THE UK
SEPSIS
TRUST**

EMAIL: INFO@SEPSISTRUST.ORG FOR MORE INFORMATION

NEWS 2 score	Clinical response- Always consider patients total NEWS2 score in relation to their normal baseline NEWS2
0	Continue routine NEWS2 monitoring as clinically indicated
<p>Total 1-4</p> <p>A score of 3 in single parameter is a red flag. Consider sepsis and complete screening tool.</p>	<ul style="list-style-type: none"> • Repeat clinical observations and monitor NEWS2. If patient continues to deteriorate, call 999 and remain with the patient. • If patient remains stable, consider escalating, if required, to senior clinician, Rapid Response (RR), Advanced clinical Practitioner (ACP/ ANP), Case Manager (CM), 111, GP. • Inform senior clinician for advice/ of actions to be taken. • Inform next of kin. (NOK) • If Cardiac arrest or stroke suspected, this is a medical emergency. Ring 999 immediately. • Escalate and document using SBAR (Situation/ Background/ Assessment/ Recommendation) informing baseline NEWS2 and NEWS2 on escalation and cause of deterioration.
<p>Total 5 or more urgent response threshold. Consider sepsis screening tool</p>	<ul style="list-style-type: none"> • As above. • Immediate clinical review/advise required. Use clinical judgment and escalate to ACP/ANP/RR/GP or 999 and remain with the patient. • Inform NOK/ carer of suspected deterioration • Document using SBAR.
<p>Total 7 or more Emergency response threshold</p>	<ul style="list-style-type: none"> • Blue light transfer- Call 999 and remain with the patient. • Using SBAR pre-alert ambulance with NEWS2 baseline and score on escalation and suspected cause of deterioration. • Inform NOK/ carer.

Wound Care Formulary

Absorbent Dressings

The capacity to absorb is a primary dressing requirement when managing exuding wounds. Simple absorbent dressings contain an absorbent material that may be backed with an adhesive border. To ensure the principles of an optimum wound healing environment an absorbent dressing should not only be absorbent but also retain the fluid when external load forces are applied.

Indications for use; absorbent dressings are ideal for use as a protective covering for primarily closed wounds. Suitable; for low exuding wounds. Some of these dressings have a shower proof self-adhesive covering.

Alginates

Alginates which are derived from brown seaweed were discovered and characterised in the 1880's. Alginate dressings are available in sheet or rope form. A soft flexible gel is formed when in contact with wound exudate. On contact with exudate, the dry alginate fibres release calcium ions which are exchanged for sodium ions present in the exudate turning the fibres into a hydrophilic gel. The moist environment provided by alginates promotes debridement of slough from wound beds.

Indications for use; alginate dressings are able to absorb 15-20 times their weight in fluid and are indicated for wounds with moderate to high levels of exudate. Example; pressure ulcers, leg ulcers, cavity wounds, diabetic foot ulcers, sinuses and infected wounds. Any cavities should be carefully packed; however over packing should be avoided. A secondary dressing may be required unless the dressing has a self adhesive border.

Precautions: Alginates should not be used on dry necrotic wounds.

Films

Semi permeable films are impermeable to fluids and bacteria. They prevent ingress of microbes and foreign matters from externally whilst allowing the wound to 'breathe' from the nature of the film being permeable to air and water vapour. They maintain a moist wound healing environment whilst preventing the formation of a scab. Their impermeability enables bathing without the risk of contaminating wounds. Films are not absorbent however a degree of moisture management is possible from the loss of moisture through the back of the film. The ability to view the wound without removing the dressing is a benefit to film dressings.

Indications for use; Films can be used as a primary or secondary dressing for shallow wounds. Eg. Donor sites, burns, grazes and postoperative incisions.

Precautions: Films are not suitable for moderate to heavy levels of exudate and are likely to cause maceration if used in these situations. Dressings can remain in situ for up to 14 days unless exudate levels indicate otherwise. Caution should be taken on removal of films to prevent trauma. Films are not suitable for use on full thickness wounds.

Wound Care Formulary Continued

Foams

Foams are available as either polyurethane or silicone. Some foam dressings require a secondary dressing whilst others have an adhesive border.

Indications for use; generally foam dressings provide a level of absorbency more appropriate for low to moderately exuding wounds. Useful in a variety of shapes and sizes; conforming to body contours. Suitable for; minor cuts and grazes, to burns, graft donor sites and exuding cavity wounds. Their moist wound healing properties mean they may help de-slough the wound. Foams can be left in place for up to 7 days depending on exudate levels.

Hydrocolloids

Hydrocolloids provide a moist wound environment; promoting autolytic debridement of slough, granulation tissue formation and epithelialisation. Hydrocolloids are occlusive dressings and offer an effective barrier to the ingress of organisms. Many have a semi permeable outer surface thus making them waterproof.

Indications for use; Hydrocolloids are suitable for clean, granulating wounds or sloughy / necrotic wounds. Indicated for low to moderately exuding wounds as they have limited absorbency capability; the level of exudate indicates the frequency of dressing changes.

Hydrogels

Hydrogels absorb water, expand without dissolving and are available in shapeless form, a sheet or as gels impregnated onto a dressing. They have high water content and provide an optimum wound healing environment. They may require a secondary dressing.

Indications for use; Hydrogels are suitable for the management of wounds that range from dry to mildly exuding and can be used to debride sloughy wound beds. Hydrogels have a cooling and soothing effect on the skin so may be helpful in treating burns and painful wounds.

Useful links

<http://www.birminghamandsurroundsformulary.nhs.uk/chaptersSub.asp?FormularySectionID=26> for further guidance and rationale

<http://nww.bhamcommunity.nhs.uk/about-us/divisions-and-directorates/medical-directorate/medicines-management/formulary/>

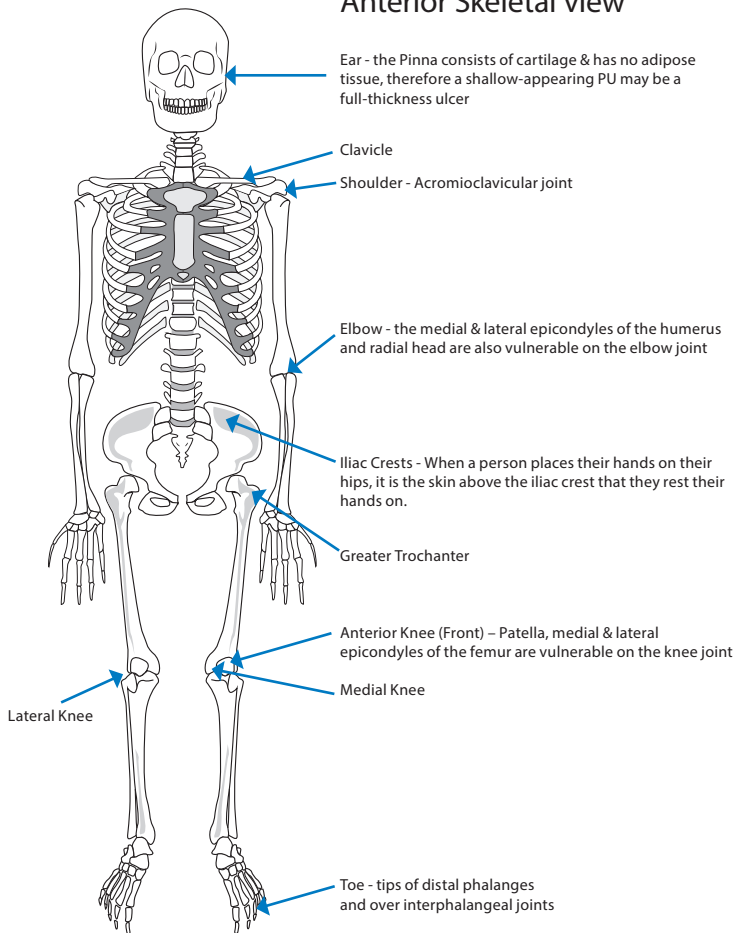
Wound assessment

Initial wound assessment check list	Wound re-assessment check list
<p>For all Wounds check you have documented SOFT TIMESPAN:</p> <ul style="list-style-type: none"> • Size • Onset • Factors affecting healing • Type • Tissue type - necrosis, slough etc. % • Infection - check for local and systemic, swab • Moisture - exudate amount, consistency and colour • Edge of wound - margin condition • Surrounding skin • Pain - severity, frequency • Anatomical area • Number 	<p>Think MI STEPS when reassessing wounds</p> <ul style="list-style-type: none"> • Moisture - exudate amount, consistency and colour • Infection - check for local and systemic, swab • Size • Tissue type - necrosis, slough etc. % • Edge of wound - margin condition • Pain - severity, frequency • Surrounding skin <p>When to reassess</p> <ul style="list-style-type: none"> • Weekly for acute wounds • 4-weekly for patients with chronic wounds in the community • DTI's and unstageable pressure ulcers a minimum of weekly • Reassess sooner if any concerns / deterioration are identified • An image should be taken of all Category 2, 3, 4, unstageable and deep tissue injury pressure ulcers and kept with the patient record. Further images must be taken regularly and will be in line with wound and photography guidance available on the Tissue Viability section of the intranet. • Ensure consent to photographer document completed and signed by patient

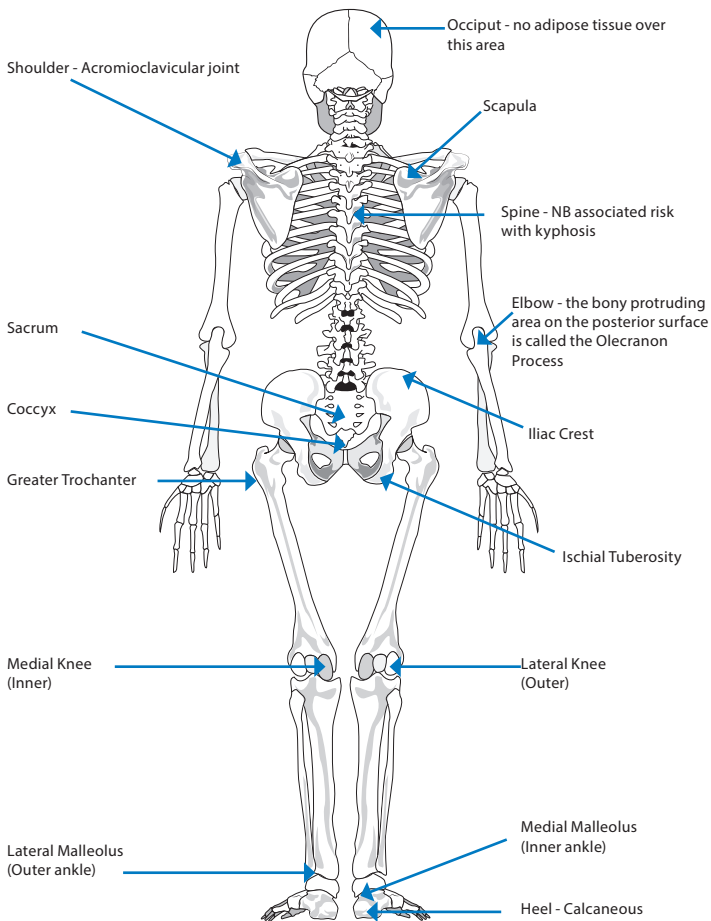
Wound assessment continued

General Signs of wound Infection: Think NERDS!	Signs of wound Infection progression: Think ONE STOP!
<p>NERDS:</p> <ul style="list-style-type: none">• Non-Healing - wounds that are not 20% to 40% smaller in 4 weeks• Exudate - more than 50% of the dressing stained with exudate, changes to colour and viscosity• Red - wound bed tissue is bright red with exuberant granulation tissue and may bleed very easily• Debris - new areas of necrosis and slough• Smell - unpleasant or sweet, sickening odour	<p>ONE STOP:</p> <ul style="list-style-type: none">• Oedema - periwound and increasing• New - areas of break down/ satellite wounds• Erythema - spreading• Size increased• Temperature - significant increasing warmth around periwound as well as fever• Os - probes to bone and possible osteomyelitis• Pain - altered and increasing
<p>Check Temperature and take a Wound Swab for MC&S</p>	<p>Check Temperature and take a Wound Swab for MC&S</p>

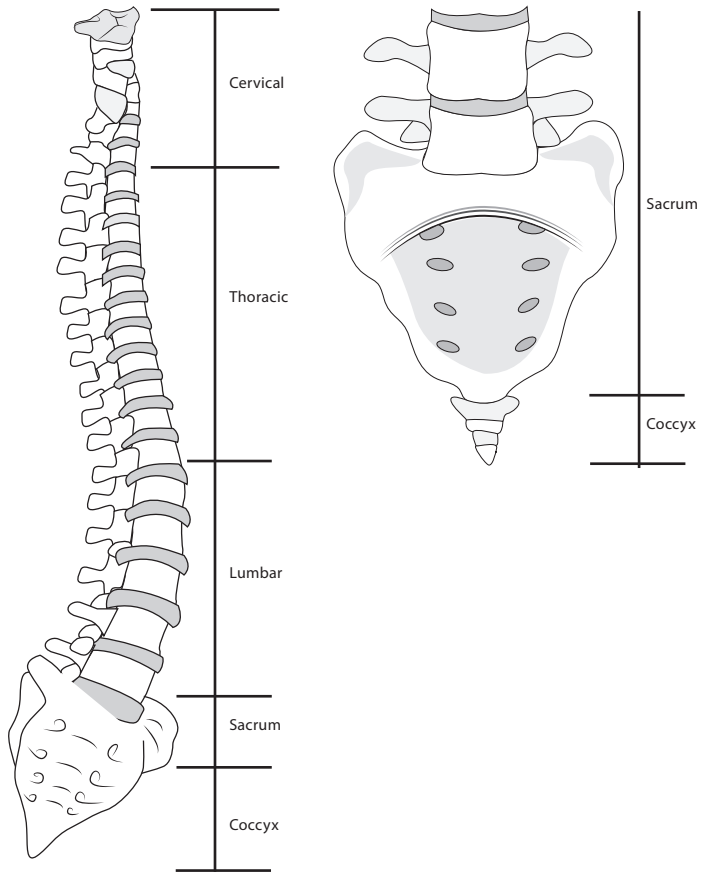
Anterior Skeletal view



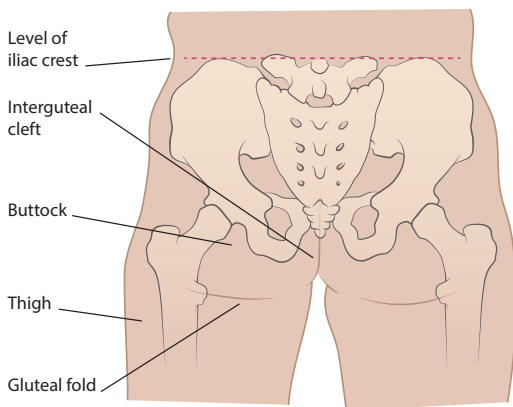
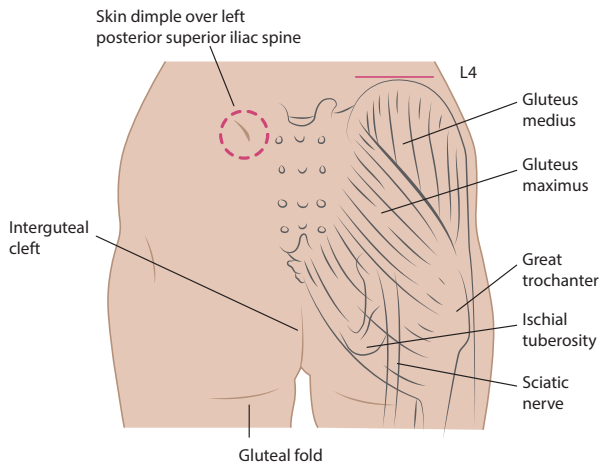
Posterior Skeletal view



The spine




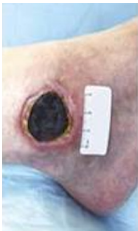


Anatomy of the Pelvis



Leg ulcers

ABPI	Referral	Treatment
<0.6	Vascular (urgent if <0.4)	Not compressible
0.6-0.8	Vascular Referral Essential	Reduced compression after TV advice / vascular review
0.8-1.3	Referral to vascular if concerns	Suitable for full compression
>1.3	Vascular referral	Await vascular recommendations

Signs of ischaemia require
urgent GP / vascular review

Feature	Ulcer type			
	Venous	Arterial	Neuropathic diabetic	Pressure
Underlying condition	Varicose veins, previous deep-vein thrombosis, obesity, pregnancy, recurrent phlebitis	Diabetes, hypertension, smoking, previous vascular disease	Diabetes, trauma, prolonged pressure	Limited mobility
Ulcer location	Area between the lower calf and the medial malleolus	Pressure points, toes and feet, lateral malleolus and tibial areas	Plantar aspect of foot, tip of the toe, lateral to fifth metatarsal	Bony prominences, heel
Ulcer characteristic	Shallow and flat margins, moderate-to-heavy exudate, slough at base with granulation tissue 	Punched out and deep, irregular shape, unhealthy wound bed, presence of necrotic tissue, minimal exudate unless infected 	Deep, surrounded by callus, insensate 	Deep, often macerated 
Condition of leg or foot	Hemosiderin staining, thickening and fibrosis, eczematous and itchy skin, limb edema, normal capillary	Thin shiny skin, reduced hair growth, cool skin, pallor on leg elevation, absent or weak pulses, delayed capillary refill, gangrene	Dry, cracked, insensate, calluses	Atrophic skin, loss of muscle mass
Treatment	Compression therapy, leg elevation, surgical management	Revascularisation, anti-platelet medications, management of risk factors.	Off-loading of pressure, topical growth factors.	Off-loading of pressure, reduction of excessive moisture, shear, and friction, adequate nutrition

