Pressure Ulcer Prevention and Management Best Practice Guidelines for Adults
# Pressure Ulcer Prevention and Management Best Practice Guidelines for Adults

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<tr>
<td>Document Purpose</td>
<td>To increase awareness of the NHS England ambition to eliminate avoidable pressure ulcers. To offer guidance to clinical staff in the prevention and management of pressure ulcers.</td>
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<tr>
<td>Target Audience</td>
<td>All Healthcare Professionals across Worcestershire Health and Care Trust (WHCT)</td>
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Version History

<table>
<thead>
<tr>
<th>Version</th>
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<tr>
<td>V.7</td>
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<td>Interim Head of Corporate Nursing and Education Safeguarding Services Manager Children’s Nurse Consultant Audit, Research and Clinical Effectiveness Manager Allied Health Professional Lead Chief Pharmacist Nurse Consultant, Infection, Prevention and Control Head of Quality Governance Director of Quality Medical Lead Clinical Director Associate Medical Director Medical Director</td>
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<td>Review and update of existing guidelines. Comments received since issue of meeting papers to be included. Appendix 1, 2, 9 &amp; 10 removed Information relating to Children to be removed and reference to the Children’s policy to be included. Policy to clearly state it is relevant to adults only. DoLS to be referenced on page 16, positioning of seated individual Reporting of pressure ulcers to Tissue viability within 48 hours added Safeguarding information updated Nutritional information updated Community hospital amended to in-patient areas throughout.</td>
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Accessibility

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- Face to face interpreting;
- Instant telephone interpreting;
- Document translation; and
- British Sign Language interpreting.

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Training and Development

Worcestershire Health and Care NHS Trust recognise the importance of ensuring that its workforce has every opportunity to access relevant training. The Trust is committed to the provision of training and development opportunities that are in support of service needs and meet responsibilities for the provision of mandatory and statutory training.

All staff employed by the Trust are required to attend the mandatory and statutory training that is relevant to their role and to ensure they meet their own continuous professional development.
Co-production of Health and Care – Statement of Intent

The Trust expects that all healthcare professionals will provide clinical care in line with best practice. In offering and delivering that care, healthcare professionals are expected to respect the individual needs, views and wishes of the patients they care for, and recognise and work with the essential knowledge that patients bring. It is expected that they will work in partnership with patients, agreeing a plan of care that utilises the abilities and resources of patients and that builds upon these strengths. It is important that patients are offered information on the treatment options being proposed in a way that suits their individual needs, and that the health care professional acts as a facilitator to empower patients to make decisions and choices that are right for themselves. It is also important that the healthcare professional recognises and utilises the resources available through colleagues and other organisations that can support patient health.
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28. Equality Analysis
1. **Introduction**

a. One of NHS Midlands and East's five ambitions is to "Eliminate avoidable grade 2, 3 and 4 pressure ulcers. This guideline reflects Ambition 1, the prevention and management of pressure ulcers. It is based on the NICE, (National Institute for Clinical Excellence) pressure ulcers, prevention and management update (April 2014), the European Pressure Ulcer Advisory Panel (EPUAP 2014), the clinical benchmark outlined in ‘The Essence of Care’ (DH 2001), and Department of Health Quality Initiatives (High Impact Actions – Skin Matters, DH 2009, Energising for Excellence (2010) and the Strategic Health Authority stop the pressure campaign aiming to eliminate avoidable pressure ulcers (www.stopthepressure.com). There is a real commitment to greater openness and candour, to developing a culture dedicated to learning and improvement that continually strives to reduce avoidable harm. Introducing the Statutory Duty of Candour (Public Health England 2015)

b. A large number of chronic wounds, including pressure ulcers, are preventable and this has been recognised in both Saving Lives: High Impact Interventions (Clean Safe Care 2007) and NHS Improving quality (2013) formerly High Impact Actions for Nursing and Midwifery (National Institute for Innovation and Improvement (2009)


d. The NICE (2014) Pressure Ulcers Prevention and management Update was developed to assist:
   - All Healthcare Professionals who have direct contact with, and make decisions concerning the treatment of patients who are at risk of developing pressure ulcers and those with pressure ulcers within primary, secondary and specialist care;
   - Service managers
   - Commissioners
   - Clinical governance and education leads and
   - Patients and carers

e. High Impact Action (HIA) “Ambassadors” have been appointed for Worcestershire Health and Care NHS Trust and for the nursing home sector within Worcestershire.

f. It is the responsibility of Health Care Professionals (NMC 2015) to:
   - Prioritize people
   - Practice effectively
   - Preserve safety
   - Promote professionalism and trust

g. Healthcare Professionals’ responsibilities include the need to:
   - Record pressure ulcer category using the adapted Midlands and East classification based upon the European Pressure Ulcer Advisory Panel Classification System (2009)
   - Ensure all patients receive an initial and on-going risk assessment
   - Implement care rounds in in-patient areas to continually review care progress to detect improvement or deterioration
   - Recognise that all pressure ulcers of category 2, 3 and 4 are to be reported as a local clinical incident and categories 3 and 4 must be recorded as a serious incident and will require the completion of a root cause analysis
   - Recognise the importance of and act upon the outcome of risk assessment with preventative care
Understand the role and responsibilities during the requisition of equipment such as mattresses, cushions and the monitoring of their use in clinical practice

Understand the roles of the multidisciplinary team in preventing pressure ulcers

Understand the involvement of clinical experts such as the Tissue Viability Service as and when appropriate and be able to initiate such a referral

Recognise and support carers and relatives who play vital roles in the prevention and management of pressure ulcers

Maintain accurate records

Participate in audit including safety thermometer

h. NICE (2014) guidance does not override individual responsibility or accountability of Healthcare Professionals to make decisions appropriate to the needs of the individual patient.

i. A structured approach to risk assessment, comprehensive skin assessment, clinical judgement, education programs and care protocols can reduce the incidence of pressure ulcers (EPUAP 2014).

j. This guideline integrates 10 main areas of care surrounding prevention and treatment:
   1. Aetiology
   2. Risk assessment and risk factors
   3. Skin assessment and tissue assessment
   4. Management
   5. Pain
   6. Positioning and early mobilisation
   7. Support Surfaces
   9. Medical device related pressure ulcers
   10. Care for a bariatric patient

2. **Purpose of this Guideline**

This document has been produced to support registered healthcare professionals working with adults within Worcestershire Health and Care NHS Trust (WHCT); it should be referred to for the recommended best practice when managing a patient with the risk of developing a pressure ulcer.

a. The aim of this guideline is to improve and maintain quality care and provide educational support enabling clinicians to work through best practice principles of care systematically and implement them into their clinical practice.

b. The purpose being:
   - The prevention of avoidable pressure ulcers
   - Effective management of pressure ulcers transferred into Worcestershire Health and Care NHS Trust
   - Maintenance of incidence and prevalence rates below estimated national average
   - Implementation of best practice pressure ulcer prevention and management principles
3. Definitions (see content 1.1)

4. Scope of Practice

This guideline applies to all staff caring for patients at risk of or who have developed a pressure ulcer. It is designed to ensure patient’s pressure areas are assessed and preventable evidence base strategies are implemented. This guideline outlines the recommendations to assess and manage the skin in relation to pressure ulcers for adults.

The guideline also supports the appropriate supply, use and monitoring of pressure redistributing equipment to support appropriate clinical and financial outcomes.

The purpose being:

- To support the prevention of pressure ulcers and the elimination of avoidable pressure ulcers
- To provide effective management of pressure ulcers by selecting and prescribing appropriate equipment
- Support clinical review of the patient in regard to the appropriate use of equipment to ensure effective outcomes
- To support the implementation of best practice pressure ulcer prevention and management principles

The guideline is to be used by all staff employed by the Worcestershire Health and Care Trust who may be engaged in the assessment and management of pressure ulcers. It is recommended for use by all care homes in Worcestershire.

5. Content

5.1 Aetiology of Pressure Ulcers

a. “A Pressure Ulcer is a localised injury to the skin and /or underlying tissue usually over a bony prominence as a result of pressure or pressure in combination with shear.” (European Pressure Ulcer Advisory Panel EPUAP 2014). They can also be caused by a combination of intrinsic and extrinsic factors to the patient (Defloor & Grypdonck 1999). Pressure ulcers can occur on any area of the body, but mainly occur over bony prominences such as: sacrum, heels, hips, shoulders and elbows (NICE 2014). Tissue damage may involve skin, subcutaneous tissue, deep fascia, muscle and bone (Bridel 1993). Pressure is considered to be the major causative factor causing occlusion of blood flow to the network of vascular and lymph vessels supplying oxygen and nutrients to the tissues (Maklebust 1987). This can lead to tissue ischemia and re-perfusion injury leading to cell destruction and tissue death (Maklebust 1987, Braden and Bergstrom 1987 and Bridel 1993). Several factors play a role in determining whether the pressure is sufficient to create an ulcer: intensity of the pressure, the duration of exposure and the ability of tissue to tolerate pressure (Braden & Bergstrom 1987) which should be considered and assessed for each patient on an individual basis.

b. There is a clear link between incontinence and the formation of pressure ulceration, it is therefore also important to differentiate between pressure ulceration and the formation of a moisture lesion (Beldon 2008). A moisture lesion is defined as prolonged exposure of the skin to excessive fluid because of urinary incontinence or faecal incontinence, perfuse sweating or wound exudate (Maklebust and Sieggreen 1995). The key to the difference between pressure and moisture lesions lies in the location, shape and depth of the damage (Evans and Stephen-Haynes 2007) and the use of moisture or pressure tool to aid the differential diagnosis (Stephen-Haynes et al 2015).
c. The causes of pressure ulcers are:

**Pressure** – normal body weight can squeeze the skin and underlying tissues in people at risk diminishing the blood supply to the area, which can lead to tissue damage.

**Shearing** – strain forces the skin and upper layers away from deeper layers of skin, leading to a distortion in the blood supply and subsequent cell death. This can happen when people slide down or are dragged up a bed or chair.

**Friction** – Inappropriate manual handling methods can remove the top layers (epidermis and dermis) of the skin resulting in superficial tissue loss. Repeated friction can increase the risk of pressure ulcers.

**Moisture** – there is debate questioning if moisture precipitates pressure ulcer development by exacerbating the effect of friction, and whether the damage seen is true pressure damage or moisture related trauma (Butcher 2005) in clinical practice this is a significant factor to consider (Cooper and Gray 2001).

d. The common sites of pressure ulcers are outlined in Figure 1 below.

**Figure 1 Common site for pressure ulcers**

[Diagram showing common sites of pressure ulcers: Toes, Heels, Sacrum, Spine, Elbows, Shoulder Blades, Occiput, Shearing Force, Friction, Ischial Tuberosity.]
5.2 Patients included

This guideline outlines recommendations in both preventing and managing pressure damage. The guideline applies to adults. There is a separate guideline for children and young adults. This guideline is to be used by all staff employed by the Worcestershire Health and Care NHS Trust engaged in the prevention and management of pressure damage. Its use is also to be promoted and encouraged within the Worcestershire Nursing Home sector.

5.3 Prevalence and impact

a. Pressure ulcers currently represent a significant problem in both acute and primary health care settings with the majority considered to be preventable (Hibbs 1998 and Bennett et al 2004). The true extent of pressure damage is unknown nationally but it is estimated that pressure ulcers affect approximately 10% of the UK population (DH 1992 and Clark and Cullum 1993). Dealey (1994) found that 62.9% of patients with pressure ulcers were over 65 years of age, which supports the findings of Callaghan (2009) reporting a 7.9% incidence in Care Homes (Nursing). The cost of treating pressure ulcers is estimated in the region of £1.4 - £2.1 billion annually, equating to £80 per second, equivalent to 4% of total NHS expenditure (Bennett et al 2006).

Importantly, pressure ulcers have a significant impact on quality of care and the DH (2010a) estimates the cost is between £363,000 and £543,000 for a category III pressure ulcer and between £447,000 and £668,000 for a category IV ulcer costs (DH, 2010a). Drew et al (2007) reports that the majority of these wounds are chronic in nature and are cared for in the community setting by GPs and community nurses.

b. More importantly pressure ulcers can be very detrimental to patients in terms of physical, psychological and social issues, resulting in reduction of quality of life and maybe mortality (Fox 2002). For the Department of Health productivity calculator see www.gov.uk/government/publications/pressure-ulcers-productivity-calculator

6. Risk assessment

a. Assessment of risk is fundamental to pressure ulcer prevention and is acknowledged by (Waterlow 2005) and EPUAP (2014) who recognise a structured approach to risk assessment, comprehensive skin assessment and informed clinical judgement will reduce the incidence of avoidable pressure ulcers. Initial and on-going risk assessment is the responsibility of a registered healthcare professional using a combination of both clinical judgement and the Trust approved risk assessment tool. Risk assessment tools attempt to identify a patient’s risk status by quantifying the most common risk factors affecting a patient at a given time (Edwards 1994). Individuals who are bedfast and/or chair fast should be considered to be at risk of
pressure ulcer development. An individual’s reduction in the ability to move and the frequency of movement are usually described as mobility limitations and will increase their level of risk.

b. The recommended tool in Worcestershire Health and Care NHS Trust is the (2005) Waterlow Tool (see Appendix 1) Waterlow risk assessment should be undertaken within 6 hours of the patient’s first episode of care (NICE 2014) within the WHCT in patient areas and on admission to the caseload in community and when the condition changes.

c. Therapists within Worcestershire may use the screening tool before completing the Waterlow risk assessment for all patients being admitted onto the caseload. If the answer is yes to any of the screening questions, the Waterlow risk assessment should be undertaken (see appendix 2).

d. Frequency of re-assessments depends on the individual patient circumstances. However, the following information provides some guidance.

e. These assessments will be documented in the nursing care plan and on the Waterlow Risk Assessment Score (see Appendix 1).

f. Nursing staff will use the SSKIN bundle (encompassing the Thompson chart) for recording the visual appearance and condition of pressure areas.

