



# Pressure Ulcer Recommendations and Clinical Pathway

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**Health Innovation**Network



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## Introduction

## The purpose of these recommendations

The purpose of these recommendations is to provide clear advice to health and care practitioners, service managers and commissioners about the fundamentals of evidence-informed care for people who have or are at risk of developing pressure ulcers. Implementing these recommendations will achieve better individual outcomes and more effective use of health and social care resources.

The recommendations outline a pathway of care that promotes early risk identification and preventative care, enabling fast access to evidence-informed therapeutic interventions, with escalation of treatment or service provision for people requiring more complex care.

The recommendations offer a framework for the development of local delivery plans that include consideration of:

- Relevant research evidence (where it exists) to inform care.
- Configuration of services and deployment of workforce.
- Appropriate education for that workforce; and
- Relevant metrics to measure quality improvement.

These recommendations signpost to relevant clinical guidelines or outline evidence-informed care that will improve healing and optimise the use of healthcare resources. They do not replace existing local or national evidence-informed clinical guidelines or replace clinical judgement and decision making in relation to the needs of the individual. They are intended for use in all clinical and social care settings and aim to support implementation of evidence-based clinical practice.

## **Background**

The National Wound Care Strategy Programme (NWCSP) has been commissioned by NHS England to improve the prevention and care of pressure ulcers, leg and foot ulcers and surgical wounds. This document focuses on pressure ulcers.

Pressure ulcers are in the 'top ten harms' in the NHS in England (1). Investigations into the causes of pressure ulcers frequently show that unwarranted variation from evidence-based practice contributes to the development of pressure ulcers.

Despite national (2) and international (3) clinical guidelines, there is currently no up-to-date standardised pathway for implementing these guidelines in England. Consequently, individual health and care organisations develop their own pathways and protocols, which may vary substantially, leading to increased and unnecessary workload and variation in clinical practice.

These recommendations propose an evidence-informed standardised pathway of care (see Appendix 1) to prevent and manage pressure ulcers in England. The recommendations outline what best practice should look like and are based on the recommendations in the NICE Clinical Guideline: Pressure ulcers: prevention and management (2) and the NICE Quality Standard: Pressure ulcers (4) updated using the EPUAP, NPIAP, PPPIA Pressure Ulcer Guidelines (3).

The recommendations propose five phases of care:

- 1. Identification of someone at risk of pressure ulcers and immediate care.
- 2. Risk assessment and diagnosis including:



- Initial screening for risk factors.
- · Risk assessment.
- · Primary and secondary diagnosis.
- 3. Ongoing care including:
  - · Primary and secondary preventative care.
  - Wound care.
- 4. Review of healing.
- 5. Care following healing of a pressure ulcer.

## Scope of the recommendations

The recommendations describe best practice for care in all health and care settings (including hospitals, general practice, community services as well as care homes and other care providers). They are suitable for use for those with both physical and mental health care needs and seek to inform and support care delivered by all health and care professionals who care for people at risk of pressure ulcers.

# The process for developing and updating these recommendations

These recommendations were developed using an evidence-informed approach, including consideration of research studies, healthcare resources, clinical settings, and individuals' preferences. The recommendations were based on evidence retrieved using a systematic approach to searching which is outlined in Appendix 2 and then sense-checked with academics, health practitioners and patients and carers, before a wider consultation with those registered with the NWCSP stakeholder forums.

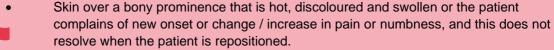


## Recommendations

# 1. Identification of someone at risk of pressure ulcers and immediate care

- 1.1 Consider whether a patient or client has pressure ulcer risk factors at every contact with a health and social care professional.
- 1.2 Respond to a request from an individual, their family or informal carer who has identified risk factors for pressure ulceration.

#### 1.3 'Red flag' risk factors are:



- An existing pressure ulcer or scar from a pressure ulcer or other wound in an at-risk area.
- The individual has had a long lie (fall and being on the floor) of more than 1 hour.
- Rapid deterioration in the clinical condition of the patient.
- There is a medical device in prolonged contact with the skin.