Pressure ulcers

NHSI NATIONAL STOP THE PRESSURE - GUIDANCE

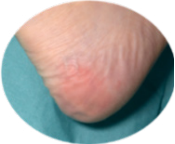
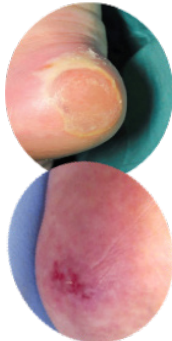
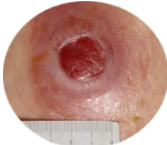

Definitions





A Pressure Ulcer is localized damage to the skin and/or underlying tissue, usually over a bony prominence (or related to a medical or other device), resulting from sustained pressure (including pressure associated with shear). The damage can be present as intact skin or an open ulcer and may be painful

Category is the new term for Grade, i.e. the level of severity

Pressure Ulcer on Admission (POA) is one that is observed during the skin assessment undertaken on admission to that service. If a patient presents with a POA, ensure this information is included in the Datix as well as the patient notes

New is one that developed in the current episode of care

EPUAP Pressure Ulcer Classification			MASD
Category 1	Category 2	Category 3	Moisture Associated Skin Damage
<p>Non-blanching erythema of INTACT skin</p> 	<p>Partial-thickness skin loss with exposed dermis (not through)</p> 	<p>Full thickness skin loss (extends to fat layer)</p> 	<p>Inflammation or skin erosion caused by prolonged exposure to a source of moisture such as urine, stool, sweat, exudate, saliva, or mucus</p> 
No Datix required	Complete Datix	Complete Datix & escalate as SI if BCHC acquired	Complete Datix for MASD Combined lesion – Datix as Pressure Ulcer
No TVN referral required	No TVN referral required	Must be referred to TVN	No TVN referral required

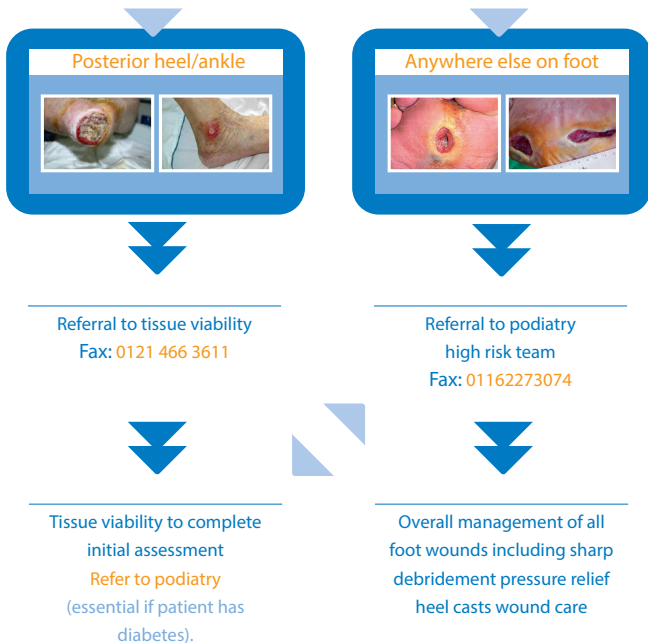
Category 4	Deep Tissue Injury (DTI)	Unstageable	Device Related Pressure Ulcer (DRPU)
<p>Full thickness loss of skin & tissue (extends to fascia and muscle)</p> 	<p>Persistent non-blanchable deep red, maroon, purple discoloration (may also look like blood-filled blister)</p> 	<p>Obscured (with necrosis of slough) full-thickness skin and tissue loss</p> 	<p>Pressure ulcers that result from the use of devices designed & applied for diagnostic or therapeutic purposes (e.g. catheter, NG, splints, O2 tubing). (The pressure ulcer often conforms to the pattern or shape of the device)</p> 
<p>Complete Datix & escalate as SI if BCHC acquired</p>	<p>Complete Datix</p>	<p>Complete Datix</p>	<p>Complete drop-down box on Datix to indicate category of pressure damage & (d) device related</p>
<p>Must be referred to TVN</p>	<p>No TVN referral required, but must be monitored in community at least weekly by registered nurse</p>	<p>Must be referred to TVN but must be monitored in community at least weekly by registered nurse</p>	<p>Refer to TVN if Category 3, 4 or unstageable</p>

Useful link:

<http://nww.bhamcommunity.nhs.uk/about-us/divisions-and-directorates/adult-community-services/tissue-viability/>

Podiatry and tissue viability



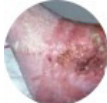

Patient identified with a wound to the foot



Think.....



Moisture Associated Skin Damage (MASD) Pathway

Type of MASD				
Diagnosis	Incontinence-associated dermatitis	Intertriginous dermatitis	Peri wound moisture associated dermatitis	Peristomal irritant contact dermatitis
Source	Urine Liquid stool	Perspiration	Exudate	Urine Faecal effluent
Presentation	<p>Erythema and inflammation of the skin, sometimes with erosion or denudation. Common locations include natal cleft, inner and posterior thighs, gluteal folds, either side of the anus. NB Generally NOT over bony prominences as in the case of pressure ulcers.</p> <p>Skin appears wet and can be macerated</p> <p>Wounds are irregular in shape with diffuse borders. Unlike pressure ulcers which are generally round with defined edges.</p> <p>Erythema can be situated to one side where urine/liquid faces gravitate to and blanches. Unlike pressure ulcers where erythema is often non-blanching and halo-like around the wound.</p>	<p>Erythema and inflammation of the skin inside and adjacent to skin folds.</p> <p>Can be mirrored on both sides of the fold.</p> <p>Initially may be shiny, moist erythema, but can progress to skin erosion and breakdown</p>	<p>Erythema and inflammation of the skin within 4cm of the wound edge, sometimes accompanied by erosion or denudation. Can initially present as maceration.</p>	<p>Erythema and inflammation of the skin around the stoma, at times accompanied by denudation</p>

Moisture Associated Skin Damage (MASD) Pathway continued

Management	<ul style="list-style-type: none"> • Complete skin and continence assessment and care plan • Keep skin clean and dry. Use Proshield Cleanser • Apply barrier products: Cavilon <ul style="list-style-type: none"> • DB Cream for prevention/unbroken. Reapply every 3rd wash. • Cavilon NS Barrier Film for broken. Reapply every 48-72 hours • Proshield for deep broken areas • Treat areas of cutaneous candidiasis (thrush) with appropriate antifungal treatments • Consider the use of appropriate products or devices to absorb/divert urine or stool • Ensure correct fitting and use of all products and devices • Involve/educate carers on use of products and devices • Complete relevant documentation • Include patients in decisions about their treatment • Datix 	<ul style="list-style-type: none"> • Complete an assessment & care plan • Examine entire area of skin folds • Enlist assistance when lifting skin folds to enable full inspection & application of treatments • Use appropriate pH balanced skin cleansing products • Do not use products containing alcohol or perfumes • Ensure ongoing drying of the skin fold. This must be a primary treatment strategy • Protect affected area from further breakdown or maceration (e.g. barrier products Cavilon NS Barrier Film) • Complete relevant documentation • Include patients in decisions about their treatment • Datix 	<ul style="list-style-type: none"> • Complete an assessment & care plan • Consider dressing products to manage level & viscosity of exudate • Use sacral and heel shaped dressings for contouring to body shape & preventing leakage • Consider wound infection potential • If the wound is not healing/progressing, reassess to establish barrier to healing • Protect periwound area from further breakdown/maceration (e.g. barrier film Cavilon NS Barrier Film) • Complete relevant documentation • Include patients in decisions about their treatment • Datix 	<ul style="list-style-type: none"> • Complete an assessment & care plan • Cleanse area and dry gently and carefully • Protect peri-stomal area from further breakdown and maceration (e.g. use barrier film Cavilon NS Barrier Film) • Consult Continence Team or Acute Trust Colorectal specialist for guidance on appliances or if there are any problems • Complete relevant documentation • Include patients in decisions about their treatment • Datix
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Lymphoedema: What is it?

Lymphoedema is swelling or oedema that occurs if the lymphatic system is not working properly due to not being fully developed or is damaged by trauma. It can affect any part of the body.

The lymphatics form part of your immune system, helping to deal with infection at a local level. They are responsible for cleansing your tissues and maintaining a balance of fluids in your body. There are between 500 – 800 lymph nodes in the body which facilitate this.

If the lymphatic system is not working correctly, or the vessels are not draining adequately, the fluid in the tissues build up. Swelling occurs when the amount of fluid in an area is greater than the capacity of the lymphatic system to transport it away.

Signs and symptoms of Lymphoedema:

Swelling with little or no reduction. Heaviness or aching. Skin changes including blisters, thickening, distorted shape and colour change. Areas of skin leaking clear fluid. May or may not have had recurrent episodes of cellulitis.

Assessment of lymphoedema includes:

Oedema: Where? What does it look like? Pitting or non-pitting? Stemmer sign - positive or negative? Patient's perspective of symptoms. History of the swelling: How long? Is there a trigger factor? Pain? Altered sensations? When is the swelling worse and when does the swelling reduce?

Past medical history including any surgery or trauma: Any fractures or replacements. Cancer and treatment for this. Lymph node removal. Recurrent cellulitis. Reduced mobility. Venous insufficiency. Obesity. All of which can effect/ impair the lymphatic system and cause swelling.

Risk Factors: Heart failure, chronic kidney disease, Peripheral arterial disease, venous disease – varicose vein stripping or harvesting, surgery, lymph node removal, radiotherapy, cellulitis, chronic skin disorders, dependency and immobility. Cardiovascular risk factors.

Medications: Medications could be contributing towards the swelling common ones include: Amlodipine, dexamethasone/prednisolone (Steroids)

Holistic factors: Mobility, living environment, mental health, diet and lifestyle.

Vascular assessment:

What should be included? All of the above.

Symptoms: Intermittent claudication, chronic ischaemic rest pain, acute ischaemic pain, neuropathic or musculoskeletal pain?

Clinical examination: Peripheral neurological status, oedema, peripheral pulse palpation/ hand held Doppler, skin colour, nails, temperature, trophic skin changes, venous hypertension, capillary refill, buergers test.

British Lymphology Society ABPI Statement:

Routine ABPI measurements for patients who present with lymphoedema are not required in the absence of significant cardiovascular risk factors and clinical signs or symptoms of Peripheral Arterial Disease, provided the vascular status has been thoroughly assessed. **If there are concerns in terms of reduced arterial flow, a referral for further vascular assessment and possible intervention should be pursued.** Documentation and effective communication must be provided to all health care professionals involved in the on-going management of the patient with Lymphoedema: which demonstrates the clinical assessment and rationale for not completing an ABPI.

Bladder dysfunction

	Description	Symptoms and Causes	Treatment
Stress urinary incontinence	<p>The involuntary loss of urine occurring because of a rise in intra-abdominal pressure that causes the pressure in the bladder to exceed the maximum urethral pressure. This condition is more commonly experienced by women but also seen in men especially following surgery to the prostatic bed or urethra.</p>	<ul style="list-style-type: none"> Urine loss experienced immediately upon physical exertion e.g. laughing, coughing, sneezing, lifting, bending, walking and any exercise. The urine leakage occurs at the time of effort or exertion and is usually a small amount but can be significant if severe. 	<ul style="list-style-type: none"> Pelvic floor exercises – careful assessment 3–6 months at least Biofeedback - pelvic floor exercises, weighted cones Neuromuscular stimulation (NMS) Oestrogen replacement – post menopausal women Surgery - bladder neck procedures, anterior compartment procedures, mid urethral procedures, artificial sphincters Drug therapy - Duloxetine
Detrusor over activity/ overactive bladder (oab)	<p>This is defined as the involuntary loss of urine characterised by the involuntary bladder contraction during the filling phase. This is also often called urge incontinence or overactive bladder. This condition occurs when the powerful sensory impulses are transmitted from the bladder to the spinal cord during the filling phase of the bladder. This may occur when there is as little as 30mls in the bladder or up to 400ml or more of urine in the bladder. The sensation is perceived by the patient as an overwhelming desire to void e.g. a full bladder which needs to be emptied immediately. Not all patients with an overactive bladder are wet.</p>	<p>Symptoms:</p> <ul style="list-style-type: none"> Urgency Urge incontinence Frequency - more than 7 in the day more than 1 at night Poor voiding habits – just in case voiding or toilet mapping Nocturia or nocturnal enuresis Overwhelming fear of incontinence <p>Causes:</p> <ul style="list-style-type: none"> Detrusor overactivity Upper motor neuron disease affecting cortical micturition centre Stroke / Alzheimer's disease, Parkinson's disease Increased hypersensitivity of the bladder e.g. UTI's, cystitis, stones, cancer, faecal impaction Incomplete spinal cord lesions Idiopathic 	<ul style="list-style-type: none"> Fluid modification Pelvic and perineal floor exercises Bladder re training and deferment techniques Use of bladder diaries Drug therapy- anticholinergic medications Surgical procedures – cystectomy, intravesical Botox, Sacral nerve stimulation

Bladder dysfunction continued

Description	Symptoms and Causes	Treatment
<p>Outflow obstruction</p> <p>This is the inability of the bladder to empty efficiently due to an obstruction. Residual volumes of urine may build up and the bladder may become progressively distended which can lead to outflow incontinence. For many this is a slow progressive problem but can be a significant acute problem depending on the cause of the obstruction. If the urethra becomes completely obstructed and no urination is possible this causes the patient significant pain and distress and MUST receive IMMEDIATE medical attention.</p>	<ul style="list-style-type: none"> • Poor stream - a weak or interrupted urinary flow • Straining to start the flow of urine • Hesitancy • Higher frequency of urination day and night including enuresis • Dribbling towards the end of flow and after finishing • Urgency • Burning or pain during urination. <p>Causes:</p> <ul style="list-style-type: none"> • Enlarged prostate in men - malignant or benign • Urethral strictures more common in men but also women who have undergone pelvic surgery / urethral procedures, traumatic deliveries • Vaginal prolapse of any compartment • FGM and scar tissue • Faecal impaction common in the elderly <p>It is important to note that the above symptoms do not necessarily prove that there is an obstruction. These symptoms may suggest poor detrusor function or neurogenic bladder.</p>	<ul style="list-style-type: none"> • Removal of obstruction if there is one i.e. prolapse management, good bowel regime • Wait and watch – this is done when there are only a few minor symptoms and this requires regular planned review by specialist team. • Surgical treatment – transurethral resection of the prostate (TURP) - possible complications of this include erectile dysfunction, retrograde ejaculation and urinary incontinence. • Urethral dilation, repair of prolapse. • Catheterisation either intermittent or urethral indwelling if surgery is not an option / pt choice.
<p>Neurogenic bladder</p> <p>This is a condition which is often experienced by patients with neurological problems. The main neural circuits controlling the two functions of the bladder, (storage and voiding) are trans spinal so that the intact cord connections between the pons and sacral segments are necessary to sustain physiological control.</p>	<p>Symptoms:</p> <ul style="list-style-type: none"> • Post void residual urine of over 100ml. • Frequency • Urgency • Constant dribble – passive incontinence • Poor stream • Nocturnal enuresis • Recurrent urinary tract infections • Sensation of incomplete voiding / emptying <p>Causes:</p> <ul style="list-style-type: none"> • Damage to the peripheral nerves to the bladder and spinal cord • Pelvic injury • Diabetic neuropathy • Neurological impairment associated with Multiple Sclerosis, Parkinsons disease, spinal cord injury. 	<ul style="list-style-type: none"> • Clean intermittent catheterisation to eliminate residual • Anticholinergic therapy (only if able to drain bladder with clean intermittent self catheter (CISC) or indwelling catheter) • Indwelling urethral or supra pubic catheterisation • Containment products

Continence formulary

Continence Service

Adults Community Services Division
Birmingham Community Healthcare
NHS Foundation Trust
St Stephens Centre
171 Nineveh Road
Birmingham
B21 0SY

Telephone: (0121)466 3700
(option 4 to speak to the duty clinician during office hours)

Abena Contact Details:

Telephone: 0800 0901617



Abena Patient Mail Order:

Telephone: 0800 0521165
(Patients purchasing additional supplies direct
from Abena will be charged at a discounted rate)

Contact Numbers for Sheath Samples:

Coloplast: 0800 132 787
Great Bear: 0800 318 559
Holister: 0800 521 377

Shaped Products...The way forward.

BCHC Continence Product Formulary

The BCHC Continence Service has developed the Continence Product Formulary to help guide clinicians when prescribing the most appropriate continence product for their patients.

The Formulary details the continence products available on prescription, the expected volume of product absorbency, and the maximum quantity of products available on prescription.

All continence product prescriptions requested outside the Formulary will require a further conversation and authorisation by the BCHC Continence Team to ensure a standardised approach across the Trust in line with national guidance.

Please utilise the Abena free sample service to ensure the correct prescription has been selected before a full prescription and delivery is processed.

Description of Incontinence	Volume (ml)	Male	Female
Small damp patch	<150	Formula 1 Abri-man: 1-3 pads per day or washable pants Consider prescribing a sheath as a discreet alternative	Washable pants
Underwear and immediate clothing wet	250	Formula 2 Abri-man: 1-3 pads per day	Abri-san 3a: 1-3 pads per day (Self-adhesive strip)
All clothing/ bedding wet	300	Abri-san 4: 1-3 pads per day (Self-adhesive strip)	Abri-san 4: 1-3 pads per day (Self-adhesive strip)
	400	Abri-san 5: 1-3 pads per day + Abri Super Pants	Abri-san 5: 1-3 pads per day
	500	Abri-san 6: 1-3 pads per day + Abri Super Pants	Abri-san 6: 1-3 pads per day + Abri Super Pants
	650	Abri-san 7: 1-3 pads per day + Abri Super Pants	Abri-san 7: 1-3 pads per day + Abri Super Pants
	800	Abri-san 9: 1-3 pads per day + Abri Super Pants	Abri-san 9: 1-3 pads per day + Abri Super Pants

Abri-San Shaped Pad

- 1st product of choice.
- Easy to use.
- Discreet.
- Size 3a and 4 are designed to be worn with normal underwear.
- Abri-san 5 and above require Abri-fix pants to be worn.



