

# Pressure Ulcer Prevention and Management Clinical Guideline

<b>CLINICAL GUIDELINE REFERENCE NUMBER:</b>	CG11
<b>VERSION NUMBER:</b>	2.1
<b>KEY CHANGES FROM PREVIOUS VERSION</b>	Addition of Appendix 9 – Pressure Ulcer Documentation Checklist
<b>AUTHOR:</b>	Tissue Viability CNS/Associate Director Practice Development/Clinical Lead End of Life Care
<b>CONSULTATION GROUPS:</b>	Tissue Viability Services, Trust Pressure Ulcer Group
<b>IMPLEMENTATION DATE:</b>	February 2018
<b>AMENDMENT DATE(S):</b>	October 2018, December 2018, August 2021; October 2021
<b>LAST REVIEW DATE:</b>	September 2021
<b>NEXT REVIEW DATE:</b>	September 2024
<b>APPROVAL BY CLINICAL GOVERNANCE AND QUALITY SUB-COMMITTEE:</b>	September 2021

CLINICAL GUIDELINE SUMMARY
This clinical guideline outlines the standards for the prevention and management of Pressure Ulcers. It will ensure that practice is evidence based and that there is a systematic and multi-disciplinary approach to the prevention and management of pressure ulcers across the Trust
The Trust monitors the implementation of and compliance with this clinical guideline in the following ways:
RCA review of pressure ulcer management through Skin Matters panels Clinical supervision Record keeping audits Datix incident reporting Annual thematic review Mandatory training

Services	Applicable	Comments
Trustwide	✓	
Essex MH&LD		
CHS		

**The Director responsible for monitoring and reviewing this Clinical Guideline is the Executive Nurse**

**ESSEX PARTNERSHIP UNIVERSITY NHS FOUNDATION TRUST**

**Pressure Ulcer Prevention and Management Clinical Guideline**

**CONTENTS**

THIS IS AN INTERACTIVE CONTENTS LIST – PLEASE CLICK ON THE SECTION HEADINGS TO GO TO THE SECTIONS

- 1.0 INTRODUCTION**
- 2.0 PURPOSE**
- 3.0 DUTIES**
- 4.0 DEFINITIONS**
- 5.0 PRESSURE ULCER PREVENTION AND MANAGEMENT**
- 6.0 ASSESSMENT OF A PATIENT/RESIDENT WITH AN EXISTING PRESSURE ULCER**
- 7.0 REPORTING PRESSURE ULCERS**
- 8.0 REFERENCE TO TRUST POLICIES/PROCEDURES**

**APPENDICES**

**APPENDIX 1 – NHS REVISION OF DEFINITIONS AND GUIDANCE  
#STOPTHEPRESSURE**

**APPENDIX 2 – PRESSURE ULCER CATEGORISATION**

**APPENDIX 3 – ROOT CAUSE ANALYSIS TEMPLATE - SEECHS**

**APPENDIX 3A – STRUCTURED JUDGEMENT REVIEW TEMPLATE (INPATIENTS  
PU)**

**APPENDIX 4 – SAFEGUARDING GUIDANCE**

**APPENDIX 5 – ADAPTED GLAMORGAN PRESSURE ULCER RISK ASSESSMENT  
SCALE**

**APPENDIX 6 – PAEDIATRIC NUTRITIONAL ASSESSMENT TOOL**

**APPENDIX 7 – RISK ASSESSMENT FREQUENCY GUIDE**

**APPENDIX 8 – SKIN INTEGRITY PATHWAY FOR PEOPLE RECOGNISED IN LAST  
DAYS OF LIFE**

**APPENDIX 9 – PRESSURE ULCER DOCUMENTATION CHECKLIST**

SAMPLE ONLY

**ESSEX PARTNERSHIP UNIVERSITY NHS FOUNDATION TRUST****Pressure Ulcer Prevention and Management****1.0 INTRODUCTION**

The presence of a pressure ulcer creates a number of significant difficulties psychologically, physically and clinically to patients/residents, their families and their carers; they have a profound impact on the overall wellbeing of patients/residents and can be both painful and debilitating (Moore et al 2009).

Pressure ulcers are high on both the political and clinical agenda. Treating pressure ulcers costs the NHS more than £3.8 million every day (NHSI 2017), with the greatest spend being on nursing time and dressing requirements (Dealey et al 2012).

**2.0 PURPOSE**

The purpose of this clinical guideline is to provide a standardised approach to:

- Assessing a patient/resident's risk of developing a pressure ulcer
- Managing patients/residents with existing pressure ulcers
- Preventing the occurrence of pressure ulcers

The guideline will ensure that staff employed by the Trust are aware of the risks of pressure ulcer development and ensure that no action or omission on their part leads to either unnecessary pressure ulcer development or deterioration of an existing pressure ulcer.

This clinical guideline provides a clear strategy for the assessment and management of patients/residents in community and in-patient services and nursing homes who have a pressure ulcer or are at risk of developing a pressure ulcer. It matches clinical guidelines and quality standards by the National Institute of Health and Care Excellence (NICE) (2014, 2015) and the European Pressure Ulcer Advisory Panel (EPUAP) (2019). It provides a framework to support healthcare professionals to deliver care within the context of continual improvements in service delivery.

**3.0 DUTIES**

**The Trust Board** has overall responsibility for ensuring:

- That the principles of this guideline and other associated procedures are implemented across the organisation
- The availability for any necessary financial resources to ensure staff are appropriately trained and have access to appropriate pressure relieving equipment.

