Tissue Viability Guidance and Formulary

The 5 key messages the reader should note about this document are:

1. Wound care is estimated to cost the NHS around £3.1 billion per year (based on 2006 costs) and is rising year on year.

2. The guidelines and formulary are based on best practice evidence and include: wound, pressure ulcer prevention strategies and management and leg ulcer management.

3. By selecting treatment that is appropriate to the cause and condition within a framework of holistic care, healthcare professionals will improve performance.

4. This guidance has been developed to maintain and enhance a standardised approach to practice.

5. Wound care practice needs to be clinically effective, cost effective and safe for the management of patients who have acute and chronic wounds.
This document has been approved and ratified. Circumstances may arise where staff become aware that changes in national policy or statutory or other guidance (e.g. National Institute for Health and Care Excellence (NICE) guidance and Employment Law) may affect the contents of this document. It is the duty of the staff member concerned to ensure that the document author is made aware of such changes so that the matter can be dealt with through the document review process.

NOTE: All approved and ratified policies and procedures remain extant until notification of an amended policy or procedure via Trust-wide notification, e.g. through the weekly e-Update publication or global e-mail and posting on the Intranet (Connect).

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<thead>
<tr>
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<th>Tissue Viability Guidance and Formulary</th>
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<tbody>
<tr>
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</table>
| 8    | 43      | 8.5 Changed wound formulary format – now includes pictorial wound categories, exudate levels and choice of 1st & 2nd line products.  
04/07/2019 Formulary removed from the document and replaced by a BDCFT web taking the reader to the up to date formulary.  
| 9    | 68      | Appendix C added Podiatry referral form |
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1 INTRODUCTION

This Tissue Viability Guidance and Formulary supports the Tissue Viability Policy and has been devised collaboratively by members of the Tissue Viability Board.

The guidelines are based on best practice evidence at the time of publication and include: wound, pressure ulcer prevention strategies and management and leg ulcer management.

The wide range of products included in the formulary will assist clinicians in making informed clinical management decisions appropriate for specific stages of wound healing.

In exceptional circumstances where a suitable dressing cannot be found in the formulary further information and advice must be sought from the Tissue Viability Service.

2 SCOPE

These guidelines are to ensure that all patients with a wound or ulcer have the following:

- Patient centred holistic assessment in relation to wound care, pressure ulcer prevention and management and leg ulcer management
- Comprehensive and accurate assessment
- Rationale for the management and treatment selection
- Documented evidence of patient advocacy
- Contemporaneous record of all interventions
- Review dates

3 DUTIES

3.1 All Staff

Staff will work to the Tissue Viability Policy and utilise these guidelines to support best practice.

Will only use products listed in the Tissue Viability Guidelines and Formulary unless agreement and arrangements are made by a Tissue Viability Nurse to use an alternative product on a named patient basis.

An ‘Off Formulary Dressing Product’ form must be completed on each occasion (appendix A).

Permissions will be documented, monitored and matched against prescribing data by the tissue viability service and data analyst.

Patients who present with a wound will have a holistic assessment by a competent registered health care professional, wound/s assessment, have their wound/s cleansed as required in accordance with best practice, have an individualised wound management plan ensuring clinically effective dressing selection is in line with this formulary.

Staff will identify training needs and make their line manager aware of training deficit.

Staff will report to their line manager all clinical incidents pertaining to wound management.
Staff will refer to the Tissue Viability Service in accordance with the referral criteria and referral methods as detailed in the Tissue Viability Policy document (section 6.2).

### 3.2 Recording Information

It is a legal requirement that all interventions are fully documented in the patient’s treatment record.

The organisations Wound Management electronic patient clinical system should be used to record all information.

All staff must ensure that rationale is fully recorded for any interventions thought to be clinically inappropriate e.g. full skin inspection/photograph and mapping and MUST assessment.

### 4 DEFINITIONS

#### 4.1 Holistic Assessment

The healing process is complex and is affected by numerous general and local factors. It is essential to treat the whole person and not just the wound/ulceration in isolation.

The initial assessment should be undertaken by a competent and registered health care professional. The assessor should have a clear understanding of the extrinsic/intrinsic factors that may relate to each individual patient and the knowledge to understand and act upon the findings of the assessment.

Using this information, the assessor will generate an immediate care plan, which should be discussed and agreed by the patient and/or carer(s). All accurate data obtained at the initial assessment will act as a baseline measurement for subsequent assessments.

The patient’s health status must be recorded and supported by use of the relevant assessment tools (e.g. Care pathways, MUST and Maelor, Waterlow).

To ensure optimum wound management and patient comfort is achieved, a holistic wound assessment must include:

- **Detailed Visual Examination**: e.g. for signs of venous or arterial disease, skin damage from localised pressure.

- **Aetiology (type)**: e.g. ulceration, diabetic foot ulcer, pressure ulcer, moisture lesions, Fungating, burn, laceration, post-surgical.

- **Location**: including number of wounds.

- **Size**: including length, width, depth, position/extent of sinuses, undermining of surrounding skin.

In line with best practice a photographic record and wound tracing must be undertaken.

- **Exudate**: including type, colour, approximate amount/extent of strike through on current wound management product, odour.
Wound Bed: e.g. healthy granulation tissue, epithelialisation, slough, brown/black eschar.

Wound Margins: e.g. increasing, decreasing, static, colour, rolled, induration, erythema

Surrounding Skin: e.g. dry, eczematous, fragile, maceration, oedema, colour, erythema.

Signs of Infection: e.g. suspected, confirmed and details of any swab results.

Pain: wound related, at dressing or post dressing change. That is Neuropathic or Nociceptive and/or a combination of both.

4.2 Factors Affecting Wound Healing

Age: the skin’s resistance to injury reduces with the ageing process and cell replication is slower (Guo & DiPietro, 2010). This increases susceptibility to pressure ulcer formation.

Immobility: individuals who are chair fast or bed fast are at an increased risk of pressure ulcer development. The patient’s ability to reposition him/herself affects risk. Mobility may be restricted by a patient’s conscious level, medication, acute illness, severe chronic or terminal illness, weight and pain.

Skin/Tissue Condition: this is adversely affected by age, dehydration, oedema and moisture. Other factors include malnutrition and hypoxia. Previous skin trauma such as surgical scars or previous pressure ulceration increases the risk of future pressure damage (National Institute for Clinical Excellence 2014)

Poor Circulation: delayed healing and tissue breakdown is frequently associated with poor circulation and this may be due to local pressure, vascular disease or diabetes mellitus (Vowden 1996)

Immune Response: e.g. allergies to topical applications can delay healing.

Obesity: adipose tissue has poor vascularity. No known mechanism is responsible for increased infection and wound breakdown in obese surgical patients, but these patients are at a high risk of postoperative wound problems.

Medication: prescribed and over the counter e.g. Anti-Inflammatory drugs (can suppress the preliminary inflammatory response), topical or systemic corticosteroids (can repress the immune system and decrease the multiplication of fibroblasts).

Skin Blanching: blanching is an evaluation that can be performed when repositioning the patient. Finger pressure on the skin of a pressure area should cause the skin to go white initially, but to turn red again within seconds.

If non-blanching (whitening) occurs, then a pressure ulcer is present and its category should be documented.

For patients with dark pigmented intact skin, redness in pressure areas is equivalent to a localised skin colour change, a taut, shiny surface to the skin with increased skin temperature.

Pain: a detailed pain history is integral to alleviating stress and anxiety and improving quality of life. This includes the patient’s perception of pain such as specificity, frequency, immediate or post dressing change, severity etc. Pain assessment should identify Nociceptive or Neuropathic pain or a combination of both.
• Nociceptive pain is typically well localised, constant and often with an aching or throbbing quality. It is often found in patients who have chronic wounds.
• Neuropathic pain is the result of an injury or malfunction in the peripheral or central nervous system. Nerves can be infiltrated or compressed by scar tissue or inflamed by infection. The pain frequently has burning, lancinating or electric shock qualities. It is frequently of a chronic nature.
• Combination of Nociceptive and Neuropathic pain is a nervous system dysfunction that triggers the neural release of inflammatory mediators and subsequent neurogenic inflammation.

Psychological Status: stress and worry increases the production of hormones such as Glucocorticoids which can stem the inflammatory phase and slow down healing (Guo & DiPietro 2010).

Sensory Functioning: this is the loss a protective response which is a major factor in pressure damage. The inability to feel discomfort or pain, e.g. spinal injury, CVA, MS or neuropathy related conditions such as Diabetes Mellitus, may decrease the usual response to discomfort of changing position.

Social Factors: e.g.
• Smoking - as the effects of nicotine and carbon monoxide in cigarette smoke causes tissue hypoxia (Guo & DiPietro 2010).
• Alcohol - misuse can lead to delayed wound healing by impairing the early inflammatory response, inhibiting wound closure, angiogenesis, collagen production and altering the protease balance at the wound site (Guo & DiPietro 2010).
• Illicit Drug Abusers - may become compromised by repeated intravenous vascular access and injection of toxic drug substances. This has devastating effects on the veins, skin, muscles and joints of the lower extremities, thus increasing the risk of chronic venous disease and venous ulcers that tend to be multiple and large by the time wound care is sought (Williams & Southern 2005).

4.3 Wound Cleansing

The aim of wound cleansing is to remove gross contamination with minimal pain and tissue trauma. NICE guidelines for the prevention and treatment of surgical site infection state that sterile saline should be used for wound cleansing up to 48 hours after surgery, after which tap water should be used (NICE 2008).