### 1.4 Immediate care:

- Reposition the patient off the affected area and record the position in which the patient was found.
- If the skin is broken, clean and dress the wound using a sterile dressing as per local policy.
- Ensure any existing equipment is functioning and in use.
- Take a digital image of any broken skin.
- Seek assistance / escalate care / refer to specialist as necessary.
- Give patient, family and carers information about what they can do to help manage the skin damage, including what they should avoid doing.
- Document any interventions, conversations or care plans and ensure these are handed over to other caregivers to ensure continuity.
- Check if medical devices in use are still required. If it is still, necessary fit and position correctly.



## 2. Screening, risk assessment and diagnosis

## Initial screening

- 2.1 If the person identifying someone at risk of a pressure ulcer, (or responding to a request for a risk assessment) does not have the appropriate knowledge / skills to carry out screening, they should provide immediate preventative care that reduces any identified risk and refer to a suitably trained professional.
- 2.2 Everyone receiving care from a health or care professional should be screened for pressure ulcer risk using the PURPOSE T tool (5), or other validated risk assessment tool that, as a minimum, contains the same risk factors (see Appendix 3).
  - Screening should follow a structured and replicable approach and consider, as a minimum, mobility and activity limitations, skin status and other risk factors that are highly predictive in specific populations.
  - Screening and skin assessment should be based on a combination of skin temperature, skin texture, patient reports of pain and discomfort as well as visual skin assessment.
     This is particularly important when considering skin of dark colour and tone.

## Risk Assessment

- 2.3 Those identified as being potentially at-risk following screening (e.g., step 1 of the PURPOSE T tool) should receive a full pressure ulcer risk assessment using the PURPOSE T tool, or other risk assessment tool that, as a minimum, contains the same risk factors.
- 2.4 Risk assessment for those admitted to hospital or a care home with nursing should be done within 6 hours of admission or in a community health care service the first face-to-face visit. This includes virtual contact via telephone or video and may be based on questioning the patient about their skin. Clearly document the risk assessment and whether it was conducted face-to-face or virtually.
- 2.5 Document the outcome of the risk assessment in the clinical or care record along with a prestipulated date for review of risk and planned care.
- 2.6 Reassess if there is a change in that person's condition, circumstances or environment.
- 2.7 For those whose condition is stable, review at regular intervals to monitor for more subtle changes in level of risk.
- 2.8 If the person identifying someone in need of a full pressure risk assessment does not have the appropriate knowledge / skills to carry out that risk assessment, they should provide immediate preventative care that reduces any identified risk and refer to a suitably trained professional.



## Diagnosis

2.9 Primary diagnosis of pressure damage

Document pressure ulceration accurately, avoiding confusion with similar but different aetiologies (e.g., incontinence associated dermatitis (IAD).

Differential diagnosis of pressure ulceration should consider:

- · Is there evidence of pressure or shear?
- Is the wound or skin damage over a bony prominence or under a device?
- Are the edges distinct?
- 2.10 Categorisation of pressure damage

Categorise pressure ulcers using Pressure Ulcer Categories 1 – 4 (see Explanatory Notes).

## Outcome of risk assessment

- 2.11 Combine the outcome of risk assessment and diagnosis together to identify which of the following pathways should be followed.
  - No pressure ulcer, not currently at risk, or
  - No pressure ulcer but at risk, or
  - PU Category 1 or above or scarring from previous pressure ulcers.



## 3. Ongoing care

## Care to prevent pressure ulcers.

- 3.1 Use the aSSKINg Framework (Appendix 4) to plan and deliver individualised care that addresses the individual's presenting risk factors for anyone identified at risk of pressure ulceration.
- 3.2 Deliver care according to the identified pathway.

## No pressure ulcer and not currently at risk

- Document outcome of risk in the clinical record.
- Review risk at regular intervals which should be based on:
  - o a change in that individual's condition,
  - o a change in the place of care delivery,
  - o a change in the individual's circumstances, or
  - o at the pre-planned interval, which should be as a minimum once a week in acute settings and once a month in community or care settings.

### No pressure ulcer but at risk

As above plus:

- Implement an individualised plan of preventative care that addresses their presenting risk factors and follows the aSSKINg bundle.
- Ensure there is regular monitoring of skin condition and escalate preventative care if any deterioration in skin condition is noted.
- Document outcome of risk in the clinical record.
- Provide information to the patient and / or their carer about the level of risk and what they
  can do to help reduce the risk.