**The Executive Nurse** has lead responsibility to ensure:

- Clinical Guidelines are embedded into clinical practice and in ensuring these are updated regularly.
- That any clinical risk issues identified are addressed with relevant line managers

- The implementation of national guidance in relation to the prevention and management of pressure ulcers.

**Directors and Senior Management** are responsible for:

- Disseminating, implementing and monitoring this guideline within their services via clinical audit and supervision
- Ensuring that EPUT policies and procedures are followed

**Managers and other Persons in Charge** will ensure that:

- The procedures and principles detailed within this guideline are followed, to ensure best practice and that national guidelines are met
- Staff receive appropriate and correct training
- The monitoring the implementation of this policy via clinical audit and supervision

**Tissue Viability Nurse Specialist/Physical Healthcare Consultant Nurse** is responsible for:

- Providing advice and support to clinicians within EPUT
- Acting as a resource to all members of the multi-disciplinary team.
- Responding to educational and training needs of staff and patients/residents

**Individuals will ensure:**

- Any difficulties relating to carrying out the care of patients/residents with or at risk of developing pressure ulcers are reported to their line manager;
- That they adhere to all EPUT policies and guidelines;
- That they are familiar with these guidelines and associated documents and know where to locate them i.e. on the Trust intranet (InPut).

## 4.0 DEFINITIONS

### Definitions

EPUT follows the recommended international guidelines for reporting of pressure ulcers- NPUAP/EPUAP/PPPIA (2019).

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

A pressure ulcer that has developed due to the presence of a medical device **should** Be referred to as a 'medical device related pressure ulcer'.

### Deep Tissue Injury

Usually a purple or maroon localised area of discoloured skin (which remains intact) or a blood-filled blister due to damage of the underlying soft tissue from pressure and/or shear.

## Extrinsic and Intrinsic Factors

Both extrinsic and intrinsic factors have been identified as involved in pressure ulcer development.

**Extrinsic** factors (external to the patient/resident) are considered to be

- Pressure
- Shearing

Pressure is the exertion of continuous force on an area; its force is usually vertical in nature resulting in a circular shaped area of damage directly over a bony prominence.

Pressure damage occurs when the skin and other tissues are directly compressed between bone and another surface, the capillary blood flow is cut off and over time the skin will die

The relationship between pressure and tissue damage is dependent on two characteristics: the intensity of the pressure and the duration of the pressure. Prevention therefore should be targeted at removing or relieving one or other.

Shear occurs when tissues are wrenched in opposite directions such as when reclining: external skin stays in contact with the chair but internally the tissues are sliding down resulting in disruption or angulations' (an abnormal angle or bend in an organ) of capillary vessels.

Tissue damage caused by shear is usually shaped like a 'teardrop' and is caused by the pull on the skin. It can very often first present as a hard dark red/purple area (indication of dead tissue beneath the overlying skin) but will eventually work its way outwards often revealing an ulcer which is very much bigger inside than out.

**Intrinsic** (internal to the patient/resident) factors include:

- General health
- Previous history of tissue damage
- Levels of mobility
- Moisture to the skin
- Continence
- Posture
- Old age
- Weight
- Sensory impairment
- Acute, chronic and terminal illness
- Vascular disease
- Neurological deficit
- Trauma
- Medication
- Oedema of the lower extremity

**Relief** of pressure is the complete removal of pressure.

**Reduction** / Redistribution of pressure is a decrease in pressure but not complete removal.

### **Pressure ulcer classification**

For the purposes of this clinical guideline, classification of pressure ulcers will be in line with the International Classification System EPUAP/NPUAP/PPIA (2019) Appendix 1

## **5.0 PRESSURE ULCER PREVENTION AND MANAGEMENT**

### **5.1 Risk Assessments**

Risk assessment is a fundamental part of preventing pressure ulcers and prescribing care. Several pressure ulcer risk assessment tools exist (Guy 2012) but these only represent a part of the process. Recognising the risk factors, both extrinsic and intrinsic is an essential part of the risk assessment process and once identified these factors should be removed or reduced wherever possible.

A risk assessment should be carried out by clinical staff who:

- Have undertaken appropriate training to recognise the risk factors that contribute to the development of pressure ulcers and
- Know how to initiate and maintain correct and suitable preventative measures (NICE, 2014).

All patients/residents regardless of the care setting will be individually assessed by a registered nurse, However, where this is not possible, it can be undertaken by a competent health care assistant under delegated responsibilities. The assessment will determine their risk of pressure ulcer development (EPUAP 2019). The definition of a pressure ulcer on admission (POA) should be that it is observed during the skin assessment undertaken on admission to that service:

- For patients/residents within in-patient services and nursing homes this will be within 6 hours of admission to the ward
- For patients/residents in the community this will be on the first visit by the community nurse.

Individuals vulnerable to pressure ulcer development may include those who:

- Are seriously ill
- Are neurologically compromised
- Are immobile or have impaired mobility
- Have impaired nutrition
- Are obese or malnourished and under weight
- Have poor posture, or use equipment such as seating or beds which do not provide appropriate pressure relief.
- Are living with spinal cord injury
- Are pregnant

- Are elderly
- Recent surgery
- Have neuropathy

All formal risk assessments should be documented and recorded accurately in the patient/resident's notes. Refer to Appendix ... Pressure Ulcer Checklist for frequency of risk assessments.