Tap water is therefore mostly used in the community for cleansing wounds. It is easily accessible, efficient and cost effective. Where tap water is of high quality (drinkable) it is as good as other methods such as sterile water or saline and more cost-effective. (Fernandez & Griffiths 2008). The fluid should be close to body temperature.

The use of liners in bowls or buckets reduces the risk of cross infection.

Wounds should only be cleansed to:
• Remove excess exudate
• Remove slough and / or necrotic tissue
• Remove remnants of previous dressing products
- Facilitate accurate assessment of the wound
- Promote patient comfort

### 4.4 Debridement

Dead tissue in the form of slough and necrosis can, if present in a wound, delay healing and promote infection. Debridement describes any method by which such materials are removed and as a consequence the potential to achieve wound healing enhanced.

Monofilament debridement product is a convenient and easy to use product that is well tolerated by patients and is effective for sloughy wounds and hyperkeratotic skin around acute or chronic wounds (NICE 2014).

Debridement can also be achieved either through the use of wound care products (including Larvae) or by conservative sharp debridement.

If conservative sharp debridement is necessary referral must be made to the relevant professional (Haycocks & Chadwick 2008).

The TVN or Podiatrist carrying out sharp debridement will have completed a validated educational programme in the subject.
4.5 **Integrated Debridement Assessment Flow Chart**

**Assess the wound:**
Underlying cause, site, size, Signs of infection, condition of Peri-wound skin/wound bed

**Trigger Questions**
Do I need to accelerate debridement?
What are the risks?
What are the expected outcomes?
What are my options?

**Assess the patient:**
Co-morbidities, medications, concordance, psychological issues, nutritional status

**Decide debridement goals/desired treatment outcomes – Am I certain what to do?**

**DISCUSS with patient**

**Consult with MDT if further advice needed:**
E.g. contraindications/unsure how to proceed or refer to MDT if specialist debridement method required

**Implement debridement treatment plan and document in patient records**

**Debride if competent in chosen method**

**Do not debride**
E.g. ischemic limbs/high risk

**Keep wound dry, e.g. mummified diabetic toes (some areas such as exposed tendons may need to be kept moist)**

**Autolytic** (generalist); **Mechanical** (generalist); **Larval** (generalist); **Hydro-surgery** (competent practitioner); **Sharp** (competent practitioner); **Surgery** (surgeon)

**Reassess at dressing change and review goals/treatment plan and change method if appropriate**
4.6 Dressing Selection

To optimise healing a moist wound environment is desirable. This encourages the breakdown of fibrin and dead tissue, promotes the interaction of growth factors that stimulates healing and prevents tissue dehydration.

However where ischaemic or thrombolytic aetiology is suspected it is essential that the area is kept dry.

Dressing selection should include the following characteristics:

- Maintenance of a moist environment (where appropriate)
- Controlled exudate management
- Allow gaseous exchange
- Provide thermal insulation
- Non – adherent to wound bed
- Be non – allergic and non – sensitising
- Impermeable to micro – organisms
- Comfortable and conforming
- Acceptable to the patient
- Cost effective

4.7 Single Use

A device (dressing products, bandages, scissors, forceps etc.) designated for ‘single use’ must not, under any circumstances be re – used.

It should only be used on an individual patient during a single procedure and then discarded.

It is not intended to be reprocessed and used again, even on the same patient.

The symbol below is used on medical device packaging indicating ‘do not re – use’ and may replace any wording (MHRA 2006).
5 PRESSURE ULCER PREVENTION AND MANAGEMENT

5.1 Pressure Ulcer Damage

European Pressure Ulcer Advisory Panel (EPUAP) 2009, and NHS Improvement (2018)

Pressure Ulcer Definition is:

A pressure ulcer is a localised injury to the skin and/or underlying tissue usually over a bony prominence (or related to a medical or other device) as a result of sustained pressure, or pressure in combination with shear.

The damage can be present as intact skin or open ulcer or maybe painful.

Assessment and treatment includes:

- Addressing the cause i.e. pressure, shear and moisture
- Assessing the extent of the tissue damage, the state of the wound bed, the level of bacterial load, the condition of the surrounding skin and the perfusion of the wound area
- Deciding on treatment objectives for the wound
- Where appropriate create a healing environment at the wound surface by:
  - Debriding dead tissue/slough
  - Reducing undermining
  - Identifying and treating infection
  - Reducing contamination by faeces or urine
  - Supporting healthy granulation tissue
- Improve the patients general condition including their nutritional status
- Managing Pain and psychological stress

5.2 Skin Assessment

Skin assessment should take into account patient’s dignity and privacy with their consent.

Full body skin inspection should be offered to all patients deemed at risk and outcome documented, including if patient refuses. All vulnerable areas need to be inspected; these are typically bony prominences. A comprehensive skin inspection should include techniques for identifying blanching response, localised heat, oedema and induration (hardness).

On admission to a service / ward all pressure ulcers observed at the skin inspection, regardless of attribution must be reported as an incident.

Individuals who are identified as being at risk of pressure ulceration require regular skin inspections for signs of redness using the European Pressure Ulcer Advisory Panel Classification System.

Pressure – this is caused by sitting or lying for prolonged periods which results in a diminished blood supply to the tissue causing capillary occlusion. The most common sites
for pressure damage in adults are: sacrum, heels, femoral trochanter and buttocks but damage can also occur elsewhere e.g. spine, ears or elbows.

**Medical Device Related Pressure Ulcer** – this is a pressure ulcer that has developed due to the presence of a medical device (NHS Development 2018).

**Moisture-associated Skin Damage** - is inflammation and erosion of the skin caused by prolonged exposure to various sources of moisture, including urine or stool, perspiration, wound exudates, mucus or saliva (Grey et al. 2011), (image in 7.1).

**Pressure and Moisture-associated Skin Damage** – this is a combination of the above and should be reported based on the category of pressure damage (NHS Development 2018).

**Shear** – shearing forces occur when deeper tissues near the bone slide, while the skin remains at its point of contact with the supporting surface (Waterlow 2005). This most commonly occurs when any part of the supported body is on a gradient. Mimura (2009) has demonstrated how bed positioning and body shape and size influence focal shear forces.

### 5.3 Pressure Ulcer Prevention

The involvement of the patient and/or carer in the prevention of pressure ulcers is vital. Explanation should be given about pressure ulcer risk factors, their implications and strategies for their prevention. The patient and/or carer’s experience in successfully preventing pressure ulcers should be taken into account when planning care. Patient information should be verbal, supported by written information as appropriate. The patient/carer should be involved in the long term care planning which may involve other members of the Community Health Care Team.

There are three principles of action to prevent pressure ulcers:

1. Redistribution of Pressure
2. Preventing damage to the skin
3. Improving tissue resistance

**SSkin Care Bundle**

The SSKIN Care Bundle is a powerful tool as it defines & ties best practice and the elements of prevention and assessment together. The bundle also makes the process of preventing pressure ulcers visible to all. This minimises variation in care practices.

It is a series of actions which are required in order to achieve a desired outcome (such as a reduction in the number of pressure ulcers). It ensures all elements of the care bundle are delivered & completed at every care opportunity, thus improving the pressure area care that a person receives.

By checking the skin more regularly when delivering care, early signs of pressure damage will be identified sooner by staff/carers.

### 5.4 Pressure Ulcer Management Plan

Following assessment an individualised plan of care needs to be formulated, together with patient and carer(s) to ensure a multidisciplinary team approach is implemented.
This should include:

Equipment selection, positioning/repositioning, wound treatment plan, nutritional treatment plan, pain management plan and education and advice for patients and carer(s).

Patients with identified risk factors may require referral to other members of the multidisciplinary team where appropriate i.e. Tissue Viability, Dietician, Physiotherapy, Wheelchair Services and Continence.

Patient education is an important piece of pressure ulcer prevention and management. The patient, family and care givers are paramount in the prevention, management and treatment of pressure ulcers.

5.5 Equipment / Positioning

Pressure redistribution is the main approach used in the prevention of pressure ulcers (Dealey 2005). The overall aim is to reduce the magnitude and duration of any pressure exposure (McInnes et al 2008).

The effects of pressure and shear can be minimised by:

1. Correct positioning of the patient e.g. use of a profiling bed
2. Protection of high risk areas e.g. offloading pressure from heels
3. Using appropriate moving and handling techniques and equipment

The use of the 30 degree tilt to position patients in such a way to minimise the impact on bony prominences can also reduce the risk of pressure damage.

The frequency of timing and positional change will be determined by the individual’s tissue tolerance, vulnerable areas, level of mobility, general medical condition and overall treatment objectives. The frequency of repositioning must be included in the patients care plan and repositioning chart.

It is the responsibility of the health care professional to provide the most appropriate support surface to meet the individual patient needs for pressure redistribution, microclimate control and comfort (EPUAP 2009)

5.6 Pressure Ulcer Reporting Process

Document and report all pressure ulcers category 2 and above, pressure ulcers identified on admission to the service/ ward and moisture associated skin damage as an incident using the trust clinical incident reporting system (NHS Development 2018).

Where skin damage is caused by a combination of moisture associated skin damage and pressure, it will be reported based on the category of pressure damage (NHS Development 2018).