Washable Pants

- Reusable and designed for <400mls urinary incontinence.
- Patients must have good mobility and dexterity, and be able to remove their clothing to change the products.
- Patients must have access to laundry facilities to wash and dry the product.
- Reduces impact on the environment
- 3 pairs every 6 months.



Male Urinary Sheath

- Are an ideal incontinence solution for men who prefer not to use disposable products.
- They allow urine to pass through into a discreet leg bag, so that it can be easily disposed of.
- They are available on FP10.
- Leg bags are sold separately and available on FP10.
- Contact the supplier for samples.



Abri-let Anatomic

- The Abri-let Anatomic is designed for Faecal smearing.
- The product is designed to be worn with fixation pants.



Product Prescription Information



Abri-fix Super Pants

- Washable.
- 6 pairs initial delivery.
(then 3 pairs every 6 months)

Abri-fix Super Pants	Waist Size
Small	75-105cm
Medium	80-120cm
Large	90-130cm
X - Large	95-145cm
XX - Large	105-155cm
XXX - Large	110-165cm
XXXX - Large	130-175cm
XXXXX - Large	150-185cm

All products need to be ordered through the Abena website.

Abena are the company used to provide containment products within BCHC Birmingham.

If you will require an individual Abena log on please find the form on the BCHC intranet page.

Please email the completed form to:

IT@abena.co.uk or fax back to 0800 988 4374

Incontinence increases the level of moisture on the skin and is recognised to be one of the causative factors in the development of pressure ulcers.

Remember to...

Think.....



UTI diagnosis and treatment

This is a clinical guide only and ALL assessments must always be based on clinical observations, clinical judgement and an individualized care plan.

Have you considered SEPSIS?

Does the patient have ONE RED FLAG SYMPTOM?

- Respiratory rate >25/min
- Heart rate >130bpm
- New deterioration in GCS/ AVPU or acute confusion
- Systolic BP 90 or below mmHg or a drop of 40mmHg below normal
 - Needs O2 to keep Spo2 92% (88% in COPD)
- Non blanching rash or mottled skin
- Not passed urine in the past 18 hours
- Recent Chemotherapy within the past 6 weeks
- Urine output less than 0.5ml/kg/hr if catheterised



Red Flag SEPSIS! This is a time critical condition, immediate action is required!

1. If appropriate* dial 999, arrange blue light transfer
2. For Moseley Hall Hospital and in-patients start sepsis 6 pathway NOW!
If available give O2 to keep saturations >94% (88-92% in COPD)
4. Cannulise patient if skills & competencies allow
5. Inform Next of Kin
6. Ensure ambulance

Does the patient have 1 symptom indicative of an Upper Urinary Tract Infection (pyelonephritis)?

- Shaking chills (Rigor) OR temperature >37.9 or <36
- Nausea and vomiting
- Kidney pain/ tenderness in back, under ribs



Consider Pyelonephritis

- Send MSC/ CSU for culture
- Immediately start antibiotics (see antimicrobial guidance for upper urinary tract infection/ pyelonephritis)
- If catheter in situ change/remove on commencing antibiotics
- Seek medical review if signs/symptoms of serious illness/ condition (consider use of NEWS)

Does the patient have more than 1 symptom indicative of a Urinary Tract Infection/ Catheter Acquired Urinary Tract Infection (UTI/ CAUTI)?

- A full set of observations is essential
- Pain on voiding
- Increased urinary frequency
- Urinary urgency
- Increased night time voiding
- New onset incontinence
- Visible blood in urine
- Generally unwell

(RED FLAG SYMPTOM- requires an urgent doctor referral)

- Confusion (new or worsening)
- Lower abdomen pain



More Than 1 Symptom Present UTI LIKELY

1. Send MSU/ CSU for culture
DO NOT PERFORM URINALYSIS FOR CLIENTS WITH CATHETERS
Urinalysis is a screening tool however should not be used to diagnose a Urinary Tract Infection
2. Treat with antibiotics based on clinical observations (see antimicrobial guidance for lower urinary tract infection)
If catheter in situ change/ remove catheter on commencing antibiotics
3. Review antibiotic with culture and sensitivity results Continue to MONITOR the patient for any signs of further deterioration and follow NEWS guidelines and think Sepsis
4. STOP antibiotics if a Urinary Tract Infection is excluded and patient is systemically well
5. Consider alternative diagnoses such as:
Alternative infection (eg. Respiratory, gastrointestinal, skin/soft tissue), over active bladder, dehydration, diabetes, malignancy, moisture/skin damage, urethritis, sexually transmitted infections or genitourinary syndrome associated with menopause

1 Symptom Present UTI UNLIKELY

1. Do not initiate antibiotic treatment
2. Act on symptoms observed
3. Check for other causes of delirium
4. Consider alternative diagnoses such as; Alternative infection (eg. Respiratory, gastrointestinal, skin/soft tissue), over active bladder, dehydration, diabetes, malignancy, moisture/skin damage, urethritis, sexually transmitted infections or genitourinary syndrome associated with menopause

Continue to MONITOR the patient for any signs of further deterioration and follow NEWS2 guidelines and think Sepsis

Managing problematic catheters

Assess why patient has the Catheter:

Is it for urinary retention? If no - consider trial without catheter.

If yes see below.

Check fluid intake	→ Advise on fluid intake accordingly with fluid matrix chart
Check catheter record for frequency of blocking/bypassing	→ If patient is a frequent blocker (>once a week), seek advice from continence team for further management following intervention.

Is catheter bypassing or blocked?

Bypassing	
Look for possible causes	Solutions
Detrusor over-activity caused by over-active bladder or underlying neurological condition e.g. MS	→ Consider smaller size catheter (urethral only) and/or request anti-cholinergic medication to be prescribed by GP.
Tubing restrictions	→ Straighten tube to avoid kinking, ensure drainage system is below bladder level and manipulate tubing.
Encrustation	→ Consider the use of a urotainer solution G or R. These must be prescribed on 'an authority to administer card'. Consider bringing forward the planned date of catheter change. Consider the use of Farco-fil - must be prescribed on 'an authority to administer' card.
Debris/sedimentation	→ Urotainer Use as manufacturers guidelines following full assessment. Consider bringing forward the planned catheter change date. Consider increasing the catheter CH size if urethral catheter. Consider an open tipped catheter *If problem persists consider referral to urology. For sedimentation / debris use sodium chloride 0.9%.
Catheter incorrectly positioned/catheter eye blocked by bladder wall	→ Consider changing patients position/consider changing position of tubing. If suspected displacement of catheter recatheterise patient.
If Catheter commences drainage arrange date to review	

Blocked - If catheter is blocked and not patent, catheterise as per catheterisation

Look for possible causes	For further management
Chronic/acute constipation	→ Check medical history, consider DRE, implement / review treatment for constipation if needed commence constipation care plan
Tubing restrictions	→ Straighten tube to avoid kinking, ensure drainage is below bladder level and manipulate tubing.
Encrustation/debris/sedimentation	→ To prevent future blockage consider catheter maintenance solutions as prescribed and review regularly (refer to BCHC guidelines for the catheterisation of the urinary bladder in adults 2019). For encrustation use solution G / R. For sedimentation/debris use sodium chloride 0.9%. Use as manufacturers guidelines following full assessment. Alter change date accordingly. View catheter and document findings. consider increasing CH size (urethral only) or open tipped catheter.

If patient is frequently blocking /bypassing ensure appropriate management plan/care plan is in place and speak with appropriate service for review e.g. The Continence Team.

Please note: Be aware of risk of infection/contamination caused by repeated breaking of closed sterile system.

TWOC guidance

Has the reason for catheterisation been resolved? e.g obstruction, pressure relief, post surgery

No

Yes

Is the patient/inpatient orientated?

No

Yes

Is there a relative/ friend/ full time carer who will support or is within BCHC inpatient unit?

No

Yes

Is the patient currently constipated?

Yes

No

Does the patient have a history of difficult catheterisations?

Yes

No

Leave Catheter in situ at present

TWOC is not appropriate

Inform GP

Consider referral to GP/Consultant for TWOC

Update Evaluation Notes

Date:

Initials:

Date:

Initials:

TWOC not suitable at present.

Complete relevant constipation care plan and liaising with prescriber for a review of laxatives.

Repeat 'Patient Assessment' for TWOC Suitability when resolved.

Update Evaluation Notes

Ask DR to review laxatives for inpatients

Date:

Initials:

Date:

Initials:

TWOC may not be appropriate at present

Liaise with the continence Service on 0121 466 3700

Option 4 for continence nurse on duty

Inform GP / medical staff for inpatient

Consider referral to Urology/ Consultant for TWOC

Update patient records

Date:

Initials:

Date:

Initials:

Suitable for TWOC

Consider the use of a flip flow valve during waking hours prior to TWOC- if catheter has been in situ for >4 weeks 1-2 weeks flip flow valve use recommended

Discuss and agree plans for TWOC with patient/relative/carer

Avoid the end of the week and ensure staff availability and competence

Provide patient with TWOC information leaflet and explain

Ensure measuring equipment is available

Ensure patient has catheter supplies available should re-catheterisation be required

Date..... Initials.....

Date..... Initials.....

Birmingham Community Healthcare Trial without Catheter (TWOC) Care Record Urethral Catheters ONLY

- Between 8am and 10am Nurse/ Assistant Practitioner attended to remove catheter
- Ensured patient/ carer understands TWOC process and information within TWOC leaflet
- Nurse / Assistant Practitioner completed relevant section of catheter care plan

Date:
Time:
Signature:

Contact the patient / carer between 12:00-13:00 hours to review / review an inpatient at 12:00-13:00 hours

If the Patient is voiding and comfortable

If the Patient is in pain or is uncomfortable

Nurse to assess and review patient between 1500 -1600 hours to scan bladder and review bladder diary
Residual Volume
Date.....Time.....
Signature.....

Nurse to assess patient's pain and fluid input/ output. Encourage fluids and perform a bladder scan.

Continue with TWOC if residual volume <300mls

Unsuccessful TWOC if residual volume >300mls and pain not tolerated
Residual Volume.....
Date.....
Time.....
Signature.....

Residual Volume <150mls
Continue with TWOC
Advising the patient to seek advice from a nurse if any pain is experienced

Unsuccessful TWOC

Nurse to:

- recatheterise
 - update catheter care plan and passport
 - inform doctor; considering a urology referral
 - consider intermittent self catheterisation suitability
- Date.....Signature.....

Day 2- Rescan bladder
Residual Volume
Date.....Time.....
Signature.....

Residual Volume <300mls
Successful TWOC; inform GP, document and discharge
Date.....
Signature.....

Residual Volume >150mls

Residual Volume >300mls

Contact the Continence Service on 0121 466 3700 option 4 for advice, or liaise with medical staff if IP.

Day 2- Rescan bladder before 10am
Residual Volume
Date..... Time.....
Signature.....

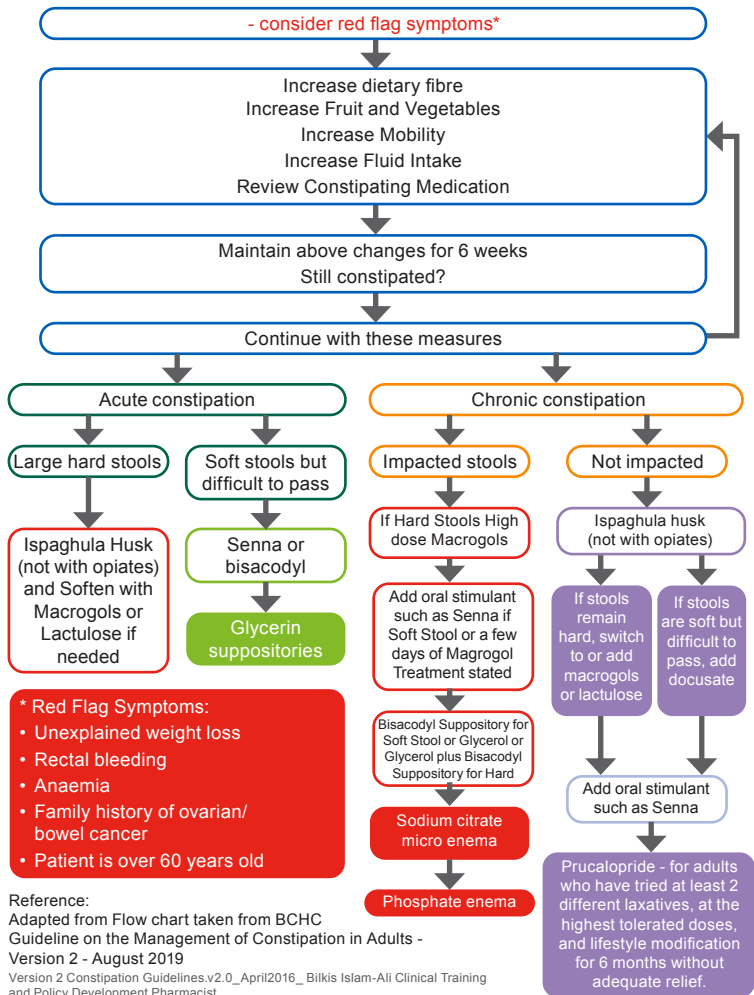
Further plan as agreed with Continence Service

In the event of an unsuccessful Community Catheterisation; patient to be signposted Accident and Emergency with their updated catheter passport








All staff using this guideline should be competent with catheterisations and bladder scanning. This is a guideline and should be used with clinical judgement at all times.

Flowchart for the management of constipation

Assessment and appropriate investigation



Bristol stool chart

Type 1		Separate hard lumps, like nuts (hard to pass)
Type 2		Sausage-shaped but lumpy
Type 3		Like a sausage but with cracks on the surface
Type 4		Like a sausage or snake, smooth and soft
Type 5		Soft blobs with clear-cut edges
Type 6		Fluffy pieces with ragged edges, a mushy stool
Type 7		Watery, no solid pieces. Entirely Liquid

Types 1 and 2 indicate constipation
Types 3 and 4 are the "ideal stools" especially the latter,
as they are the easiest to defecate
Types 5-7 are tending towards diarrhoea

Reference: Lewis SJ, Heaton KW (1997). "Stool form scale as a useful guide to intestinal transit time". Scand. J. Gastroenterol. 32 (9): 920-4.

Useful link

<http://www.bhamcommunity.nhs.uk/policies/?entryid18=54109&q=0%7ebowel%7e>

MUST including BMI

Alternative measurements: instructions and tables

If height cannot be obtained, use length of forearm (ulna) to calculate height using tables below.
(See The 'MUST' Explanatory Booklet for details of other alternative measurements (knee height and demispan) that can also be used to estimate height).

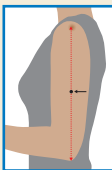
Estimating height from ulna length



Measure between the point of the elbow (olecranon process) and the midpoint of the prominent bone of the wrist (styloid process) (left side if possible).

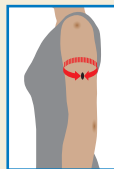
Height (m)	men (<65 years)	1.94	1.93	1.91	1.89	1.87	1.85	1.84	1.82	1.80	1.78	1.76	1.75	1.73	1.71
	men (≥65 years)	1.87	1.86	1.84	1.82	1.81	1.79	1.78	1.76	1.75	1.73	1.71	1.70	1.68	1.67
	Ulna length (cm)	32.0	31.5	31.0	30.5	30.0	29.5	29.0	28.5	28.0	27.5	27.0	26.5	26.0	25.5
Height (m)	Women (<65 years)	1.84	1.83	1.81	1.80	1.79	1.77	1.76	1.75	1.73	1.72	1.70	1.69	1.68	1.66
	Women (≥65 years)	1.84	1.83	1.81	1.79	1.78	1.76	1.75	1.73	1.71	1.70	1.68	1.66	1.65	1.63
Height (m)	men (<65 years)	1.69	1.67	1.66	1.64	1.62	1.60	1.58	1.57	1.55	1.53	1.51	1.49	1.48	1.46
	men (≥65 years)	1.65	1.63	1.62	1.60	1.59	1.57	1.56	1.54	1.52	1.51	1.49	1.48	1.46	1.45
	Ulna length (cm)	25.0	24.5	24.0	23.5	23.0	22.5	22.0	21.5	21.0	20.5	20.0	19.5	19.0	18.5
Height (m)	Women (<65 years)	1.65	1.63	1.62	1.61	1.59	1.58	1.56	1.55	1.54	1.52	1.51	1.50	1.48	1.47
	Women (≥65 years)	1.61	1.60	1.58	1.56	1.55	1.53	1.52	1.50	1.48	1.47	1.45	1.44	1.42	1.40

Estimating BMI category from mid upper arm circumference (MUAC)



The subject's left arm should be bent at the elbow at a 90 degree angle, with the upper arm held parallel to the side of the body. Measure the distance between the bony protrusion on the shoulder (acromion) and the point of the elbow (olecranon process). Mark the mid-point.

Ask the subject to let arm hang loose and measure around the upper arm at the mid-point, making sure that the tape measure is snug but not tight.



If MUAC is <23.5 cm, BMI is likely to be <20 kg/m².

If MUAC is >32.0 cm, BMI is likely to be >30 kg/m².

The use of MUAC provides a general indication of BMI and is not designed to generate an actual score for use with 'MUST'. For further information on use of MUAC please refer to *The 'MUST' Explanatory Booklet*.

Alternative measurements and considerations

Step 1: BMI (body mass index)

If height cannot be measured

- Use recently documented or self-reported height (if reliable and realistic).
- If the subject does not know or is unable to report their height, use one of the alternative measurements to estimate height (ulna, knee height or demispan).

Step 2: Recent unplanned weight loss

If recent weight loss cannot be calculated, use self-reported weight loss (if reliable and realistic).

Subjective criteria

If height, weight or BMI cannot be obtained, the following criteria which relate to them can assist your professional judgement of the subject's nutritional risk category. Please note, these criteria should be used collectively not separately as alternatives to steps 1 and 2 of 'MUST' and are not designed to assign a score. Mid upper arm circumference (MUAC) may be used to estimate BMI category in order to support your overall impression of the subject's nutritional risk.