### 6.1 Risk factors

a. The development of pressure ulceration is dependent upon both extrinsic and intrinsic factors which affect tissue tolerance and potential skin breakdown (Braden and Bergstorm 1987).

b. Areas for consideration are:
   - General health status: acute, chronic, surgery and terminal illness
   - Co-morbidities such as diabetes

<table>
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<tr>
<th>Venue</th>
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<tbody>
<tr>
<td>Community</td>
<td>Patient’s risk assessment will be assessed on admission to the caseload</td>
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<td></td>
<td>Waterlow re-assessment for patient on the active caseload</td>
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<td></td>
<td><strong>Patient without a pressure ulcer</strong></td>
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<tr>
<td></td>
<td>If visited daily to weekly: Waterlow risk assessment at least monthly or if condition changes</td>
</tr>
<tr>
<td></td>
<td>If visited monthly, 3 monthly or 6 monthly to have Waterlow at each visit or if condition changes</td>
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<tr>
<td>WHCT in patient areas and independent care sector</td>
<td><strong>Patient with a pressure ulcer</strong></td>
</tr>
<tr>
<td></td>
<td>Waterlow reassessment at least monthly or when condition changes</td>
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<tr>
<td></td>
<td>It is essential to re-assess at the agreed review date or before if the condition changes</td>
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<tr>
<td></td>
<td>Patient’s risk assessment will be assessed within 6 hours of admission and then re-assessed every week or when their condition changes and their pressure areas inspected daily using the SSKIN bundle to monitor skin integrity.</td>
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- Obesity or malnutrition
- Extremes of age
- Level of mobility
- Body temperature
- Posture, in particular orthopaedic conditions
- Sensory impairment, loss of feeling
- Level of consciousness
- Continence status
- Systemic signs of infection
- Nutrition to include hydration status
- Previous pressure damage – weak tissue
- Excessive Pain
- Psychological factors and cognition
- Social factors
- Pressure, Shearing and Friction
- Excess moisture exposure of the skin
- Medical devices.

6.2 **Assessment and Re-assessment**

a. Risk assessment should always be performed by Registered healthcare professionals who have undergone training and are competent to calculate and interpret (act upon) the level of risk. Risk assessment should be repeated dependent on the patient’s level of risk and co-morbidities. Re-assessment should also be undertaken if there is any change in the patient’s condition and both patients and carers should be fully aware of the level of risk (Nice 2014).

6.3 **Pressure Ulcers and Safeguarding**

a. In some circumstances, skin damage resulting in pressure ulcers can be a sign of neglect either because of a deliberate act or an act of omission.

b. This may be the case whether a pressure ulcer is deemed avoidable or unavoidable as the causes for the pressure damage can be varied.

c. Therefore development of all pressure ulcers should have an initial consideration as to any elements of neglect.

6.4 **What is Neglect or Acts of Omission?**

a. The withholding, either deliberately or unintentionally, of help or support necessary to carry out daily living tasks. This includes ignoring medical and physical care needs or failing to provide access to health, social or educational support, the withholding of medication, nutrition and heating.

b. Neglect of an adult or child at risk is a safeguarding issue and such cases should be discussed with the safeguarding lead and appropriate referrals made in line with the Trust safeguarding policies for adults and children and young people.

c. Where such referrals are made, the SI reporting and Root Cause Analysis must continue but will inform any safeguarding investigation.
6.5 Pressure Ulcers Safeguarding Triggers - Pathway 1

a. To determine if the identification of a pressure ulcer on an individual receiving professional support (in a care home, hospital or from domiciliary care of nursing services or agency care) should result in a safeguarding referral the following triggers should be considered.

b. IF IN DOUBT
   • Discuss with senior manager and
   • Initiate safeguarding procedures
   • Record decision and reasons for decision

c. If the person with the pressure sore is remaining in the same care setting and there are concerns that neglect had led to the development of an avoidable pressure ulcer and the contributory factors have not been removed then a safeguarding referral may be appropriate. Factors to consider are Mental Capacity where the person is 16 years or over, the severity of the pressure ulcer, care planning, timeliness of seeking expert advice and if this is an isolated incident. Where the person has moved from the care setting then alerting the commissioner of services is a more appropriate route.

6.6 Pressure Ulcers Safeguarding Triggers - Pathway 2

a. To determine if the identification of a pressure ulcer on an individual with no professional support (i.e. the only support available is from an unpaid carer/family member) should result in a safeguarding referral the following steps should be considered.

b. IF IN DOUBT
   • Initiate safeguarding procedures
   • Discuss with senior manager and
   • Record decision and reasons for decision

If the person with the pressure sore is remaining in the same care setting and there are concerns that neglect had led to the development of an avoidable pressure ulcer and the contributory factors have not been removed then a safeguarding referral may be appropriate. Factors to consider are Mental Capacity where the person is 16 years or over, the severity of the pressure ulcer and the timeliness of seeking expert advice.

c. To determine if the identification of a pressure ulcer on an individual receiving professional support (in a care home, hospital or from domiciliary care of nursing services or agency care) should result in a safeguarding referral the following triggers should be considered.

d. IF IN DOUBT:
   • Initiate safeguarding procedures
   • Discuss with senior manager and
   • Record decision and reasons for decision
1. What is the severity (grade) of the pressure ulcer?

- Grade 2 pressure ulcer or below – care plan required
- Several grade 2 pressure ulcers/ grade 3 to 4 pressure ulcers - consider question 2
- Grade 4 and other issues of significant concern

2. Does the individual have mental capacity and have they been compliant with treatment?

- Has capacity and declined treatment
- Does not have capacity or capacity has not been assessed - continue to question 3
- Assessed as NOT having capacity and treatment NOT provided

3. Unpaid carer raised concerns and sought support at an appropriate time.

- Evidence available to show concerns raised and support sought – e.g. from GP, DN, SW.
- Evidence NOT CLEAR that concerns were raised or support sought in a timely manner.
- NO cooperation and refusal to implement care plan and or purposeful neglect.

4. Full assessment completed and care plan developed in a timely manner and care plan implemented?

- Evidence available to show unpaid carer cooperated with assessment and has implemented care plan
- Evidence of partial cooperation or implementation of care plan - some aspects may have been declined e.g. certain equipment.
- NO cooperation and refusal to implement care plan and or purposeful neglect.

5. This incident is part of a trend or pattern – there have been other similar incidents or other areas of concern?

- Evidence suggests that this is an isolated incident
- There have been other similar incidents or other areas of concern
- Evidence demonstrates that this is a pattern or trend.

- NOT SAFEGUARDING
- If 2 or more of the above apply SAFEGUARDING

7. Skin assessment

7.1 Individuals Vulnerable to Pressure Ulcer Development

a. Patients deemed at risk should have their skin assessed regularly with the frequency relating to the level of vulnerability and in response to any health condition change. On-going assessment is necessary to detect the early signs of pressure damage (EPUAP 2014) and should be recorded accurately. See Appendix 3. Individuals and carers should also be encouraged to inspect the skin and take responsibility for its condition (NICE 2014). A skin care patient information leaflet should be provided to all patients/carers when skin assessment is completed. See appendix 4

b. The signs alerting damage presence include:

- persistent erythema (reddening)
- non-blanching hyperaemia (capillaries do not empty and refill)
- blisters (superficial)
- localised heat (warm to touch)
- localised oedema (swelling)
- Induration (hardness)
- Purplish/bluish localised areas in those with dark skin
c. Recognising reddened areas of the skin is a significant factor in identifying the earliest signs of pressure damage and is an indication that further action and preventative nursing care is required. Where appropriate, patients should be asked to identify areas of discomfort or pain as this may be a precursor to tissue breakdown.

d. Visual skin assessment and additional details such as discomfort or pain should be documented to allow monitoring of the progress of the individual and to aid effective communication between professionals. Patients unable to feel pain due to sensory loss or unable to communicate their pain should be more frequently and closely observed for early signs of damage. Skin assessment is to be undertaken as part of the SSKIN Bundle (see Appendix 3).

e. Additionally the skin should be observed for pressure damage created by devices (EPUAP 2014) such as continence care devices.

7.2 Skin care

a. Reddened Skin: massage should never be undertaken in the presence of acute inflammation (reddening) due to the risk of increasing the existing damage to underlying blood vessels and potentially separating fragile skin layers. Washing of the area and cream applications should also be undertaken with care.

b. Dry Skin: is less tolerant to tissue distortion (stretching) and is thus more vulnerable to breakdown (Allman et al 1995). Emollient should be applied, as available in the Wound Management Formulary to maintain the suppleness of the skin and reduce the risk of breaks/cracks forming. Barrier creams are also available when suppleness and a protective barrier are required. Skin should always be dried thoroughly after washing prior to application of products.

c. Excessively Moist Skin: prolonged exposure to excessive moisture (urine, faeces, exudate or sweat) increases the risk of damage from maceration, friction and shear forces (Defloor 1999, Stephen-Haynes et al 2015).

d. Skin that is exposed to or at risk of exposure to excessive moisture should be protected with a barrier forming product as available in the Wound Management Formulary.

e. Also refer to Skin Care Tools available in the clinical documentation library http://nww.hacw.nhs.uk/policies/clinical-documentation-library and Patient/Carer Information leaflets available from jayne.allchurch@nhs.net

8. Documentation (initial and on-going assessment)

a. Record the risk assessment and skin assessment fully documenting all relevant factors and any additional information utilising the SSKIN skin assessment chart (see Appendix 3).

b. Re-assess patient's risk level and skin status on an on-going basis according to individual need and general condition change. This is dependent upon the general condition of the patient and reassessment may be required in as little time as 6 hours. The maximum agreed period before general re-assessment for those on the District Nurse caseload is every 6 months.

9. Prevention of Pressure Damage

a. All patients considered ‘at risk’ should have 24 hour access to pressure redistribution/relieving equipment and/or other strategies to relieve pressure such as tilt and turning regimes. All patients assessed “at risk” and their carers should be given advice re pressure ulcer prevention and supplied with pressure ulcer prevention leaflet (Appendix 4).
9.1 Positioning and Re-positioning

a. Where possible, patients should be encouraged to stand, mobilise, be positioned and repositioned either with assistance, or independently every 2-6 hours to reduce the duration and magnitude of pressure over vulnerable areas of the body (Defloor 2000, Defloor 2001 and EPUAP 2014). The use of re-positioning must be based on the patient’s risk category the individual’s skin tolerance of the regime prescribed and take into consideration the support surface in use.

b. Positioning on existing pressure ulcer damage or over bony prominences, particularly hips should always be avoided. Avoid turning the individual onto a body surface which remains reddened from a previous turn rota as this indicates the area has not yet recovered from the pressure loading and requires further respite from repeated loading.

c. Seating time should always be restricted to less than 4 hours per session for those with intact skin and 2 hours with broken skin, with attention paid to heel and elbow positioning whilst seated.

d. The patient needs to be informed of the reasons for re-positioning, their needs and the needs of their carers should also be taken into consideration.

- Record re-positioning See appendix 3.
- If the individual is not responding as expected to the re-positioning regime, re-consider the frequency and method of re-positioning and review the skin bundle (See Appendix 3) for a holistic care package.

![Figure 2 Semi-Fowler 30°position](image)

![Figure 3 Lateral 30° position](image)

9.2 Re-positioning and Mobilising

a. Re-positioning will contribute to the individual’s comfort, dignity and functional ability and should be considered in all at risk individuals.

b. Mobilising, positioning and re-positioning should be determined by:

- General health status
- Location and category of existing pressure damage
- Skin assessment
- Acceptability to the patient
- The needs of the carer
c. It is important to reposition the individual in such a way that pressure is relieved or redistributed whilst avoiding subjecting the skin to pressure and shear forces

d. When using transfer aids to reduce friction and shear take care to lift and not drag the individual while repositioning

e. Caution should also be taken to avoid positioning the individual directly onto medical devices, such as tubes or drainage systems

f. Repositioning should be undertaken using the 30 degree Semi-Fowler position or the prone position and the 30 degree-tilted side-lying position (alternately right side, back, left side) if the individual can tolerate this position and her/his medical condition allows. See Figures 2 and 3 above. Any re-positioning should be recorded in the patient’s documentation. A re-positioning/turning chart may be utilised. Passive movements should always be considered for patients with pressure ulcers who have compromised mobility.

Advise the patient regarding repositioning, consult the equipment flow chart for Selecting Pressure re-distributing Support Surfaces (mattresses, cushions, integrated bed systems) (For Integrated Community Equipment Service and children see Appendix 5 for in patient areas, see Appendix 6) as guidance to ensure patients receive appropriate pressure relieving and pressure reducing equipment.

g. Deploy the appropriate pressure relieving mattress within 24 hours. Ensure documentation reflects all pressure prevention actions and turning/tilting intervention whilst awaiting any equipment resource.

h. If sitting in bed is unavoidable, head-of-bed elevation and a slouched position that places pressure and shear on the sacrum and coccyx should be avoided. The maximum head-of-bed elevation should range from 55 to 80 degrees, sitting time should be limited by the individual’s skin tolerance and medical status and direct seating position should not exceed 2 hours in a patient with existing damage. When using a profiling bed with the head of the bed elevated utilise the knee break to prevent shear and friction on the coccyx by preventing the patient from sliding down the bed. Pillows beneath the patient’s arms may improve stability of position and prevent slouching.

9.3 Re-positioning the seated individual

a. If a patient has any sign of pressure damage particularly to the sacrum, buttocks or Ischial tuberosity, sitting out time should always be restricted to 2 hours maximum (Defloor 2000). Preference should be given to sitting out at meal times to maximise nutritional support. Seating equipment should be appropriate to the needs of the patient and is in Equipment selection flow chart (see Appendix 5 and 6). For chair positioning see Figure 4 below.

b. Key aspects of re-positioning the seated individual:

- Position the individual so as to maintain his/her full range of activities
- Select a posture that is acceptable for the individual and minimizes the pressures and shear exerted on the skin and soft tissues
- Place the feet of the individual on a foot stool or foot rest when the feet do not reach the floor because if the feet do not rest on the floor, the body slides forward out of the chair. Caution should be taken to minimise the contact between the heels and foot stool as this can exacerbate the potential for heel pressure damage. Foot rest height should be adjusted to slightly flex the pelvis forward by positioning the thighs slightly lower than horizontally
- Limit the time an individual spends seated in a chair without pressure relief (Gebhardt and Bliss 1994)
NICE (2014) recommend a maximum ‘sitting out’ period of 2 hours if the patient has a pressure ulcer or 4 hours if the skin is intact. These times should always be monitored for individual patients and skin observed for changes and times adjusted accordingly.