If the patients/residents' condition changes or deteriorates it would be expected that these assessments are carried out more frequently to reflect the changing circumstances.

EPUT uses the following risk assessment tools:

### **Waterlow**

The Waterlow Risk Assessment tool should be used to predict whether adult patients/residents (community services, Mental Health inpatients/residents) fall into a low risk, medium risk or high risk category. High risk would be identified if a patient/resident has a score of **15** or higher.

### **Adapted Glamorgan Pressure Ulcer Risk Assessment Scale**

This is a clinical tool designed to help assess risk of a child developing a pressure ulcer. As with all risk assessments, there are different elements that are included in this tool which is particularly designed for assessing risk of developing a pressure ulcer in a child. It should be used together with clinical judgement.

### **Malnutrition Universal Screening Tool (MUST) Assessment (for adults only)**

The MUST tool is a five-step screening tool to identify adults, who are malnourished, at risk of malnutrition (undernutrition), or obese. It also includes management guidelines which can be used to develop a care plan. These formal assessments should be carried out at least monthly.

### **Paediatric Nutritional Assessment Tool**

## **5.2 aSSKINg**

In line with MHS Midlands & East (2012) pressure ulcer prevention and management carried out by healthcare professionals working within EPUT will be underpinned by the 'aSSKINg' bundle.

To manage the skin integrity of a patient/resident who has or is at risk of developing a pressure ulcer, staff must take account of the following:

**A**ssess risk

**S**kin Inspection

**S**upport surface - Use of pressure relieving or redistributing equipment

**K**eep moving - Positioning and repositioning

**I**ncontinence management

**N**utrition

**G**ive information

### 5.3 **ASSESS RISK**

All patients/residents considered to be at risk of pressure ulcer development should have their skin assessed as part of the admission assessment process. This can reveal the first signs of pressure damage, and at an early stage ulceration may be preventable

### 5.4 **SKIN INSPECTION**

If a patient/resident is confirmed to be at risk of developing pressure ulcers, skin inspection should be a part of the on-going risk assessment process (Guy 2012).

Skin inspection/assessment should be undertaken at the first visit/on admission by a registered nurse (NHS Midlands & East 2012). Frequency will be dependent on identified level of risk and/or existing pressure damage in accordance with the Risk Assessment Frequency Guide (Appendix 7).

Registered nurses should utilise the finger test to establish whether skin redness is non-blanching hyperaemia / erythema. This test will be crucial in determining whether tissue damage has already occurred and preventative action needs to be instigated (Phillips 1997; Guy 2012). Non-blanching hyperaemia should be documented as such and the term Category 1 should be used. The term red or redness should be avoided unless it is qualified as Non-Blanching or Blanching Hyperaemia/erythema.

Skin inspection should take account of the patient/resident's dignity, privacy and with their consent. If consent to examine the patient/resident's skin is declined this should be documented in their nursing records and the risks associated with non-compliance should be fully explained to the patient/resident and also documented in their notes.

The skin assessment should take into account an inspection of all vulnerable areas, i.e. bony prominences, to identify early signs of pressure damage for example;

The health care professionals should be aware of the following signs on the skin that may indicate pressure ulcer development:

- Blanching hyperaemia/erythema
- Non blanching hyperaemia/erythema
- Blisters
- Localised heat

- Localised oedema
- Localised induration (hardness)
- Purplish/bluish localised areas
- Localised coolness if tissue death occurs

In patients/residents with dark pigmented skin the following signs should be considered:

- Purplish / blue localised area of the skin
- Localised heat, if tissue becomes damaged, is replaced by coolness
- Localised oedema
- Localised induration

A full skin inspection should include:

- Removal of clothes, surgical devices and mobility aids with the patient/resident's consent
- Touch as well as visual assessment as sometimes pressure damage can be felt as hot hard areas (induration)
- Close monitoring of persistent redness
- Awareness of other causes of redness and skin damage such as moisture lesions, which should all be documented in the patients/residents notes

Every effort should be made to optimise the condition of the patient/resident's skin. Rubbing the skin over bony prominences should be avoided as this may cause pressure damage.

Moisture and or wet skin may exacerbate the potential of a patient/resident to develop pressure ulcers and should be considered when carrying out a risk assessment (NICE 2014; EPUAP 2019) Wet skin is more prone to damage and requires extra care.

When moisture cannot be controlled, interventions that can assist in preventing skin damage should be used. The source of excess moisture due to incontinence, perspiration or wound drainage should be identified and eliminated where possible. Excessive washing with alkaline soap should be avoided, a soap substitute is preferable. Barrier creams or films may be used to protect surrounding skin if broken or macerated.

## 5.5 **SUPPORT SURFACE: PRESSURE RELIEVING EQUIPMENT**

Patients/residents should be provided with the appropriate equipment according to their assessments i.e. patients/residents who are confined to bed or chair.

It is the responsibility of the healthcare professional to provide the most appropriate support surface to meet the individual patient/resident's needs for pressure redistribution, micro-climate control, and comfort. This choice should be made in conjunction with specific local pressure relieving equipment selection criteria.

All patients/residents assessed as having a category 1-4, unstageable pressure ulcer and DTI should have 24 hour access to appropriate pressure relieving equipment – mattresses and cushions.