All category 3 and above pressure ulcers acquired in our care may be subject to a Level 2 root cause analysis investigation, where acts or omissions in the patients care have been identified that fall outside of the top 10 themes (appendix B) or are a duty of candour incident.
5.7 Assessment Tools, Flow Charts and Guidelines

The following pathways, assessment tools and charts offer guidance with regards to:

- EPUAP Pressure Ulcer Classification System (5.8)
- Maelor Score Risk Assessment & Guidance for completion of Maelor Score (5.9)
- Pressure points – at risk areas (5.10)
- Guidance for community equipment selection (5.11)
- MUST Assessment Tool (5.12)
- Positioning of patients to minimise impact on bony prominences and reduce risk of pressure damage (5.13)
- Skin Bundle (5.14)
- 24 hour re-positioning – turning chart (5.15)

5.8 EPUAP Pressure Ulcer Classification System (2009)

The following EPUAP Pressure Ulcer Classification System should be used in conjunction with the Maelor risk assessment tool as part of a holistic assessment, as described in the Pressure Ulcer Prevention & Management Policy (Vowden 2010)

Please note grading only applies to Pressure Damage and should not be used to describe other type of wounds.
<table>
<thead>
<tr>
<th>Category (Grade) 1: Non-blanchable erythaema</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intact skin with non-blanchable redness of a localized area usually over a bony prominence.</td>
</tr>
<tr>
<td>Darkly pigmented skin may not have visible blanching; its colour may differ from the surrounding area.</td>
</tr>
<tr>
<td>The area may be painful, firm, soft, warmer or cooler as compared to adjacent tissue.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category (Grade) 2: Partial thickness skin loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partial thickness loss of dermis presenting as a shallow open ulcer with a red pink wound bed, without slough.</td>
</tr>
<tr>
<td>May also present as an intact or open/ruptured blister.</td>
</tr>
<tr>
<td>This category should not be used to describe skin tears, tape burns, and incontinence associated dermatitis, maceration or excoriations.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category (Grade) 3: Full thickness skin loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full thickness skin loss. Subcutaneous fat may be visible but bone, tendon or muscle are not exposed.</td>
</tr>
<tr>
<td>Slough may be present but does not obscure the depth of tissue loss.</td>
</tr>
<tr>
<td>May include undermining and tunnelling. The depth of a Category (Grade) 3 pressure ulcer varies by anatomical location and can be shallow or deep.</td>
</tr>
<tr>
<td>Bone/tendon is not visible or directly palpable.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category (Grade) 4: Full thickness tissue loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full thickness tissue loss with exposed bone, tendon or muscle. Slough or eschar may be present. Often includes undermining and tunnelling.</td>
</tr>
<tr>
<td>The depth of a Category (Grade) 4 pressure ulcer varies by anatomical location and can be shallow or deep; ulcers can extend into muscle and/or supporting structures (e.g., fascia, tendon or joint capsula) making osteomyelitis likely to occur.</td>
</tr>
<tr>
<td>Exposed bone/muscle is visible or directly palpable.</td>
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</table>

<table>
<thead>
<tr>
<th>Ungradable: Full thickness skin or tissue loss – depth unknown</th>
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</thead>
<tbody>
<tr>
<td>Full thickness tissue loss in which actual depth of the ulcer is completely obscured by slough or necrosis in the wound bed. The true depth cannot be determined; but it will be either Category (Grade) 3 or 4</td>
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</table>

<table>
<thead>
<tr>
<th>Suspected Deep Tissue Injury – depth unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purple or maroon localized area of discoloured intact skin or blood-filled blister due to damage of underlying soft tissue from pressure and/or shear. Deep tissue injury may be difficult to detect in individuals with dark skin tones. These should be regarded as Category (Grade) 3 or 4</td>
</tr>
</tbody>
</table>

Adapted from NPUAP/EPUAP Guide to pressure ulcer grading: [www.epuap.org](http://www.epuap.org)
5.9  **Maelor Score Risk Assessment and Guidance for Completion**

**MAELOR Score Pressure Ulcer Risk Assessment**

<table>
<thead>
<tr>
<th>RISK ASSESSMENT</th>
<th>ASSESSMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assign one value to each category</td>
<td>Date</td>
</tr>
<tr>
<td>Date</td>
<td>1</td>
</tr>
<tr>
<td>Ambulation</td>
<td></td>
</tr>
<tr>
<td>Ambulant without assistance</td>
<td>0</td>
</tr>
<tr>
<td>Ambulant with assistance</td>
<td>2</td>
</tr>
<tr>
<td>Chairfast (longer than 12 hours)</td>
<td>4</td>
</tr>
<tr>
<td>Bedfast (longer than 12 hours)</td>
<td>6</td>
</tr>
<tr>
<td>Mobility – Range of Body Movements</td>
<td></td>
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<tr>
<td>Full active range of movements</td>
<td>0</td>
</tr>
<tr>
<td>Requires assistance from one carer to move</td>
<td>2</td>
</tr>
<tr>
<td>Requires assistance from two or more carers to move</td>
<td>4</td>
</tr>
<tr>
<td>Immobile due to pain or other condition</td>
<td>6</td>
</tr>
<tr>
<td>Skin condition in Pressure Areas</td>
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<tr>
<td>Healthy</td>
<td>0</td>
</tr>
<tr>
<td>Rash and/or dehydrated</td>
<td>2</td>
</tr>
<tr>
<td>Advanced age (60+) and/or papery skin</td>
<td>4</td>
</tr>
<tr>
<td>Oedema and/or redness (blanches with pressure)</td>
<td>6</td>
</tr>
<tr>
<td>Pressure ulcer present (note grade below)</td>
<td>6</td>
</tr>
<tr>
<td>Predisposing Disease</td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>0</td>
</tr>
<tr>
<td>Chronic stable</td>
<td>2</td>
</tr>
<tr>
<td>Acute or chronic unstable (critical)</td>
<td>4</td>
</tr>
<tr>
<td>Palliative care</td>
<td>6</td>
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<tr>
<td>Levels of Consciousness (to commands)</td>
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<tr>
<td>Alert</td>
<td>0</td>
</tr>
<tr>
<td>Lethargic/Confused</td>
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</tr>
<tr>
<td>Semi-comatose (responds to stimuli)</td>
<td>2</td>
</tr>
<tr>
<td>Comatose (absence of response to stimuli)</td>
<td>3</td>
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<tr>
<td>Nutritional Status</td>
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<tr>
<td>Maintains weight, eating/drinking all meals</td>
<td>0</td>
</tr>
<tr>
<td>TPN/NG/oral sip feeds/NBM (short term)</td>
<td>1</td>
</tr>
<tr>
<td>Eats/drinks very little/losing weight</td>
<td>2</td>
</tr>
<tr>
<td>Unable/refuses to eat/emaciated/critically ill</td>
<td>3</td>
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<tr>
<td>Incontinence - Bladder</td>
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<td>Total control/catheterized</td>
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<tr>
<td>Occasional (less than 2 per 24 hours)</td>
<td>1</td>
</tr>
<tr>
<td>Usual (more than 2 per 24 hours)</td>
<td>2</td>
</tr>
<tr>
<td>Total (no control)</td>
<td>3</td>
</tr>
<tr>
<td>Incontinence - Bowel</td>
<td></td>
</tr>
<tr>
<td>Total control/stoma</td>
<td>0</td>
</tr>
<tr>
<td>Occasional (less than 2 per 24 hours)</td>
<td>1</td>
</tr>
<tr>
<td>Usual (more than 2 per 24 hours)</td>
<td>2</td>
</tr>
<tr>
<td>Total (no control)</td>
<td>3</td>
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<tr>
<td>Pain (patient’s report)</td>
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<tr>
<td>None</td>
<td>0</td>
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<tr>
<td>Mild</td>
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<td>Moderate</td>
<td>2</td>
</tr>
<tr>
<td>Severe</td>
<td>3</td>
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**SEE OVERLEAF:**

FOR PRESSURE ULCER GRADING SYSTEM AND GUIDELINES FOR COMPLETION

Adapted from Medley Re: North East Wales NHST

<table>
<thead>
<tr>
<th>TOTAL</th>
<th>Initials</th>
<th>Grade of ulcer</th>
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</tbody>
</table>

Page 20 of 56
5.9.1  Guidance for Completion of Maelor Score

Assigning a Numerical Value to each Category

Choose the level within the category that best describes the patient, and record the corresponding numerical value in the assessment column.

One value must be recorded for each of the nine categories.

Ambulation

This refers to the ability of the patient to walk. If you cannot decide between chair fast and bed fast, record a score of 5.

Mobility

This refers to the ability of the patient to move different parts of the body. Immobility may be due to a variety of factors e.g. severe pain, paralysis, coma. If a patient is receiving regular, passive exercise, record the score corresponding to the number of carers needed to produce body movement during each exercise session.

Skin Condition

This refers to the skin condition in pressure areas only. Redness (blanches with finger pressure) refers to an evaluation you can perform while repositioning the patient. Finger pressure on the skin of pressure areas should cause the skin to go white initially, but to turn red again within seconds. If no blanching (whitening) occurs, then a pressure ulcer is present and its grade should be documented below the total score. For patients with darkly pigmented, intact skin, redness in pressure areas is equivalent to a localized skin colour change, a taut, shiny surface to the skin and increased skin temperature.

Predisposing Disease

An acute or critical stage of an illness refers to the period of approximately 48 hours immediately after an incident such as myocardial infarction, cerebrovascular accident or major surgical intervention, before the patient becomes stabilised. Chronic unstable refers to an acute phase of an otherwise chronic condition, which normally also last approximately 48 hours e.g. hypoglycaemia or hyperglycaemia in a diabetic patient. Once the patient has stabilised, the condition is chronic stable. Terminal stage of illness refers to many conditions e.g. heart, liver or kidney disease, not just to terminal cancer.