![Image of sitting upright in an armchair with the feet on the ground]

Figure 4: Sitting upright in an armchair with the feet on the ground

c. Record repositioning regimes, specifying the frequency, position adopted and the evaluation of the outcome of the repositioning regime on the individuals skin condition.

9.4 Repositioning to Prevent and Treat Heel Pressure Ulcers

The reduction of pressure and shear at the heel is an important in clinical practice. The posterior prominence of the heel sustains intense pressure, even when a pressure redistribution surface is used. Ideally, heels should where ever possible be free of all pressure EPUAP (2014).

There is currently insufficient evidence to advocate the use of heel suspension devices; therefore the trust recommends that an appropriate pressure redistributing piece of equipment is utilised.

10. Nutrition

a. Nutritional status has been linked to a significant influence on the development of pressure ulceration (Mathus-Viligen 2001 and Clark et al 2004), although the relationship between nutrition and pressure ulcer prevention is unclear (EPUAP 2014). The nutritional status of every individual at risk of pressure ulcers in each health care setting should be screened and assessed.

b. Malnutrition Universal Screening Tool (‘MUST’) (www.bapen.co.uk) should be completed and nutritional intervention should be considered (NICE 2006 Nutritional Guideline).

i) Individuals with a ‘MUST’ score of 2 or more should be referred to a registered dietician for nutritional assessment and intervention.

ii) For individuals with a ‘MUST’ score of 0-1 consider a referral to a registered dietician if an individual has and existing pressure sores grade 1-2 and there are concerns over patients nutritional status and intake for nutritional assessment and intervention.

iii) Regardless of ‘MUST’ score individuals with an existing pressure sore of grade 3-4 and deep and ungradable should be referred to a registered dietician for nutritional assessment and intervention.
c. Nutritional screening should be used to identify individuals at risk. The focus of a nutritional assessment should be on evaluating energy intake, unintentional weight loss and psycho/social issues. A registered dietician, in consultation with the multidisciplinary team should develop and document an individualised intervention plan based on the individuals nutritional needs (EPUAP, 2014).

d. Encourage adequate daily fluid intake for hydration for an individual assessed to be at risk of or with a pressure ulcer. Fluid serves as a solvent for vitamins, minerals, glucose and other nutrients and transports nutrients and waste products through the body (EPUAP, 2014). This is important for maintaining good skin integrity and wound healing if a pressure ulcer is present.

The primary goal of nutritional intervention is to correct protein-energy malnutrition, ideally through oral feeding (EPUAP 2014). Nutritional supplements/fortified diet should be provided for patients who are unable to tolerate conventional meals or who have an identified deficiency, (Following Trust nutritional guidelines).

e. The success of nutritional intervention should be monitored and documented.

f. A nutritional care plan will be recommended following a nutritional assessment by a registered dietician, this assessment considers:
   - ‘MUST’ score
   - Estimation of nutritional requirements compared with nutritional intake
   - The category of pressure ulcer. Grade 3-4 will be losing high volumes of protein and fluid (EPUAP 2014) this will require replacement
   - General health status
   - The appropriate feeding route and the individual’s ability to eat independently;
   - Patient preferences
   - Monitoring and evaluation of nutritional outcome

 g. Bariatric patients require a dietician referral and review. Care advice related to pressure ulcer prevention/care in the bariatric patient can be seen in the section bariatric care.

11. Medical Device Related Pressure Ulcers

Consideration should be given to adults at risk of pressure ulcer damage from medical devices.

- Ensure that medical devices are correctly sized and fit appropriately to avoid excessive pressure
- Apply all medical devices following manufactures specifications and also ensure that they are sufficiently secured to prevent dislodgement without creating additional pressure
- The skin under and around medical devices should be inspected frequently for signs of pressure related injury. In the community setting educate the individual and or their carer with a medical device to perform regular skin inspection
- Keep skin clean and dry under medical devices
- Remove medical devices that are potential sources of pressure as soon as medically feasible
- Do not position the individual directly on a medical device unless it cannot be avoided
12. Equipment selection

This guideline uses the definitions of support surfaces from the EPUAP (2014) which states that a support surface is “a specialized device for pressure redistribution designed for management of tissue loads, micro-climate, and/or other therapeutic functions e.g. any mattresses, integrated bed system, mattress replacement, overlay, or seat cushion, or seat cushion overlay”. Therefore health care professionals need to consider all surfaces that the patient may come into contact with e.g. mattresses, cushions, theatre tables, stretchers and chairs. Surfaces offer 3 different characteristics (NICE 2014).

12.1 Support surface characteristics

<table>
<thead>
<tr>
<th>Pressure redistributing</th>
<th>Reduce magnitude and/or duration of pressure and shear</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure redistributing</td>
<td>Decrease peak interface pressures by increasing contact area</td>
</tr>
<tr>
<td>Pressure relieving</td>
<td>Effective removal of interface pressure by inflation/deflation of surface</td>
</tr>
</tbody>
</table>

Surfaces work in two different ways:

- Continuous low pressure – aim to mould around the shape of the individual, redistributing pressure over a greater surface area. These include standard foam, visco-elastic foam, air-flotation, air fluidised, low air loss, gel/liquid and combination products (NICE 2014)

- Alternating Pressure – mechanically vary the pressure beneath the individual by inflating and deflating alternate air-filled sacs. The depth of air cells, mechanical robustness, duration and sequence varies between manufacturers

12.2 Selecting and using pressure redistributing equipment

Consider the individuals need for pressure redistribution based on following factors (EPUAP 2014):

- Risk for development of new pressure ulcers
- Level of immobility and inactivity
- Number, severity and location of existing pressure ulcer
- Size and weight of the individual
- Need for micro-climate control and shear reduction

Additional factors include:

- Environment i.e. bed base, chair base
- Comfort
- Financial implication/effective use of resources

12.3 Categories of Pressure redistributing equipment

Pressure redistributing support surfaces are designed to either increase the body surface area that comes in contact with the support surface (to reduce interface pressure) or to sequentially alter the parts of the body that bear load, thus reducing the duration of loading at any given anatomical site (EPUAP 2014).

- **Static/Dry flotation**: Maximise the areas of the patient’s body in contact with the mattress surface.

- **Alternating/Dynamic**: vary the parts of the body that bear weight, usually through cyclical inflation and deflation of different sections of the support surface.

- **Turning/tilting support surfaces**: vary the body’s centre of gravity altering the loading on specific areas.
12.4 Allocation of equipment

All patients considered ‘at risk’ should have 24 hour access to pressure redistribution/relieving equipment and/or other strategies to relieve pressure such as tilt and turning regimes.

a. Use a high-specification foam mattress for adults who are assessed as being at high risk of developing a pressure ulcer (NICE, 2014)

b. Discuss with adults at high risk of developing a heel pressure ulcer and, where appropriate, their family or carers, a strategy to offload heel pressure, as part of their individualised care plan. (NICE, 2014)

c. Consider a high-specification foam or equivalent pressure redistributing cushion for adults who use a wheelchair or who sit for prolonged periods.

d. Patients with a category 1 pressure ulcer are at significant risk of it developing further and therefore staff who observe an area of new pressure damage should re-calculate the risk assessment, plan care accordingly and document the findings.

e. Those with category 1-2 pressure damage should as minimum provision receive a high specification foam mattress with pressure redistributing properties and should be closely observed for skin deterioration.

f. Those with category 3-4 pressure ulcers should as a minimum requirement be nursed on an alternating pressure mattress or a hybrid mattress (combination foam and air) this is as per equipment flowchart (see Appendix 5 and 6).

12.5 Support surfaces for individuals in Palliative care/ End of life care

An individual receiving palliative care/end of life care whose body systems are shutting down often lacks the physiological resources necessary for complete healing of the pressure ulcer. As such, the goal of care may be to maintain or improve the status of the pressure ulcer rather than heal it. (EPUAP, 2014)

It is important to implement preventive and treatment interventions in accordance with the individual’s wishes, and with consideration to overall health status. (EPUAP, 2014)

a. Reposition and turn the individual at periodic intervals, in accordance with the individual’s wishes, comfort and tolerance (EPUAP, 2014)

b. Consider changing the support surface to improve pressure redistribution and comfort (EPUAP, 2014)

c. Strive to reposition an individual receiving palliative care at least every 4 hours on a pressure redistributing mattress (EPUAP, 2014)

d. Document turning and repositioning, as well as the factors influencing these decisions (EPUAP, 2014)

12.6 Allocation and review of pressure redistributing equipment

a. All pressure redistributing equipment surfaces are allocated in Worcestershire Health and Care NHS Trust on the basis of risk assessment, level of mobility and classification of pressure ulceration (NICE 2014). See Equipment flow charts for guidance (see Appendix 5 and 6).

b. Review of equipment is essential to fulfil appropriate need and that health care professionals respond to changing requirements, stepping up and down as necessary. For this decision must be documented.

c. Maximum review times are outlined in Pressure redistributing equipment times. See appendix 7
Clinical judgement may override risk assessment but all health care professionals are accountable for their decision-making and the rationale for their decision.

Pressure relieving devices should be chosen on the basis of:

- Risk Assessment
- Pressure ulcer assessment (if present)
- Mobility and ability to move independently
- Location and cause of pressure ulcer development
- Skin assessment
- General health
- Lifestyle and abilities
- Critical care needs
- Comfort and acceptability to the patient
- Availability of carer/healthcare professional
- Patient’s weight
- Height of the bed in relation to bed rails

Specific advice is offered by NICE (2014):

- Patients with a category 1 pressure ulcer are at significant risk of it developing further (NICE 2014) and therefore staff who observe an area of new pressure damage should re-calculate the risk assessment, plan care accordingly and document the findings.
- Those with category 1 or 2 pressure damage should as minimum provision receive a high specification foam mattress with pressure relieving properties and should be closely observed for skin deterioration.
- Those with category 3 or 4 pressure ulcers should as a minimum requirement be nursed on an alternating pressure mattress (replacement or overlay) or sophisticated continuous low pressure such as low air loss, air fluidised or viscous fluid. This is as per the equipment flowchart (see Appendix 5 and 6).
- If receiving palliative care and suffering from nausea due to the mattress undulating they should be nursed on a replacement high specification foam mattress, a low air loss system or a RoHo/ Sofflex (see Appendix 5 and 6).
- Patients with sacral or buttock pressure ulcers category 2 or above should not be sat out of bed for longer than a 2 hour period and when sitting out should sit on a high specification foam cushion as a minimum.
- If bed rails are required the alternating pressure overlay should be placed on a reduced depth foam mattress to maintain safety.
- Patients undergoing surgery require a high specification foam theatre mattress.
- Manufactures guidelines to upper and lower weight limits of all support surfaces used need to be considered.

13. Initial and on-going assessment
   a. Document the allocation of equipment in care plan and update as equipment is changed. Review dates are in Appendix 7
   b. All in-patients to be reviewed weekly to ensure appropriate allocation of equipment
c. A guide to reviewing equipment is in Appendix 7

13.1 Equipment audit, cleaning & care - best practice statements

Outbreaks of infection caused by *Pseudomonas aeruginosa* and *Acinetobacter* have been associated with damaged mattresses, (Fujita *et. al.* (1981); Sherertz and Sullivan (1985), Loomes (1988). This is largely due to holes, delamination or degradation of the cover material. These faults can occur because of constant wear on one section of a mattress or catching on sharp objects, incorrect cleaning of a mattress, insufficient drying or through general wear and tear. In response to these problems bulletins have been produced by the MDA (2000), MHRA (2009) detailing the importance of mattress care and cleaning. Mattresses are generally considered to pose a low infection risk to individuals when they are in contact with normal intact skin.

Cover breakdown is multi-factorial and may be due to the bed base type, level of cleanliness, cleaning and disinfecting agents used, rough bed bases, needle stick punctures or jewellery causing cover abrasion and frequency of contamination with urine and faeces (MHRA, 2010). Mattress cover material breakdown in the clinical setting has been a recognised problem for over 15 years. Following disruption to the surface integrity, mattresses become contaminated through the ingress of body fluids, which lead to bottoming out of the foam, putting patients at an increased risk of infection and pressure ulcer formation. Consideration of the consequences of foam mattress life span on quality of care, hospital management practices, and cost analysis is justified (Heule 2007).

13.2 Audit

WH&CT are dedicated to audit each mattress, bed frame and cushion on annual basis in every in-patient area. It is important to maintain a database of mattresses across the in-patient units to ensure adequate provision of equipment is met. A copy of the audit tool is available. A report is available via Tissue Viability on review of effectiveness of pressure ulcer prevention and ability to meet infection control standards. Guidance is then available for replacement or removal of equipment depending on the audit outcome.

13.3 Mattresses/Cushions

Two methods of testing are carried out by a member of the tissue viability team and a tissue viability link nurse/ ward nurse annually on each mattress/cushion in each in-patient area to assess the pressure reducing ability and also the integrity of the cover.

Cushions are checked to ensure the base provides pressure redistribution, gel/fluid is intact and the cushion is fit for purpose and poses no risk to the user. Zips are checked for integrity and position within the chair is checked to ensure appropriate use according to manufacturer’s guidelines.

A fist test is carried out on mattresses to check for grounding/bottoming out. Grounding/bottoming out is when the foam has collapsed and the bed base can be felt through the mattress. All mattresses are tested at waist height with the cover in-situ. Hands are linked to form a fist and whilst keeping the elbows straight the fists are placed on the mattress leaning forwards at body weight and testing along 6 points down the centre of the mattress and then on the edges. Alternating pressure overlays or replacement mattresses are checked for appropriate cell rotation and evidence of up to date EBME and PAT testing.