1. BMI

- Clinical impression – thin, acceptable weight, overweight. Obvious wasting (very thin) and obesity (very overweight) can also be noted.

2. Unplanned weight loss

- Clothes and/or jewellery have become loose fitting (weight loss).
- History of decreased food intake, reduced appetite or swallowing problems over 3-6 months and underlying disease or psycho-social/physical disabilities likely to cause weight loss.

3. Acute disease effect

- Acutely ill and no nutritional intake or likelihood of no intake for more than 5 days.

Further details on taking alternative measurements, special circumstances and subjective criteria can be found in *The 'MUST' Explanatory Booklet*. A copy can be downloaded at www.bapen.org.uk or purchased from the BAPEN office. The full evidence-base for 'MUST' is contained in *The 'MUST' Report* and is also available for purchase from the BAPEN office.

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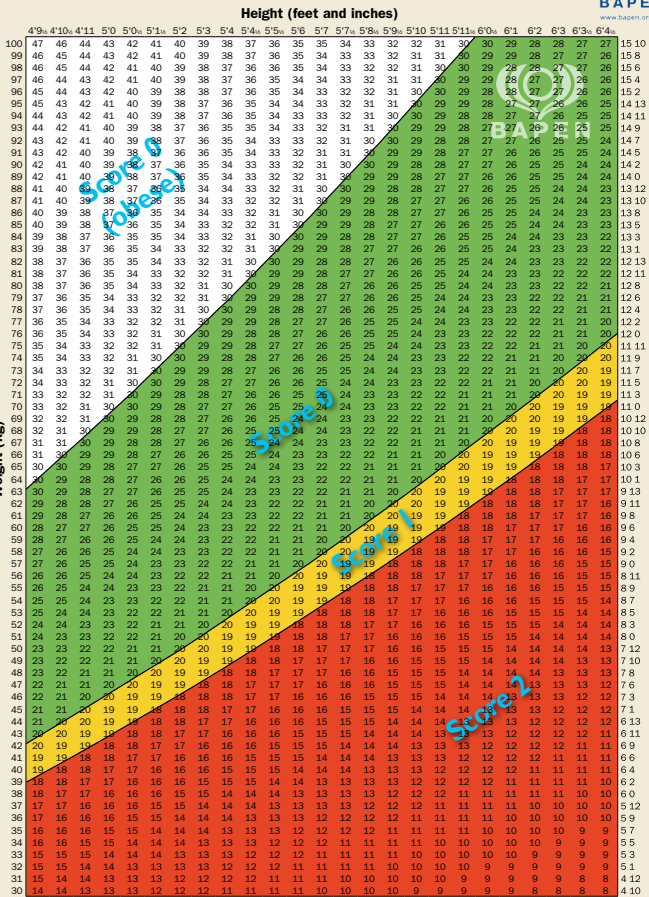


MUST including BMI

Step 1 – BMI score (& BMI)



BAPEN
www.bapen.org.uk



Step 2 – Weight loss score

KILOGRAMS	
Score 0	Score 1
WT loss < 5%	WT loss 5-10%
WT loss > 10%	WT loss > 10%

Weight loss in last 3 to 6 months

kg	Between (kg)		More than (kg)
	Less than (st lb)	(st lb)	
30	1.6	3.3	3.3
31	1.6	3.4	3.4
32	1.7	3.6	3.6
33	1.7	3.7	3.7
34	1.8	3.8	3.8
35	1.8	3.9	3.9
36	1.9	4.0	4.0
37	1.9	4.1	4.1
38	2.0	4.2	4.2
39	2.1	4.3	4.3
40	2.1	4.4	4.4
41	2.2	4.6	4.6
42	2.2	4.7	4.7
43	2.3	4.8	4.8
44	2.3	4.9	4.9
45	2.4	5.0	5.0
46	2.4	5.1	5.1
47	2.5	5.2	5.2
48	2.5	5.3	5.3
49	2.6	5.4	5.4
50	2.6	5.6	5.6
51	2.7	5.7	5.7
52	2.7	5.8	5.8
53	2.8	5.9	5.9
54	2.8	6.0	6.0
55	2.9	6.1	6.1
56	2.9	6.2	6.2
57	3.0	6.3	6.3
58	3.1	6.4	6.4
59	3.1	6.6	6.6
60	3.2	6.7	6.7
61	3.2	6.8	6.8
62	3.3	6.9	6.9
63	3.3	7.0	7.0
64	3.4	7.1	7.1

Current weight

KILOGRAMS	
Score 0	Score 1
WT loss < 5%	WT loss 5-10%
WT loss > 10%	WT loss > 10%

Weight loss in last 3 to 6 months

st lb	Between (st lb)		More than (st lb)
	Less than (kg)	(kg)	
4 10	0.3	0.7	0.7
4 12	0.4	0.8	0.8
5 1	0.4	0.8	0.8
5 3	0.4	0.8	0.8
5 5	0.4	0.8	0.8
5 7	0.4	0.9	0.9
5 9	0.4	0.9	0.9
5 12	0.4	0.9	0.9
6 0	0.4	0.9	0.9
6 2	0.5	1.0	1.0
6 4	0.5	1.0	1.0
6 6	0.5	1.0	1.0
6 9	0.5	1.0	1.0
6 11	0.5	1.1	1.1
7 1	0.5	1.1	1.1
7 3	0.5	1.1	1.1
7 6	0.5	1.2	1.2
7 8	0.6	1.2	1.2
7 10	0.6	1.2	1.2
7 12	0.6	1.2	1.2
8 0	0.6	1.2	1.2
8 3	0.6	1.3	1.3
8 5	0.6	1.3	1.3
8 7	0.6	1.3	1.3
8 9	0.6	1.3	1.3
8 11	0.6	1.3	1.3
9 0	0.7	1.4	1.4
9 2	0.7	1.4	1.4
9 4	0.7	1.4	1.4
9 6	0.7	1.4	1.4
9 8	0.7	1.4	1.4
9 11	0.7	1.4	1.4
9 13	0.7	1.4	1.4
10 1	0.7	1.4	1.4

KILOGRAMS	
Score 0	Score 1
WT loss < 5%	WT loss 5-10%
WT loss > 10%	WT loss > 10%

Weight loss in last 3 to 6 months

kg	Between (kg)		More than (kg)
	Less than (st lb)	(st lb)	
65	3.4	7.2	7.2
66	3.5	7.3	7.3
67	3.5	7.4	7.4
68	3.6	7.6	7.6
69	3.6	7.7	7.7
70	3.7	7.8	7.8
71	3.7	7.9	7.9
72	3.8	8.0	8.0
73	3.8	8.1	8.1
74	3.9	8.2	8.2
75	3.9	8.3	8.3
76	4.0	8.4	8.4
77	4.1	8.6	8.6
78	4.1	8.7	8.7
79	4.2	8.8	8.8
80	4.2	8.9	8.9
81	4.3	9.0	9.0
82	4.3	9.1	9.1
83	4.4	9.2	9.2
84	4.4	9.3	9.3
85	4.5	9.4	9.4
86	4.5	9.6	9.6
87	4.6	9.7	9.7
88	4.6	9.8	9.8
89	4.7	9.9	9.9
90	4.7	10.0	10.0
91	4.8	10.1	10.1
92	4.8	10.2	10.2
93	4.9	10.3	10.3
94	4.9	10.4	10.4
95	5.0	10.6	10.6
96	5.1	10.7	10.7
97	5.1	10.8	10.8
98	5.2	10.9	10.9
99	5.2	11.0	11.0

Current weight

KILOGRAMS	
Score 0	Score 1
WT loss < 5%	WT loss 5-10%
WT loss > 10%	WT loss > 10%

Weight loss in last 3 to 6 months

st lb	Between (st lb)		More than (st lb)
	Less than (st lb)	(st lb)	
10 3	0.8	1.2	1.2
10 6	0.8	1.2	1.2
10 8	0.8	1.2	1.2
10 10	0.8	1.3	1.3
10 12	0.8	1.3	1.3
11 0	0.8	1.3	1.3
11 3	0.8	1.4	1.4
11 7	0.8	1.4	1.4
11 9	0.9	1.4	1.4
11 11	0.9	1.4	1.4
12 0	0.9	1.5	1.5
12 2	0.9	1.5	1.5
12 4	0.9	1.5	1.5
12 6	0.9	1.5	1.5
12 8	0.9	1.6	1.6
12 11	0.9	1.6	1.6
12 13	1.0	1.6	1.6
13 0	1.0	1.7	1.7
13 3	1.0	1.7	1.7
13 5	1.0	1.7	1.7
13 8	1.0	1.7	1.7
13 10	1.0	1.7	1.7
13 12	1.0	1.8	1.8
14 0	1.0	1.8	1.8
14 2	1.0	1.8	1.8
14 5	1.0	1.8	1.8
14 7	1.0	1.9	1.9
14 9	1.1	1.9	1.9
14 11	1.1	1.9	1.9
14 13	1.1	1.9	1.9
15 2	1.1	2.0	2.0
15 4	1.1	2.0	2.0
15 6	1.1	2.0	2.0
15 8	1.1	2.0	2.0

Hydration including fluid matrix

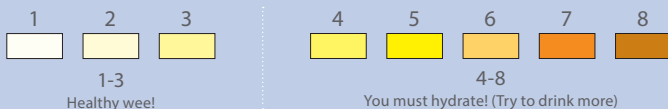
Urine colour chart

The following signs, symptoms and risk markers may help indicate whether the patient is at risk of becoming dehydrated.

- Does the patient have a dry mouth, lips or tongue?
- Is the patient taking diuretics e.g. Furosemide/Spironolactone/Bendroflumethiazide?
- Does the patient require assistance with eating and drinking?
- Can the patient access fluids independently?
- Does the patient require thickened fluids?
- Does the patient have Postural Hypotension?
- Has the patient had recent diarrhoea/vomiting?
- Low BP/Weak?
 - Oligurea (urine output of <400mls/24 hours)?
 - Cold hands or feet (poor circulation)?

Urine Colour Chart

Ask the patient if they have noticed their urine is pale and clear, or dark and concentrated. Some patients may not be aware of the colour of their urine, if so, they should be encouraged to monitor this if possible.



Be aware some medications can cause urine discolouration. These may include but not limited to:

Dark brown	Yellow	Orange	Red/pink
Senna Levodopa Quinine Nitrates	Senna Metronidazole	Vitamin C B vitamins Warfarin Heparin	Ibuprofen Salicylates Senna Phenytoin Methyldopa Food: beetroot

Fluid Matrix

Please use to estimate daily fluid target and document on patient hydration leaflet. If you don't know how much your patient weighs, you can use the mid upper arm circumference (MUAC) as an estimation as follows:

MUAC <23.5cm = 1200-1500ml

MUAC 23.5cm-32cm = 1500-2000ml

MUAC >32cm = 2000-2500ml

Important: consider whether or not your patient is on a fluid restriction. If they are, please disregard the fluid matrix.

Patient's weight			
Stones	Kilos	Mls	Mugs
6	38	1200	4
7	45	1300	5
8	51	1450	5-6
9	57	1800	6
10	64	2000	7
11	70	2200	7-8
12	76	2350	8
13	83	2550	9
14	89	2750	10
15	95	3000	10-11
16	102	3150	11

Important: Fluid Overload

It's important also to be aware of the signs of fluid overload. These include:

- Breathlessness
- Increased blood pressure
- Oedema

If the patient is showing multiple signs/symptoms or risk markers of dehydration or you are concerned the patient is dehydrated please alert the patients GP and state the action taken within your nursing evaluation.

Useful link

<http://www.bhamcommunity.nhs.uk/about-us/divisions-and-directorates/nursing-and-therapies/patient-safety/safety-express/vsbpct-risk-managementclinical-auditclinical-governanceclinical-risk-pt-safetyhydration-groupresource-tools-for-hydration/>

Eating, drinking and swallowing difficulties (Dysphagia)

Clinical risks of eating, drinking and swallowing difficulties:

- Choking potentially leading to asphyxiation and death
- Chest infection
- Malnutrition
- Dehydration
- Weight loss
- Increased length of hospital admission
- Increased risk of developing pressure ulcers
- Low mood and social isolation.

Signs of eating, drinking and swallowing difficulties:

- Reports from patient or the family of swallowing difficulties
 - Avoidance of food or drinks previously consumed
 - Withdrawal from mealtimes
 - Weight loss (not associated with dieting)
 - Prolonged time required to eat and drink
 - Recurrent chest infections
 - Drooling
 - Food spillage from lips
 - Coughing when eating or drinking
 - Choking when eating or drinking
 - Dry mouth
 - Poor oral hygiene
 - Shortness of breath when eating or drinking
 - Changes in the sound of the voice after eating or drinking.
- If any of the above signs are noted please refer to Speech and Language Therapy for advice.**

Easy ways to help a patient with eating and drinking difficulties:

- Check if a texture modified diet is already recommended
- Check the level of assistance required for eating and drinking
- Check whether specific techniques or equipment are recommended
- Do not use spouted beakers or straws unless recommended by SLT/OT
- Ensure the person is upright and alert for all oral intake
- When assisting a patient, raise the bed/sit down so you are face to face
- Turn off the TV, radio and reduce other distractions at meal times
- Give extra time to eat and drink
- Check the mouth for food residue when eating and drinking
- Prompt the person to swallow if required
- Consider the form of medication (e.g. syrup, soluble, pill) administered if a patient is on a modified. Consult SLT or pharmacy with any queries
- Contact Speech and Language Therapy for further advice.

Reference:

Enderby P, Pickston C, John A, Fryer K, Cantrell A, Papaioannou D, 2009. Resource Manual for Commissioning and Planning Services for SLCN. London: Royal College of Speech and Language Therapists.

Royal College of Speech and Language Therapists, 2006. Communicating Quality 3: RCSLT's guidance on best practice in service organisation and provision. London: Royal College of Speech and Language Therapists.

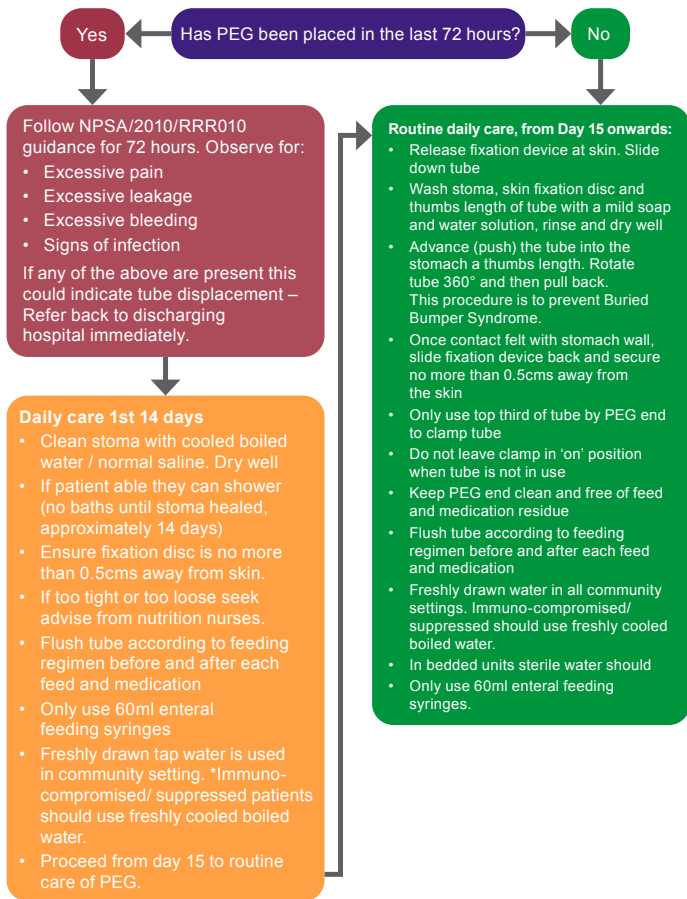
Royal College of Speech and Language Therapists 2005. Clinical Guidelines. Oxon: Speechmark Publishing Ltd

Royal College of Physicians (2010) . Oral feeding difficulties and dilemmas: A guide to practical care, particularly towards end of life. Report of a working party. London: Royal College of Physicians.

Enteral Feeding guidance

Principles of Percutaneous Endoscopic Gastrostomy (PEG) Care

It is particularly important for all community nursing staff to know what type of tube a patient has in and where this tube is placed (whether it is in the stomach or jejunum). It is not unusual for a PEG tube to be placed in the jejunum which will mean that the management of the tube is different in this case. Any tubes that are placed in the jejunum should not be advanced and rotated. Please liaise with the Nutrition Nurses for BCHC to confirm tube position.



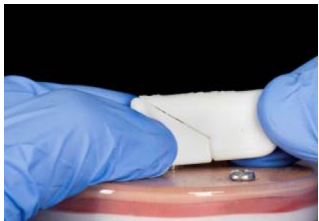
Prevention of buried bumper syndrome

There is a risk that occasionally the bumper of the tube can become embedded in the stomach wall ("buried bumper"). This is thought to occur if there is too much tension between the bumper and the external skin fixator. This is prevented by a technique often referred to as 'advancing and rotating'. This should be started once the gastrostomy stoma site has formed a tract. A doctor or nutrition nurse will let you know when to start this process. The first advance and rotate will be completed by a nutrition nurse. Following on from this it should be done once a day and documented. It should be done once a day and documented. If the tube cannot be advanced please contact the BCHC nutrition nurses.

Corflo PEG advance and rotate

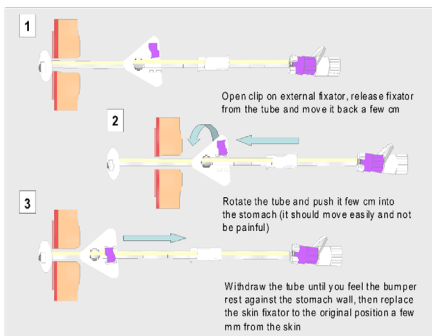


1. Wash your hands with soap and water.
2. Open the white plastic fixation device by holding both ends and twisting away from each other until the two parts separate.
3. Detach the tube from the groove in the base of the fixation device. Move the base of the fixation device away from the skin.