The initial choice and subsequent decisions, following re-assessments, related to the provision of pressure-relieving support surfaces for patients/residents with pressure ulcers should include:

- Ulcer assessment (severity)
- Level of risk from holistic assessment
- Location and cause of the pressure ulcer
- General skin assessment
- General health status
- Acceptability and comfort for the patient/resident
- Lifestyle of the patient/resident
- Ability of the patient/resident to reposition themselves
- Availability of carer/health professional to reposition the patient/resident, and cost consideration.

### **5.5.1 Equipment and Category/Categories of Pressure Ulcers**

Pressure relieving equipment should be considered for all patients/residents with:

- Waterlow score of 15 or above – meet criteria for pressure relieving equipment for prevention
- Category 1, 2, 3 or 4 pressure ulcers
- Unstageable and deep tissue injury categories
- Device related pressure ulcer

#### **Category 1 and 2 Pressure Ulcer**

All patients/residents assessed as having a Category 1 or Category 2 pressure ulcer should, as a minimum be placed on a high-specification foam mattress or cushion with pressure-reducing properties combined with very close observation of skin changes, and a documented positioning and repositioning regime (NICE 2014).

#### **Patient/resident in chair with Category 1 and 2 Pressure Ulcer**

- In line with EPUT's Pressure Relieving Equipment Criteria use a pressure-redistribution (static) cushion in the chair for individuals that are at risk (Waterlow 15 or above) and Category 1 pressure ulcers.
- Use a pressure – relieving ( Dynamic ) cushion for Category 2,3,4, unstageable and deep tissue injury ( DTI) pressure damage
- Minimise seating time and consult a seating specialist if pressure ulcers deteriorate on the seating surface selected
- Ensure that the feet are properly supported either directly on the floor, on a footstool, or on footrests when sitting (upright) in a bedside chair or wheelchair.
- If sitting in a chair is necessary for individuals with pressure ulcers on the sacrum/coccyx or ischia, limit sitting to three times a day for periods of 60 minutes or less. Consult a seating specialist to prescribe an appropriate

seating surface and or positioning techniques to avoid or minimize pressure on the ulcer.

- Avoid seating an individual with an ischial ulcer in a fully erect posture (in chair or bed).
- Modify sitting-time schedules and re-evaluate the seating surface and the individual's posture if the ulcer deteriorates or fails to improve.

If there is a perceived or actual deterioration of the affected areas or further pressure ulcer development, the clinician should consider upgrading the existing support surface with one that will match the support surface environment in terms of pressure, shear and microclimate for the individual. An increase in repositioning, preventative interventions and local wound care should also be increased as required.

### **Category 3 and 4 Pressure Ulcer, Unstageable and Deep Tissue Injury**

- All patients/residents assessed as having Category 3, 4, unstageable and or deep tissue injury should as a minimum provision, be placed on a dynamic replacement mattress system.
- Patients/residents should have a documented positioning and repositioning regime. The regime should include very close observation of skin changes.

In line with EPUAP guidelines (2019):

- Avoid wherever possible positioning the individual on the area(s) of pressure damage. If pressure over the area cannot be relieved by repositioning or if there are pressure ulcer on multiple turning surfaces, evaluate the individual and provide a support surface properly matched to meet their needs, considering pressure redistribution, shear reduction, and microclimate control. Keep the individual off of the area as much as possible.

### **Deep Tissue Injury (DTI)**

For all practical purposes, deep tissue injury should be provided the same level of pressure relief as a Category 3 or 4 or unstageable pressure ulcer. Offloading and pressure redistribution may allow reperfusion if ischemic and injured tissue, limiting the extent of dead tissue.

### **Moisture Associated Skin Damage**

Moisture associated skin damage (MASD) is the term used for describing skin damage associated with exposure to urine / stool, sweat, exudate or bodily fluid. There are four types of MASD - Periwound Moisture-associated dermatitis (exudate from wounds), Peristomal Moisture-associated dermatitis (Stomal effluent), Intertriginous dermatitis and Incontinence –associated dermatitis (if left untreated, pressure and friction may increase stress on the affected area and lead to skin breakdown (Wound Source 2018). MASD should be reported via the Datix monitoring system.

## Heel Pressure Ulcers

Heels are the second most common site for pressure ulcers (Clark et al 2004, Ousey 2009) and are particularly at risk of pressure damage due to lack of cushioning and a vulnerable bony prominence; rapid and often severe pressure damage occurs in this area.

Central to the prevention and management of heel pressure ulceration is relief and reduction of pressure (Ousey 2009).

In line with EPUAP Guidelines (2019), ideally heels should be free of all pressure - a state sometimes called 'floating heels'. Heel suspension devices are preferable for long term use, or for individuals who are not likely to keep their legs on a pillow. Pillows or foam cushions used for heel elevation should extend the length of the calf to avoid areas of high pressure, particularly under the Achilles tendon. Flex the knee slightly to avoid popliteal vein compressions and increased risk of DVT.

### Repositioning for treating existing heel pressure ulcers

Pressure on existing DTIs, Category 3 and 4 & unstageable pressure ulcers should be completely offloaded as much as possible.