Pain

The score registered should represent the patient’s perception of pain whenever possible. Where this is not possible you should use your clinical judgment and observe the patient for signs of pain such as facial expression, splinting and protection of painful areas.

Total Score

The total Score obtained by adding together the numerical values from each of the 9 categories indicate the overall risk of the patient.
Follow up Action

It is imperative that patients identified as being at high risk of pressure ulcer development and any patients already with pressure ulcers are placed on a suitable support surface and a management plan implemented and evaluated. For information on prevention and management including suitable support surfaces refer to the Tissue Viability Guidelines.

Frequency of Assessment

The frequency of pressure ulcer risk assessment will depend on the condition of the patient. Assessment will normally be on a daily basis for medium and high risk patients.
5.10 **Pressure Points at Risk Areas**

From Seating and Pressure Ulcer: Clinical Practice Guideline (Tissue Viability Society 2009)

The “at risk” areas are:

- Ischial tuberosities
- Sacrum
- Trochanter
- Popliteal Fossa
- Scapula
- Heels
5.11 Guidance for Equipment Selection

- **Patient at risk of developing pressure damage?**
  - Yes → **Is patients pressure areas free from persistant erythema?** → Yes → Continue to reassess as care plan using risk tools
  - No → **Can patient change position independently and frequently?**
    - Yes → **Is the patient in bed or chair for more than 12 hours each day?** → No → **Mattress** Replacement foam or air filled
    - Yes → Perform Skin Inspection
    - No → **Is the skin to the patients pressure areas intact?** → Yes → **Mattress** Alternating cell mattress or air filled static
    - No → **Is there pressure damage or a pressure ulcer present Grade 2 or above, deteriorating 3, 4 or ungradable?**
      - Yes → **Is the patient in bed or chair for more than 12 hours each day?** → No → **Cushion** Alternating cell cushion or air filled static
      - Yes → **Mattress & Cushion** Alternating cell
      - No → **Mattress C** Consider dual action mattress Cushion Alternating cell or air filled cushion if unable to tolerate
    - No → **Is the patient totally dependant for all cares, palliative etc** → Yes → **Mattress & Cushion** Alternating cell
    - No → **Is the patient un able to tolerate an alternating system** → Yes → **Mattress C** Consider dual action mattress Cushion Alternating cell or air filled cushion if unable to tolerate

*Consider foot protectors if known Peripheral Vascular Disease, Diabetes, or previous heel ulcers*
5.12 MUST Assessment Tool

**Step 1**
BMI score
- BMI kg/m²
  - >20 (>30 Obese) = 0
  - 18.5 – 20 = 1
  - <18.5 = 2

**Step 2**
Weight loss score
- Unplanned weight loss in past 3-6 months
  - %
    - < 5 = 0
    - 5 - 10 = 1
    - > 10 = 2

**Step 3**
Acute disease effect score
- If patient is acutely ill and there has been or is likely to be no nutritional intake for > 5 days
  - Score 2

**Step 4**
Overall risk of malnutrition
- Add scores together to calculate overall risk of malnutrition
  - Score 0 = Low Risk
  - Score 1 = Medium Risk
  - Score 2 or more = High Risk

**Step 5**
Management guidelines
- **0 Low Risk**
  - Routine clinical care
  - Repeat screening
  - Hospital – weekly
  - Care Homes – monthly
  - Community – annually for special groups e.g. those > 75 yrs

- **1 Medium Risk**
  - Observe
  - Document dietary intake for 3 days if subject in hospital or care home
  - If improved or adequate intake – little clinical concern
  - If no improvement – clinical concern – follow local policy
  - Repeat screening
  - Hospital – weekly
  - Care Home – at least monthly
  - Community – at least every 2-3 months

- **2 or more High Risk**
  - Treat
    - Refer to dietician, Nutritional Support Team or implement local policy
    - Improve and increase overall nutritional intake
    - Monitor and review care plan
    - Hospital – weekly
    - Care Home – monthly
    - Community – monthly
  - *Unless detrimental or no benefit is expected from nutritional support e.g. imminent death.

All risk categories:
- Treat underlying condition and provide help and advice on food choices, eating and drinking when necessary.
- Record malnutrition risk category.
- Record need for special diets and follow local policy.

Obesity:
- Record presence of obesity. For those with underlying conditions, these are generally controlled before the treatment of obesity.

Re-assess subjects identified at risk as they move through the care setting or if their clinical condition changes significantly.
### 5.13 Positioning of Patients to Minimise Impact on Bony Prominences and Reduce Risk of Pressure Damage

**Semi-recumbent position**

1. The patient's lower back should be positioned as far into the pillows as possible, to support the lumbar spine. Plump or fold the lower pillow if necessary.

2. An additional pillow is placed underneath the others. The corner is carefully positioned under the buttock to 'tilt' the body and give clearance to the ischial tuberosities and sacrum.

3. The legs are supported as in diagram 3 and 4 of the recumbent position. Ensure the heels are clear of the mattress and the feet are correctly positioned.

**Recumbent position**

1. Lie the patient in the centre of the bed. Use one or two pillows to support the head and neck.

2. Use a further pillow to support the lumbar region and shoulder. This 'tilts' the patient onto one buttock and lifts the sacrum clear of the mattress. Use your hand to check this clearance.

3. The full recumbent 30° 'tilt' position.

4. Support the full leg by placing it centrally on another pillow. Ensure that the heel overhangs the edge of the pillow.

5. An additional pillow gives further comfort to any unsupported areas of the other leg.

6. It may be necessary to use an extra pillow to prevent 'foot drop'.
### 5.14 Skin Bundle

<table>
<thead>
<tr>
<th><strong>Patient Name</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reposition patient every</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Hours in bed</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Reposition patient every</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Hours in chair</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Level of Mobility</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Prescribed barrier cream / spray</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Date:</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mental score:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Risk of falls:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Dementia Diagnosis:</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Time (some hours to be completed):</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sedentary</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Sitting</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Standing</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Walking</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Surface &amp; Safety</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mattress:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Cushion:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Orientation</strong></td>
<td></td>
</tr>
<tr>
<td><strong>FA = Fully alert, D = Drowsy, A = Asleep, NIC = Not included in questionnaire, SG = Severe confusion/irritation:</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Keeping Moving</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Position changed - in bed:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Position changed - sat out:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Skin Condition:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>N = normal, R = red, P = purple discoloration, D = dressing in place, C = Contacted D &amp; M team:</strong></td>
<td></td>
</tr>
</tbody>
</table>

| **Knee - Unfolded:** |  |
| **Suptocks:** |  |
| **Hip:** |  |
| **Elbow:** |  |
| **Bony prominences:** |  |
| **Barrier cream/spray applied:** |  |

<table>
<thead>
<tr>
<th><strong>Incontinence</strong></th>
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<tbody>
<tr>
<td><strong>Container:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Urinary incontinence:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Bowels opened:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Bowel incontinence:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Toilet offered:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Clean and dry:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Barrier cream/spray applied:</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Nutrition</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Offer fluids, including prescribed protein drinks, maintain daily fluid balance chart. Dietician referrals as indicated by MUST score:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Drinks available:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Fluid balance chart completed:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Assisted with feeding:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Food chart completed:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Mouth care performed:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Intakes:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Senior carer on duty name:</strong></td>
<td></td>
</tr>
</tbody>
</table>
### 5.15 24 Hour Positioning – Turning Chart

<table>
<thead>
<tr>
<th>Name:</th>
<th>Mattress type:</th>
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</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Address</th>
<th>Cushion:</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date of Birth:</th>
<th>Use of Wedge/Foot trough: Yes □ No □</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency of repositioning e.g. 2 to 4 hourly</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NHS:</th>
<th>Sitting in chair - frequency of repositioning</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

- Inspect skin for evidence of change at each repositioned change
- Reassess at every positional change and document below
- Reposition the patient to reduce the risk of pressure ulcer damage, e.g. using the 30 degree tilt
- Follow Moving and Handling policy and use of equipment to minimise risk of friction and shear
- If required, provide suitable seating equivalent to the mattress specification and encourage repositioning/mobilisation where possible
- Document change on positional changes chart and electronic patient record (e.g. system One)

<table>
<thead>
<tr>
<th>Date&amp; time</th>
<th>Patients position (e.g. 30 degree left/ back/ 30 degree right/Sitting out)</th>
<th>Skin condition (e.g. Intact/Marking)</th>
<th>Pressure Ulcer (if applicable) Category/ location</th>
<th>Signature &amp; designation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>
6 DIABETIC FOOT ULCER

A diabetic foot ulcer is a none or poorly healing partial or full thickness wound below the ankle in a patient with diabetes. The most common sites are the plantar surface of the foot and toes.

Patients with diabetes, with or at risk of foot ulceration, should receive regular reviews by a foot protection team in accordance with National Institute for Clinical Excellence NICE (2011) guidance and in accordance with the following NICE guidance table.

Referrals should be electronic for SystmOne users (IDCR E-referral). Alternatively, complete the attached Podiatry Service Referral Form (appendix C)

<table>
<thead>
<tr>
<th>Referral advice category</th>
<th>Time Frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediate</td>
<td>Within 24 hours (new ulceration, swelling, discolouration)</td>
</tr>
<tr>
<td>Urgent</td>
<td>Within 14 days</td>
</tr>
<tr>
<td>Timeframe not specified</td>
<td>Timeframe to be determined by the clinician with responsibility for the referral</td>
</tr>
</tbody>
</table>

7 LEG ULCER MANAGEMENT

A leg ulcer is a loss of skin below the knee of the leg or foot which takes more than 4 – 6 weeks to heal (Dale et al. 1983).