Cover integrity

Testing is carried out by examining the mattress cover for:

- visible staining, tearing or damage
- breakdown
- condensation
delamination

appropriate cover size and type for inner foam

The inner foam mattress is checked for staining, strikethrough, odour and foam deterioration. Alternating pressure overlays or replacement mattresses are also checked for permeability. It is recognised that cover integrity is not as important because individual cells can be cleaned in between each patient. Usage or more frequently if visibly soiled.

All the mattresses are marked with a PERMANENT MARKER PEN which identifies a pass with a date on or fail in a circle with a large cross in the middle and the date of condemning.

Please note the word fail is not written on the mattress.

Bed rails must be cleaned in accordance with the Infection Prevention manual. The Infection Prevention Team must be contacted if there are any doubts regarding decontamination.

**Bed Frames**

Manual handling is a key area for the reduction of risk to both staff and the organisation. Profiling bedframes can contribute to the pressure reducing capacity of the mattress due to the ease of movement of the patient, particularly when sitting a patient up, thereby reducing the potential for shear and friction forces.

All the bed frames of in-patient units are audited annually and labelled with a small white sticker identifying 3 categories: Pass, Borderline (will last up to 1-year max) and Fail.

Bed frames are variable and are classified as:

- anti-ligature
- height adjustable-manual
- height adjustable-electric
- adjustable height and profiling and knee bracing-electric
- adjustable height low to floor and profiling and knee bracing

The audit identifies:

- the number of bed frames
- the current condition of the bed frame including the presence of rust
- weather cabling and hand set is intact
- whether the brakes work
- whether the height adjustment is working
- whether the profiling mechanism is working
- whether the knee brace is working
- condition of Head and foot rest

  a. Seating cushions should be inspected for signs of wear on a daily basis. The support surface (chairs and wheelchairs) should be inspected according to the manufacturer’s recommendations. (EPUAP, 2014)

  b. Evaluate the condition of equipment daily and ensure it is fit for purpose and providing pressure redistribution as manufacturer’s instructions intended

  c. Seek guidance from user manuals, peers, ICES or manufacturer if required to ensure effective function of equipment
13.4 Cleaning and care

BHTA guidance on the care, cleaning and inspection of healthcare mattresses Medical Device Alert Ref: MDA/2010/002 (MDA 2010) highlighted that mattress covers can become damaged at any time during use or storage, for example from needle stick, strike throughput, damage from sharp objects, abrasion during handling, transport or movement and inappropriate cleaning and decontamination procedures. Frequent or prolonged exposure to higher concentration disinfectant solutions may prematurely age the fabric cover of mattresses. Surfaces must be protected during use and rinsed and thoroughly dried after application of a disinfectant. Mattress covers are more susceptible to physical damage when wet and will remain susceptible for a period of time after being dried. Care also needs to be taken to provide protection between the mattress cover and any mechanical patient transfer devices including protecting against sharp edges of bridging boards and buckles on hoists which can snag and damage the mattress cover during transfer. There is an increased risk of permanent damage being caused to mattress covers if the cover is not completely dry before a patient is mechanically transferred onto the mattress.

All equipment that is returned to ICES is cleaned but should not be returned specifically for the purpose of cleaning.

For all inpatient areas and community follow standard operating procedures covered in Infection control in TV guideline

13.5 Damage during transportation

Movement of a mattress by one person will cause damage due to the size and shape of the mattress. Moving a mattress from one location to another may require two people for lifting and a trolley or a bed frame or similar to transport the mattress.

- Do not drag along the floor
- Do not transport in roll cages unless completely protected from sharp edges of the cage.
- Do not scrape against walls, door (Quick guide on the care, cleaning and inspection of pressure reducing foam mattresses, BHTA, September, 2011)

14. Management of existing pressure damage

Patients and their carers should be made aware of the potential risk and/or complications of having a pressure ulcer. As well as the trust information leaflets and NICE (2014) guideline and its recommendations, they should be referred in particular to information for the public and the public website www.your-turn.org.uk . Treatment and care should take into account the patient’s individual needs and preferences and carers and relatives should have the opportunity to be involved in discussions where appropriate.

14.1 Assessment of Pressure Damage

a. All patients with pressure ulcers will have a holistic assessment, including environment, nutrition, assessment of the skin as a sensory organ and the patients’ knowledge and understanding of their wound and general condition. The wound assessment will be documented on an appropriate wound assessment tool, within 24 hours of admission to a hospital setting and within one week of referral to primary care. A multidisciplinary approach is necessary for planning and implementing treatment options.

b. Assessment of the individual includes:

- The individuals and families knowledge and goal of care
- A complete health/medical and social history
- A focused physical examination including factors that may affect healing (impaired perfusion, sensation or systemic infection)
- Vascular assessment including ABPI in extremity ulcers
- Nutritional status
- Pain assessment including cause, level, location and management interventions (Hollinworth 2005) using appropriate pain assessment tool available in the Wound Management Guideline
- Psychological health, behaviour and cognition
- Social and financial support systems
- Functional capacity - particularly in regard to positioning, posture and the need for assistive equipment and personnel
- The employment and adherence to pressure relieving manoeuvres
- The integrity of support surfaces

c. Assessment of the pressure ulcer includes:

- CAUSE
- Site/location
- Dimensions
- EPUAP Categorisation (see Appendix 9) and differentiation from moisture lesions (See appendix 9)
- Pain
- Exudate amount and type
- Local signs of infection (EWMA 2006)
- Wound appearance/classification
- Peri-wound/Surrounding skin;
- Odour
- Consider undermining, tracking, sinus or fistula
- Size - length, width and depth

d. This should then be used to plan interventions based upon the assessment

e. The documentation of the wound assessment should be supported by photography or tracing, calibrated with a ruler with all patients having their wound size assessed and documented (by centimetre measurement or photography) on initial assessment and as part of the re-assessment. This is to provide a baseline and to monitor improvement or deterioration and should include a photograph.

f. The pressure ulcer should be categorised according to the Midlands and East modified European Pressure Ulcer Advisory Panel 1 - 4 System, and should NEVER be reverse graded (EPUAP, 2014) see Appendix 9.

15. Documentation for pressure ulcers

a. Assess the skin using the SSKIN Bundle (see Appendix 3) paying particular attention to reddened areas of skin to prevent any damage occurring. Pressure ulcers should be recorded on the wound management assessment tool. Care Rounds should be undertaken and recorded 2 hourly within in-patient area settings and at each district nurse visit. Category 2, 3 and 4 and deep and un-gradable pressure ulcers MUST be recorded as a serious incident within 48 hours. A root cause analysis will be
undertaken to identify the cause and origin of all grade 3, 4 and deep and ungradable. All patients with category 2, 3 and 4 should be referred via E health to Tissue Viability Department. A referral form is available in the clinical documentation library and should be emailed to whcnhs.tissueviability.nhs.net

b. An initial and on-going assessment of the wound bed should be undertaken and documented on a Wound Assessment Chart. The assessment should be documented and the use of photography to capture and monitor progress.

c. All patients with pressure ulcers will be re-assessed and documented at least weekly or less frequently at the discretion of the registered Healthcare Professional and documented. Any alterations to the treatment regime will be discussed with the patient, Healthcare Professional and the rationale for this will be documented. This is to enable the monitoring of the appropriateness of current treatment and to respond to any changes as a result of the re-assessment.

d. A plan of treatment should be documented on a care plan and an evaluation form completed to monitor progress.

16. Treatment of pressure ulcers

a. Choice of dressing, method of debridement and the optimum wound healing environment should be created by using modern dressings (NICE 2014). The use of topical agents or adjunct therapies should be based on the current assessment of the wound and Worcestershire NHS Wound Management Formulary:

- General skin assessment
- Treatment objective
- Characteristic of dressing/technique
- Previous positive effect of dressing/techniques
- Manufacturer’s indications/contraindications for use
- Risk of adverse events
- Patient preference

b. Patients and carers who are willing and able to should be taught how to re-distribute their own weight and utilise a mirror to view any areas difficult to see.

c. Passive movements should be considered for patients with compromised mobility.

d. Topical and oral anti-microbial therapy should be considered in the presence of systemic and/or local signs of infection. Topical anti-microbial agents are included in the Worcestershire NHS Wound Management Formulary. Referral for surgical/plastics opinion should be made based on the needs of the patient, their health status, their risk (anaesthetic and surgical intervention), previous pressure ulcer history, the assessment of psychosocial factors regarding the risk of recurrence, the failure of previous conservative treatment and positive effect of surgical techniques.

e. All patients with pressure ulcers who are transferred to any other care setting will have their treatment regime communicated to the appropriate health care professional prior to discharge. (Transfer of Care Appendix 11). This can contribute to the continuity of patient care.

f. Patients with pressure ulcers category 3 and 4 are to be referred to Tissue Viability for consideration of Negative Pressure Wound Therapy (NPWT) within 48 hours.

17. Management of pain
a. All individuals should be assessed for pain related to pressure ulceration or its treatment and a number of preventative strategies utilised:
   • Position the individual to avoid the pressure ulcer
   • Use lifts/transfers to minimise friction and/or shear when re-positioning
   • Avoid posture that increases pressure
   • Minimise pressure ulcer pain by careful handling of the wound
   • Organise care so analgesia is provided before procedures
   • Allow “time out” during dressing change/procedure
   • Utilise dressings that will minimise pain and trauma
   • Utilise distracting techniques
   • Offer appropriate analgesia
   • Referral of a patient with chronic pain related to pressure ulceration to the appropriate pain clinic for assessment and management

b. This should be carried out utilising the appropriate pain assessment tool for the client group involved

18. Consent
   a. Patients have a fundamental legal and ethical entitlement to determine what happens to their bodies (Beauchamp and Childress 2013). Valid consent to treatment is central to all forms of healthcare. Consent is a patient agreement for a health professional to provide care. Patients may indicate non-verbally (by turning over to expose the area of pressure damage), orally, or in writing. For consent to be valid the patient must be competent to take that decision, be fully informed of the action and its consequences, and not be under duress.

   b. Consent should be sought verbally and where possible in writing prior to sharp debridement of dead tissue and for photography to monitor progress of the wound (see Consent to Treatment Policy.)

   http://nww.hacw.nhs.uk/policies/clinical-policies/ then select consent to treatment.

   c. If a patient declines treatment or equipment recommended by the health-care professional, that may be detrimental to the health and wellbeing of the patient, this should be documented in accordance with the consent policy. The aim of pressure ulcer assessment is to establish the severity of the pressure ulcer, assess for complications and develop a plan of care which is communicated to those involved in care. WHCT have also developed a decision against tissue viability advice form, for further information please see http://nww.hacw.nhs.uk/policies/clinical-documentation-library/ then select decisions against tissue viability advice.

19. Decision against Tissue Viability Advice
   a. Patients have a fundamental legal and ethical (Beauchamp & Childress 2013) entitlement to determine what happens to their bodies. Valid consent to treatment is central to all forms of healthcare. Consent is a patient agreement for a health professional to provide care. Patients may indicate non-verbally (by turning over to expose the area of pressure damage), orally, or in writing. For consent to be valid the patient must be competent to take that decision, be fully informed of the action and its consequences, and not be under duress.

   b. If a patient declines treatment or equipment recommended by the health-care professional, that may be detrimental to the health and wellbeing of the patient, this
should be documented on the Decision Against Tissue Viability Advice (DATVA). See appendix 12.

20. Clinical Audit and Safety Thermometer

a. Safety Thermometer is the point prevalence audit tool that senior clinical staff are required to complete monthly. The objectives of the Safety Thermometer are to measure, monitor and track ‘harm free’ care ensuring organisational accountability, system learning and triangulation of data, thereby raising the profile of the ambition.

b. All patients with a category 2, 3 or 4 and deep and ungradable pressure ulcer will have this recorded as a clinical incident on incident reporting system. The patient safety report on this is presented quarterly to the Quality and Safety Committee. This information will be analysed with the usage of equipment through central equipment services. This will include:

- Number of patients with pressure ulcers
- Number of patients with pressure ulcers acquired within establishment
- Number of patients admitted/admitted onto caseload with pressure ulcers
- Number of patients on mattresses that met their clinical need
- Categories of pressure damage
- Treatment regimes
- Presence of documentation for risk, wound assessment, and treatment care plans
21. Pressure Ulcer Prevention and Management Algorithm

Patient at risk of or presents with a pressure ulcer

Waterlow assessment, Holistic assessment and assessment of SSKIN
Conducted by a competent healthcare professional and recorded every week in in-patient areas and every month, 3 months or 6 months on Community Nursing caseload for those at risk and at least monthly if a pressure ulcer is present.

Contributory risk factors/factors that delay healing or cause complications

Health Status
(acute, chronic, terminal)
Previous pressure ulcer history
Co-morbidity
Cognition
Sensory impairment
Conscious level
Nutritional status
If Bariatric refer to dietician
Psycho-social factors
Continence status
Tissue perfusion

Skin Assessment and Ulcer assessment with tracings/photographs

Access ulcer weekly and document
Base line, photograph
ABPI in extremity ulcers
Cause Site/location
Dimensions of ulcer
Category (E.P.U.AP) Tissue type
Infection/inflammation
Exudate (type, amount, odour)
Undermining/tracking (sinus, fistula)
Edge of wound surrounding skin
Pain
Medication

Prevention/treatment plan should address all aspects of assessment
Provide patient information

Relieve the Pressure

Patient at risk of or who have pressure damage should be actively encouraged to mobilise, change position or be re-positioned frequently

Patients at risk of pressure damage should not sit for intervals greater than 4 hours (2 hours with pressure damage)

Patients at risk of/who have pressure damage have access to appropriate pressure re-distributing support surfaces (mattresses and cushions) 24 hours a day

Category 2, 3, 4 and deep and ungradable to be referred to Tissue Viability within 48 hours. Refer to dietician if MUST is 2 for grade 2 Refer all 3, 4 and deep and ungradable to Dietician

Surface
Skin
Keep moving
Incontinence
Nutritional Support
Wound management
Debridement
Dressing Selection
Adjunct therapy

Evaluate impact of prevention/treatment intervention by regular re-assessment

No improvement

Improvement
22. Bariatric Care: Pressure Ulcer Prevention.