#### 5.5.2 Medical Device Related Pressure Ulcers

- Consider both adults and children with medical devices to be at risk for pressure ulcers
- Review and select devices available that will induce the least degree of damage from the forces of pressure and shear
- Ensure device sized and fitted correctly to avoid excessive pressure
- Ensure device secured appropriately to avoid dislodgement

#### Recommendations for prevention of medical device related pressure ulcers –

- Remove device as soon as feasibly possible
- Keep skin clean and dry under medical device
- Reposition the device and rotate if possible to redistribute the pressure and decrease shear forces

#### 5.5.3 Children and Pressure Relieving Mattress

The following issues should be taken into account before placing a child on an alternating pressure mattress whether overlay or replacement:

- Cell size of mattress – small children can sink into gaps created by deflated cells causing discomfort and reducing efficacy
- Position of pressure sensors within the mattress in relation to the child – small children positioned at the top of the mattress may not register as the weight sensor is positioned in the middle of the mattress, thus producing inappropriate cell calibration.
- Lower weight restrictions of alternating pressure mattress

- Many alternating pressure mattresses have a permanently inflated head end which may place the occiput at risk in young children

#### **5.5.4 Management of patients/residents with special needs**

The following patients/residents have special requirements in terms of pressure ulcer management:

- Critically ill
- Spinal Cord Injury
- Bariatric

They should be managed in line with EPUAP Guidelines (2019) as follows:

##### **Critically Ill patients/residents**

In the community setting it is unlikely that patients/residents will be considered critically ill. However these patients/residents require special attention to minimise potential pressure damage if they are stable enough to tolerate being moved by:

- Ensuring appropriate equipment is in situ
- Considering slow gradual turns
- Considering small shifts in position but these do not replace turning if possible
- By preventing shearing and friction

##### **Spinal Cord Injury**

For patients/residents with ischial pressure ulcers the ideal environment is total bed rest to provide a pressure-free environment. However this has to be balanced against the following needs:

- Physical
- Psychological
- Social

These patients/residents will need to use a wheel chair. Sitting time restrictions may need to be considered in the presence of ischial pressure ulcers. Consideration must be given to the seating surface. Ensure repositioning regimes are documented, specifying frequency and position adopted and include an evaluation of the outcome of the repositioning regime. Referral should be made to the Wheelchair Service for professional support and advice.

##### **Bariatric patients/residents**

These patients/residents require appropriate beds and mattresses. Advice can be sought from the TVN or pressure relieving equipment service.

Special attention should be given to skin inspection for bariatric patients/residents. Pressure damage may occur under skin folds and from pressure across the buttocks and areas of high adipose tissue concentration.

### 5.5.5 The safe use of pressure relieving mattresses

The following factors should be considered when selecting pressure-relieving devices:

- Ensure that the mattress does not elevate the individual to an unsafe height in relation to bed rails if used.  
<https://input.eput.nhs.uk/DocumentCentre/Policies/Clinical%20Policies/CG86%20-%20Use%20of%20Bedrails%20Clinical%20Guidelines/CG86%20-%20Use%20of%20Bedrails%20Clinical%20Guidelines.pdf#search=Bedrail%20guideline>  
 (For individuals requiring bed rails, alternating pressure overlay mattresses should be placed on a reduced-depth foam mattress).
- Ensure that the individual is within the recommended weight range for the mattress.

### 5.6 **keep moving - positioning and repositioning**

Positioning, or repositioning, a patient/resident with a pressure ulcer, or at risk of developing a pressure ulcer, is part of the overall prevention or treatment plan. However the use of repositioning must take into account:

- The patient/resident's condition and the pressure relieving equipment being used
- Specialist advice should be sought on the appropriate aids and equipment that should be used to keep bony prominences (e.g. heel, ankles and knees) from direct contact with one another.
- Patients/residents who are considered to be at risk of developing pressure ulcers should have a personalised written prevention plan, which may include a pressure redistributing device.

The use of repositioning as part of the plan of care must be substantiated by documentation demonstrating the outcome of the repositioning regime.

#### 5.6.1 Positioning patients/residents with pressure ulcers

All patients/residents with an existing pressure ulcer must have a care plan that documents the frequency of repositioning which is determined by the outcome of a skin inspection and the patient/resident's individual needs.

For all patients/residents with pressure ulcers (either in bed, chair or wheelchair), skin injury due to friction and shear forces should be minimised through correct positioning, transferring and repositioning techniques (Dealey 1999, NICE 2014). This should be done, with the patients/residents' or their representatives' agreement, and should be in line with EPUAP Guidelines (2019) as follows:

- Do not position an individual directly on a pressure ulcer. Continue to turn and reposition the individual regardless of the support surface in use.
- Establish turning frequency based on the characteristics of the support surface and the individual's response. Inspect the skin for additional damage each time the individual is turned or repositioned while in bed.