There is no single aetiology; however it is thought that approximately 70% of people with a leg ulcer are as a result of venous hypertension (Moffatt and Franks 1994; Chen and Rogers 2007). Arterial or mixed arterial/venous disease is responsible for a further 20% and the remaining are from other conditions such as diabetes, rheumatoid disease, malignancy and vasculitic conditions (Chen and Rogers 2007).

Inadequate assessment and ineffective treatment may result in the persistence of ulcers for many years, some never healing

7.1 Leg Ulcer Management

The guidelines aim to ensure that all patients presenting with a leg ulcer receive a comprehensive assessment and subsequent diagnosis from a registered health care professional who have additional competencies in leg ulcer management.

The first step is recognising the wound as a leg ulcer. Wounds that commonly fall into this category are pre – tibial lacerations (or other trauma wounds) and surgical incisions where veins have been harvested for coronary bypass grafts (Moffatt et al 2007).
A detailed assessment of the patient’s general health and past medical history is vital when diagnosing and determining treatment of the ulcer and should be carried out using trust assessment tools incorporated within these guidelines.

It is essential that underlying disease processes are addressed and stabilised to ensure maximum potential to heal.

The leg should be assessed for signs of venous disease, in particular, varicose veins, venous dermatitis, haemosiderin deposition, lipodermatosclerosis and atrophie blanche.

Oedema should be assessed and non-venous causes of unilateral and bilateral oedema ruled out.

Joint mobility, particularly of the ankle is an important factor of the function of the calf muscle pump and should be recorded.

The following conditions require specific treatment and should be looked for in initial assessment (SIGN 2010):

**Peripheral Arterial Disease:** approximately 20% of patients with a leg ulcer will have arterial disease.

A history of intermittent claudication, cardiovascular disease, or stroke may indicate that the patient has arterial disease. Absence of symptoms does not exclude the presence of peripheral arterial disease.

**Rheumatoid Arthritis and Systemic Vasculitis:** around 9% of patients with a leg ulcer have rheumatoid arthritis. These patients may have venous, arterial or vasculitic ulcers. Systemic vasculitis occurs as a feature of several collagen vascular diseases when leg ulcers will usually be multiple, necrotic, deep and have an atypical distribution.

**Diabetes Mellitus:** approximately 5% of patients will have diabetes. These patients may have venous, arterial or neuropathic ulcers, or may have diabetic bullae which subsequently ulcerate.

The guidelines aim to ensure that all patients presenting with a leg ulcer receive a comprehensive assessment and subsequent diagnosis from a registered health care professional who have additional competencies in leg ulcer management.

The first step is recognising the wound as a leg ulcer. Wounds that commonly fall into this category are pre- tibial lacerations (or other trauma wounds) and surgical incisions where veins have been harvested for coronary bypass grafts (Moffatt et al 2007).

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### 7.2 Chronic Oedema

This broad term is used to describe oedema of more than 3 months where normal lymphatics have failed to remove the overload of fluid mainly due to chronic venous insufficiency (Partsch and Moffatt 2012).

#### Lymphovenous Disease

It is essential that early detection such as swollen or wet leaky legs are recognised and treated accordingly to help prevent progression to a chronic oedema state where worsening skin changes and enhanced skin folds are present (Todd 2012).

- Enhanced skin folds - caused by over-stretching of skin due to oedema. Ankles and toes are mainly affected but the mid-calf and knee can also be involved.

- Papillomatosis - are blind-ended superficial lymphatic vessels that swell due to back pressure and protrude through the skin (warty appearance).

- Lymphorrhoea/exudate - if there is oedema and a break in the skin fluid can leak onto the skin surface. This is often called ‘wet legs’.

- Lipodermatosclerosis - fibrosis and indurations of the skin around the ankle area, caused by prolonged inflammation, giving a ‘woody’ feel, especially around the ankle. If allowed to progress, this results in the ‘upturned champagne bottle’ shape of the leg.

- Stemmer’s test - results in either a positive or negative sign for long standing chronic oedema. To perform it, try to pinch and lift a skin fold at the base of the second toe. If you can pinch and lift the skin, Stemmer’s sign is negative. If you can’t, the sign is positive. False positives never occur.

- Cellulitis - is infection of the skin and soft tissue caused by bacterial infiltration of the stagnant protein-rich fluid. It is usually caused by group streptococci, but may also involve Staphylococcus aureus, especially if folliculitis is present.

Antibiotics are the main treatment for cellulitis, oral for a mild infection but intravenous antibiotics can be needed.
Living with chronic oedema can be devastating for the patient and his or her family. Having to adapt clothing/footwear, disguise large and unsightly limbs, and deal with exuding wounds is embarrassing and affects body image, self-esteem and personal relationships (Moffatt et al 2003).

7.3 Doppler Studies

It is important to assess arterial supply with respect to safety of compression therapy, which is the standard treatment for venous leg ulcers.

Measurement of the ankle brachial pressure index (ABPI) of both lower limbs by Doppler device is the most reliable way to detect peripheral arterial disease (PAD), (SIGN 2010).

ABPI must be carried out as soon as possible after the initial presentation.

Objective evidence to substantiate the presence or absence of PAD is obtained reliably (except in those with heavily calcified vessels) by obtaining an ABPI in both legs at the initial assessment.

Doppler assessment is twofold:

- Interpretation of signals
- Pressure index

Patients who have a normal arterial circulation will have an Ankle systolic pressure that is the same as, or higher than, their Brachial pressure. Ankle pressures lower than the brachial pressures are indicative of arterial disease.

Care must be taken in interpreting ABPI results in patients with heavily calcified vessels, such as in some patients with diabetes and advanced chronic renal failure, where they may be misleadingly high (SIGN 2010).

7.4 Diagnosis

After completing a holistic assessment and Doppler studies, treat the patient according to the underlying pathology of their diagnosis using the following flowcharts.

Patients who have a mixed picture may be treated along the lines of their predominant pathological presentation.

Patients where diagnosis is unclear should be referred to the Tissue Viability Team.

7.5 Compression Therapy

The key to the successful healing of chronic venous ulcers will be to correct the underlying venous hypertension using graduated compression therapy (EWMA, 2003, Moffatt 2007).

In the first instance the venous leg ulcer / chronic oedema pathway should be initiated unless clinical and Doppler studies indicate otherwise. Referral to the Tissue Viability Team may be required.

Alternative compression bandages are documented in the compression section of the formulary.
### 7.6 Ankle Brachial Pressure Index

**ABPI 0.8 to 1.3**

- Normal Doppler Index with Triphasic & Biphasic sounds.
- No significant arterial factors
- Follow venous leg ulcer pathway for standard or complex care.
- For chronic oedema (lymphovenous disease) follow chronic oedema pathway

- Normal Doppler Index but with Biphasic and Monophasic sounds that are difficult or muffled and significant arterial factors are present, indicate possible arterial component.
- Reduced compression building to full compression if tolerated
- Follow venous leg ulcer or chronic oedema (lymphovenous disease) pathway.

**Address pain, any underlying disease and refer if unstable.**

Address dermatology issues – refer as needed to TVN for advice, GP with special interests, secondary care.

**Ulcer healed - Prevent reoccurrence**
- Measure for and fit Class 2 or 3 European classifications, circular knit Hosiery.
- For patients with limb distortion due to chronic oedema measure for and fit flat knit hosiery Class 2 or 3.
- As appropriate and via GP - referral to vascular surgeon may be indicated for assessment and treatment of varicose veins as per NICE guidance (2013).

**Ulcer not improving or deteriorating**
- Reassess and re Doppler
- Refer to Tissue Viability Team

**ABPI Greater than 1.3 consider referral to Tissue Viability**
**ABPI 0.8 – 0.6**

Biphasic and Monophasic sounds that are difficult or muffled and significant arterial factors indicate a mixed venous and arterial ulcer.

Follow venous leg ulcer pathway for standard or complex care.

For chronic oedema (Lymphovenous disease) follow chronic oedema pathway

---

Monophasic sounds and significant arterial components indicate an arterial ulcer.

Refer to Tissue Viability Team for opinion

---

Address pain, any underlying disease and refer if unstable.

Address dermatology issues – refer as needed to TVN for advice, GP with special interests, secondary care.

---

**Ulcer healed**

Prevent reoccurrence

Measure for and fit Class 1 or 2 European classifications, circular knit Hosiery dependant on Doppler Index.

For patients with limb distortion due to chronic oedema measure for and fit flat knit hosiery Class 1 or 2, dependant on Doppler Index.

Routine referral to vascular services if experiencing claudication pain

For re-occurring ulcers refer to Tissue Viability Team for advice.

---

**ABPI Less than 0.5**

No compression and Urgent referral to vascular services

---

Page 34 of 56
7.7  **Venous and Chronic Oedema Pathways Explained**

The pathways set out the processes to follow for patients with standard or complex care management needs.

It is the responsibility of the clinician to determine the underlying disease process and select appropriate pathway options.

**Venous**

Venous leg ulcers result from chronic venous disease as a consequence of failure of the calf muscle pump due to incompetence in the deep, perforating or superficial veins. Venous leg ulcers are usually in the gaiter area and shallow in appearance.

**Chronic oedema**

This broad term is used to describe oedema of more than 3 months where normal lymphatics have failed to remove the overload of fluid mainly due to chronic venous insufficiency and Lymphovenous disease (Partsch and Moffatt 2012).