22.1 Introduction

*If the person is under 16, healthcare professionals should follow the guidelines in the Department of Health’s Seeking consent: working with children (obesity guidelines, nice)*

Bariatric patients have complex needs that require a multi-disciplinary approach throughout their journey. Clinicians encountering bariatric patients should be aware of their special needs and maintaining skin integrity is one of the challenges that nurses will encounter, as bariatric patients are at increased risk of pressure ulcers due to skin physiology changes, resulting in poor wound healing. Slower wound healing is thought to be associated with decreased wound collagen deposition, which causes structural changes in adipose tissue (Pokorny 2008). Gallagher (2006) identified that pressure ulcer development seriously related to bariatric patients immobility, patients had difficulty in repositioning themselves and nurses were reluctant to turn and reposition the patient, causing shearing damage and atypical pressure ulcers in the skin folds from tubes or catheters than have burrowed into the soft tissue.

The clinical management of obesity cannot be viewed in isolation from the environment in which people live. (Obesity -Guidance on the prevention of overweight and obesity in adults and children Issued: December 2006 last modified: March 2015 NICE clinical guideline 43)

More than half the adult population are overweight or obese (NICE clinical guideline 43 (2006). This presents an organisational challenge to the National Health Service to deliver a safe dignified experience for the patient as well as safe systems of work for staff.

There was a marked increase in the proportion of adults that were obese from 13.2 per cent in 1993 to 26.0 per cent in 2013 for men and from 16.4 per cent to 23.8 per cent for women. The proportions that were overweight including obese increased from 57.6 per cent to 67.1 per cent in men and from 48.6 per cent to 57.2 per cent in women. (Statistics on Obesity, Physical Activity and Diet - England, 2015 Health and Social Care information Centre, www.hscic.gov.uk)

To obtain Bariatric beds please follow the Safer Handling Policy on the Trust internet. If there is no bariatric bed available within the Trust, one can be hired. Numbers can be located in the Safer Handling Policy or on the Trust moving and handling intranet site

a. To avoid shearing the bed should not be angled at more than 30° however if that cannot be achieved pillows which will reduce friction and shear. To reduce the effects of gravity, the knee break of the bed will also contribute to reducing the pressure on the heels.

b. Due to increase in body mass, it may be more appropriate to nurse in a semi-recumbent position to ensure breathing is not restricted.

c. Ensure that the bed surface area is sufficiently wide to allow turning of the individual without contact with the bed rails or any part of the bed frame.

d. Use equipment that adequately supports the weight of the individual. Take extra care to protect skin folds during repositioning

e. Handle skin with great care to prevent trauma to the delicate tissues

f. Select equipment that will encourage independence and transfer abilities i.e. foam mattresses may increase independence whereas alternating pressure surfaces may decrease independence.

g. It is essential that bariatric patients are discouraged from sleeping in a chair due to increased risk of sacral pressure damage
h. Chairs should provide sufficient pressure redistributing qualities and be proportionate to the individual’s size and weight distribution.

Reviewing pressure redistributing equipment

Choose pressure relieving device on the basis:
- risk assessment pressure ulcer assessment (severity) if present
- location and cause of the pressure ulcer if present
- availability of carer/healthcare professional to reposition the patient
- skin assessment
- general health
- lifestyle and abilities
- critical care needs
- acceptability and comfort
- cost consideration

a. Consider all surfaces used by the patient
b. Patients should have 24 hour access to pressure relieving devices and/or strategies
c. Change pressure relieving device in response to altered level of risk, condition or needs

22.2 Risk Factors/Complications

Bariatric patients may experience strain on the heart and lungs which may affect systemic perfusion and lead to chronic skin and wound problems (Krasner et al 2006). Personal hygiene may be problematic for bariatric patients as they may experience difficulties with bathing and showering due to the weight and accessibility of the skin folds (See picture 1).

Bariatric patients may develop pressure ulcers under the pannus (Picture 2). Thus, careful intervention is needed to protect vulnerable skin.

Drying the skin under the folds is critical; leaving the skin underneath the folds wet encourages fungal and bacterial growth. In some circumstances, leaving a soft cloth between the skin folds would reduce friction and absorb moisture.

Care should be taken to prevent device related pressure damage in the skin folds from tubes or catheters than have burrowed into the soft tissue (Gallagher 2006).

Skin may break down at the occiput due to the bull-head configuration of the head and neck (picture 3). The weight of the skin folds and skin to skin can create forces that enable pressure ulcers to develop in areas that are not considered to be high risk.
Preventive measure for bariatric patients can be difficult for health care professionals to implement, and solutions should be implemented that meet the needs of the individual through management strategies that includes multi-disciplinary involvement, equipment provision that prevents or is part of the management of a pressure ulcer.

Health care professionals should be vigilant, and undertake a holistic assessment that encompasses and identify all high risk breakdown areas for careful monitoring of vulnerable areas. The assessment should also include the co-morbidities of the patient and their effects on the patient to include pain thresholds.

Moving bariatric patients around the bed is challenging and may require more than 2 people to minimise friction and shear when (Mastrogiannis et al 2003).

Bariatric patient can be positioned using appropriate moving and handling equipment in order to reduce the risk of skin damage and removed after re-positioning unless specified in manufacturers' guidance.

23. Training/Competencies

a. Registered health care professionals MUST demonstrate theoretical underpinning and practical competence in pressure ulcer prevention and management.

b. Essential training in pressure ulcer prevention, risk assessment, skin assessment and grading of pressure ulcers is available via e-learning for all registered WHACT staff and must be completed every 3 years. Additional face to face education is also available in all of these aspects to staff supporting registered clinical staff.

c. Competencies must be completed every 3 years in risk assessment, skin assessment and grading of pressure ulcers. Completion of these competencies rests with the individual registered health care professional.

d. Educational programmes, incorporating internal courses are available to all staff groups and forms a major part of the individuals overall professional development. Each course contains core competencies which will be approved (signed off) and it is the responsibility of the individual to ensure no task is undertaken outside of completed competency.

e. Training is essential for all registered health care professionals with responsibility for selecting and ordering pressure redistributing equipment. ELearning is supported by practical demonstrations at Integrated Community Equipment Services (ICES) and in each in-patient area. There is a competency for each item of redistributing equipment available within WHCT. The registered healthcare professional should ensure that they have the appropriate knowledge and skill for the selection and use of all.
pressure redistribution equipment within WHCT. It is the responsibility of the individual to ensure no task is undertaken outside of their competency.

24. **Responsibilities and Duties**

It is the responsibility of all registered health care professionals and supervised student nurses, with in WHCT, to be able to demonstrate practical competence in the prevention and management of pressure ulcers. It is the responsibility of all health care professionals to provide and discuss with patient’s the pressure ulcer prevention leaflet (Appendix 13).

Staff will be offered education relating to pressure ulcer prevention and management. Staff will be expected to maintain evidence of their own up to date, evidence-based knowledge and skills as part of their professional registration and/or development and will be available within WHCT.

Unqualified staff should be competent to inspect an individual’s skin and inform the responsible clinician of any changes or areas of concern.

25. **Monitoring implementation**

<table>
<thead>
<tr>
<th>STANDARDS</th>
<th>%</th>
<th>Clinical Exceptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>All patients with a pressure ulcer will have a differential diagnosis of the wound documented.</td>
<td>100</td>
<td>Nil</td>
</tr>
<tr>
<td>All patients with a pressure ulcer will have a wound assessment completed initially and then reviewed at least weekly or if there is a change noted.</td>
<td>100</td>
<td>Nil</td>
</tr>
<tr>
<td>All patients with a pressure ulcer will have a clear wound treatment objective documented.</td>
<td>100</td>
<td>Nil</td>
</tr>
<tr>
<td>All patients with a pressure ulcer will have a care plan implemented and evaluated for pressure ulcer management.</td>
<td>100</td>
<td>Nil</td>
</tr>
<tr>
<td>All patients will be given a trust care of the skin and pressure ulcer prevention patient information leaflet.</td>
<td>100</td>
<td>Nil</td>
</tr>
<tr>
<td>Informed consent will be documented in the patient’s notes.</td>
<td>100</td>
<td>Nil</td>
</tr>
<tr>
<td>All patients will have their risk of developing a pressure ulcer assessed and reviewed.</td>
<td>100</td>
<td>Nil</td>
</tr>
</tbody>
</table>

26. **References**


Care Quality Commission CQC (2014) Monitoring the use of the deprivation of liberty standards.
http://www.cqc.org.uk/sites/default/files/20150325%20Deprivation%20of%20Liberty%20Safeguards%20FINAL.pdf


Department of Health (2001) the essence of care, Patient focused benchmarking for health care practitioners. HMSO:

Department of Health (2005) Consultation document. Arrangements for the provision of dressings, Incontinence appliances, stoma appliances, chemical reagents and other appliances to Primary and secondary care. Published 24th October 2005


Topical management of infected grade 3 & 4 pressure ulcers. Moore, Z. & Romanelli, M. p11-13


Bariatric Times - ISSN: 1044-7946 - Volume 03 - Issue 05 - June 2006 - Pages: 26 – 27


Malnutrition Universal Screening Tool (MUST) Nutritional assessment tool (www.bapen.co.uk).


### WATERLOW PRESSURE ULCER ASSESSMENT CHART

<table>
<thead>
<tr>
<th>SCORE 10+ at risk</th>
<th>SCORE: 15+ high risk</th>
<th>SCORE 20+ very high risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>DATE</td>
<td>DATE</td>
<td></td>
</tr>
</tbody>
</table>

#### BUILD/WEIGHT FOR HEIGHT
- **Average BMI = 20-24.9**
- **Above average BMI = 25-29.9**
- **Obese – BMI ≥ 30**
- **Below average BMI < 20**
- **BMI = Wt(kg)/HT(m)^2**

#### CONTINENCE
- **Complete/catheterised**
- **Urine incontinence**
- **Faecal incontinence**
- **Doubly incontinent**

#### SKIN TYPE (VISUAL AREA)
- **Healthy**
- **Tissue paper**
- **Dry**
- **Oedematous**
- **Clammy (raised temp)**
- **Discoloured**
- **Broken/spot**

#### MOBILITY
- **Fully**
- **Restless/fidgety**
- **Apathetic**
- **Restricted**
- **Bed bound eg Traction**
- **Chair bound eg Wheelchair**

#### SEX/AGE
- **Male**
- **Female**
- **14 – 49**
- **50 – 64**
- **65 – 74**
- **75 – 80**
- **81+**

#### MEDICATION
- **Cytotoxics**
- **Anti-inflammatory**
- **Long term/high dose steroids**
- **Orthopaedic/spinal**
- **Paraplegia (MAX 6)**
- **Is pressure ulcer present**
- **If Yes state grade**

#### NEUROLOGICAL DEFICIT
- **Diabetes, MS, CVA**
- **Motor/sensory**
- **Is wound chart in use**

#### MAJOR SURGERY or TRAUMA
- **Orthopaedic/spinal**
- **Is pressure ulcer present**
- **If Yes state grade**

#### SIGN AND DATE WHEN INFORMATION GIVEN
- **Malnutrition Screening Tool (MUST)**
- **Assessment and treatment has been discussed with patient/carer**
- **Verbal information on positioning given**
- **Written information given**
- **Patient/carer understands equipment**
- **Comments on your decision re Risk to Patient**

---

**Appendix 1**

**Waterlow Pressure Ulcer Risk Assessment (2005)**

**WATERLOW PRESSURE ULCER ASSESSMENT CHART**

<table>
<thead>
<tr>
<th>DATE</th>
<th>DATE</th>
<th></th>
</tr>
</thead>
</table>

**BULK/HEIGHT FOR WEIGHT**
- **Average BMI = 20-24.9**
- **Above average BMI = 25-29.9**
- **Obese – BMI > 30**
- **Below average BMI < 20**
- **BMI = Wt(kg)/HT(m)^2**

**CONTINENCE**
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**MEDICATION**
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- **Diabetes, MS, CVA**
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**SIGN AND DATE WHEN INFORMATION GIVEN**
- **Malnutrition Screening Tool (MUST)**
- **Assessment and treatment has been discussed with patient/carer**
- **Verbal information on positioning given**
- **Written information given**
- **Patient/carer understands equipment**
- **Comments on your decision re Risk to Patient**
Appendix 2

Waterlow Pre-Screening Questions for registered therapists

Q1. Is the patient currently in the care of Worcestershire Health & Care NHS Trust and will have already had a Waterlow risk assessment undertaken ie on DN caseload/in–patient/Out-patient?

If yes, do not continue as the Waterlow risk assessment has already been completed.

If the answer to question 1 is No then complete questions 2-5 below

Q2. Does the patient have reduced mobility?  Yes ☐  No ☐

Q3. Is the skin broken?  Yes ☐  No ☐

Q4. Do they have pain at a pressure ulcer point?  Yes ☐  No ☐

Q5. Has the patient had a previous pressure ulcer?  Yes ☐  No ☐
Waterlow pre-screening Decision Flow chart

Question 1  if answer Yes........ no action

If answer no complete question 2-5

Question 2-5 ..... If answer No ...... no action required unless your clinical judgement indicates otherwise

If yes to one or more questions then complete Waterlow Risk Assessment

Waterlow Less than 10

No further action required unless your clinical judgement indicates otherwise

Waterlow Greater than 10

Provide patient info (Available from Tissue Viability)
Provide appropriate therapy care
Refer to DN (preventative care plan)
Provide pressure reducing equipment as per the pressure selection guide if competent
**Waterlow Pre-Screening chart for registered therapists**

Q1. Is the patient currently in the care of Worcestershire Health & Care NHS Trust and will have already had a Waterlow risk assessment undertaken i.e. on DN caseload/ in-patient/ Out-patient?

Yes □ No □

Q2. Does the patient have reduced mobility?