4. Check that the plastic fixation device is clean.
5. Clean the tube and skin around the PEG with warm water and dry well.
6. Push about 2 - 3 cm (about a thumb's length) of the tube into the hole of the patient's stomach and rotate the tube 360 degrees. This ensures the internal retention bolster moves away from the lining of your stomach. This should not hurt.
7. Place the base of the fixation device back down close to patient's skin.
8. Re-insert the tube into the groove, place the cover over the base and clip into place.





Gastrostomy Feeds

There are two ways of feeding through a gastrostomy.

- Bolus feeding is using syringes throughout the day to give feed.
- Pump feeding is a continuous liquid drip which goes into a gastrostomy over a prescribed amount of hours.

Instructions for Bolus Feeding

Equipment: 60 ml syringe, Water, Feed bag, Giving set

Bolus Syringe Method

Wash your hands

1. Flush the Tube

- Draw up 60mls of water in the enteral syringe.
- Gently flush the water through the tube to make sure the feeding tube is clean and open.
- Disconnect the syringe.
- Recap the end of the feeding tube.
- This water also helps keep patients hydrated.

2. Administer Feed

- Pour prescribed feed into a clean cup.
- Uncap the feeding tube.
- Draw up the feed with the syringe and plunge into the feeding tube slowly over ten minutes.
- Repeat until all of the feed has been given

3. Disconnect the syringe from the feeding tube.

4. Recap the feeding tube.

5. Flush the Tube

- Draw up 60mls of water in the enteral syringe.
- Gently flush the water through the tube to make sure the feeding tube is clean and open.
- Disconnect the syringe.
- Recap the end of the feeding tube.

6. Repeat the procedure as many times a day as you are prescribed.

INSTRUCTIONS FOR SETTING UP FEED PUMP FLOCARE INFINITY

Equipment: 60 ml Syringe, Water. Feed bag. Giving set

Flushing the PEG tube

- Wash your hands
- Fill syringe with water
- Attach syringe to connector
- Open clamp on PEG tube
- Flush water through
- Clamp tube and replace cap on PEG tube

Setting up the feed pump

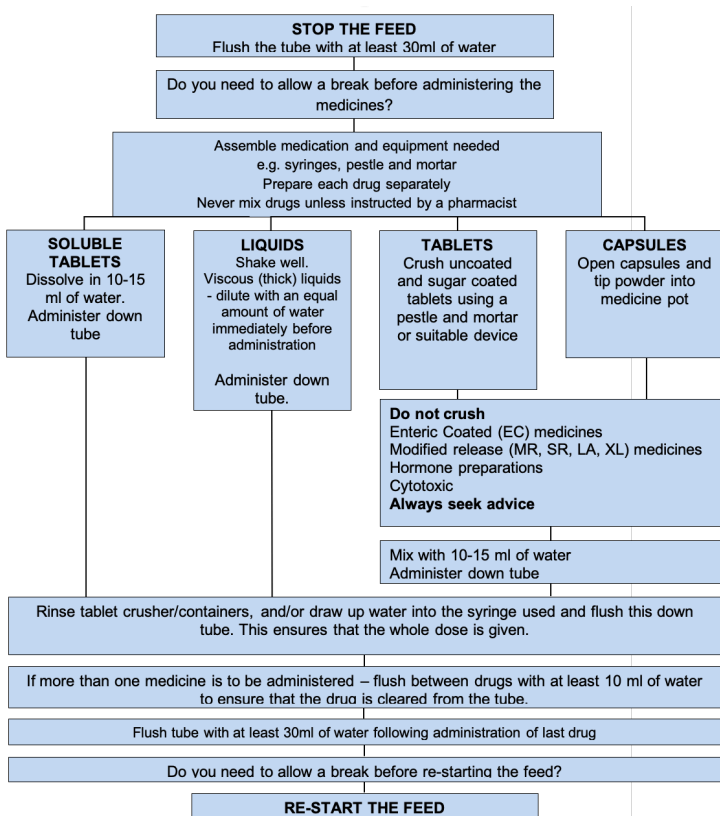
- Open the giving set packaging
- Remove purple cap from the feed bag and screw the giving set on securely
- Open the door on the pump by pressing the tongue
- Insert the giving set into the pump – hard plastic side facing outwards
- Close the door on the pump
- Press the ON/OFF button firmly for 2 seconds - Press the CLR key quickly
- The rate should now be showing on the screen
- If incorrect, use the + or – keys to adjust
- Press and hold the FILL SET button for two seconds
- Once filled, attach the giving set to the PEG tube by gently twisting
- Open clamp on the PEG tube
- Press START/STOP key to start the feed
- RUN will appear in the top right hand corner of the screen

Disconnecting the feed

- When the pump alarms AIR and the bag is empty or you have had the correct dose of feed, press and hold the ON/OFF switch until the pump switches off
- Wash your hands
- Clamp the PEG tube and disconnect the giving set
- Flush required amount of water through the PEG tube as before
- Remove the giving set from the pump and discard

Administering Drugs Via Enteral Feeding Tubes

Prior to administration of medication via an enteral feeding tube to a new patient or changes to medication of an existing patient; the suitability and formulation of the medication being administered via an enteral feeding tube **MUST** be confirmed with a pharmacist.



Balloon gastrostomy care

Adjusting the external skin fixator

It is important that it is not too tight as this can damage the skin and also the inside lining of the stomach. The patient should not feel any discomfort from the fixator, either being too tight or digging in. There should be a small gap between the fixator and the skin. To adjust the position of the fixator simply hold the tube and move the fixator up and down the tube.

To allow the healing process, please do not adjust the position of the fixator for the first 14 days after the tube has been inserted.

Checking the water in the balloon that holds the gastrostomy tube in place

Equipment: 2 x 5 ml syringe (luer slip, not purple), Cooled boiled water

- Unclamp tube clamp if present.
- Check and draw up volume of water to be inserted (usually printed on balloon port or ask the nutrition nurse).
- Move the external fixator back a few mm and gently advance gastrostomy tube a few mm into the stomach to prevent accidental inflation of the balloon within the stomach tract.
- Using a luer slip syringe, remove the water from the balloon port.
- Inflate balloon with correct amount of water. Do not over-inflate the balloon.
- Gently pull back on the gastrostomy tube until resistance is felt, indicating that the balloon is resting against the stomach lining.
- If any concerns with changing the water in the balloon please contact the nutrition nurses.

What to do if problems occur

PEG tube / Gastrostomy blockage

Check that the clamp is open and there is nothing blocking the end port. Use a 60ml syringe and fill it with 5ml of warm water. Use a gentle push and pull motion on the plunger of the syringe to aid removal of the blockage. If there is a visible blockage along the tubing, try massaging the tube between your fingers.

After unblocking, flush the tube with tap water. Never try to unblock the gastrostomy with sharp objects or excessive force. If at first you do not succeed, try once more. If the blockage persists contact your nutrition nurse.

The tube falls out

For the first 4 weeks from initial surgical insertion or in the evening or at a weekend send the patient to accident and emergency straight away. Call the nutrition nurses Monday to Friday 9-5 for them to visit to re-insert tube and to also inform them of any hospital attendance out of hours.

PEG SITE Problems

If you suspect your patient may be suffering with one of the following please contact the nutrition nurses for advice.



Localised Redness



Over Granulation



Infection



Leakage



Discharge / Pus



Candida

Nasogastric tube checking

How to check the position of the tube

You need to check that the tube is in the stomach every time before using the NG tube.

- Wash your hands
- Remove the bung from end of the nasogastric tube
- Connect the 60ml enteral syringe to the end of the tube and draw the plunger back to get 0.5-1ml stomach liquid into the syringe. This liquid is called aspirate.
- Drop the aspirate on the pH testing strip and compare the colour match with the colours on the container, look at the number next to the best colour match, this is the pH.
- The pH of the liquid should be 5.5 or less (acidic).
- This can be affected if the patient is on medication to cut down the amount of acid in your stomach, please ask the nutrition nurse to advise how this will effect the patient.
- If the pH is 5.5 or less. Flush the tube with 30ml water and administer a feed if required.
- If the pH is higher than 5.5 DO NOT use or flush the tube and call the nutrition nurse or call nutricia 03457623603.

Useful Link for nutrition pump training

<https://www.nutriciaflocare.com/>

Produced by the British Association for Parenteral and Enteral Nutrition

Adult Palliative Care

Individualised care for a dying patient - Incorporating the five priorities for care

Recognising the dying phase

It can be difficult to be certain that a person is dying. Signs and symptoms include; reduction in physical function, increasing fatigue, sleeping much of the time/reduced engagement with surroundings and people, reduced consciousness, reduced appetite, diminishing oral intake, unable to swallow tablets, agitation, laboured breathing and noisy secretions

Discuss: The assessment that a patient is in the last days of life should be made by the multidisciplinary team in discussion with the patient and relatives as appropriate.

Initial assessment

Communicate with the patient about their prognosis and care. Prioritise patient preference and wishes and involve patients and those identified as important to them when making decisions. An individualised plan of care including information on; nutritional and hydration intake, symptom control, psychological, social and spiritual support should be completed with the patient and those identified as important to them.

Commence: the Supportive Care Plan / End of Life Care Plan; stop non-essential medication/interventions

Review: DNACPR status and ensure this is clearly detailed within notes and that the ReSPECT document/DNACPR form is completed

Discuss: preferred place of care and patient wishes. If patient is in hospital and wishes to be at home or another location accommodate rapid discharge wherever possible

Prescribe: anticipatory medication via a suitable route for pain, secretions, agitation and nausea and vomiting

Review: nutrition and hydration. Encourage the patient to eat and drink if they wish.

Discuss the benefits and risks of clinically assisted hydration. For patients with PEG consider whether to continue, reduce or stop clinically assisted hydration. Consider oral care

Ongoing review

Review Regularly Monitor symptoms - physical and non-physical. Ensure the people important to the patient are listened to, supported and their needs respected

Aim for: pain under control, secretions not excessive, no agitation, no nausea or no vomiting, no elimination problems, no pressure damage, able to sleep, moist and comfortable oral cavity, eating / drinking as desired.

Consider: conditions that would cause pain such as: limb contractures/ ischaemia, arthritis, pressure sores, in the event that the patient cannot verbalise pain experience.

Prescribe regular analgesia via a suitable route e.g Syringe Driver or subcutaneous injection if a patient cannot take oral analgesia.

Check: No unnecessary interventions are being continued

Care after death

- Support the family and provide them with the Trust information Pack 'Information for families and carers following bereavement'
- Consider cultural/religious needs
- Aim for prompt verification and certification of death (refer to Trust verification of expected death policy)
- Be aware of when and how to refer to the coroner (refer to Trust verification of expected death policy)

Palliative care medications

Mixing drugs in a syringe driver - Compatibility Chart

The compatibility chart below from the West Midlands Palliative Care Physician Guidelines for the use of drugs in symptom control (2018) includes the common medications used in a syringe driver. The chart is based on studies performed at specified drug concentrations:

120 **Table X:** Compatibility Chart for Two Drugs in Water for Injections

	Incompatible - DO NOT USE	Caution - some reports of incompatibility	Caution - Some reports of incompatibility at doses outside those commonly use in palliative care	Compatible	Combination not advised clinically	No published data available		
Glycopyrronium		?						
Haloperidol								
Hyoscine hydrobromide								
Hyoscine butylbromide								
Levomopromazine								
Metoclopramide								
Midazolam								
Morphine/Diamorphine								
Oxycodone								
	Cyclizine	Glycopyrronium	Haloperidol	Hyoscine HBr	Hyoscine BBr	Levomopromazine	Metoclopramide	Midazolam

Appendix 1
Standards for the use of syringe drivers for subcutaneous administration of drugs

Dexamethasone compatibility is unpredictable and is best given in a separate syringe driver if possible or as a bolus subcutaneous dose daily.

Further information can be found in the West Midlands Palliative Care Physicians Guidelines for the use of drugs in symptom control (2018)

ANTICIPATORY PRESCRIBING

Syringe Driver and PRN subcutaneous route - In normal renal function (eGFR>30)

Drug	Usual starting Dose via Syringe Driver/24hrs	PRN Dose	Max dose/24hrs	Purpose
Levomopromazine	6.25mg - 25mg	6.25mg	25mg	Nausea and vomiting
Midazolam	10 -30mg	2.5 -5mg	60mg	Agitation/ restlessness
Hyoscine Butylbromide	60 - 120mg	20mg	180mg	Respiratory secretions
Morphine	10 - 30mg	2.5 -5mg* (or 1/6th total daily dose)	N/A	Pain and respiratory distress *Dose for opioid naive patients

Useful links

<http://www.wmcares.org.uk/wmpcp/guide/syringe-driver-pump/mixing-drugs>

<http://nww.bhamcommunity.nhs.uk/about-us/palliative-and-end-of-life-care-intranet-section/adult-palliative-and-end-of-life-care/>

McKinley T34 Syringe Pump

The CME McKinley T34 Ambulatory Syringe Pump is a portable, battery operated device for delivering medications by continuous subcutaneous infusion over a 24 hour period. The Ambulatory syringe pump is a useful way of delivering medication when a patient is unable to take oral medication, or can no longer tolerate regular subcutaneous injections. They are of particular use in palliative care.

Indications for use of a syringe pump

The decision to administer medication via a syringe pump needs to be taken by the multi-professional team in consultation with the patient and / or carer.

Use of a syringe pump may be indicated in the following situations:

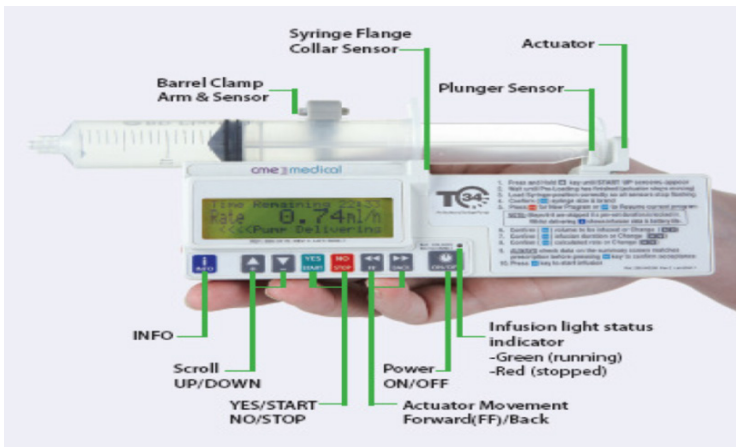
- Persistent nausea or vomiting
- Difficulty swallowing
- Poor alimentary absorption
- Intestinal obstruction
- Profound weakness / cachexia
- Comatose or moribund patient

Benefits of using a syringe pump:

- Delivers drugs at an even rate continuously, maintaining plasma concentration at an optimum therapeutic level therefore improving symptom control
- Increases patient control, removing the fear and pain of regular injections
- Allows delivery of drugs through a single site for a period of time
- Allows for combination of drugs via one route
- Portable and light weight device therefore allows for independence and mobility
- Accurate infusion timing
- When used in conjunction with the locking box, it minimises the risk of syringe tampering/displacement.

Risks/Disadvantages of using a syringe pump:

- Local site reactions from irritant drugs
- Negative impact upon body image
- Potential of technical problems / syringe driver failure
- Dose titration not possible without renewing whole infusion
- Potential for psychological dependence on device
- Barrel clamp arm on pump vulnerable to damage with rough handling



Dickman and Schneider (2016) recommend a 20ml syringe as minimum for several reasons: a larger dilution will reduce both the risks of adverse site reactions and incompatibility and it also accommodates large doses of medications. It is therefore recommended that 20ml and 30ml syringes should be used and that they **MUST** have a luer lock facility in order to avoid leakage or accidental disconnection.