## Category 1 pressure ulcer or above or scarring from previous pressure ulcer As above plus:

- If deterioration in skin or wound is noted, escalate interventions including review of equipment (beds, mattresses, cushions and off-loading devices) and repositioning schedules.
- Complete a full wound assessment<sup>7</sup> and document in the care record.
- Agree a patient-centred objective of care.
- Implement evidence-informed wound care based on the objective of care.
- 3.3 Document the plan of care in the patient's care record.



Care to promote healing of a new or existing pressure ulcers.

Immediately escalate to the relevant medical team / GP those with the following 'red flag' symptoms/ conditions:



- Acute infection (e.g., increasing erythema, swelling, pain, pus, heat).
- · Symptoms of sepsis.
- 3.4 Undertake and document a comprehensive wound assessment in line with the wound minimum data set (6) that includes:
  - Full history, including any previous history of pressure ulceration.
  - Review of medication.
  - Pain and analgesia needs.
  - · Psychosocial needs.
  - Possible infection.
  - Nutrition.
  - Record image(s) of ulcer(s) using digital imaging.
- 3.5 Plan and deliver individualised care that addresses the presenting risk factors using the aSSKINg Framework for anyone with an existing pressure ulcer *plus*:
  - If appropriate, treat infection in line with local guidelines.
  - · Offer analgesia to alleviate pain.
  - As far as possible, use ANTT to cleanse the wound bed, skin around the ulcer and consider debridement if required.
  - Apply an appropriate dressing with sufficient absorbency.
- 3.6 At each dressing change:
  - Review care and identify, discuss, and incorporate opportunities for supported selfmanagement into treatment plan in line with the individual's and their carers' capacity, capability and wishes.
  - Review effectiveness of treatment plan and if there is deterioration, escalate in line with local pathway.
- 3.7 All those with category 3 and 4 pressure ulcers should be considered for possible surgical revision in line with local guidance based on the following criteria:
  - Have all reasonable conservative / non-surgical methods been tried to close the pressure ulcer?
  - Would the individual consider surgical revision?
  - Is the individual able and motivated to adhere to post-operative regimens to prevent pressure ulcer recurrence or breakdown of surgical repair.
  - Does the individual have available skin / muscle for surgical revision (to be assessed by a member of the surgical team).
  - Is the individual fit for surgery or able to become fit for surgery (e.g., through treatment for infection, by improved nutrition)?



## 4. Review of healing

- 4.1 At 4 weekly intervals (or more frequently if concerned) monitor for healing by:
  - Completing wound assessment in line with the wound minimum data set (6).
  - Taking digital wound image(s) and comparing with previous images.
- 4.2 Review the effectiveness of treatment plan and escalate any concerns to the relevant clinical specialist at weekly intervals.

Wounds that are deteriorating should be escalated to the relevant clinical specialist unless this is anticipated (e.g., in final days of life) and preventative intervention, including surface provision and repositioning regimens, escalated.

4.3 Undertake a comprehensive holistic re-assessment at 12 weeks, for patients with wounds that remain unhealed.

## 5. Care following healing

- 5.1 Determine an agreed process of evaluation of care and review of risk level for all individuals at continued risk.
- 5.2 Discuss with all individuals and/or their carers their specific risk factors and what they or their carer's role in preventative care could be.
- 5.3 Provide all individuals at risk of pressure ulcers with information about their risk factors and treatment plan. This may be in written form (in a relevant format e.g., braille, different languages), using digital media or verbally, but the form of delivery and content must be clearly documented.
- 5.4 Identify, discuss, and incorporate opportunities for supported self-care into treatment plans in line with each individual's capacity, capability and wishes.



## **Explanatory Notes**

# 1. Identification of someone at risk of pressure ulcers and immediate care

The NICE clinical guideline for pressure ulcers (2) advises that all patients are potentially at risk of developing a pressure ulcer. Therefore, all health and care professionals coming into contact with patients should consider pressure ulcer risk at each contact.

## 2. Screening, risk assessment and diagnosis

## Initial screening

Initial pressure ulcer risk screening rapidly identifies those who are at risk of pressure ulcer development and for whom a full risk assessment is required, and those who are not and require no further risk assessment.