Yes □ No □

Q3. Is the skin broken?

Yes □ No □

Q4. Do they have pain at a pressure ulcer point?

Yes □ No □

Q5. Has the patient had a previous pressure ulcer?

Yes □ No □
# Pressure Ulcer Prevention and Skin Assessment Form

**Worcestershire Health and Care NHS Trust**

**APPENDIX 3**

| NAME: | | NHS NO: | | HOSP. NO: | | D.O.B: | | MALE: | | FEMALE: | |  |

---

**Pressure Ulcer Prevention and Skin Assessment Form**

- **Date:**
- **Ward/Team:**
- **Time:**
- **Signature:**

---

**Mark each area of pressure damage with an 'X' on the body map and number /date each area of damage/pressure ulcer. Please consider all areas of the body.**

**Previous history of pressure ulcer**
- **Yes** □ **No** □

**Focus of care**
- Skin □
- Keep moving □
- Incontinence □
- Nutrition □
- Surface □

---

**Most common location of pressure ulcers**

1. Back of head
2. Ears
3. Shoulders
4. Elbow
5. Lower Back
6. Sacrum
7. Ischial Tuberosities
8. Hips
9. Between knees
10. Malleoli
11. Heels

**Waterlow Score**

---

**Signs to look for (Tick if present)**

- Red areas
- Cracks, calluses
- Shiny areas
- Purplish/bluish area
- Localised oedema
- Dry patches

**Signs to feel for (Tick if present)**

- Hard areas
- Localised coolness if tissue death occurs
- Warm areas
- Swollen skin over bony points

**Skin Assessment (Tick if present)**

- Non blanching Erythema
- Blanching Erythema
- Dry Scaly Skin
- Oedema
- Fragile
- Healthy
- History of skin tears
- History of skin stripping by adhesive dressings
- Skin changes at life's end

---

**Patient assessed – skin intact** □

**Patient information leaflet discussed and given to the patient (tick if apply):**

- Skin Care □
- Pressure Ulcers □
<table>
<thead>
<tr>
<th>Date</th>
<th>Skin assessment Completed (Please tick)</th>
<th>Number of area of damage or pressure ulcers</th>
<th>Signs or categorisation</th>
<th>Signature and designation</th>
</tr>
</thead>
<tbody>
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</tr>
</tbody>
</table>
How can skin breakdown be prevented?

It is possible to prevent skin damage or breakdown by maintaining mobility, managing incontinence, maintaining nutrition and regular skin care by using of the appropriate skin care regime and products.

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
<th>Benefits</th>
<th>Precautions</th>
<th>Barrier Film</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bath additive</td>
<td>Soap substitute</td>
<td>Prevent dryness caused by soap-based cleansers</td>
<td>Before using, apply barrier film</td>
<td>×</td>
</tr>
<tr>
<td>Creams</td>
<td>Light moisturiser</td>
<td>Used for prevention or treatment</td>
<td>Do not over apply</td>
<td>×</td>
</tr>
<tr>
<td>Ointment</td>
<td>High oil content</td>
<td>Treatment for dry thick scaly skin</td>
<td>Do not over apply</td>
<td>×</td>
</tr>
<tr>
<td>Barrier films</td>
<td>Barrier forming, durable</td>
<td>Protect skin against environmental factors e.g. friction, moisture</td>
<td>Apply sparingly</td>
<td>✓</td>
</tr>
<tr>
<td>Barrier Creams</td>
<td>Barrier forming, durable</td>
<td>Protect skin against environmental factors e.g. friction, moisture</td>
<td>Apply sparingly</td>
<td>✓</td>
</tr>
</tbody>
</table>

What can I do to help?

- Regularly inspect skin for signs of vulnerability
- Assess skin for redness and any signs of skin breakdown
- Wash your skin regularly with warm water and a mild, pH balanced cleanser
- Moisturise skin, especially dry areas with cream/ointments as advised by a health care professional
- Avoid “rubbing” the skin when applying creams
- Avoid damage to the skin through abrasion, tears etc.

Patient safety

An important aspect of patient safety is the promotion and maintenance of skin integrity which is one of the most important roles for clinicians in all care settings and must never be under prioritised - (Professor Stephen Haynes 2011).

Skin Care & Protection
A Guide for Patients & Carers

Supporting education in healthcare

Aspen Medical

Worcestershire Health and Care NHS Trust

The National Patient Safety Agency www.npsa.nhs.uk/nhs

This guide has been developed by Jackie Stephen-Haynes Professor, Practice Development Unit, Birmingham City University & Consultant Nurse Worcestershire Health & Care NHS Trust and Flossie Callaghan, Tissue Viability Nurse Specialist, Worcestershire Health & Care NHS Trust.

Supported by an education grant from Aspen Medical in support of Sorbadosm.

If you would like this information in other formats or languages please call 01905 760029 or email – pct.communications@worcestershire.nhs.uk

Pressure Ulcer Prevention and Management Guideline 2016
What is vulnerable skin?
Skin that is at risk of breakdown due to the loss of its natural protective barrier.

What factors increase the risk of skin damage?
- Lack of skin care
- Mobility
- Nutrition
- Incontinence
- Poor blood supply
- Smoking
- Environment/activity/lifestyle
- Underlying illness
- Trauma
- Drugs
- Steroids
- Age

What can cause skin damage?
- Friction and shear
- Pressure
- Dry skin
- Incontinence
- Skin Tears
- Excess moisture, e.g. from wounds, perspiration etc.

Skin assessment
Skin should be assessed with particular attention to the prominences such as the heels and sacrum. Redness is an indicator of early skin damage and actions should be taken to protect and prevent further damage:

S - Skin care
Cleansing and the use of appropriate protective barrier

K - Keep moving
Mobilisation and repositioning

I - Incontinence
Skin should be immediately cleansed and moisturised after each episode

N - Nutrition
Eating a well balanced diet and drinking plenty of fluids

What are the consequences of skin breakdown?
- Discomfort or pain
- Development of a wound
- Risk of wound infection
- Altered body image
- Reduced quality of life

Further advice is available from
www.nhs.uk/Livewell/skin/Pages/Keepskinhealthy.aspx
# Pressure Care Selection Guide for the Integrated Community Equipment Service

**Produced by:**
Jackie Stephen-Haynes - Professor and Consultant Nurse in Tissue Viability
Jenny Stanford - Wheelchair and Integrated Community Equipment Service Manager

## 1 Mattress and Seating Equipment Selection Guide

Clinical judgement overrides risk assessment.

<table>
<thead>
<tr>
<th>Pressure Ulcer Risk</th>
<th>Mobility</th>
<th>Pressure Ulcer</th>
<th>Equipment Provision/Tolerance</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-9 Not at Risk</td>
<td>Consider</td>
<td>No Ulcer</td>
<td>No Equipment Provision</td>
</tr>
<tr>
<td></td>
<td>Mobility</td>
<td></td>
<td>Can tolerate alternating mattress follow Treatment Chart 3a</td>
</tr>
<tr>
<td></td>
<td>Ulcer</td>
<td></td>
<td>Cannot tolerate alternating mattress follow Treatment Chart 3b</td>
</tr>
<tr>
<td>10-14 At Risk</td>
<td>Consider</td>
<td>No Ulcer</td>
<td>Follow Prevention Chart 2</td>
</tr>
<tr>
<td></td>
<td>Mobility</td>
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<td>Can tolerate alternating mattress follow Treatment Chart 3a</td>
</tr>
<tr>
<td></td>
<td>Ulcer</td>
<td></td>
<td>Cannot tolerate alternating mattress follow Treatment Chart 3b</td>
</tr>
<tr>
<td>15-19 High Risk</td>
<td>Consider</td>
<td>No Ulcer</td>
<td>Follow Prevention Chart 2</td>
</tr>
<tr>
<td></td>
<td>Mobility</td>
<td></td>
<td>Can tolerate alternating mattress follow Treatment Chart 3a</td>
</tr>
<tr>
<td></td>
<td>Ulcer</td>
<td></td>
<td>Cannot tolerate alternating mattress follow Treatment Chart 3b</td>
</tr>
<tr>
<td>20+ Very High Risk</td>
<td>Consider</td>
<td>No Ulcer</td>
<td>Follow Prevention Chart 2</td>
</tr>
<tr>
<td></td>
<td>Mobility</td>
<td></td>
<td>Can tolerate alternating mattress follow Treatment Chart 3a</td>
</tr>
<tr>
<td></td>
<td>Ulcer</td>
<td></td>
<td>Cannot tolerate alternating mattress follow Treatment Chart 3b</td>
</tr>
</tbody>
</table>

For Bariatric patients follow 4

## 2 Prevention

### Mattress

<table>
<thead>
<tr>
<th>Waterlow Score</th>
<th>Equipment Provision</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-14 At Risk</td>
<td>Prepad, Salflex</td>
</tr>
<tr>
<td>15-19 High Risk</td>
<td>Salflex, Softflex</td>
</tr>
<tr>
<td>20+ Very High Risk</td>
<td>Salflex, Kermo</td>
</tr>
</tbody>
</table>

### Cushion

| 20+ Very High Risk | Dual, Ralho, Airtech, Acare |

## 3a Treatment

### Mattress Guide - Patient can tolerate alternating therapy

<table>
<thead>
<tr>
<th>Category of Pressure Ulcer</th>
<th>Equipment Provision</th>
</tr>
</thead>
<tbody>
<tr>
<td>At Risk / Category 1 Pressure Ulcer</td>
<td>Prepad, Salflex</td>
</tr>
<tr>
<td>Up to Category 2 Pressure Ulcer</td>
<td>Salflex, Premier Active, Salflex</td>
</tr>
<tr>
<td>Up to Category 3 Pressure Ulcer</td>
<td>Premier Active, Ralho, Autologic 110</td>
</tr>
<tr>
<td>Up to Category 4 Pressure Ulcer</td>
<td>Dual Professional, Ralho</td>
</tr>
</tbody>
</table>

## 3b Treatment

### Mattress Guide - Patient cannot tolerate alternating therapy or requires more comfort/end of life care

<table>
<thead>
<tr>
<th>Category of Pressure Ulcer</th>
<th>Equipment Provision</th>
</tr>
</thead>
<tbody>
<tr>
<td>At Risk / Category 1 Pressure Ulcer</td>
<td>Prepad, Salflex</td>
</tr>
<tr>
<td>Up to Category 2 Pressure Ulcer</td>
<td>Salflex, Softflex</td>
</tr>
<tr>
<td>Up to Category 3 Pressure Ulcer</td>
<td>Premier Active, Ralho, Salflex</td>
</tr>
<tr>
<td>Up to Category 4 Pressure Ulcer</td>
<td>Ralho, Premier Active</td>
</tr>
</tbody>
</table>

## 4 Bariatric

<table>
<thead>
<tr>
<th>Category of Pressure Ulcer</th>
<th>Equipment Provision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to Category 4 Pressure Ulcer</td>
<td>Dual Professional Bariatric 120cm wide and 200kg weight limit, Ralho no weight limit</td>
</tr>
</tbody>
</table>

Version 2 - December 2015
## CONSIDER

### Prevention

<table>
<thead>
<tr>
<th>Waterlow Score</th>
<th>Mattress</th>
<th>Cushion</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-9 Not at Risk</td>
<td>Softform</td>
<td>Dual, Roho, Flatback</td>
</tr>
<tr>
<td>10-14 At Risk</td>
<td>Softform</td>
<td>Propad</td>
</tr>
<tr>
<td>15-19 High Risk</td>
<td>Softform</td>
<td>Mastech</td>
</tr>
<tr>
<td>20+ Very High Risk</td>
<td>Softform</td>
<td>Dual, Roho, Flatback</td>
</tr>
</tbody>
</table>

### Treatment

<table>
<thead>
<tr>
<th>Category of Pressure Ulcer</th>
<th>Equipment Provision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Degree Pressure Ulcer</td>
<td>Softform, Premier Active, Flatback</td>
</tr>
<tr>
<td>2nd Degree Pressure Ulcer</td>
<td>Dual Professional, Premier Active, Flatback, Roho</td>
</tr>
<tr>
<td>3rd Degree Pressure Ulcer</td>
<td>Dual Cushion, Flatback, Roho</td>
</tr>
</tbody>
</table>

### Bariatric

<table>
<thead>
<tr>
<th>Category of Pressure Ulcer</th>
<th>Equipment Provision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to Category 2 Pressure Ulcer</td>
<td>Softform, Premier Active, Flatback</td>
</tr>
<tr>
<td>Up to Category 3 Pressure Ulcer</td>
<td>Premier Active, Roho, Softform, Flatback, Roho</td>
</tr>
<tr>
<td>Up to Category 4 Pressure Ulcer</td>
<td>Roho, Premier Active, Roho</td>
</tr>
<tr>
<td>Up to Category 4 Pressure Ulcer</td>
<td>Dual Professional Bariatric 1200w wide and 200kg weight limit, Roho/no weight limit</td>
</tr>
</tbody>
</table>

*Equipment to be phased out over the next four years.

## Pressure Care Selection Guide for the Worcester Community Hospitals

1. **Mattress and Seating Equipment Selection Guide**

   Clinical judgement overrides risk assessment.