- Do not turn the individual onto a body surface that is damaged or still has evidence of blanching or non-blanching hyperaemia/erythema from a previous episode of pressure loading, especially if the area is non blanching (i.e. Category 1 pressure ulcer)
- Limit head-of-bed elevation to 30 degrees for an individual on bed rest, unless contraindicated by medical condition. Encourage individuals to sleep in a 30- to 40-degree side-lying position or flat in bed if not contraindicated.
- Use transfer aids to reduce friction and shear. Ensure use of appropriate manual handling aids to assist with while repositioning. Do not leave moving and handling equipment under the individual after use.
- Increase activity as rapidly as is tolerated
- Do not leave the individual on a bedpan longer than necessary
- Do not use ring or donut-shaped devices
- Do not apply heating devices (e.g. hot water bottles, heating pads, built-in bed warmers) directly on pressure ulcers. Heat increases the metabolic rate, induces sweating, and decreases the tolerance of the tissue to pressure. When the body heat cannot dissipate, it will increase the risk of skin maceration and may impede healing.
- Any person who is acutely ill and is at risk of developing a pressure ulcer should avoid long periods of seating
- The period of time should be defined in the individualised care plan but generally will not be more than two hours. Individuals, where appropriate, should be encouraged to reposition themselves if this is possible
- Prolonged chair sitting has been shown to increase the risk of pressure ulcer development
- As the patient/resident's condition improves the potential for improving mobility and activity status and rehabilitation efforts may be instituted if consistent with the overall goals of therapy. Maintaining activity level, mobility, and a range of movement is an appropriate goal for most individuals.
- Individuals who are able should be taught to redistribute weight every fifteen minutes. Patients/residents should be encouraged to initiate their own pressure ulcer management regimes where possible.

## 5.7 INCONTINENCE MANAGEMENT

The relationship between incontinence and pressure ulcers is not as obvious as presumed (Defloor et al 2005). The key factor is moisture to the skin, which puts it at greater risk from maceration, friction and shearing forces. Therefore the main practice issue is the presence or absence of wet skin. As such, effective management of incontinence is an essential part of skin care and central to maintaining a patient/resident's dignity and comfort (Guy 2012).

### Factors to Consider when planning care:

- The use of continence products that absorb moisture. Care should be taken that they are not too tight so as to cause unintentional skin damage
- Pads should be loosened at night to allow the skin to breathe
- Skin assessment should enable differentiation to be made between moisture lesions and pressure damage
- Using a no sting barrier cream or film product

- Dressings that do not cause skin stripping
- Skin hygiene – faeces and urine should be cleaned away from the patients/residents skin as soon as possible to prevent possible damage
- Where possible avoid the use of continence pads where patients/residents are being nursed on a pressure relieving mattress as the pads inhibit the therapeutic effect of the mattress.

## 5.8 NUTRITION

### Management of Nutrition and Pressure Ulcers

Insufficient dietary intake impairs wound healing by hindering the normal processes that enables a wound to progress through the stages of wound healing i.e. haemostasis, inflammation, proliferation and maturation.

#### Screen and Assess Nutritional Status

Each adult with a pressure ulcer should have a nutritional assessment using the MUST tool on admission to community services and mental health in-patient/resident services, with each condition change and when progress toward pressure ulcer closure is not observed.

MUST screening should be undertaken as follows:

- Score 0 (low risk) – re-screen weekly if an in-patient/resident; monthly in a care home or on clinical concern if in own home
- Score 1 (medium risk) – re-screen weekly if an in-patient/resident; monthly in a care home or if in own home
- Score 2 or more (high risk) – re-screen weekly if an in-patient/resident or monthly if in a care home or own home

A nutritional care plan must be written for all patients/residents who have had a MUST screen to manage any identified nutritional risks. This needs to consider:

- Ability to eat independently
- Access to food
- Dentition
- Fluid intake
- Food preferences
- Current food intake

Those patients/residents at medium or high risk of malnutrition should also be provided with relevant information sheets to encourage a high calorie, high protein diet and referred to relevant services in line with local policies, e.g. Speech and Language Therapy, Dietitian, Occupational Therapist, Social Worker.

All patients/residents prescribed oral nutritional supplements (ONS) should be known to a dietician, to ensure they have relevant goals set. Where there is no dietetic service, goal and MUST score should be stated with ONS prescription request. For detailed guidance please refer to [www.bapen.org.uk](http://www.bapen.org.uk)

## 5.9 **GIVE INFORMATION**

Staff caring for patients/residents/residents at risk of developing pressure ulcers should communicate effectively and provide information to patients/residents/residents, carers and the multidisciplinary team regarding pressure ulcer prevention (i.e. repositioning, equipment, nutrition/hydration). This will include a conversation and the provision of the EPUT Preventing Pressure Ulcers Information Leaflet (EP0080).

## **6.0 ASSESSMENT OF A PATIENT/RESIDENT WITH AN EXISTING PRESSURE ULCER**

In line with EPUAP Guidelines (2019), and the NHS Midlands & East pathway patients/residents with pressure ulcers should receive an initial holistic assessment to include:

- A complete health/medical and social history
- A focused physical examination that includes:
  - Factors that may affect healing (e.g. impaired perfusion, impaired sensation, systemic infection)
  - Vascular assessment in the case of extremity ulcers (e.g. physical examination, history of claudication, and ankle-brachial index or toe pressure)
  - Laboratory tests and x-rays as needed

Individual care plans will be developed from the nursing assessment, taking into account the patient/resident's needs, preferences and legal requirements.

If specialist wound management advice is required the appropriate referral should be done as soon as possible to ensure referral onto appropriate speciality is undertaken in a timely fashion e.g. TVN, Podiatry, Dermatology, Vascular surgeon or GP.

All patients/residents regardless of the healthcare setting will have a multi-disciplinary team approach to their pressure ulcer prevention or treatment. Patients/residents with identified risks factors may require referral to other members of the multi-disciplinary team where appropriate i.e.