The PURPOSE-T pressure ulcer assessment tool was developed by the NHS for the NHS and is currently the pressure ulcer risk assessment tool with the most robust evidence base. The risk factors on which it is based have been identified as having direct or indirect causal relationship with the development of pressure ulcers.

The 6 hours must encompass a completed process so if the person is SCREENED and not at risk, the episode is complete. However, if the person is screened and must progress to full assessment, the whole process (screening and assessment) must be completed within 6 hours.

Admission means the point at which the patient is first seen by a registered clinician within the hospital. i.e., at the point that duty of care to that person begins.

Regular intervals should, as a minimum, be weekly in acute care and monthly in community settings or care homes.



## Diagnosis

Pressure ulcers should be categorised using the following 4 categories.

#### Category 1: Non blanchable Erythema

Intact skin - In lighter skin tones, this presents as non-blanchable redness of a localised area usually over a bony prominence. Darkly pigmented skin may not have visible blanching, but its colour may differ from the surrounding area. The area may be painful, firm, soft, warmer, or cooler as compared to adjacent tissue. Category 1 may be difficult to detect in individuals with dark skin tones. May indicate "at risk" individuals (a heralding sign of risk).

## Category 2: Partial Thickness Skin Loss

Partial thickness loss of dermis presenting as a shallow open ulcer with a red/pink wound bed, without slough. May also present as an intact or open/ruptured serum-filled blister or as a shiny or dry shallow ulcer without slough or bruising\*. This Category should not be used to describe skin tears, tape burns, perineal dermatitis, maceration, or excoriation.

#### Category 3: Full Thickness Skin Loss

Full thickness tissue loss. Subcutaneous fat may be visible, but bone, tendon or muscle are not exposed. Slough or necrosis may be present. May include undermining and tunnelling. The depth of a Category 3 pressure ulcer varies by anatomical location. The bridge of the nose, ear, occiput, and malleolus do not have subcutaneous tissue and Category 3 ulcers can be shallow. In contrast, areas of significant adiposity can develop extremely deep Category 3 pressure ulcers. Bone/tendon is not visible or directly palpable.

## **Category 4: Full Thickness Tissue Loss**

Full thickness tissue loss with exposed bone, tendon, or muscle. Slough or eschar may be present on some parts of the wound bed. Often includes undermining and tunnelling. The depth of a Category 4 pressure ulcer varies by anatomical location. The bridge of the nose, ear, occiput and malleolus do not have subcutaneous tissue and these ulcers can be shallow. Category 4 ulcers can extend into muscle and/or supporting structures (e.g., fascia, tendon, or joint capsule) making osteomyelitis possible. Exposed bone/tendon is visible or directly palpable.

Pressure ulcers where the skin is broken but the wound bed is not visible due to slough or necrosis (formally referred to as 'unstageable') should initially be recorded as Category 3 pressure ulcers but immediately re-categorised and re-recorded in the patient's records if debridement reveals category 4 pressure ulceration.

Deep tissue injuries (DTIs) should not be reported as pressure ulcers unless they result in broken skin or they fail to resolve and it is evident on palpation that there is deep tissue damage present, at which point, they should immediately be categorised and reported. However, the skin change must be recorded within the clinical record (for example by ticking the vulnerable skin option in the PURPOSE T tool) and appropriate preventative care delivered as soon as the damage is noted.



## 3. Ongoing Care

The 'aSSKINg' framework (Appendix 4) is a tool which brings together best practice with the aim of minimising variation in care. The aSSKINg framework is widely used across England so is familiar to many health and care organisations.

Taking a digital wound image allows for a clear record of the skin condition on first assessment against which progress, or deterioration can be measured. A clear image may also be useful in case of safeguarding concerns or litigation.