Batteries from different manufacturers can vary by 2mm in length and shorter batteries may be at risk of losing connection – CME Medical recommends using Duracell brand 9-volt (6LR61) in the syringe pump as this was the battery validated for use with the pump or Enix 9-volt NX 6LR61

Everything you need to setup a sub-cut infusion line available in one pack

Unomedical's newly improved range of subcutaneous needles, neria™ soft 90 is now available. This product includes further enhancements that benefits both the healthcare professional and the patient.



neria™ Soft 90 has many advantages

- Minimises the risk of needle injuries
- Makes it easier to insert the needle
- Makes it possible to observe the injection
- Greater choice and customisation as required
- Cost effective

neria™ Soft 90

1 Small bore double layer tubing

- Helps minimise drug wastage
- Kink resistant
- Priming Volumes:
 - * 60 cm - ~0.10 ml
 - * 110 cm - ~0.18 ml

2 Firm grip and needle safety system

- Makes it easy to insert the needle
- Minimises needle prick injuries

3 Self-adhesive pad

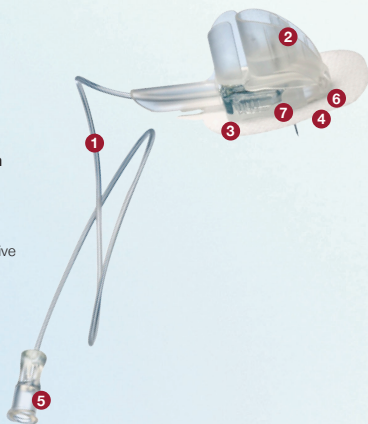
- Eliminating the need for extra adhesive
- Skin-friendly
- Breathable

4 Thin needle

- Minimizes pain during insertion
- Patient comfort, as the needle is removed after insertion, leaving a soft flexible cannula in place

5 Standard luer-lock connection**6 Window for observation of the insertion site****7 Disconnect and re-connection feature**

- The disconnect feature makes neria™ soft 90 infusion set convenient during long infusion periods as well as providing the patient with increased flexibility

**neria™ Soft 90 Product Description**

neria™ Soft 90 Product Description	Product No.	NHS Code	PIP Code
6mm cannula 60cm tube std luer lock connector	722060-5226	FSN341	386-6472
9mm cannula 60cm tube std luer lock connector	722060-5229	FSN342	386-6506
6mm cannula 110cm tube std luer lock connector	722110-5226	FSN343	386-6480
9mm cannula 110cm tube std luer lock connector	722110-5229	FSN344	386-6498

For questions or further information, please phone: **0800 289 738**,
email: **adam.kite@convatec.com** or visit **www.neria.com**

References: 1. Chan G.C.F, Ng D.M.W et al, Comparison of Subcutaneous Infusion Needles for Transfusion-Dependent Thalassemia Patients by the Intrapersonal Cross-Over Assessment Model, *Am.J.Hematol.* 76:398-404 (2004). 2. Parsons J. Infusion line preferences of patients prescribed apomorphine for complex Parkinson's Disease. *British Journal of Neuro-science Nursing*, December 2009. Vol 5 No 12. 3. RM-004034 Biological Safety Testing, October 2011 (skin friendly adhesive)[*]

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T34 McKinley syringe pump troubleshooting

Fault	Possible cause	Action
The pump will not start	No battery present	Fit a battery
	Battery inserted incorrectly	Re-align battery
	Cap on battery terminal	Remove cap
	Battery is depleted/very low	Fit a new battery
	Pump is faulty	Service is required
Infusion ended early/late *see note above	Drug incompatibility or site problems	Assess patient and discuss with healthcare staff. If ended late, check if PRN (as required medication) is needed to control symptoms. If the pump is continuing to infuse beyond the prescribed time –stop infusion. Assess why and resolve
	Disconnection of syringe, SC infusion line or cannula	Check placement of syringe, SC infusion line and cannula
	Wrong syringe brand confirmed during set up/incorrect volume measured by syringe pump.	Set up new infusion
	Syringe pump placed > 75cm above infusion site. This can lead to <u>siphonage</u> if the syringe is not secured.	If user error –seek additional training
	Air is present in the syringe	Check syringe barrel to see if it is cracked. A cracked syringe can lead to <u>siphonage</u>
	The syringe pump is faulty	Send syringe pump for servicing
Infusion is running slow	The syringe pump may have stopped	Check if the infusion has stopped at any point. Assess patient and discuss with registered nurse. If ended late, check if PRN (as required) medication is needed
	Cannula needs to be changed	Set up new infusion
	Pressure/kinking of the SC infusion line or cannula	Check placement of the syringe, SC infusion line and cannula
	Disconnection of syringe, line or cannula	If user error –seek additional training
	The syringe pump is faulty	Send syringe pump for servicing

Cannula sites require changes	Irritation from prescribed medication	Use a larger syringe and a more dilute solution of drug. Check diluents and potential alternatives for prescribing with pharmacist/specialist palliative care team
	Cannula insertion technique	User error – seek additional training support
The pump has stopped before the syringe has emptied	Exhausted battery	Fit new battery, turn syringe pump on, confirm syringe size brand and then resume infusion
	The syringe pump is faulty	Send syringe pump for servicing

T34 McKinley syringe pump on screen display unit indicators and solution

Display	Cause/Action
Pump paused too long	Pump was left unattended in stopped or programme mode for more than two minutes. When appropriate, start the infusion (checking rate prior to doing so), continue programming or switch pump off.
Occlusion	Occlusion can be related to drug or site factors e.g. drug incompatibility. Check for trapping or kinking of the SC infusion line. Check cannula and that the patient is not lying on the cannula insertion site. Check if the pump has been placed lower than cannula site which can increase the risk of alarming. If not resolved re-site cannula. Then if still not resolved send for servicing.
Syringe displaced	Syringe not correctly fitted/displaced. On screen message identifies which sensor to check.
Near End	Infusion nearly complete. Infusion does not stop. Prepare to change syringe.
End programme	Infusion complete. Change syringe or remove infusion if pump discontinued.
Syringe empty	Infusion stops. Check intended time for completion. Change syringe.
Low battery	To alert user- the infusion does not stop. Change battery, resume infusion.
End battery	Battery depleted. Infusion stops. Change battery and resume infusion
System error	If the screen indicates 'Switching pump off and on may resolve the problem', follow advice on screen. If this does not resolve the problem then contact Medical Physics Department for further advice.

<http://www.bhamcommunity.nhs.uk/policies/?entryid18=25401&char=M>

Medicines Management; 5 rights to drug administration

1. Right patient

- Check the name on the prescription (authority to administer record- yellow card) with the patient.
- Check the name on the dispensing label corresponds with prescription
- Care homes may have Photographs to identify patients.
- Ideally, use 2 or more identifiers and ask the patient to identify themselves.

2. Right medication

- Check the name of the medication, brand names should be avoided.
- Check the expiry date.
- Check the prescription (authority to administer record- yellow card) and medication correlate.
- Make sure medications (especially antibiotics) are reviewed regularly.

3. Right dose

- Check the prescription (authority to administer record- yellow card)
- Confirm appropriateness of the dose using the BNF or local guidelines.
- If necessary, calculate the correct dose
- If insulin ensure Blood Glucose readings are reviewed regularly

4. Right route

- Again, check the order and appropriateness of the route prescribed.
- Confirm that the patient can take or receive the medication by the ordered route.

5. Right time

- Check the frequency of the prescribed medication.
- Double-check that you are giving the prescribed at the correct time.
- Confirm when the last dose was given.
- Unstable diabetic patients: same hour each day
- Stable diabetics patients: within a 2 hour window

Community Considerations

- Promote independence with administration of medication where possible
- Involve family/ friends/ carers as appropriate
- Is the authority to administer record (yellow card) in date or does it require updating?
- Is the patients schedule accurate? Do you need to specify a time specific administration eg. Enoxaparin 1200-1300

Useful links

- <http://nww.bhamcommunity.nhs.uk/about-us/divisions-and-directorates/medical-directorate/medicines-management/>
- <https://www.rcn.org.uk/clinical-topics/medicines-management/professional-resources>

Diabetes

The two main types of diabetes

Pancreas gland



Type 1 Diabetes

Develops when the insulin-producing cells in the pancreas have been destroyed and the body cannot produce any insulin

Affects 5-15% of people with diabetes

Treated with insulin injections, a healthy eating plan and regular physical activity

Type 2 Diabetes

Develops when the pancreas can still produce some insulin but insufficient to control blood glucose levels, or when the body is resistant to the effects of insulin

Affects 85-95% of people with diabetes

Treated by normalising weight where appropriate, eating healthily and taking regular physical activity, tablets, injectable medication and/or insulin may be required

HbA1c units conversion chart

DCCT (Diabetes Control and Complications Trial) units measured in %
IFCC (International Federation of Clinical Chemistry) units measured in mmol/mol

DCCT (%)	IFCC (mmol/mol)
4.0	20
4.1	21
4.2	22
4.3	24
4.4	25
4.5	26
4.6	27
4.7	28
4.8	29
4.9	30
5.0	31
5.1	32
5.2	33
5.3	34
5.4	36
5.5	37
5.6	38
5.7	39
5.8	40
5.9	41
6.0	42
6.1	43
6.2	44
6.3	45
6.4	46
6.5	48
6.6	49
6.7	50
6.8	51
6.9	52
7.0	53
7.1	54
7.2	55
7.3	56
7.4	57
7.5	58
7.6	60

DCCT (%)	IFCC (mmol/mol)
7.7	61
7.8	62
7.9	63
8.0	64
8.1	65
8.2	66
8.3	67
8.4	68
8.5	69
8.6	70
8.7	72
8.8	73
8.9	74
9.0	75
9.1	76
9.2	77
9.3	78
9.4	79
9.5	80
9.6	81
9.7	83
9.8	84
9.9	85
10.0	86
10.1	87
10.2	88
10.3	89
10.4	90
10.5	91
10.6	92
10.7	93
10.8	95
10.9	96
11.0	97
11.1	98
11.2	99
11.3	100

DCCT (%)	IFCC (mmol/mol)
11.4	101
11.5	102
11.6	103
11.7	104
11.8	105
11.9	107
12.0	108
12.1	109
12.2	110
12.3	111
12.4	112
12.5	113
12.6	114
12.7	115
12.8	116
12.9	117
13.0	119
13.1	120
13.2	121
13.3	122
13.4	123
13.5	124
13.6	125
13.7	126
13.8	127
13.9	128
14.0	130
14.1	131
14.2	132
14.3	133
14.4	134
14.5	135
14.6	136
14.7	137
14.8	138
14.9	139

Hypoglycaemia (Hypo)

Glucose is a sugar carried in the bloodstream that your body uses for energy. In individuals that have diabetes and take certain treatment; blood glucose levels can sometimes become too low. This is called hypoglycaemia (or a "hypo") and occurs when blood glucose levels drop below 4 mmol/L.

Early Symptoms of Hypoglycaemia include:

Hunger

Sweating heavily

Tingling of the lips

Feeling anxious

Trembling and shaking

Palpitations

Becoming pale

Symptoms may vary from person to person, but you will feel 'different' very quickly.

If you miss these early signs, the symptoms may get worse and include:

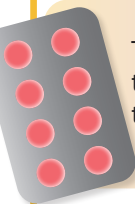
- Slurring your words
- Behaving oddly
- Being unusually aggressive or tearful
- Having difficulty in concentrating

If you do not treat hypo at this stage, you may become unconscious

Who is at risk of a hypo?

Individuals on insulin or taking diabetes tablets that make the body produce more insulin

Causes of Hypoglycaemia

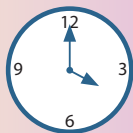


Too much insulin or too many diabetes tablets

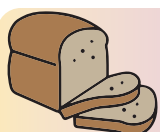
Unplanned or strenuous activity



Delayed or missed meals

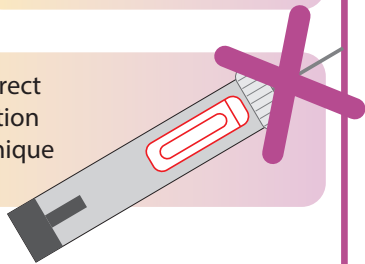


Too much alcohol/ drinking without food



Eating less carbohydrate foods than usual

Incorrect injection technique



Sometimes there is no obvious cause, but treatment should always be carried out immediately, as advised.

Treatment of a Hypo

If blood glucose result is below 4mmols then:

- Treat by ingestion of rapid action carbohydrate e.g. 150 mls non diet cola, 200mls smooth orange juice, 15-20 g fast acting carbohydrate such as dextrose tablets, Lucozade 170-220mls
- Wait for 5-10 minutes and repeat the Blood glucose
- Repeat the treatment again if the Blood Glucose is less than 4mmols
- Repeat every 5mins until Blood Glucose is 4mmols or greater
- Administer the insulin
- Follow up with complex carbohydrate (a meal if due or if not due for more than an hour, a slice of bread or 2 rich tea biscuits or a small yogurt)

The unconscious person

- Call 999 and seek urgent medical assistance
- If breathing the individual should be placed in the recovery position (on their side with their head tilted back)
- Check if the individual is breathing if not commence cardio pulmonary resuscitation
- Glucose treatment should not be put in their mouth

Insulin Administration Colour Coded Indicators

Morning
Lunchtime
Teatime

GLP-1 Agonists (Incretin mimetics)

This medication is not insulin. It helps the body release its own insulin just when its needed and improves blood glucose control.

Generic Name	Administration dose
Byetta	Twice daily
Bydureon	Weekly
Lyxumia	Daily
Victoza	Daily
Trulicity	Weekly
Ozempic	Weekly
Xultophy	Daily

Background Insulin

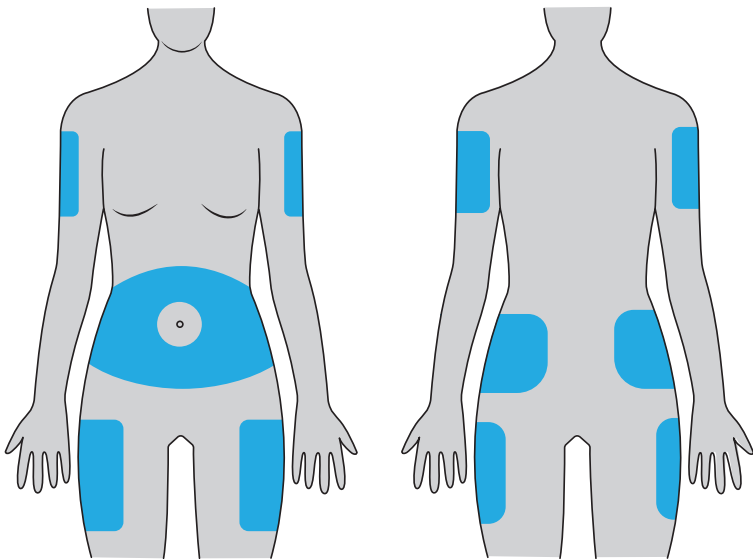
Brand Name	Generic Name
Humulin I	30 mins before meals
Insulatard	30 mins before meals
Insuman basal	30 mins before meals
Levemir	Same time each day
Lantus	Glargine/ same time each day
Toujeo	Glargine/ same time each day
Abasaglar	Glargine/ same time each day
Tresiba	Same time each day

Fast / Intermittent Insulin - **FOR GUIDANCE ONLY**

Apidra	To be administered just before, during or after meals
Humalog	
Novorapid	
Fiasp	
Actrapid	20 – 30 mins before meals
Humulin S	
Insuman Rapid	
Humalog mix 25	To be administered just before, during or after meals
Humalog mix 50	
Novomix 30	
Humulin M3	20 – 30 mins before meals
Insuman Comb 25	
Insuman Comb 50	

Recommended injection sites

- Either side and under the level of the umbilicus
- Upper and outer thigh
- Upper outer arm
- Upper buttock
- Ensure sites are rotated



Lipohypertrophy (Lipo)

A lipo is a lump or swelling where you repeatedly inject insulin.

Lipos are caused by not rotating sites correctly and reusing needles.

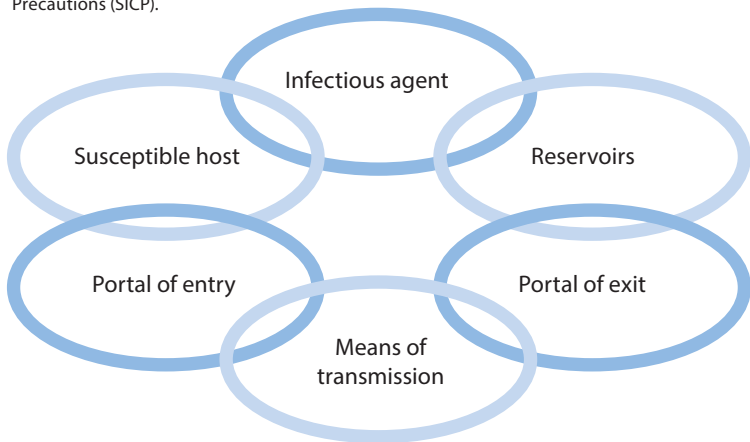
USEFUL LINK

www.trend-uk.org

Infection control

Chain of Infection

A series of events have to happen to enable micro-organisms (e.g bacteria, fungi and viruses) to cause infections. This is called the 'Chain of Infection'. Each part of the process can be viewed as a separate 'link' in the chain. To prevent the spread of infection the chain links need to be broken, this can be achieved using Standard Infection Control Precautions (SICP).



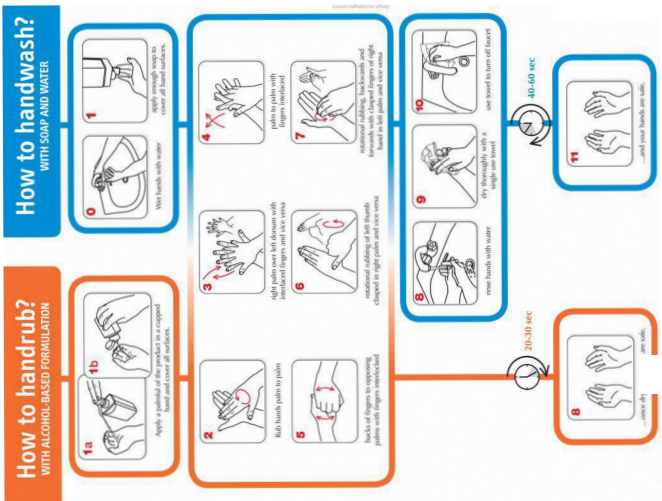
Standard Infection Control Precautions

- Hand hygiene
- Patient placement/isolation;
- Respiratory and Cough hygiene;
- Personal protective equipment;
- Safe management and decontamination of care equipment;
- Safe management and decontamination of the care environment;
- Safe management of linen;
- Safe management of blood and body fluid spillages;
- Safe management and disposal of waste;
- Safe management of inoculation injury including handling and disposal of sharps;
- Personal health and hygiene.