<table>
<thead>
<tr>
<th>Pressure Ulcer Risk</th>
<th>Mobility</th>
<th>Pressure Ulcer</th>
<th>Equipment Provision/Tolerance</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-9 Not at Risk</td>
<td>Consider</td>
<td>No Ulcer</td>
<td>No Equipment Provision</td>
</tr>
<tr>
<td></td>
<td>Mobility</td>
<td></td>
<td>Can tolerate alternating mattress follow Treatment Chart 1a</td>
</tr>
<tr>
<td></td>
<td>Mobility</td>
<td>Ulcer</td>
<td>Cannot tolerate alternating mattress follow Treatment Chart 1b</td>
</tr>
<tr>
<td>10-14 At Risk</td>
<td>Consider</td>
<td>No Ulcer</td>
<td>Follow Prevention Chart 2</td>
</tr>
<tr>
<td></td>
<td>Mobility</td>
<td></td>
<td>Can tolerate alternating mattress follow Treatment Chart 3a</td>
</tr>
<tr>
<td></td>
<td>Mobility</td>
<td>Ulcer</td>
<td>Cannot tolerate alternating mattress follow Treatment Chart 3b</td>
</tr>
<tr>
<td>15-19 High Risk</td>
<td>Consider</td>
<td>No Ulcer</td>
<td>Follow Prevention Chart 2</td>
</tr>
<tr>
<td></td>
<td>Mobility</td>
<td></td>
<td>Can tolerate alternating mattress follow Treatment Chart 3a</td>
</tr>
<tr>
<td></td>
<td>Mobility</td>
<td>Ulcer</td>
<td>Cannot tolerate alternating mattress follow Treatment Chart 3b</td>
</tr>
<tr>
<td>20+ Very High Risk</td>
<td>Consider</td>
<td>No Ulcer</td>
<td>Follow Prevention Chart 2</td>
</tr>
<tr>
<td></td>
<td>Mobility</td>
<td></td>
<td>Can tolerate alternating mattress follow Treatment Chart 3a</td>
</tr>
<tr>
<td></td>
<td>Mobility</td>
<td>Ulcer</td>
<td>Cannot tolerate alternating mattress follow Treatment Chart 3b</td>
</tr>
</tbody>
</table>

For Bariatric patients follow 4.
Re-assessment of pressure redistributing equipment time frame for equipment supplied through ICES

<table>
<thead>
<tr>
<th>CUSHION</th>
<th>PREVENTION</th>
<th>TREATMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propad</td>
<td>ICES – 1 year</td>
<td>N/A</td>
</tr>
<tr>
<td>Flotec Image</td>
<td>DN – 6 months</td>
<td>DN – 3 months</td>
</tr>
<tr>
<td>Aerotec / RoHo</td>
<td>DN – 6 months</td>
<td>DN – 3 months</td>
</tr>
<tr>
<td>Dual Professional</td>
<td>DN – 6 months</td>
<td>DN – 3 months</td>
</tr>
<tr>
<td>Aura</td>
<td>DN – 6 months</td>
<td>DN – 3 months</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MATTRESSES</th>
<th>PREVENTION</th>
<th>TREATMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propad</td>
<td>DN – 1 year</td>
<td>DN – 6 months</td>
</tr>
<tr>
<td>Softform/Premier Active/2</td>
<td>DN – 6 months</td>
<td>DN – 3 months</td>
</tr>
<tr>
<td>RoHo/Sofflex</td>
<td>DN – 6 months</td>
<td>DN – 3 months</td>
</tr>
<tr>
<td>Logic 110</td>
<td>DN – 3 months</td>
<td>DN – 3 months</td>
</tr>
<tr>
<td>Dual Professional</td>
<td>DN – 3 months</td>
<td>DN – 3 months</td>
</tr>
<tr>
<td>Replacement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dual Professional</td>
<td>DN – 3 months</td>
<td>DN – 3 months</td>
</tr>
<tr>
<td>Bariatric</td>
<td>DN – 3 months</td>
<td>DN – 3 months</td>
</tr>
</tbody>
</table>

NB clinical judgement may override these recommendations to see the patient sooner than the recommended reassessment time.
## Cleaning and Checking pressure redistributing mattresses and cushions in in-patient areas procedure

<table>
<thead>
<tr>
<th>No.</th>
<th>Main Operating Steps</th>
<th>Action / Key Points</th>
<th>Explanation / Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Gather all relevant equipment/ensure all that is needed to perform cleaning the mattresses or cushion is at hand. (Gloves Apron should be worn).</td>
<td>If the mattresses or cushion has not been contaminated by blood or bodily fluids, use warm soapy water or water based wipes.</td>
<td>Inspection of equipment must be in a well-lit environment, to ensure all areas of equipment is visible.</td>
</tr>
<tr>
<td>2.</td>
<td>Identification of mattresses and cushions through weekly or monthly auditing.</td>
<td>If mattresses or cushions identified as contaminated through blood or bodily fluids or identification of an infectious environment, clean with warm soapy water then to you 10000ppm sodium hydrochloride solution.</td>
<td>Hand Hygiene Use of PDI Multi Surface Detergent Wipes for cleaning Appropriate use of wipes Ensure mattress is dry prior to bedmaking.</td>
</tr>
<tr>
<td>3.</td>
<td>Check cover for degradation, damage or de-lamination. The mattresses and cushions have a welded zip overlap, check for leakage and zip integrity. The inspection of mattress and cushion should be undertaken and recorded</td>
<td>Unzip the mattresses cover or cushion and inspect the inside for any ingress (seen as staining). Check the outer cover for any staining or breaches in the covers. If a replacement mattress or cover is required the Ward Manager/Matron/Lead Nurse must be informed to arrange purchase of a permanent replacement. If no mattress available within immediate area (or adjacent wards) contact other inpatient facilities within WHACT to identify a replacement mattress.</td>
<td>Any rips or delamination of the surface covers please dispose. If the foam is contaminated along with the covers please remove immediately from use, and place them in a disposable waste bag.</td>
</tr>
<tr>
<td>4.</td>
<td>Storage of mattresses and cushions, including covers.</td>
<td>Ensure mattresses are stored upright and in singular store units, to maintain integrity of foam. Covers should be stored in there packaging to prevent contamination.</td>
<td>Ensure there is adequate storage facility for mattresses and cushions not being used. There should be covers available to replace identified breached covers. Amount will be dependent on overall stock within the clinical area.</td>
</tr>
<tr>
<td>5.</td>
<td>Remove all personal protective equipment, gloves, and apron.</td>
<td>This must be disposed of as appropriate, within line with infection control. Contaminated equipment must be in clinical waste.</td>
<td>Identified coloured bags must be available and identified areas for the waste to be disposed of clearly evident to all staff.</td>
</tr>
</tbody>
</table>
## Appendix 9

<table>
<thead>
<tr>
<th>Superficial Pressure Damage</th>
<th>Deep Pressure Damage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Grade 1</strong></td>
<td><strong>Grade 2</strong></td>
</tr>
<tr>
<td>Non-blanchable erythema (redness) of intact skin. Discolouration of the skin, warmth, oedema, induration or hardness may also be used as indicators, particularly on individuals with darker skin.</td>
<td>Partial thickness skin loss involving epidermis, dermis, or both. Presents clinically as an abrasion or clear blister. The ulcer is superficial without bruising.</td>
</tr>
<tr>
<td><strong>Grade 3</strong></td>
<td><strong>Grade 4</strong></td>
</tr>
<tr>
<td>Full thickness skin loss. Subcutaneous fat may be visible but bone, tendon or muscle are not exposed. May include undermining or tunnelling. The depth varies by anatomical location.</td>
<td>Full thickness tissue loss with exposed bone. Or palpable tendon. Can extend into the muscle or supporting structures.</td>
</tr>
<tr>
<td>Suspected Deep Tissue Injury</td>
<td>Moisture Lesion</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>----------------</td>
</tr>
</tbody>
</table>
| Purple or maroon localized area of discoloured intact skin or blood filled blister due to damage or underlying soft tissue. This area may be preceded by tissue that is painful, firm, boggy, mushy, warmer, or cooler as compared to adjacent tissue. Deep tissue injury may be difficult to detect in individuals with dark skin. | Redness or partial thickness skin loss involving the epidermis, dermis, or both caused by excessive moisture to the skin from urine, faeces or sweat. Described as an irregular shaped lesion not usually associated with a bony prominence, often found in the natal cleft area. **These are not pressure ulcers.** The increased moisture make the skin more susceptible to pressure ulcers. | Full thickness tissue loss in which actual depth of the ulcer is completely obscured by slough or necrotic tissue in the wound bed. Until enough slough/necrotic tissue is removed to expose the base of the wound, the true depth cannot be determined; but it will be either grade 3 or 4. It should be graded as a grade 3 until it is debrided. | **Checklist**
- Complete Waterlow risk assessment
- SKINS assessment
- S: Surface
- K: Keep patient moving
- I: Incontinence
- N: Nutritional status
- S: Surface
- Check seating position
- Check shoe and clothing fitting
- Pressure Ulcer information leaflet to be given to patient and /or carers
- All Category 2-4 Pressure Ulcer to be reported on Ulysees / Datix |

**Tissue Viability Team**
Acute: 01905 763333 ext. 33177
Health & Care Trust: 01299 879453
Management

<table>
<thead>
<tr>
<th>Moisture Lesion</th>
<th>Pressure Ulcer</th>
<th>Combination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wash gently with a soft cloth or a skin cleanser.</td>
<td>Think SKINS.</td>
<td>Bring the two management plans together.</td>
</tr>
<tr>
<td>Dry thoroughly by patting the skin.</td>
<td>Skin inspection.</td>
<td>Focus on pressure and moisture management.</td>
</tr>
<tr>
<td>Use barrier protection.</td>
<td>Incontinence.</td>
<td></td>
</tr>
<tr>
<td>Use silicone medical adhesive remover if required.</td>
<td>Nutrition (food, hydration).</td>
<td></td>
</tr>
<tr>
<td>Provide patient information.</td>
<td>Surface (bed, chair).</td>
<td></td>
</tr>
</tbody>
</table>

Reporting

<table>
<thead>
<tr>
<th>Moisture Lesion</th>
<th>Pressure Ulcer</th>
<th>Combination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not to be reported as a Serious Incident.</td>
<td>Report all category 2 pressure ulcers as an Incident.</td>
<td>Report all combination wounds as Pressure Ulcers.</td>
</tr>
<tr>
<td>Does not require a Root Cause Analysis.</td>
<td>Report all category 3 pressure ulcers as a Serious Incident on the Trust reporting system (Ulysses).</td>
<td></td>
</tr>
<tr>
<td>Refer for Specialist Tissue Viability /Nutrition Team if advice is required.</td>
<td>The use of a mootchment dressing pad to assist with categorisation.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Refer all category 3 and 4 pressure ulcers to Tissue Viability.</td>
<td></td>
</tr>
</tbody>
</table>

Combination

- A moisture lesion and a pressure ulcer may exist in the same area.
- Where incontinence associated dermatitis/moisture lesions are accompanied by pressure, this must be reported as a pressure ulcer.
- The two areas of moisture and pressure need to be addressed as part of their care plan.

Contact details for the Tissue Viability Department

Jackie Stephen-Haynes (Community)
Professor and Consultant Nurse in Tissue Viability
Email: j.stephen-haynes@nhs.net
Mobile: 07775 792775

Rosie Callaghan (Community)
Tissue Viability Nurse
Email: rosiecallaghan@nhs.net
Mobile: 07717 543046

Jayne Allchurch (Community)
Secretary, Tissue Viability
Email: Jayne.allchurch@hacw.nhs.uk
Phone Number: 01299 879453

Elaine Bethell (Acute)
Lead Tissue Viability Nurse
Email: Elaine.Bethell@worsac.nhs.uk
Phone Number: 01905 783333 ext 33177
<table>
<thead>
<tr>
<th>Incontinence Associated Dermatitis (IAD) (Moisture Lesions)</th>
<th>Tick box if present</th>
<th>Signs and Symptoms</th>
<th>Tick box if present</th>
<th>Pressure Ulcer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moisture must be present (e.g. shiny, wet skin caused by urinary incontinence or diarrhea)</td>
<td>□</td>
<td>&lt; Cause &gt;</td>
<td>□</td>
<td>Pressure and/or shear friction/moisture present</td>
</tr>
<tr>
<td>Navel cleft/inner gluteal/buttocks/any skin fold</td>
<td>□</td>
<td>&lt; Location &gt;</td>
<td>□</td>
<td>Over a bony prominence or aligned with causative pressure</td>
</tr>
<tr>
<td>IAD may occur over a bony prominence. If this appears to be the case, exclude pressure shear and friction prior to diagnosis</td>
<td>□</td>
<td>&lt; Location &gt;</td>
<td>□</td>
<td>Over a bony prominence or aligned with causative pressure</td>
</tr>
<tr>
<td>Mirror image and linear in shape (splits in skin)</td>
<td>□</td>
<td>&lt; Shape &gt;</td>
<td>□</td>
<td>Takes the appearance of the causative pressure</td>
</tr>
<tr>
<td>Diffuse, in several superficial spots</td>
<td>□</td>
<td>&lt; Depth &gt;</td>
<td>□</td>
<td>Limited to one spot or specific area</td>
</tr>
<tr>
<td>Superficial</td>
<td>□</td>
<td>&lt; Depth &gt;</td>
<td>□</td>
<td>Superficial or deep</td>
</tr>
<tr>
<td>No necrosis</td>
<td>□</td>
<td>&lt; Necrosis &gt;</td>
<td>□</td>
<td>A black necrotic scab on a bony prominence</td>
</tr>
<tr>
<td>Diffuse or irregular edges</td>
<td>□</td>
<td>&lt; Edges &gt;</td>
<td>□</td>
<td>Distinct edges</td>
</tr>
<tr>
<td>Non uniform redness</td>
<td>□</td>
<td>&lt; Colour &gt;</td>
<td>□</td>
<td>Uniform redness</td>
</tr>
<tr>
<td>Blanchable or non-blanchable erythema</td>
<td>□</td>
<td>&lt; Colour &gt;</td>
<td>□</td>
<td>If redness is non-blanchable, this indicates damage to the capillaries</td>
</tr>
</tbody>
</table>
| Pink or white surrounding skin due to maceration | □       | < Colour > | □       | Moisture damage will improve rapidly (e.g. 48-72 hrs). Pressure Ulcers will improve more slowly (e.g. usually longer than 7 days). If the area occurs over a bony prominence it is more likely to be a Pressure Ulcer.
APPENDIX 11

Pressure Ulcer Discharge/Transfer Form

This chart is designed to assist nurses with the discharge/transfer of patients with Tissue Viability needs.