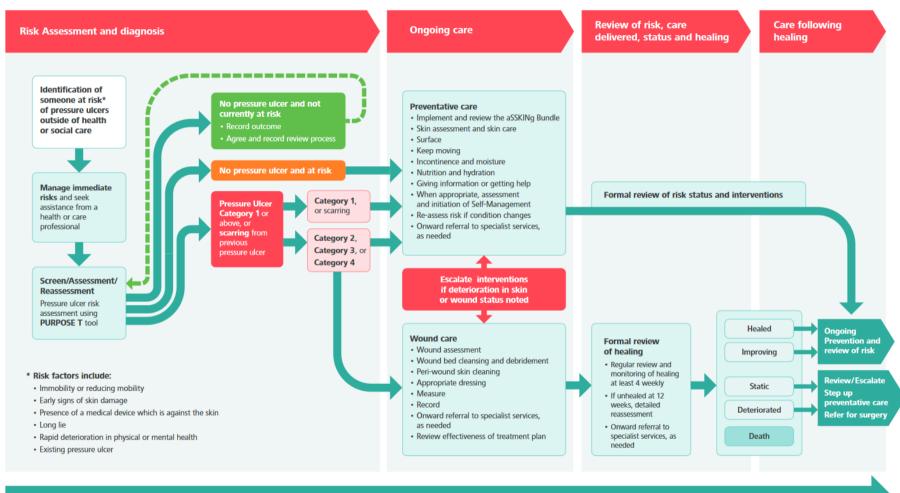
There should be local guidelines in place on how to take, transmit and store images and the relevant level of patient consent should be obtained.

Guidance on taking a digital wound image can be found at:

https://www.nationalwoundcarestrategy.net/wp-content/uploads/2021/09/Digital-Images-in-woundcare-17Sept21.pdf

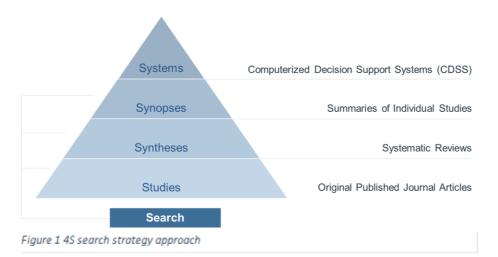


## **Appendix 1: The clinical pathway**



# Appendix 2: Search strategy for research evidence

The search strategy was limited to pre-appraised sources of research evidence, using a 4S approach (5) to structure a search strategy as shown.

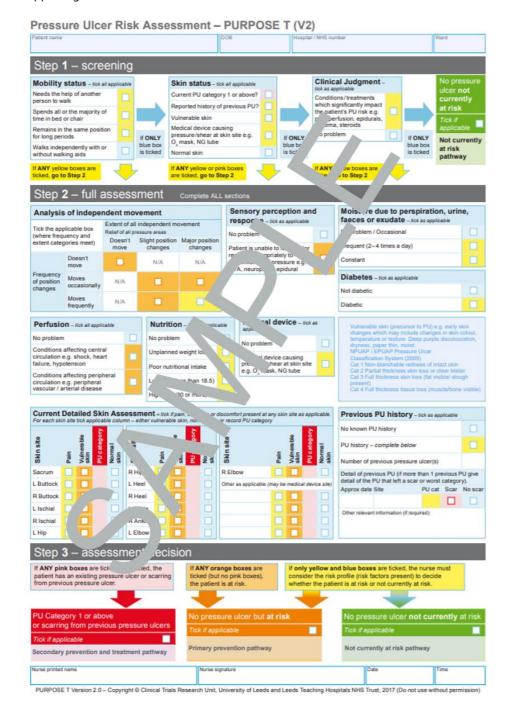


- Systems: searched UK computerised decision support systems for pressure ulcers.
- Synopses: searched for summaries of the current state of knowledge about the prevention and treatment of pressure ulcers.
- Syntheses: searched the Cochrane Library of Systematic Reviews to identify reviews for prevention and treatment of pressure ulcers.
- Studies: searched the NIHR library for NIHR funded studies completed after publication of the relevant Cochrane systematic reviews for prevention and treatment of pressure ulcers.



# Appendix 3: PURPOSE T risk assessment tool

Please register at <a href="https://ctru.leeds.ac.uk/purpose/purpose-t/">https://ctru.leeds.ac.uk/purpose/purpose-t/</a> to download the full version of the tool and supporting information.