**Lymphovenous Disease**

It is essential that early detection such as swollen or wet leaky legs are recognised and treated accordingly to help prevent progression to a chronic oedema state where worsening skin changes and enhanced skin folds are present (Todd 2012).

Inclusion details of the most appropriate allocation to a flowchart for either standard or complex care management are detailed on page 32;

**Standard care management**

- **Standard venous leg ulcer** flow chart – page 33
- **Standard Chronic oedema and Lymphovenous** flow chart – page 34

**Complex care management**

- **Complex venous leg ulcer** flow chart – page 35
- **Complex Chronic oedema and Lymphovenous** flow chart – page 36

**First line product choice**

Both the standard and complex flowcharts identify products that are to be used as first line choice.

**Healing target**

The healing target aim for the two care regimes is 24 weeks and includes referral guidance if expected healing times are not achieved.
7.8 Inclusion Criteria and Flow Charts

Inclusion

Patients should meet **ALL** of the following to be allocated to a flow chart

- Patient should be concordant (ensuring all reasonable strategies have been employed to gain concordance e.g., pain managed etc.)
- Underlying co-morbidities should be optimally managed (e.g. diabetes, anaemia)
- The patient should not be end of life

Allocation to a specific flow chart

The patient should satisfy one or more of the criteria below

**IF THE PATIENT HAS A RECURRENT ULCER THEY WILL AUTOMATICALLY BE ALLOCATED TO THE COMPLEX FLOW CHART.**

Allocation to the **STANDARD** Venous Leg Ulcer Flow Chart

- ABPI 0.8-1.3
- First Ulcer
- Ulcer present for less than 3 months
- Less than 10cm x 10cm in size
- Patient currently in or willing to have high compression therapy

Allocation to the **COMPLEX** Venous Leg Ulcer Flow Chart

- ABPI 0.8-1.3
- Ulcer present for more than 3 months
- Ulcer failed to reduce in size by 20% or more at 4 to 6 weeks despite best practice
- History of recurring ulcer/s
- Current infection or history of recurrent infections
- Greater than 10cm x 10cm in size
- Possibility of elevated protease activity
- Patient currently in or willing to have high compression therapy
7.8.1 Standard Venous Leg Ulcer (VLU) Flow Chart

**24 Week Healing Target**

To be used in conjunction with guidance. Products identified are first line choice

Initial leg ulcer assessment
Diagnosis of venous ulceration (ABPI 0.8-1.3)
**Ulcer present for less than 3 months**

Free from slough and infection

Slough

Local wound infection (with or without slough)

Treat with UrgoClean, Zetivit Plus & KTtwo bandage system until the wound bed is clean. If debridement not achieved in 4 weeks refer to community TVN

Treat with antimicrobial from formulary, Zetuvit Plus and KTtwo bandage system for 2 weeks. Contact community TVN for advice if no improvement

Treat with Atrauman, Zetuvit Plus and KTtwo bandage system

At this point if the wound is of a size and the exudate level is reduced enough to be managed with the required primary dressing and Mepilex Boarder Comfort then consider using a Leg Ulcer Hosiery Treatment Kit. (See contraindications below)

Reassess every 4 weeks
Photograph, map and measure wound surface area in cm²

Following expected healing (has achieved at least 20% or more reduction in wound surface area)

Continue of Standard VLU Flow Chart

HEALED - Commence preventative hosiery

Not following expected healing (less than 20% reduction in wound surface area in 4 weeks)

Move to Complex VLU Flow Chart. Refer to community TVN

*Leg Ulcer Hosiery Kit Contraindications
1) Unusual Limb Shape
2) Decreasing Oedema
3) Exudate contained within Dressing

*Consider SELF CARE – When being treated in a hosiery kit if assessed as appropriate.
7.8.2 Complex Venous Leg Ulcer (VLU) Flow Chart

24 Week Healing Target

To be used in conjunction with guidance. Products identified are first line choice.

Initial leg ulcer assessment
Diagnosis of venous ulceration (ABPI 0.8-1.3)
*Ulcer present for more than 3 months*

- **Free from Slough and infection**
- **Slough**
- **Local wound infection (with or without slough)**

Treat with UrgoClean, Zetuvit Plus and KTtwo bandage system until the wound bed is clean. If debridement not achieved in 4 weeks refer to Community TVN.

Treat with antimicrobial from formulary, Zetuvit Plus and KTtwo bandage system for 2 weeks. Contact community TVN for advice if no improvement.

Treat with UrgoStart Contact, Zetuvit Plus and KTtwo bandage system

At this point if the wound is of a size and the exudate level is reduced enough to be managed with Mepilex Boarder Comfort dressing then consider using a Leg Ulcer Hosiery Treatment Kit. (See contraindications below)

- **Reassess every 4 weeks.**
  - Photograph, map and measure wound surface area in cm². Has there been a reduction of wound surface area of 10% or more since commencing UrgoStart

  - **YES**
    - Continue with UrgoStart Contact
      - Reassess at 8 & 12 weeks
        - Discontinue UrgoStart, commence Atrauman. If less than 20% reduction since last assessment refer to community TVN
      - Reassess at 16 & 20 weeks
        - Continue with Atrauman. If less than 10% reduction since last assessment refer to TVN
  - **NO**
    - Discontinue UrgoStart Contact and change to Atrauman.
      - Refer Community TVN
      - Week 24 assessment
        - Continue with current treatment regime until healing. If wound fails to progress or becomes static, refer to community TVN. On healing commence preventative hosiery

*Leg Ulcer Hosiery Kit Contraindications*
1) Unusual Limb Shape
2) Decreasing Oedema
3) Exudate contained within Dressing

*Consider SELF CARE – When being treated in a hosiery kit if assessed as appropriate.*
7.8.3 Standard Oedema & Lymphovenous Leg Ulcer Flow Chart

To be used in conjunction with guidance. Products identified are **first line** choice

<table>
<thead>
<tr>
<th>Initial leg ulcer assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diagnosis of chronic oedema/Lymphovenous disease with ulceration (ABPI 0.8-1.3)</td>
</tr>
<tr>
<td><strong>Ulcer present for less than 3 months</strong></td>
</tr>
</tbody>
</table>

- **Free from Slough and infection/critical colonisation**
  - Treat with UrgoClean, Zetuvit Plus as required Bandage System toe to knee or toe to thigh dependant on level of oedema with KTtwo or Actico multilayer dependant on clinical judgement and patient choice. Toe bandages as required. If debridement not achieved in 4 weeks refer to community TVN

- **Sloughy**
  - Critical colonisation or local wound infection (with or without slough)
  - Treat with antimicrobial for 2 weeks from formulary, Zetuvit Plus as needed and appropriate bandage system. Contact TVN for advice if no improvement

- **Treat with Atrauman, Zetuvit Plus as required and prescribed bandage system**

**Reassess every 4 weeks**

- Photograph, map and measure wound surface area in cm$^2$

Following expected healing (has achieved at least 20% or more reduction in wound surface area)

- Continue with Standard Flow Chart

**HEALED**

- Commence preventative hosiery
- This must be **European standard** either circular knit for patients without limb distortions, Flat knit for patients with limb distortions
- Refer to TVN for advice as required

Not following expected healing (less than 20% reduction in wound surface area in 4 weeks)

- Move to Complex Flow Chart. Refer to community TVN
7.8.4 Complex Oedema & Lymphovenous Leg Ulcer Flow Chart

24 Week Healing Target
To be used in conjunction with guidance Products identified are first line choice

Initial leg ulcer assessment
Diagnosis of chronic oedema/ Lymphovenous disease (ABPI 0.8-1.3)

Ulcer present for more than 3 months

Free from Slough and infection/critical colonisation

Sloughy

Initial leg ulcer assessment
Diagnosis of chronic oedema/ Lymphovenous disease (ABPI 0.8-1.3)

To be used in conjunction with guidance Products identified are first line choice

Initial leg ulcer assessment
Diagnosis of chronic oedema/ Lymphovenous disease (ABPI 0.8-1.3)

Ulcer present for more than 3 months

Free from Slough and infection/critical colonisation

Sloughy

Critical colonisation or local wound infection (with or without slough)

Treat with antimicrobial for 2 weeks from formulary, Zetuvit Plus as needed and appropriate bandage system. Contact community TVN for advice if no improvement

Treat with UrgoClean. Zetuvit Plus as required
Bandage System toe to knee or toe to thigh dependant on level of oedema with KTtwo or Actico multilayer dependant on clinical judgement and patient choice. Toe bandages as required
If debridement not achieved in 4 weeks refer to community TVN

Treat with UrgoStart Contact, Zetuvit Plus as required and bandage system

Reassess every 4 weeks

Photograph, map and measure wound surface area in cm². Has there been a reduction of wound surface area of 20% or more since commencing UrgoStart Contact?

YES

Continue with UrgoStart Contact

NO

Discontinue UrgoStart Contact and change to Atrauman

Refer Community TVN

Reassess at 8 & 12 weeks
Photograph, map and measure wound surface area in cm². Discontinue UrgoStart, commence Atrauman. If less than 20% reduction since last assessment refer to community TVN

Reassess at 16 & 20 weeks
Continue with Atrauman. If less than 20% reduction since last assessment refer to community TVN

Week 24 assessment
Continue with current treatment regime until healing. If would fails to progress or becomes static, refer to community TVN. Following healing commence preventative hosiery. This must be European standard either circular knit for patients without limb distortions, Flat knit for patients with limb distortions Refer to TVN for advice as required
8 WOUND TYPES, ASSESSMENT AND DRESSING GUIDANCE / SELECTION CHARTS

8.1 Moisture Associated Skin Damage

Moisture associated skin damage (MASD) is defined as inflammation and erosion of the skin caused by prolonged exposure to various sources of moisture, including urine or stool, perspiration, wound exudates, mucus or saliva (Grey et al. 2011, NHS Development 2018).