Does the patient have a wound? Yes □ No □
Location______________________________
Length of time wound present____________
Ulysses completed? Yes □ (if yes) Ulysses number______________ No □ N/A □

<table>
<thead>
<tr>
<th>Depth of Wound / Grade of Ulcer (tick)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blanching / non blanching hyperaemia or grade 1 pressure ulcer</td>
</tr>
<tr>
<td>Superficial tissue loss or grade 2 pressure ulcer</td>
</tr>
<tr>
<td>Wound extends to subcutaneous tissue or grade 3 pressure ulcer</td>
</tr>
<tr>
<td>Wound extends to bone or joint capsule or grade 4 pressure ulcer</td>
</tr>
<tr>
<td>Suspected deep Tissue Injury</td>
</tr>
<tr>
<td>Deep and ungradeable</td>
</tr>
<tr>
<td>Moisture lesion</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Classification (tick)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Necrotic</td>
</tr>
<tr>
<td>Sloughy</td>
</tr>
<tr>
<td>Infected</td>
</tr>
<tr>
<td>Granulating</td>
</tr>
<tr>
<td>Epithelialising</td>
</tr>
</tbody>
</table>

Has the patient had antibiotics whilst in hospital? Yes □ No □
Has the patient been seen by / referred to a specialist? Yes □ No □

Investigations carried out in hospital:

<table>
<thead>
<tr>
<th>Wound Swab</th>
<th>MSU</th>
<th>FBC</th>
<th>U+E’s</th>
<th>XR</th>
<th>ABPI</th>
<th>Tissue Biopsy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y / N</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Findings

Referral/Appointment Date

<table>
<thead>
<tr>
<th>Vascular Surgeon</th>
<th>Dermatologist</th>
<th>Dietician</th>
<th>Tissue Viability Nurse</th>
<th>Chiropodist</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Pressure Ulcer Prevention and Management Guideline 2016 54
### Current Dressing Regime

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Dressing</td>
<td></td>
</tr>
<tr>
<td>Secondary Dressing</td>
<td></td>
</tr>
<tr>
<td>Bandage</td>
<td></td>
</tr>
<tr>
<td>Frequency of Application</td>
<td></td>
</tr>
<tr>
<td>Ordered as TTOs?</td>
<td>Yes  □ No □</td>
</tr>
</tbody>
</table>

### Equipment

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Is patient using specialised equipment for the prevention and</td>
<td>Yes  □ No □</td>
</tr>
<tr>
<td>management of pressure ulcers?</td>
<td></td>
</tr>
<tr>
<td>Name of Mattress</td>
<td></td>
</tr>
<tr>
<td>Name of Cushion</td>
<td></td>
</tr>
<tr>
<td>Both Ordered for Discharge?</td>
<td>Yes  □ No □</td>
</tr>
<tr>
<td>Date of Delivery</td>
<td></td>
</tr>
<tr>
<td>Delivery Location</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name of Discharging Nurse (print)</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signature</td>
<td>Date</td>
</tr>
</tbody>
</table>
### Decisions Against Tissue Viability Advice

Nature of care where the patient is taking a decision against Tissue Viability advice

<table>
<thead>
<tr>
<th>Action</th>
<th>Yes</th>
<th>Evidenced in: Patient records</th>
<th>No</th>
<th>Rationale</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>If you have any reason to doubt the person’s ability to make this decision, please complete a Mental Capacity Assessment (MCA) before continuing.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A multi disciplinary approach has been undertaken</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pain relief has been addressed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>An alternative repositioning regime has been attempted</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternative wound care products to maximise comfort have been tried</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternative compression has been offered even if it is offered at sub optimal pressure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternative pressure reducing equipment has been tried even if it is offered at sub optimal pressure relief</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Where suitable a double mattress has been offered to allow the patient to share a bed</td>
<td></td>
<td></td>
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<tr>
<td>Nutritional supplement/Dietetic advice offered</td>
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<tr>
<td>Advice/support has been sought from the Tissue Viability team where it is not possible to adhere to WH&amp;CT guidelines</td>
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<tr>
<td>There has been discussion with the family to promote the best interest of the patient</td>
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<tr>
<td>Appropriate patient information has been provided</td>
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<tr>
<td>Patient/carers have been given appropriate information in an appropriate manner</td>
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<tr>
<td>Aspects of the home environment that were barriers to the implementation of the care were addressed</td>
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<tr>
<td>The decision against advice has been escalated to the relevant manager</td>
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<tr>
<td>Should patient be referred to Safeguarding</td>
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<tr>
<td>Any other areas of concern</td>
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</tbody>
</table>

Staff name (print)………………………………………….. Signature………………………………………..

Patient Name …………………………………….. Signature ………………………………………………

Date………………………………….. Time………………………………..
Guidelines for using the Decisions Against Advice

This form should be completed when a patient makes an informed decision against advice and is capable of making that decision. This could include medication, dressings, bandaging, hosiery, re-positioning or equipment that has been prescribed for pressure ulcer prevention/care.

How to complete

Do not complete this form if a mental capacity assessment has NOT been completed

1. Consider the actions listed in the first box. If that action has been carried out, tick “Yes” and go to:

2. Evidenced in:

Indicate in this box where the evidence for your actions can be found e.g." care plan number 5 evaluation dated 1.1.12"

There is no need to document again what action you took providing it can be clearly identified in the care plan/evaluation

3. If that action was not undertaken, tick "No" and justify in the next box why it was not done.

Forms that have “No” ticked without justification given will not be accepted.

4. NA (not applicable)

Occasionally, an action may not be applicable, in which case the use of the NA box is acceptable. Some entries do not have an NA box, in which case the “Yes” or “No” (with justification) must be used.

Decisions Against Advice forms are for one decision only. Patients may require more than 1 form.
Appendix 13

What can I do to help?

- Inspect and maintain skin (you may need a mirror for awkward places)
- Report redness to a Health Care professional
- Relieve pressure by moving, standing or turning
- Do not sit for longer than 2 hours without relieving pressure
- Eat a well balanced diet and maintain normal body weight
- Use any equipment that has been provided and return when no longer needed
- Reduce or stop smoking.

Further information needed?

Further information can be obtained from Health Care professionals on:

- Risk factors associated with developing pressure ulcers
- Areas of the skin that are of greatest risk of pressure damage
- How to care for your skin, inspect and recognise skin changes
- How to adjust your lying or seating position
- How often you need to be moved
- Which equipment you should use and how
- How to avoid pressure (e.g. by making sure bedding is free of creases, clothing does not have thick seams, zips, studs or buttons, and shoes and socks are not too tight)
- Where to seek further advice.

There is a dedicated website to pressure ulcer prevention which has been supported by Health Care professionals. www.your-turn.org.uk

Pressure Ulcer Prevention
A guide for Patients and Carers

If you would like this information in other formats or languages please call 01905 760020 or email communications@worcestershire.nhs.uk

www.worcestershire.nhs.uk
What are Pressure Ulcers?
A pressure ulcer is an area of localised damage to the skin and underlying tissue damage caused by pressure, shear, friction and or a combination of these.
- Pressure is when the weight of the body is pressing down on the skin
- Shear is when layers of the skin are forced to slide over one another for example when you slide down or are pulled up a bed or chair
- Friction is the rubbing of the skin.

When the blood supply and Oxygen to the skin is damaged this leads to death of the skin cells.

Are they the same as bed sores?
Pressure ulcers are sometimes known as bed sores, pressure sores and decubitus ulcers.

Which age group develop Pressure Ulcers?
Anybody can develop a pressure ulcer whatever age they are, but they are more common in those who are very young or very old

Are Pressure Ulcers serious?
Pressure ulcers can be serious, depending upon how much skin and tissue has been damaged. Severe pressure ulcers can destroy the muscle or bone underneath the skin so they take a very long time to heal. In extreme cases pressure ulcers can become life threatening as they can become infected which may cause blood poisoning or bone infections.

Who gets pressure ulcers?
- Those who have trouble moving and cannot change position themselves
- Those who cannot feel pain over part or all of their body
- Those who are incontinent
- Those who are seriously ill or who have had surgery
- Those who have a poor diet and do not drink enough fluids
- Those who have damaged their spinal cord and can neither move nor feel their bottom and legs.

Where do Pressure Ulcers occur?

Can Pressure Ulcers be prevented?
- Most pressure damage can be prevented with care and attention given to prevention
- Look after your skin by observing, washing and moisturising
- Relieving pressure by moving, standing or turning
- Eating a balanced diet and drinking 6 to 8 glasses of water per day
- Observing skin and reporting redness to a Health Care professional
- Using any equipment that has been provided and returning when no longer needed.

Why is nutrition important?
Good nutrition is vital in preventing and healing pressure ulcers. If you do not get enough calories, protein, vitamins and fluids you may develop a pressure ulcer or your pressure ulcer may fail to heal.
28. Equality Analysis

<table>
<thead>
<tr>
<th>Title of Policy/Function</th>
<th>New</th>
<th>Existing/Revised</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure Ulcer Prevention and Management Guideline</td>
<td>NO</td>
<td>Revised</td>
</tr>
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</table>

**Short description of Policy/Function (aims and objectives, is the policy/function aimed at a particular group if so what is the intended benefit):**

This document has been produced to support Registered Healthcare Professionals working within Worcestershire Health and Care NHS Trust; it should be referred to for the recommended best practice for the management and treatment of pressure ulcers.

The guideline will reduce potential risk and harm to patients at risk of or who have a pressure ulcer and provide guidance for those who have a pressure ulcer.

<table>
<thead>
<tr>
<th>Name of Lead/Author(s)</th>
<th>Job Title</th>
<th>Contact details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professor Jackie Stephen-Haynes</td>
<td>Professor &amp; Consultant Tissue Viability Nurse</td>
<td><a href="mailto:j.stephen-haynes@nhs.net">j.stephen-haynes@nhs.net</a> 07775 792775</td>
</tr>
<tr>
<td>Jenny Stanford</td>
<td>Wheelchair and integrated Community Equipment Service manager</td>
<td><a href="mailto:JStanford@worcestershire.gov.uk">JStanford@worcestershire.gov.uk</a> 01527 869101</td>
</tr>
<tr>
<td>Rosie Callaghan</td>
<td>Tissue Viability Specialist Nurse</td>
<td><a href="mailto:rosiecallaghan@nhs.net">rosiecallaghan@nhs.net</a> 07717 543046</td>
</tr>
<tr>
<td>Monique Maries</td>
<td>Tissue Viability Nurse</td>
<td><a href="mailto:monique.maries@nhs.net">monique.maries@nhs.net</a> 07436281992</td>
</tr>
<tr>
<td>Suzy Tandler</td>
<td>Tissue Viability Nurse</td>
<td><a href="mailto:suzanne.tandler1@nhs.net">suzanne.tandler1@nhs.net</a> 07944406867</td>
</tr>
</tbody>
</table>

When the policy/function involves patients/staff/partners/stakeholders etc. please where possible include them in the Equality Analysis to demonstrate openness, transparency and inclusion and particularly by those who this policy/function is most likely to have impact.

**Does this Policy/Function have any potential or actual impact that is positive(+) or negative (-) impact on the following protected characteristics please indicate:**

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>+</th>
<th>N</th>
<th>-</th>
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</thead>
<tbody>
<tr>
<td>Age</td>
<td>N</td>
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</tr>
<tr>
<td>Disability</td>
<td>N</td>
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<td></td>
</tr>
<tr>
<td>Gender Reassignment</td>
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<td>-</td>
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</tbody>
</table>

**Please provide a rational/justification for each of the following regardless of impact:**

**Age**

This guideline is relevant to adults only, a separate guideline is available for children and young adults.

**Disability**

Reasonable and appropriate adjustments will be made to ensure that any person who has a disability/learning disabilities will not be discriminated against as will no person with mental health issues. Equally, consideration for careers and family members who have either a disability/learning disability or mental health issue to avoid associative discrimination.

**Gender Reassignment**

This policy is relevant to any persons who are undertaking or have undertaken gender reassignment in the same way as those who have not undertaken or who are undertaking gender reassignment.
Pregnancy & Maternity  N  This policy is relevant to any person who may be pregnant or receiving post natal care. It is not relevant to the un born child.

Race  N  This policy is relevant to any race.

Religion & Belief  N  All patients will be treated equally; this is regardless of their religion or belief.

Sex  N  This policy is relevant to any gender and applies to both sexes equally.

Sexual orientation  N  This policy is relevant to any sexual orientation/preference.

Marriage & Civil Partnership  N  This policy is relevant to marriage & civil partnership equally.

Other Groups who could experience inequality, e.g. carers, homeless, travelling communities, unemployed, people resident within deprived areas, different socio/economic groups e.g. low income families, asylum seekers/refugees, prisoners, people confined to closed institutions or community offenders, people with different work patterns e.g. part-time, full-time, job-share, short-term contractors or shift workers - Access, location and choice of venue, timings of events and activities. Support with caring responsibilities

Analysis conducted by: (minimum of 3 people)

<table>
<thead>
<tr>
<th>Name</th>
<th>Job Title</th>
<th>Contact details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Jackie Stephen-Haynes</td>
<td>Professor and Consultant Nurse in Tissue Viability</td>
<td><a href="mailto:j.stephen-haynes@nhs.net">j.stephen-haynes@nhs.net</a></td>
</tr>
<tr>
<td>2 Suzy Tandler</td>
<td>Tissue Viability Nurse</td>
<td></td>
</tr>
<tr>
<td>3 Monique Maries</td>
<td>Tissue Viability Nurse</td>
<td><a href="mailto:Monique.maries@nhs.net">Monique.maries@nhs.net</a></td>
</tr>
</tbody>
</table>

Start date of policy/function

Review date of policy/function

Service Delivery Unit:

Reference/Version:

Date Equality Analysis completed:

D D M M Y Y

If you have identified a potential discriminatory impact on the policy/function please refer it to the author together with suggestions to avoid or reduce the impact.

A copy of the completed Equality Analysis must be attached to the policy/function and a copy sent to:

Patrick McCloskey
Equality Inclusion Practitioner
Isaac Maddox House, Shrub Hill Road, Worcester, WR4 9RW
Tel: 01905 761324
patrick.mccloskey@nhs.net