## **Appendix 4 The aSSKINg framework (5)**

	Action	Best Practice
а	Assess risk	Consider risk factors associated with compromised skin integrity.  Undertake screening and risk assessment using the PURPOSE T screening and risk assessment tool or similar evidence-based and validated tool which contains as a minimum, the same risk elements.  Refer to appropriate members of the interprofessional team.  Be aware of safeguarding policies and take appropriate action when necessary.  Document risk status and timing of review in the clinical record.
S	Skin assessment and skin care	Carry out a comprehensive skin assessment including skin under devices where it is safe to do so.  Consider colour, texture and temperature of the skin.  Ask the individual to identify any areas that are painful, itchy, uncomfortable or numb.  Consider risk factors associated with impaired skin integrity.  Identify complex health conditions that affect skin integrity.  Keep the skin clean, dry and well hydrated.  Implement evidence-based skin interventions to promote skin integrity.  Document the presence of vulnerable skin, including where there is a change in colour, temperature or texture or patient reported changes in sensation.
S	Surface	Consider risk factors associated with a range of support surfaces including but not limited to beds, mattresses, chairs, cushions, wheelchairs and in vehicle systems.  Consider the impact of offloading devices such as boots or other orthoses.  Consider the impact of medical devices and their contact with the skin.  Consider the range of available equipment, including the mechanism of action, benefits and associated risks.  Identify and undertake relevant seating and moving and handling risk assessments.  Consider the role of support surfaces and equipment on the patient's level of independence while managing the risk of pressure ulcer development.  Refer to appropriate members of the inter-professional team throughout the patient journey, including discharge planning.



K	Keep moving	Consider level of mobility and risk factors associated with reduced mobility.  Consider the range of available moving and handling equipment, including the mechanism of action, benefits and associated risks.  Use relevant formal tools to assess mobility - falls risk, moving and handling risk assessments to balance the risk from other harm.  Consider the impact of reduced mobility on an individual's posture, engagement in activities of daily living (ADL) and psychosocial functioning (mood, isolation, social engagement).  Safely use a range of appropriate equipment to promote self mobilisation and good posture - hoists and slings, standing hoists and frames, electronic bed frames, appropriate seating and mobility aids, sleep systems, wheelchairs etc - to promote individualised plan of mobility and assisted transfers.  Refer to appropriate members of the interprofessional team throughout the planning journey, including discharge planning.  Consider the individual's usual daily routine when planning repositioning or activity schedules.  Identify, understand and, where possible, address the cause of any change
I	Incontinence or increased moisture	Identify the cause of moisture-related skin damage ie. incontinence, sweat, saliva, stoma effluent, wound leakage.  Where possible, address the cause of the moisture.  Consider whether incontinence-related skin damage is an issue.  Differentiate between aetiologies associated with incontinence.  Consider how increased moisture increases the risk of skin damage caused by skin and friction.  Implement appropriate prevention and management strategies.  Refer to continence services where necessary.  Keep the skin clean, dry and well hydrated.  Maintain hydration.



		Consider the impact of key nutritional elements in wound healing.
		Understand the impact of disease on nutritional need and nutrient absorption.
		Utilise the relevant tools and documentation which should include food and fluid charts, for example, food diaries, MUST, BMI, MUAC, bloods, feeding risks and PEM assessment.
N	Nutrition	Advise on food fortification, nutritional supplementation and moderation of dietary restrictions in event of pressure ulceration.
		Collaborate to deliver appropriate care with relevant members of the multidisciplinary teams (MDT) (dietician, speech and language therapist, occupational therapist).
		Consider the practical elements of maintaining nutrition and hydration including portion sizing, food texture, access and ease of use of implements and good dentitition.
		Select and implement the most appropriate communication approach to
		increase awareness and facilitate concordance and engagement with pressure ulcer prevention strategies.
		Consider the patient's level of capacity and perform the necessary checks.
		Communicate effective and safe use of interventions effectively for the patient, family and within the MDT.
		Recognise when clinical concerns need to be escalated.
		Promote effective pressure ulcer prevention approaches.
g	Give information	Consider effective resource allocation and escalate concerns when resources are unavailable.
		Be aware of safeguarding policies and take appropriate action when necessary.
		Use the clinical record as the source of documentation to ensure information is available to all members of the MDT.
		Use appropriate language to ensure the clinical record can be appropriately used for coding/analytic purposes.
		When capturing/using digital images, ensure appropriate consent has been obtained.



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