8.2 Stage and Signs and Symptoms of wound infection

Wound Infection Continuum

The stages in the continuum (Fig 7.2) demonstrate the gradual increase in the number and virulence of microorganisms and the response they invoke within the host (IWII 2016).

Signs and Symptoms Associated with Wound Infection

Fig 7.3 details information regarding the associated signs and symptoms the individual and their wound exhibits as the infection emerges and proliferates (IWII 2016).
8.3 **Wound Infection Continuum**

![Wound Infection Continuum Diagram]

International Wound Infection Institute (IWII) 2016
## 8.4 Signs and Symptoms Associated with Wound Infection

Table 1: Signs and Symptoms associated with Stages of the Wound Infection Continuum

<table>
<thead>
<tr>
<th>Contamination</th>
<th>Colonisation</th>
<th>Local Infection</th>
<th>Spreading Infection</th>
<th>Systemic Infection</th>
</tr>
</thead>
</table>
| All wounds may acquire microorganisms. If suitable nutritive and physical conditions are not available for each microbial species, or they are not able to successfully evade host defences, they will not multiply or persist; their presence is therefore only transient and wound healing is not delayed | Microbial species successfully grow and divide, but do not cause damage to the host or initiate wound infection | Covert (subtle) signs of local infection:  
- Hyper-granulation (excessive ‘vascular’ tissue)  
- Bleeding, friable granulation  
- Epithelial bridging and pocketing in granulation tissue  
- Wound breakdown and enlargement  
- Delayed wound healing beyond expectations  
- New or increasing pain  
- Increasing malodour | Overt (classic) signs of local infection:  
- Erythema  
- Local warmth  
- Swelling  
- Purulent discharge  
- Delayed wound healing beyond expectations  
- New or increasing pain  
- Increasing malodour | Extending in duration +/-  
- Erythema  
- Lymphangitis  
- Crepitus  
- Wound breakdown/dehiscence with or without satellite lesion  
- Malaise/lethargy or non-specific general deterioration  
- Loss of appetite  
- Inflammation, swelling of lymph glands | Severe sepsis  
- Septic shock  
- Organ failure  
- Death |

International Wound Infection Institute (IWII) 2016
8.5 Formulary Products

Products listed in the formulary are classed a 1st line and 2nd line.

The formulary is published electronically and available for BDCFT staff via the following link:

https://www.bdct.nhs.uk/services/woundformulary/

The link takes the user to the BDCFT external professional web site where the formulary is published. Publication in the external web site enables our external professional colleagues’ access to the formulary.

Products listed as 1st line should be used unless as exceptional circumstances arise when a 2nd line product is required.

To ensure the most effective product is selected the formulary is pictorially categories into wound types with exudate levels and supplementary wound management items, section 7.6.

To support the formulary section for bandages the reader is referred to, Bandage Options section 7.7.

To support the choice of hosiery the reader is referred to, Compression Hosiery Options section 7.8.

Expected compliance

Compliance to the following formulary is expected as stated in the Tissue Viability Policy (section 3.5)

‘Off Script’ Process

District Nursing and Tissue Viability BDCFT has changed the way certain wound care products are obtained and have transferred the supply of selected wound care and associated products (named ‘Off Script’) from FP10 prescription to a supplier led service (managed via NHS Supply Chain).

This way of working must be applied using the Trusts specific ‘Green Formulary Favourite list’, menu of products and orders created accordingly.

This process will be supported by Tissue Viability and NHS Supply Chain.

It expected that all teams will keep with their given weekly budget; order weekly in accordance with stock used and ensure they always maintain a ‘lean’ stock philosophy.

Non-formulary products

The use of non-formulary products should be the exception, in agreement and/or by arrangement with Tissue Viability Nurse on a named patient basis.

An ‘Off Formulary Dressing Product’ request form (appendix A) must be completed for each named patient. Permissions will be documented, monitored and matched against E-pact prescribing data by the tissue viability service and data analyst.

Service leads/managers will be notified of any miss-matches of request form and E-pact prescribing data.
Compression Bandage Use
All bandages must be applied in accordance with manufacturer’s instructions e.g. spiral, figure of eight etc.

Two layer bandage systems offer less bulk, greater mobility of the limb and promote better concordance than 4 layer systems.

KTwo and Actico systems are all licensed for use in venous, Lymphovenous and oedematous conditions. These systems exert high pressure peaks intermittently during mobility and a lower resting pressure. These pressure variations allow the lymph vessels to fill and thus facilitate lymph flow.

KTwo
The first layer is a short-stretch compressive fabric
The second layer is a cohesive, compressive elastic bandage
The ankle circumference must be measured to ensure the correct kit size is selected
KTwo reduced compression kits available. Latex free kits available

Actico
Layer 1; under-cast padding is required for all limbs. Normal shaped limbs will require 1 or more rolls of padding. For Lymphovenous disease, oedematous limb shape distortion use as many as required to equalise the pressure, reshape the limb, fill hollows etc.
Layer 2; cohesive short stretch bandage; Application is dependent on care management plan and if dealing with normal or oedematous distorted limb shapes.

All offer various bandages sizes, when treating Lymphovenous disease, distorted limb shapes. It is essential that the correct bandage width is selected and padding is applied in accordance with manufacturer’s guidance
Sizes used are generally (manufacturer’s width may vary)
• 8cm bandage toe to ankle
• 10cm bandage ankle to knee
• 12cm bandage knee to mid or high thigh (as required)

Toe bandages if toes are swollen (conforming bandage) must be applied

Long Stretch multi-layer bandaging is a compression bandaging system (sub-bandage pressure 35-40mmHg at the ankle) that incorporates elastic layers to achieve a sustained level of compression over time and NOT suitable for patients with Lymphovenous disease, oedematous limb shape distortion (sustained pressure significantly reduces lymphatic refill).

Long Stretch Multi-layer generally consists of: - Layer 1: Under-cast padding; Layer 2: Retention bandage; Layer 3: Compression bandage class 3a or 3c depending on ankle size; Layer 4: Cohesive compression bandage
8.7 Compression Hosiery Options

Compression Hosiery Classification and Use

Compression hosiery is available in different sizes, lengths and compression classifications.

Legs must be measured in accordance with each manufacturers own guide.

Readymade and made to measure are available in all classifications.

It should be noted that there is a difference of compression between:

- Circular knit (2 way stretch) are suitable for patients with no or minimal oedema and limb shape distortion
- Flat knit made to measure (1 way stretch) are suitable for patients with minimal to gross chronic limb oedema / distortion and/or rebound oedema as the hosiery does not curl, twist or tourniquet (Doherty Morgan & Moffatt 2006)
- British standards – circular knit only for patients without limb oedema (garment life span 12 weeks)
- European standards – circular knit and flat knit for patients with limb oedema (garment life span 12 to 24 weeks depending on manufacture) (Johnson 2002)
- Two layer hosiery kits comprising of a liner and outer stocking when combined give 40mmHg compression or worn as separate components are available in British and European classifications (SIGN 2010)

<table>
<thead>
<tr>
<th>Compression Class</th>
<th>British Classification For Patients WITHOUT oedema</th>
<th>European Classification For Patients WITH oedema</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class 1</td>
<td>14 – 17 mmHg</td>
<td>18 – 21 mmHg</td>
</tr>
<tr>
<td>Class 2</td>
<td>18 – 24 mmHg</td>
<td>23 – 32 mmHg</td>
</tr>
<tr>
<td>Class 3</td>
<td>25 – 35 mmHg</td>
<td>34 – 46 mmHg</td>
</tr>
<tr>
<td>Class 4</td>
<td>Not available</td>
<td>49 – 70 mmHg</td>
</tr>
</tbody>
</table>

When considering the type of compression to use, practitioners should take into account:
- Practitioner level of expertise and knowledge of products available
- Hosiery that meets clinical needs that is, patients should be offered the strongest compression that maintains concordance (SIGN 2010)
- Patient preference, lifestyle and likely concordance
- Required frequency of application e.g. ability to don on and off
- Size and shape of leg (if readymade or made to measure is required)
- Chronic Oedema, defined as long standing oedema of greater than 3 months duration must be treated with European circular or flat knit hosiery dependant on limb distortion
- Latex allergy (Latex free hosiery is available)
- Quality of product and cost comparisons
8.8 1st Dressing Pack for District Nursing Teams

The pack is designed to provide District Nurses with access to a legal and safe supply of wound care products for use on initial assessment of a patient.

The patient would then obtain future wound care supplies, as assessed by the District Nurse with reference to the BDCFT Tissue Viability Guidance and Formulary.

The first dressing pack has been reviewed against:

- Current best practice
- District Nurses opinions
- The BDCFT Tissue Viability Guidance and Formulary

1st Dressing How Does It Work?