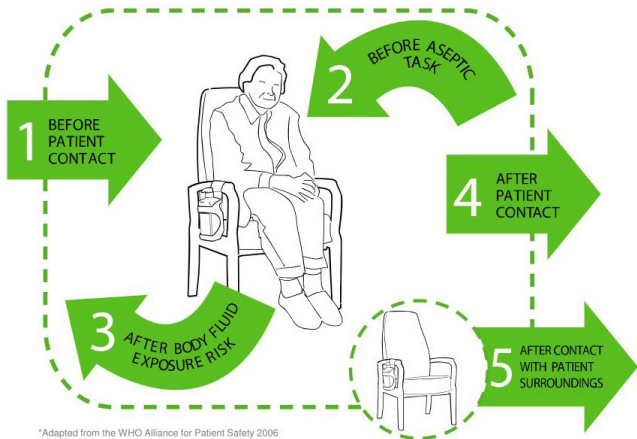
Areas most commonly missed during hand washing



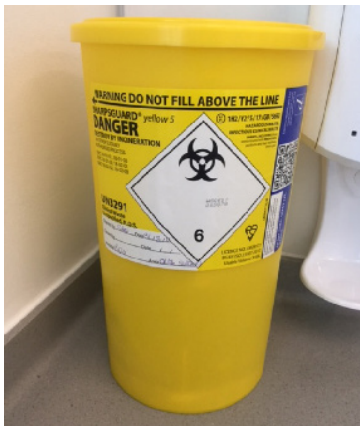
Hand cleaning techniques



Your 5 moments of hand hygiene



Sharps injury



Alert organisms

- Meticillin resistant *Staphylococcus aureus* (MRSA) - a resistant form of the common bacterium *Staphylococcus Aureus*
- Extended Spectrum Beta-Lactamase (ESBL) - Beta-lactamases are enzymes produced by some bacteria that may make them resistant to some antibiotics. ESBL production is associated with a bacteria usually found in the bowel
- *Clostridium Difficile* (C.Diff) (*Clostridiodes Difficile*- new name) - a spore which is transmitted via contact and ingestion, one of the most common bacterial causes of diarrhoea
- Norovirus - commonly known as winter vomiting bug, transmitted via contact, ingestion and aerosol-highly infectious, rapid onset.
- Carbapenemase producing Enterobacteriaceae (CPE) - an enterobacteria which usually lives harmlessly in the gut which produces an enzyme Carbapenemase which disables the group of antibiotics considered the last resort, becomes a problem if it gets into the bloodstream or urine
- Tuberculosis (TB) - TB is an infectious disease caused by the organism *Mycobacterium*. It usually presents as a respiratory disease affecting lungs larynx, pleura and / or mediastinal lymph nodes. It can also affect bones and joints, the gastrointestinal and renal tracts, the central nervous system or disseminated through the blood stream
- MDR-TB is not more virulent or more infectious than any other forms of tuberculosis, but the consequences of acquiring the disease are much more serious because of the complexities and duration of the required treatment regimens. Patients with suspected/confirmed MDR-TB will also require transfer to a hospital recognised as a MDR-TB centre.
- Group A Strep - GAS is commonly found in the throat and on the skin and can cause a large variety of infections. Most GAS infections are relatively mild e.g. streptococcal throat or impetigo; however, occasionally these bacteria can cause severe life threatening infections e.g. necrotising fasciitis and toxic shock syndrome and are referred to as Invasive Group A Streptococcus or iGAS

Antibiotic resistance/Antimicrobial Stewardship

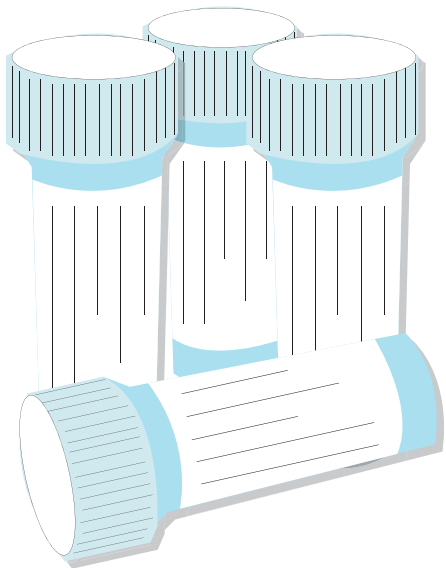
Antibiotic resistance is reducing the effectiveness of a range of antibiotics today which is why they need to be used cautiously. Their overuse (particularly broad spectrum) and the emergence of resistant strains is also reducing their effectiveness in more severe infections. This has led to restrictions on certain antibiotics for particular infections. The resistance patterns also vary for community and hospital acquired infections. Therefore, prescribing antibiotics empirically is not good practice and prescribing decisions should, wherever possible, be based on local sensitivities and culture.

Antibiotics should be used for the shortest duration possible that gives an appropriate clinical outcome and be managed within a multifactorial programme (including hand hygiene and infection prevention and control precautions) aimed at reducing healthcare associated infections and improving antimicrobial use.

Specimens

All specimen request forms must be clearly labelled with the Minimum Patient Identification Data set (PID) which include:

- Patient's full name
- Patient's address
- Patient gender
- NHS Number
- Date of Birth
- Date and time of collection
- Examination/ investigation required
- The relevant clinical details, e.g. description of the wound, pyrexia, catheter or mid-stream urine. For serological diagnosis date on onset of symptoms must be recorded.
- Specimen type/ site



Useful links

Standard Infection Control Policy

<http://nww.bhamcommunity.nhs.uk/policies/?entryid18=33252&char=S>

Hand Hygiene

<http://nww.bhamcommunity.nhs.uk/policies/?entryid18=29191&q=0%7ehand%7e>

Antibiotic Formulary and Guidance

<http://nww.bhamcommunity.nhs.uk/policies/?entryid18=28225&char=A>

Prevention, Recognition and Management of Clostridium Difficile

<http://nww.bhamcommunity.nhs.uk/policies/?entryid18=26763&q=0%7ePrevention%2c+Recognition+and+Management+of+Clostridium+difficile%7e>

MRSA Screening and Management (Meticillin Resistant Staphylococcus aureus) Policy

[http://nww.bhamcommunity.nhs.uk/policies/?entryid18=33233&q=0%7eMRSA+Screening+and+Management+\(Meticillin+Resistant+Staphylococcus+aureus\)+Policy%7e](http://nww.bhamcommunity.nhs.uk/policies/?entryid18=33233&q=0%7eMRSA+Screening+and+Management+(Meticillin+Resistant+Staphylococcus+aureus)+Policy%7e)

Carbapenemase Producing Enterobacteriaceae (CPE)-Procedure for the Management of patients with CPE and Suspected Contacts

[http://nww.bhamcommunity.nhs.uk/policies/?entryid18=45681&q=0%7eCarbapenemase+Producing+Enterobacteriaceae+\(CPE\)-Procedure+for+the+Management+of+patients+with+CPE++and+Suspected+Contacts%7e](http://nww.bhamcommunity.nhs.uk/policies/?entryid18=45681&q=0%7eCarbapenemase+Producing+Enterobacteriaceae+(CPE)-Procedure+for+the+Management+of+patients+with+CPE++and+Suspected+Contacts%7e)

Waste Management Policy

<http://nww.bhamcommunity.nhs.uk/policies/?entryid18=20078&q=0%7eWaste%7e>

Prevention and Control of Tuberculosis (TB) Policy

[http://nww.bhamcommunity.nhs.uk/policies/?entryid18=37149&q=0%7ePrevention+and+Control+of+Tuberculosis+\(TB\)+Policy%7e](http://nww.bhamcommunity.nhs.uk/policies/?entryid18=37149&q=0%7ePrevention+and+Control+of+Tuberculosis+(TB)+Policy%7e)

Respiratory Tract Infections (RTIs) Policy

<HTTP://NWW.BHAMCOMMUNITY.NHS.UK/POLICIES/?ENTRYID18=45695&CHAR=R>

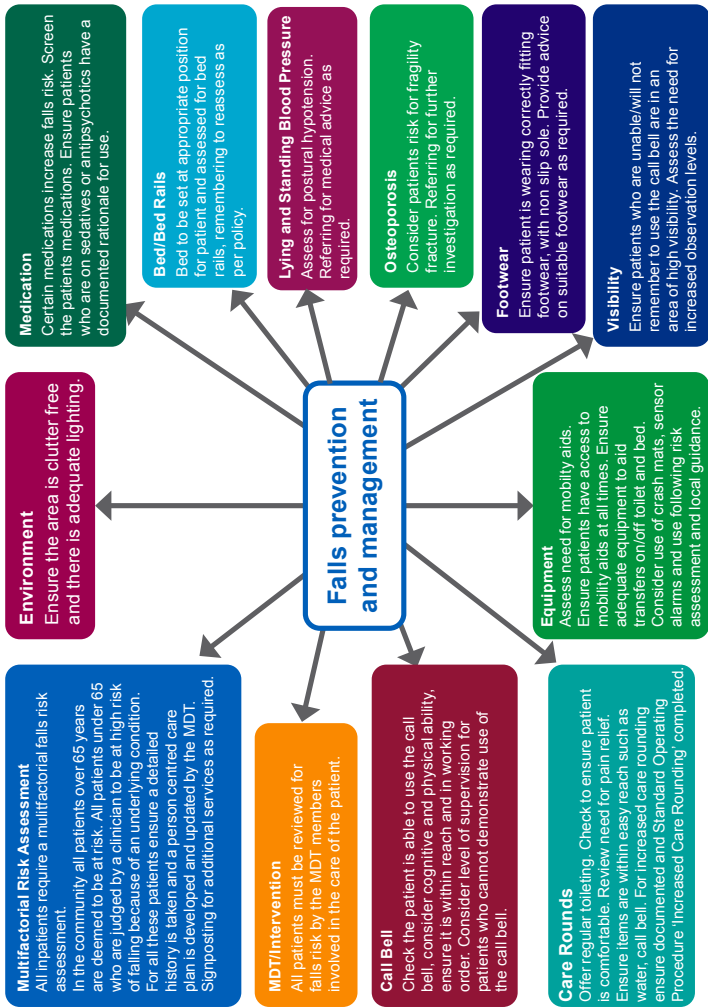
Collection, Handling and Transportation of Specimens Policy

<http://nww.bhamcommunity.nhs.uk/policies/?entryid18=37195&char=C>

Management of Inoculation Injuries and Exposure to Blood and High Risk Body Fluids

<http://nww.bhamcommunity.nhs.uk/policies/?entryid18=33249&char=M>

Falls Prevention and Management



Refer to: Falls involving Adult Service users - Prevention and Management Policy (Community and Inpatients) and Multifactorial Risk Assessment and Intervention Guidance

Normal blood values

Biochemistry

Albumin	34-51	g/L
Amylase	5-100	u/L
Alk Phos	40-130	u/L
Bilirubin	<22	umol/L
Correct calcium range	2.10-2.60	mmol/L
Creatinine	60-126	umol/L
CRP	<10	mg/L
MCV	80-99	fL
Potassium	3.4-5.2	mmol/L
Sodium	134-146	mmol/L
Urea	3.4 – 8.0	mmol/L

Haematology

Haemoglobin(Hb)		
Male	135 - 180*	g/L
Female	115 - 165*	g/L
Platelet count	150 - 450	x10 ⁹ /L
White blood count	4.0 - 11.0	x10 ⁹ /L

Coagulation

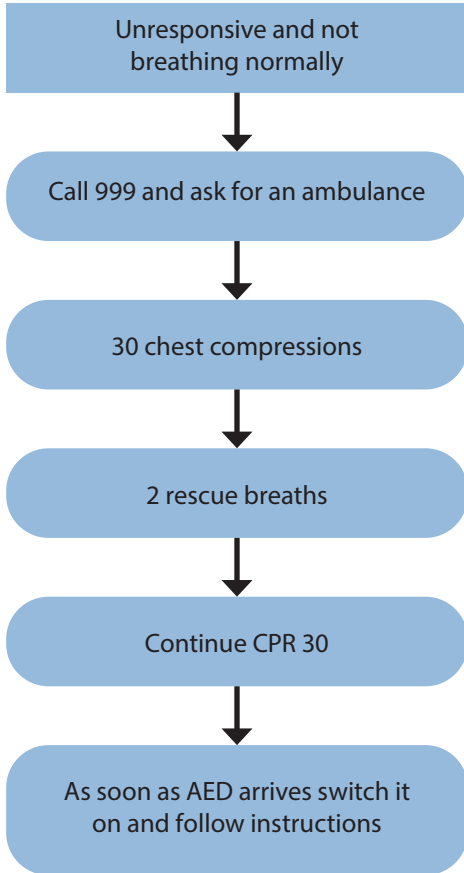
Activated partial thromboplastin	
International Normalised Ratio (INR)	0.9-1.3 seconds

* please note different reference ranges for males and females



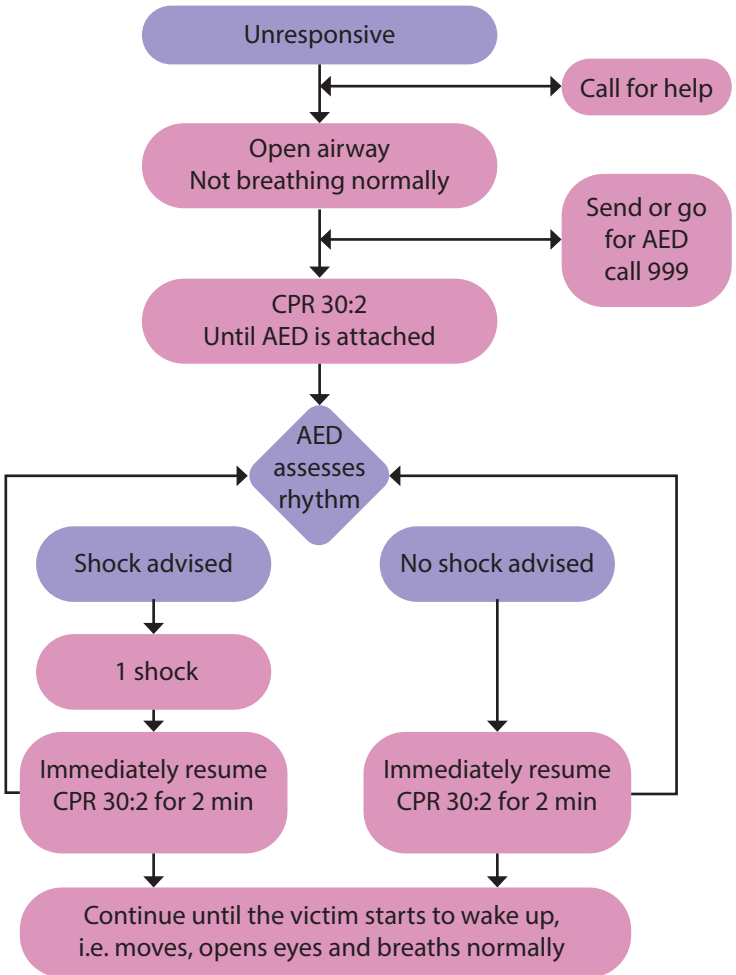
CPR

Adult Basic Life Support Algorithm



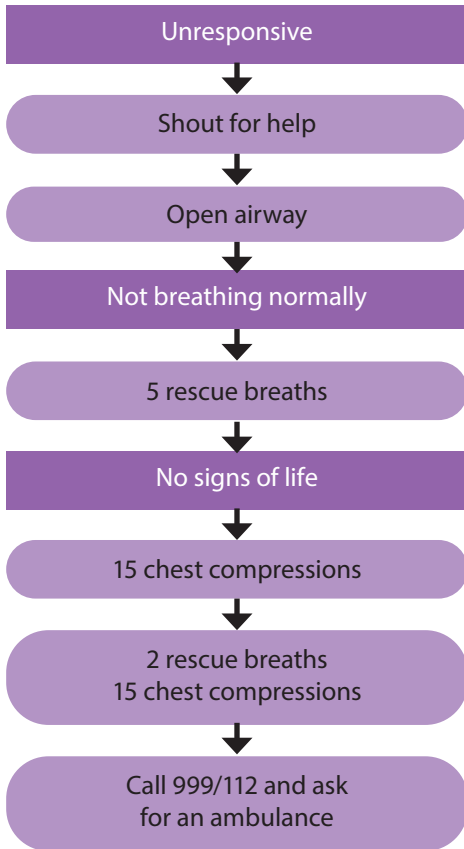
CPR

AED algorithm



CPR

Paediatric Basic Life Support Algorithm



Useful links

<https://www.resus.org.uk/resuscitation-guidelines/adult-basic-life-support-and-automated-external-defibrillation/#chain>

Anaphylaxis

Adrenaline 1:1000 (1MG/1ML) Injection	
Clinical Condition: Emergency treatment of acute anaphylaxis	
Inclusion Criteria	<p>Patients showing symptoms of anaphylaxis Anaphylactic reaction should be distinguished from for example: fainting (syncope) and panic attacks. Assess using ABCDE method.</p> <p>Anaphylaxis is likely when all of the following 3 criteria are met:</p> <ul style="list-style-type: none"> • Sudden onset and rapid progression of symptoms • Life-threatening Airway and/or Breathing and/or Circulation problems • Skin and/or mucosal changes (flushing, urticarial, angioedema) • Exposure to a known allergen for the patient supports the diagnosis <p>Remember:</p> <ul style="list-style-type: none"> • Skin or mucosal changes alone are not a sign of an anaphylactic reaction • Skin and mucosal changes can be subtle or absent in up to 20% of reactions (some patients can have only a decrease in blood pressure, i.e., a Circulation problem) • There can also be gastrointestinal symptoms (e.g. vomiting, abdominal pain, incontinence)
Exclusion criteria	Patient has received adrenaline within the previous 5 minutes
Drug Details	
Name, form and strength of medicine	Adrenaline 1 mg in 1mL (1in 1000) injection (ampoule or pre-filled syringe)
Legal status	Prescription only Medicine (POM) but waived in a life saving emergency
Route/Method	Intramuscular Injection, preferably in anterolateral aspect of thigh. Inpatients receiving more than one dose of adrenaline, the injection site should be rotated to minimise the risk of tissue necrosis.

Dosage	Age	Dose	Volume of Adrenaline (1:1000) 1mg.1mL
	Adult & adolescent	500microgram	0.5mL
	Child more than 12 years*	500microgram	0.5mL
	Child 6-12 years	300microgram	0.3mL
	Child less than 6 years	150microgram	0.3mL
	*If child more than 12 years is small or prepubertal	300microgram	
Use a syringe with appropriate graduations for measuring small doses. If using a pre-filled syringe expel the excess until required volume remains before administering.			
Frequency	Repeat if necessary after 5 minutes		
Duration of treatment	Can be repeated at 5 minute intervals according to patient response until medical assistance or ambulance arrives.		
Side effects	Anxiety, nausea, tremor, sweating, tachycardia, vomiting, headache, dizziness, cold extremities, dyspnea		
Advice to patient/carer	<p>If appropriate and practical:</p> <ul style="list-style-type: none"> • Explain treatment and course of action • Give the patient a copy of any relevant patient information leaflet • Discuss what caused the anaphylaxis and measures to avoid/manage such episodes again if appropriate. • Patients at high risk of such reactions e.g. to foods, may wish to carry their own adrenaline injection 		
Follow up	Arrange immediate transfer to Acute Trust A&E Department. Advise what dose(s) of Adrenaline have been given.		