- Dietitian (depending on local service agreements)
- Physiotherapist
- Continence advisor
- Tissue Viability Nurse
- Podiatrist
- Vascular Surgeons
- Occupational Therapists
- Wheelchair Service

The EPUAP guidelines (2019) should be used to assess the pressure ulcer as follows:

- Assess and accurately document physical characteristics such as:
  - Location
  - Size
  - Tissue type
  - The base of the wound and the Tissue surrounding the wound.
  - Wound edges
  - Sinus tracts
  - Undermining
  - Tunnelling
  - Exudate
  - Necrotic tissue
  - Odour
  - Presence/absence of granulation tissue
  - Epithelialisation
- This should be supported by wound photography (calibrated with a ruler).
- Care should be taken to identify areas of undermining and sinus formation.
- To ensure treatment plans accurately reflect the current status of a pressure ulcer (e.g., wound improvement, wound deterioration, more or less exudate, signs of infection, or other complications), assessment should be carried out at each dressing

### **6.1 Measuring a Pressure Ulcer**

The patient/resident should be positioned in a consistent neutral position for wound measurement. (Document the position in the nursing record to ensure consistency of position).

The following information should be documented in the patient/resident's nursing notes:

- Estimated surface area
- Depth of ulcer

To ensure comparisons of wound measurements between assessments are meaningful, use a calibrated wound probe, in line with EPUAP (2019) Guidelines for measuring:

- Wound length, width and depth
- Area of tunnelling and undermining

Extreme care should be taken when probing the depth of the wound bed or determining the extent of undermining or tunnelling to avoid causing injury

## 6.2 Reassessment of a Pressure Ulcer

This should be undertaken on initial assessment, including if patient is re-admitted to caseload or on recall. It should be fortnightly for pressure ulcers category 2 pressure ulcers and above including dti & unstageable, unless changes to the wound then to be reassessed on identification of this. This enables early complications to be detected, and changes to treatment plans to be made.

Re-assessment, and the outcome, must be documented in the patients/residents nursing notes. Pressure ulcers should not be reverse categorised. A Category 4 pressure ulcer does not become a Category 3 as it heals. As the ulcer heals it should be described as a healing Category 4 pressure ulcer.

A two week period is recommended for evaluating further treatment required to evaluate progress towards healing.

## 6.3 Photography of Pressure Ulcers

National and International Guidelines (NICE 2014, EPUAP 2019) suggest that consideration should be given to the use of photography as a part of the management regime – it provides a tool to monitor healing over time. It is acknowledged that photography is not routinely used in all localities.

Where healthcare professionals have access to photography the following points must be considered:

- The patients/residents consent should be obtained before any photograph is taken.
- Give a full explanation to the patient/resident as to reason for taking a photograph, and gain consent. The photographer must always check the patient/resident understands what they have consented for and if there is any doubt Mental Capacity to be assessed
- Tidy the area likely to be in the background of the photograph to avoid showing clothing and dressings etc. At all times ensure that the privacy and dignity of the patient/resident is maintained
- Use a white pillowcase/sheet or the white drape contained in the gloves packs as background to the area being photographed.
- Always take a locator picture first to identify the part of the body involved
- Take a close up view to show the relevant detail
- All photographs must be patient/resident identifiable and include the specific site of the body being photographed. The patient/resident's full name, NHS Number and Date of Birth can be written on the disposable tape measure and placed on the wound prior to the photograph being taken

- Attach the photographs to the patient/resident's nursing records via either their computerised nursing records, or by mounting them onto a card insert and place in the paper nursing records
- The wound should be photographed at initial assessment and then at least monthly therefore after in order to document the healing progress. However the frequency will depend on the individual wound e.g. if the wound is deteriorating rapidly. Disposable, paper scales have limited value as a measurement tool but can be useful in terms of giving an impression of the extent of a wound, in particular over large curved surfaces (NICE 2005; IMI 2007)

#### **6.4 Pressure Ulcer Cleansing**

EPUAP Guidelines (2014) should guide practice as follows:

- Cleanse the pressure ulcer and surrounding skin at the time of each dressing change.
- For clean, healing pressure ulcers: Use normal saline or safe drinking water
- For pressure ulcers which have debris or are critically colonized or clinically infected: Consider using cleansing solutions with surfactants or antimicrobials
- Cleanse the pressure ulcer using an irrigation solution
- Prevent cross contamination by ensuring cleaning agents are disposed of in line with infection control procedures (Refer to Infection Control Policy).

#### **6.5 Dressing Selection**

Following assessment, all pressure ulcers should be dressed with an appropriate wound management product in line with the local Wound Management Policy and Wound Formulary.

The decisions about choice of dressing or topical agent should be made by registered health care professionals only.

Choice of dressings should be based on:

- Ulcer assessment (condition of wound)
- General skin assessment
- Treatment objective
- Dressing characteristics
- Previous positive effect of particular dressing

#### **6.6 Wound Infection**

##### **6.6.1 Managing critically colonised/infected pressure ulcers**

Bacteria are present on all wound surfaces. Infection is present when the bacteria (by numbers or virulence) cause damage to the body (see local wound management guidelines for further information).

Infection in Category 1 and 2 pressure ulcers is not common. Routine swabbing of the pressure ulcers is not required in the absence of clinical signs of infection (see local Wound Management Guidelines).

Assessment of infection should be focused on Category 3, Category 4 and, Unstageable pressure ulcers (EPUAP 2019).

To avoid serious consequence of spreading infection patients/residents considered at high risk of infection should be identified. Prevention of infection should be a priority. If a pressure ulcer is, or becomes infected, early detection and timely and effective treatment should be the priority of care.