Each member of the District Nurse Team will have a re-sealable plastic bag or wallet which will contain the items listed below:

The following products are available through NHS Supplies:

<table>
<thead>
<tr>
<th>2 x Cellona 10cm</th>
<th>2 x K-Lite 10cm</th>
<th>10 x Softpore 10cm x 10cm</th>
<th>5 x Mepilex Border Comfort 12.5cm x 12.5cm</th>
<th>5 x Mepilex Border Comfort 7.5cm x 7.5cm</th>
<th>1 x Clinipore 2.5cm</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 x Atrauman 10cm x 7.5cm</td>
<td>5 x Mepitel Film 6.5cm x 7cm</td>
<td>5 x Exufiber 5cm x 5cm</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

When visiting a new patient with a wound the nurse uses the most suitable items from the pack and then generates a prescription for further wound care products in accordance with the wound assessment.

The pack is then replenished from stock held at the District Nurse base.

*Please note: products for your 1st dressing pack must be purchased through the teams NHSSC regular stores account and NOT the ‘Off Script’ NHSSC account.

It is stressed that the pack is intended for the first dressing only, after which the patient should be assessed for the most appropriate product in accordance with the Tissue Viability Guidance and Formulary.
## SELECTION of ANTIMICROBIALS for TREATMENT of COMMON SKIN INFECTIONS in ADULTS

<table>
<thead>
<tr>
<th>INFECTION</th>
<th>COMMENTS</th>
<th>DRUG</th>
<th>DURATION OF TREATMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cellulitis / soft tissue infection, including Diabetic leg ulcer</td>
<td><em>Strep pyogenes, Staph aureus</em></td>
<td>*Mild - Flucloxacillin 500mg QDS</td>
<td>7 – 14 days</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*Penicillin allergy: clindamycin 300mg QDS</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Stop if diarrhea occurs</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>For treatment failure or severe infection</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>refer for possible hospital admission</td>
<td></td>
</tr>
<tr>
<td>Diabetic foot ulcers with surrounding soft tissue infection</td>
<td><em>Staph aureus</em> including MRSA, streptococci, anaerobes, Gram-negative organisms</td>
<td>Refer to GP</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Refer diabetic foot ulcers for specialist podiatry opinion</td>
<td></td>
</tr>
<tr>
<td>Leg ulcers</td>
<td>Only use antibiotics if clinical signs of infection present</td>
<td>As for cellulitis</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Malodorous ulcers</td>
<td>Add Metronidazole 400mg TDS</td>
<td></td>
</tr>
</tbody>
</table>
10 REFERENCES TO EXTERNAL DOCUMENTS


International Wound Infection Institute (IWII) (2016), Wound infection in clinical practice, Wounds International
Johnson S (2002), Compression hosiery in the treatment and prevention of leg ulcers, World Wide Wounds


NHS Improvement (2018) Pressure Ulcers: revised definition and measurement, Publication code CG 73/18, NHS Improvement London
National Institute for Health and Clinical Excellence NICE (2013) Varicose veins in the legs: The diagnosis and management of varicose veins, NICE clinical guideline
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Partsch H, Moffatt C (2012), chapter 2, An overview of the science behind compression bandaging for lymphoedema and chronic oedema, in Best Practice for the management of lymphoedema – 2nd edition; International Lymphoedema Framework
Tissue Viability Society, 2009, Seating and Pressure Ulcer: Clinical Practice Guideline (TVS)
Todd M (2012) Strategies to prevent progression of venous and lymphovenous disease, Educational Supplement, BJCN
Vowden K (2010) Pressure Ulcer Prevention & Management Policy, Bradford Teaching Hospital; Bradford & Airedale NHS; Bradford & Airedale Community Health Services
### APPENDIX A: OFF FORMULARY DRESSING PRODUCT REQUEST FORM

**OFF FORMULARY DRESSING PRODUCT FORM**

The form should only be used when there is a valid rationale for using an off-formulary product.

<table>
<thead>
<tr>
<th>Date</th>
<th>Name of DN Team/Contact Number</th>
<th>Name of GP Surgery</th>
<th>Patients NHS Number</th>
<th>Requestors Name</th>
<th>Non-medical Prescribers name if different to Requestors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

**Formulary Products Tried**

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Size</th>
<th>Frequency of use</th>
<th>Date started</th>
<th>Date finished</th>
<th>Reason formulary Product not suitable</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

**Non-Formulary Request**

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Size</th>
<th>Frequency of use</th>
<th>Date started</th>
<th>Date finished</th>
<th>State rationale for request and reason for using this product over formulary product</th>
</tr>
</thead>
<tbody>
<tr>
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Additional Information Required

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<tr>
<th>Yes</th>
<th>No</th>
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Has this been discussed with the Tissue Viability Nurse

Was this discussion prior to commencing the non-formulary product

Was the decision approved by the Tissue Viability Nurse

Please note all non-formulary product information/request forms will be audited against E-Pact data.

It is essential the form is emailed promptly to the Tissue Viability Team TV@bdct.nhs.uk

For completion by TV Team only

<table>
<thead>
<tr>
<th>Date the form actioned</th>
<th>By whom - TVN Name</th>
<th>Date added to spreadsheet &amp; form uploaded</th>
<th>Date response sent to Requestor</th>
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12 APPENDIX B: TOP 10 COMMON RECURRENT THEMES

Theme 1 - Skin Inspections

a) Skin check not conducted by Case Manager/Community Matron
b) Skin check not conducted by District Nursing Team
c) Skin check performed but not documented
d) Not enough time/too busy
e) Staff shortage
f) Assumed care staff had performed skin check
g) Patient refused but this was not documented on S1
h) No evidence documented of skin inspection being offered/carried out

Theme 2 - Categorisation

a) Inexperienced staff/confidence in categorising
b) Out of date with training
c) Delay in senior nurse reviewing due to staff constraints
d) Incorrect categorisation

Theme 3 - Documentation/Care Plans

a) Pressure of workload and time constraints and/or staff shortages
b) Care provided by numerous different nurses – care plans not reviewed
c) Reduced opportunity for clinical handover
d) Lack of knowledge around completion & review of care plans
e) Appropriate PUP Care plans not in place despite being on case load and DN visiting

Theme 4 - Equipment

a) Lack of knowledge around satellite stores
b) Delay in accessing equipment & use of satellite stores due to busy workload
c) Lack of knowledge around prescribing
d) Equipment not in place/failure to upgrade in a timely manner prior to PU developing despite increased risk

Theme 5 – Maelor

a) Delay in completing the Maelor assessment when change in clinical condition
b) Time constraints and busy workload
c) Lack of knowledge in how & when to complete the Maelor
d) Appropriate PUP Care plans not in place despite being on case load and DN visiting
Theme 6 - MUST

a) Delay in completing the MUST assessment when change in clinical condition
b) Time constraints and busy workload
c) Lack of knowledge in how & when to complete the MUST
d) Appropriate PUP Care plans not in place despite being on case load and DN visiting

Theme 7 - TV Referral

a) Inaccurate categorisation resulting in missed referral
b) Busy workload/time constraints
c) Referral not completed at the weekend resulting in a delay

Theme 8 - Photography

a) Photograph taken but not uploaded onto S1
b) Staff not taking cameras into all visits
c) Staff reporting camera faulty or batteries flat at time of need not checking if fit for purpose prior to using.
d) Access to camera
e) No photography due to pressure of a busy workload and time constraints
f) Staff unsure how to upload the photographs onto SystmOne.
g) Staff not aware of DN Standards
h) Patient refused but not documented on S1
i) Not clinically appropriate – not documented on S1
j) Photograph taken on phone and too small to use to assess/triage

Theme 9 - Resources

a) Vacancies within team
b) Skill mix
c) Leadership e.g. – caseload cleansing/geographical allocation
d) Sickness
e) High number of unplanned/additional visits requested by care home

Theme 10 - Non-Concordance

a) Patient refusing element of care – not documented on S1
b) Patient Capacity not addressed
## 13 APPENDIX C PODIATRY SERVICES REFERRAL FORM

<table>
<thead>
<tr>
<th>PODIATRY SERVICES REFERRAL FORM</th>
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<tbody>
<tr>
<td>NURSING &amp; RESIDENTIAL HOMES / ST LUKE’S HOSPITAL / LYNFIELD MOUNT / AIREDALE CENTRE FOR MENTAL HEALTH</td>
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PLEASE COMPLETE LEGIBLY IN BLOCK CAPITAL LETTERS

PLEASE COMPLETE ALL SECTIONS IN FULL, FAILURE TO DO SO MAY RESULT IN INAPPROPRIATE APPOINTMENT ALLOCATION

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PLEASE STATE REASON FOR REFERRAL: (Please note we do not provide a nail cutting service for normal nails with no underlying medical conditions)

<table>
<thead>
<tr>
<th>TYPE OF APPOINTMENT REQUIRED: (TICK BELOW)</th>
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<tbody>
<tr>
<td>RESIDENTIAL / NURSING HOME REFERRAL</td>
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<td>ST LUKES HOSPITAL</td>
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LYNFIELD MOUNT HOSPITAL  □ Please state ward:

AGH CENTRE FOR MENTAL HEALTH  □ Please state ward:

COMMUNITY HOSPITAL - Please state:

IS REFERRAL URGENT? (e.g. pus, infection or inflammation present, long toe nails are not classified as urgent)

Y □ N □

MEDICAL HISTORY INFORMATION: (TICK IF APPLICABLE)

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DESIGNATION OF REFERRER:  (PLEASE STATE e.g. GP, PRACTICE NURSE ETC) □ DATE: Referral date

Please fax your referral to: 01274 215660

General Enquiries Telephone: 01274 221165

Address: Podiatry Services, Physical Health Administration, Level 5, New Mill, Victoria Road, Saltaire, BD18 3LD.