Safeguarding and mental capacity

Does my patient need a mental capacity assessment?

There must be a decision to be made

Has your patient made an unwise decision or refused to make one at all? Or do you have reason to doubt their ability to decide something?

Yes

Does your patient have an illness or condition which could affect their mind or brain?

Yes

Capacity assessment
needed

No

Capacity assessment
not needed

No

Capacity assessment
not needed

Version 2

Does my patient have capacity?

Capacity should be assumed, but there is a reason to question that this patient lacks it*

Give detailed information about the decision, pros and cons, alternatives, etc

Following this, could the patient:

1. Understand the information?
2. Retain the information?
3. Weigh up the information?
4. Communicate their decision?***

Yes to all 4 questions

No to any 1 question

Patient has capacity

Patient lacks capacity

Repeat for every decision –
mental capacity is **decision and time specific**

*See 'Does my patient need a mental capacity assessment?'

***Please ensure all practicable support has been provided to facilitate communication (e.g. family, IMCA, Speech and Language Therapist, psychologist). Communication may be verbal, non-verbal, with use of visual aids, sign language etc.

Useful links

<http://www.bhamcommunity.nhs.uk/about-us/divisions-and-directorates/nursing-and-therapies/safeguarding/safeguarding-vulnerable-adults/>

<http://www.bhamcommunity.nhs.uk/policies/?entryid18=19878&char=M>

Suicide Prevention

Suicide is a relatively rare event but one which can have a devastating effect on the persons family, friends, carers and professionals involved in their care. The Trust provides community services in England's 2nd city, which has a multicultural mix of people with a range of needs and beliefs. Staff are ideally placed to identify people who are at risk of suicide and support them when they feel in it is difficult to continue.

If you come across a patient who is presenting with an Immediate Risk of Suicide:

- Continue to talk with, listen to and reassure the patient;
- Advise senior clinicians/ consultant/clinical director/manager;
- If the person/patient has a psychiatric consultant contact their team;
- If the person/patient does not have a psychiatrist contact patient's GP who will organise an emergency psychiatric assessment;
- Consider contacting the patient's family (with their consent) to provide support;
- If the person/patient is in a public place and presenting immediate danger consider contacting the Police to remove the patient to a place of safety;
- Refer to care plan and update with any concerns;
- Once the episode has finished consider talking to colleagues,

If it is a member of your own team

- Contact your manager supervisor to ensure they are aware;
- Contact Care First to support team member;
- Referral to Occupational Health.



Consent

Where possible consent for any actions taken should be obtained. However, if the person is assessed as being at risk of suicide the normal boundaries around confidentiality may be over ridden.

Informal Contact

Staff providing care and treatment for patients may come into contact with parents, families, carers, colleagues who are having problems coping and who may give indications of suicidal thoughts and feelings. While the trust may not have the same duty of care it has with a person/patient, the Trust has a moral duty to indicate where they can access support and if necessary treatment. This may include:

- Involving their family or friends (with their consent);
- Directing them to their general practitioner who may consider a referral to the local mental health trust;
- Providing details of local Samaritans and other services who may be able to help;
- Involving local mental health trust if already involved.

Advice can be sought via the Trust Intranet page: Suicide Awareness, which includes the Trust Policy on Suicide Prevention:

<http://nww.bhamcommunity.nhs.uk/about-us/divisions-and-directorates/medical-directorate/clinical-governance/suicide-awareness/>

Or contact the Clinical Governance team for advice 0121 466 7060

Dementia and Frailty as Long Term Conditions



With the population set to increase and a larger proportion of people living longer over the coming years, the numbers of people recognized to be living with frailty is also expected to escalate.

Dementia is a growing challenge. As the population ages and people live for longer, it has become one of the most important health and care issues facing the world. In England it is estimated that around 676,000 people have dementia. In the whole of the UK, the number of people with dementia is estimated at 850,000.

Dementia mainly affects older people, and after the age of 65, the likelihood of developing dementia roughly doubles every five years. However, for some dementia can develop earlier, presenting different issues for the person affected, their carer and their family.

There are around 540,000 carers of people with dementia in England. It is estimated that one in three people will care for a person with dementia in their lifetime. Half of them are employed and it's thought that some 66,000 people have already cut their working hours to care for a family member, whilst 50,000 people have left work altogether.

There is a considerable economic cost associated with the disease estimated at £23 billion a year, which is predicted to triple by 2040. This is more than the cost of cancer, heart disease and stroke.

Dementia is a key priority for both NHS England and the Government. In February 2015 the Prime Minister launched his Challenge on Dementia 2020, which set out to build on the achievements of the Prime Minister's Challenge on Dementia 2012-2015. It sets out NHS England's aim that by 2020 we are: the best country in the world for dementia care and support for individuals with dementia, their carers and families to live; and the best place in the world to undertake research into dementia and other neurodegenerative diseases.



Some of the key aspirations of this vision are:

Equal access to diagnosis for everyone

GPs playing a lead role in ensuring coordination and continuity of care for people with dementia

Every person diagnosed with dementia having meaningful care following their diagnosis

All NHS staff having received training on dementia appropriate to their role.

One of the 10 priorities identified by NHS England as part of the Five Year Forward View is to upgrade the quality of care and access to mental health and dementia services.

Frailty as a long term condition useful links

To support health professionals, care professionals and commissioners in the development of patient-centred services that enable people to age well, there is a range of materials available to improve understanding of frailty as a long term condition:

["https://www.england.nhs.uk/rightcare/products/pathways/frailty/"](https://www.england.nhs.uk/rightcare/products/pathways/frailty/)

NHS RightCare Frailty Toolkit, designed to support systems to understand the priorities in frailty identification and care, and key actions to take.

["http://www.skillsforhealth.org.uk/services/item/607-frailty-core-capabilities-framework"](http://www.skillsforhealth.org.uk/services/item/607-frailty-core-capabilities-framework) Skills for Health, NHS England and Health Education England Frailty Framework of Core Capabilities

["https://www.nationalvoices.org.uk/sites/default/files/public/publications/im_still_me.pdf"](https://www.nationalvoices.org.uk/sites/default/files/public/publications/im_still_me.pdf) National Voices narrative for coordinated support for older people

["https://www.ageuk.org.uk/documents/EN-GB/For-professionals/Policy/health-and-wellbeing/report_bgs_frailty_language_and_perceptions.pdf"](https://www.ageuk.org.uk/documents/EN-GB/For-professionals/Policy/health-and-wellbeing/report_bgs_frailty_language_and_perceptions.pdf) Age UK and the British Geriatric Society research on the language and perceptions of frailty

["https://www.nhs.uk/NHSEngland/keogh-review/Documents/Frailty.pdf"](https://www.nhs.uk/NHSEngland/keogh-review/Documents/Frailty.pdf) NHS England, Age UK and Public Health England patient information leaflet - Keeping your independence

["https://www.england.nhs.uk/publication/toolkit-for-general-practice-in-supporting-older-people-living-with-frailty/"](https://www.england.nhs.uk/publication/toolkit-for-general-practice-in-supporting-older-people-living-with-frailty/) NHS England toolkit for general practice in supporting older people living with frailty

["https://www.nice.org.uk/search?q=Frailty"](https://www.nice.org.uk/search?q=Frailty) NICE information relevant to frailty

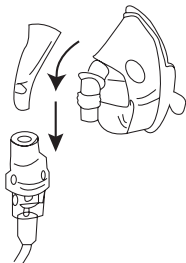
["https://www.england.nhs.uk/rightcare/wp-content/uploads/sites/40/2016/08/janet-story-narr.pdf"](https://www.england.nhs.uk/rightcare/wp-content/uploads/sites/40/2016/08/janet-story-narr.pdf) NHS RightCare resource comparing a sub-optimal, but typical, frailty pathway with an ideal frailty pathway

["https://www.dc.nihr.ac.uk/themed-reviews/frailty-in-hospital-research.htm"](https://www.dc.nihr.ac.uk/themed-reviews/frailty-in-hospital-research.htm) National Institute of Health Research on older patients living in hospital with frailty

["https://www.york.ac.uk/crd/publications/effectiveness-matters/"](https://www.york.ac.uk/crd/publications/effectiveness-matters/) National Institute of Health Research summary of reliable evidence about the effects of important interventions for practitioners and decision makers

["https://www.bgs.org.uk/resources/resource-series/comprehensive-geriatric-assessment-toolkit-for-primary-care-practitioners"](https://www.bgs.org.uk/resources/resource-series/comprehensive-geriatric-assessment-toolkit-for-primary-care-practitioners) British Geriatric Society Comprehensive Geriatric Assessment (CGA) toolkit for general practitioners and medical and healthcare professionals working in primary care setting.

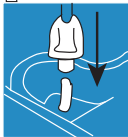
Using a mouthpiece instead of a mask can help some people to avoid the aerosol irritating the eyes. Some medications should only be administered using a mouthpiece.



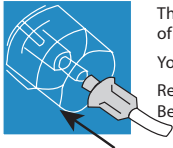
Setting up your Portaneb:



Push the mains lead into the mains socket on the side of the Portaneb ensuring that it is fully inserted. Then push the 3-pin plug into the main supply.



Next, connect one end of the long clear tubing (Duratube) onto the air flow outlet on your Portaneb.



Then, push the other end of the Duratube onto the stem at the bottom of your Sidestream drug container.

Your Portaneb is now ready.

Remember: air is drawn into the Portaneb through the air vents on the sides. Be careful not to cover or block these.

Taking your treatment

You will probably be given help on how to take your treatment by a doctor or nurse. Remember to relax as much as possible so you get the most benefit from your medication. Sit upright in a bed or chair.



When you are ready, switch the portneb on at the off-on switch. "I" is on and "O" is off.

The treatment will begin as soon as you turn the machine on.

Breathing

- Do not try to breathe too quickly. The treatment should not be hard work.
- If you get breathless during treatment, you might be breathing too fast.
- If you need to take a short break during the treatment, switch off the Portaneb.
- Treatment is over when the Portaneb begins to "spit".

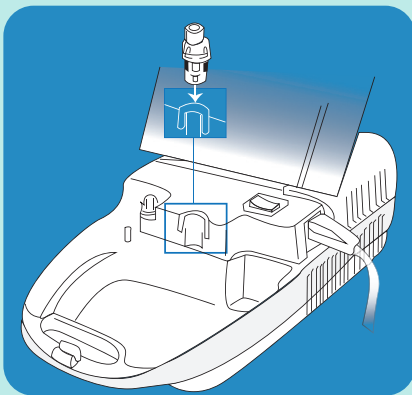
If you are ever unsure about what to do, call the Respiratory team



Useful links

- <https://www.asthma.org.uk/advice/inhaler-videos/> <https://www.rightbreathe.com/>
- <https://www.brit-thoracic.org.uk/quality-improvement/guidelines/asthma/>
- <https://www.asthma.org.uk/advice/resources/>
- <https://www.nice.org.uk/guidance/qs25>
- <https://www.brit-thoracic.org.uk/quality-improvement/guidelines/copd/>
- <https://www.brit-thoracic.org.uk/quality-improvement/guidelines/home-oxygen/>

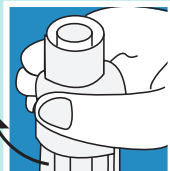
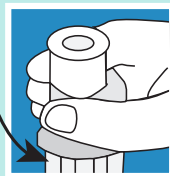
Nebuliser Set Up



Filling your Sidestream with medication.

1. Make sure you have been instructed in the use of your medications.
2. Unscrew the base of the side stream medication container
3. Put the medication into the base of the side stream drug. For more stability when filling medication, use the post on Portaneb to hold the Sidestream nebuliser
4. Screw the top of the Sidestream nebuliser back onto the base
5. Connect one end of the Duratube onto the air flow outlet of your Portaneb
6. Then, push the other end of the Duratube onto the stem at the bottom of your sidestream drug container
7. Now connect either the mouthpiece or the mask to the top of the sidestream drug container

Note: If your Doctor has told you to dilute the solution, empty the medication in the same way then add the amount of saline your doctor instructed.



Parkinsons

STOP! and THINK about Parkinson's disease

Do not alter or stop
Parkinson's medication until the
patient has discussed with
the local specialist team

Ensure the patient is receiving
the correct drug preparation

Caution: when prescribing
neuroleptics and antiemetics

Be aware of fluctuations in mobility,
the patient is not being awkward

Listen to the patients and relatives

Correct individual drug regimen
and timings are essential to allow the
patient to maintain mobility

Contact your local Parkinson's disease
nurse specialist or specialist medical team
for advice

Useful link

<https://www.parkinsons.org.uk/>

Heart failure

www.bacpr.com/pages/page_box_contents.asp?pageid=791

BACPR Standards & Core Components 2017 Standards and Core Components for Cardiovascular Disease Prevention and Rehabilitation. This third edition of BACPR Standards & Core Components represents current evidence-based practice and a pragmatic overview of the structure and function of Cardiovascular Prevention and Rehabilitation Programmes (CPRPs) in the UK

<https://pumpingmarvellous.org/about>

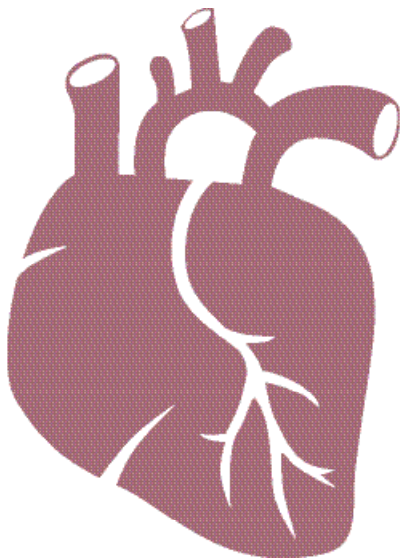
The Pumping Marvellous Foundation (PMF) is the UK's patient led Heart Failure charity. It was founded by a heart failure patient whose experiences whilst rehabilitating have shaped the Foundation's goals and principles of a patient-centric charity focused on improved patient outcomes.

<https://www.bhf.org.uk/informationsupport/support/practical-support/cardiac-rehabilitation>

NICE Guidelines:

<https://www.nice.org.uk/guidance/conditions-and-diseases/cardiovascular-conditions>

<https://www.nice.org.uk/guidance/conditions-and-diseases/cardiovascular-conditions/heart-failure/products?Status=Published>



Documentation

<p>Subjective history</p>	<p>Presenting complaint (by patient, carer) History of presenting complaint Summary of medical/nursing history + medication</p>
<p>Objective examination + investigations</p>	<p>Patient appearance Vital signs test results, swabs, pathology, bloods, physical examination</p>
<p>Assessment diagnosis + impression</p>	<p>Summary of presenting problem (combine your findings from subjective and objective to reach assessment stage) Eg: with presenting complaint, you have completed your observations/tools of assessments etc and have decided on a diagnosis based on your nursing assessment</p>
<p>Plan What are your next steps to manage the situation</p>	<p>Who is best placed to treat/review the patient (you, self care, Carer, another discipline, CCM, ANP / ACP, GP, Paramedic) Who have you escalated - to whom - have they confirmed/accepted to see the patient - when will they visit Safety net: if no escalation req'd - do you need to increase visits, rapid response input - advise pt/carers when to seek medical advice.</p>
<p>Implement</p>	<p>Apply/implement your plan using either nursing intervention or signposting/escalation as necessary</p>
<p>Evaluate Has your plan worked ?</p>	<p>Review what you have done, has it made a difference to what the presenting problem was? If not, do you need to escalate to another service eg: GP, ANP, ACP, CCM, 999</p>

Useful link

<http://www.bhamcommunity.nhs.uk/policies/?entryid18=19485&char=C>



Clinical Directory



Abena	0800 090 1617
ATS Moseley Hall	0121 466 6162
Brain Injury Specialist Clinic	0121 466 6070
Cardiac Services	0121 466 2170
Birmingham Community Nutrition (Nutrition Nurses and Dietitian)	0121 683 2300 BCN.nutritionnurses@ nhs.net
Chronic Kidney Disease	0121 466 3680
City Road Hospital	0121 553 1831
Continence Service	0121 466 3700
Community Stroke Team	0121 466 2130
Customer Services	0800 917 2855
Diabetes Service	0121 466 3680
Falls Prevention	0121 466 2105 East/ North
Heartlands Hospital	0121 424 2000
Infection Control	0121 466 6550 IPCdata@nhs.net
John Taylor Hospice	0121 465 2000
Lymphoedema	0121 466 6110
Marie Curie Solihull	0121 703 3600
Medicines Mangement	0121 466 4099
Moseley Hall Hospital	0121 466 6000
Multiple Sclerosis Clinic	0121 466 3226
Physiotherapy	0300 555 1919 option 1
Podiatry	0121 466 7600
Posture & Mobility Service	0121 466 3100
Prosthetics/ Amputee	0121 466 3005

Rapid Response	0300 555 1919 option 2
Risk Management	0121 466 7278
Respiratory Service for any queries, Monday - Friday, 9-5pm	Admission Avoidance 0121 466 3705 Respiratory Clinic 0121 466 3705
Sandwell Hospital	0121 553 1831
Safeguarding	0121 466 7118
Sickle Cell Thalassaemia	0121 466 3667
Solihull Hospital	0121 424 2000
Speech and Language Therapy	
Single Point of Access (SPA)	03005551919
St Giles Hospice	01922 602542
St Mary's Hospice	0121 472 1191
Therapy Hub	South - 0121 466 4162 East & North - 0121 466 2138 Central & West - 0121 466 6625
Tissue Viability	0121 466 3610
University Hospital	0121 627 2000
Word 360 Interpreters	020 33226365 Your client PIN. This can be found on your Wordskii account or by contacting Word360 Your department PIN This can be identified from your account The Language Code for the interpreting language required.