### **6.6.2 High Risk Patients/residents with Infection in Pressure Ulcers**

High risk of likelihood of an infection in a pressure ulcer includes:

- Presence of necrotic tissue
- Presence of foreign bodies
- Large deep wounds
- Length of time present
- Location – i.e. frequently contaminated
- Diabetes
- Malnutrition
- Immuno-suppressed patients/residents
- Poor tissue perfusion
- Auto-immune patients/residents

### **6.6.3 Signs of Local Infection**

This includes:

- Non-healing after 2 weeks
- Bleeding on simple contact
- Friable granulation tissue
- Malodour
- Heat around the ulcer margins
- Increase in pain
- Change in consistence of exudate (onset of blood or pus)
- Bridging or pocketing

### **6.6.4 Signs of Spreading Acute Infection**

Observe for signs of:

- Erythema extending from the ulcer edge,
- Induration
- New or increasing pain
- Warmth or purulent drainage
- Increase in size or have crepitus, fluctuance or discoloration in the surrounding skin

### **6.6.5 Systemic Infection (infection spreading beyond pressure ulcer)**

This may include:

- Fever
- Malaise
- Lymph node enlargement
- Confusion/delirium and anorexia in elderly patients/residents.
- Elevated CRP

A deep wound swab should be taken in the presence of clinical infection. (See local Wound Management Guidelines for swabbing technique)

### **6.6.6 Management of Infected Pressure Ulcer**

This should be in line with international Guidelines (EPUAP 2019) and will include:

- Debridement and appropriate wound cleaning
- Appropriate use of antimicrobial dressings (see local Wound Management Guidelines) which includes reassessment of the wound after two weeks of use
- Appropriate use of topical antiseptics in line with manufacturers guidelines
- Appropriate use of systemic antibiotics for patients/residents with clinical evidence of systemic infection – positive blood cultures, cellulitis, fasciitis, osteomyelitis, systemic inflammatory response syndrome (SIRS), or sepsis elevated CRP
- Topical antibiotic therapy is not recommended except in specific circumstance following discussion with the Microbiologist
- Appropriate evaluation and management of patients/residents with exposed bone

### **6.7 Debridement of Pressure Ulcers**

When appropriate for the patients/residents' condition, devitalised tissue may be debrided. Decisions about the most appropriate form of debridement should be made by a registered practitioner.

Decisions about the method of debridement should be based on types of debridement include:

- Autolytic
- Mechanical
- Sharp
- Surgical
- Biological
- Enzymatic

Following assessment (condition of wound) – urgent surgical debridement may be required in the case of spreading sepsis or advancing cellulitis in this instance the following criteria need to be considered:

- General skin assessment
- Previous positive effect of debridement techniques

- Manufacturer's indication for use and contraindications
- Risk of adverse events
- Patient/resident preference (lifestyle, abilities and comfort)
- Characteristic of dressing technique
- Treatment objective

## 6.8 Pain Management

All patients/residents should have a pain assessment related to the pressure ulcer or its treatment. It should include:

- Assessment of pain on each visit
- Assessing of pain by observing both verbally and non-verbal i.e. body language or facial expression
- All pain assessments should be documented

### **Pain can potentially be prevented by:**

- Using moving and handling equipment
- Correct positioning off the pressure ulcer wherever possible
- Handling the wound gently by avoiding unnecessary cleansing

### **Pain can be managed by:**

- Eliminating and controlling the source of pain i.e. covering wounds, adjusting support surface (see section 10) repositioning
- Choosing the appropriate dressings that have extended wear time when required to reduce frequency of dressing change
- Providing appropriate analgesia prior to dressing being changed when required
- Providing medication or other methods of pain relief as needed
- Seeking specialist advice when required

## **7.0 REPORTING PRESSURE ULCERS**

Reporting of new pressure ulcers (POA), observed during the skin assessment undertaken on admission to that service should be reported via Datix. In addition the deterioration of existing pressure ulcers (Cat 2, 3 & 4) should also be reported via Datix.

All pressure ulcers - Category 2, 3, 4 and including unstageable and deep tissue injuries should be reported on the Datix incident reporting system when first identified (Deep Tissue Injury ulcers should be reviewed by a clinician with appropriate skills on a weekly basis to help identify a definitive PU category) .

Category 3, 4 and unstageable pressure ulcers must be categorised as serious incidents on Datix.

In addition, Device Related Pressure ulcers should be reported and identified by the notation of (d) after the report e.g. Category 2 PU (d)

Moisture-Associated Skin Damage (MASD) should also be reported via Datix in addition to pressure ulcers. Where skin damage is caused by a combination of MASD and pressure, it will be reported based on the category of pressure damage. MASD will also be subjected to root cause analysis if it is deemed to have caused serious harm (please refer to the NRLS framework for further guidance on harm levels)

Category 3, 4 and unstageable pressure ulcers that are acquired within EPUT services will be subject to a root cause analysis process through a local reporting system e.g. Skin Matters panel.

Where a safeguarding issue may be suspected refer to the Safeguarding Guidance on reporting PUs (Appendix 6)

## **8.0 REFERENCE TO OTHER TRUST POLICIES/PROCEDURES**

Infection Control Policy ICP1

Records Management Policy CP9

Adverse Incidents (including Serious Incidents) Policy CP3

Clinical Guidelines on the use of Bedrails CG86

**END**