**Front Sheet for at a Glance Series**

Pressure Care (Adults): *at a Glance*

1901 words

*By Aby Mitchell*

Pressure care (adult): At a glance

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| This article will:   * Provide clinical guidance on pressure area care in adults * Increase knowledge on risk assessment tools * Identify pressure ulcer prevention strategies * Provide an awareness of the complications of pressure damage |

**Why is pressure area care important?**

Pressure area care is an essential component of nursing practice with all patients potentially at risk of developing a pressure ulcer (NICE, 2014). Pressure ulcers (PU) are quite often preventable and caused by tissue damage from an impaired blood supply to an area of skin as a result of significant pressure (NICE, 2014). They have become a worldwide concern for health professionals with the cost burden of managing PU’s and associated complications in excess of 2.1 billion annually (Dealey, Posnett and Walker, 2012). The clinical interventions for PU prevention include holistic assessment, risk assessments and preventative measures (NICE, 2014).

**Pressure area assessment**

The purpose of using a risk assessment tool is to identify a patient’s risk status and plan care accordingly (NICE, 2014). A comprehensive risk assessment should include intrinsic and extrinsic factors such as neurological conditions, impaired mobility, nutritional status, posture, level of consciousness, deformity, sensory impairment, previous pressure damage, pain status, psychological factors, social factors, cognition, medication and continence (NICE, 2014). Those at high risk often have multiple factors including a history of or a current PU.

**Risk assessment tools**

Risk assessment should be carried out as soon as possible (within a maximum of eight hours) of the patient either admitted to hospital of onto a community caseload and repeated as often as required based on the patient acuity (Epuap, 2014) or if a change occurs in the patient’s condition. There are numerous validated risk assessment tools used, the Waterlow score is the most commonly used in the UK, despite the lack of conclusive evidence of one score over another (Anthony et al., 2008). For staff undertaking, risk assessments training and education are essential to ensure correct completion and reduce subjectivity. ***Insert picture of the Waterlow score***

Other factors not included in the tools which should be considered as part of the risk assessment are ethnicity, low blood pressure, and risk factors such as smoking (Anthony et al., 2008).

**Prevention strategies**

In England, the Commissioning for Quality and Innovation (CQUIN) payment framework is used as an incentive to deliver harm free care. Once the risk of developing a PU is established, individual prevention strategies must be put in place. The five-point PU prevention strategy **SSKIN** bundle (NHS Scotland, 2009; NHS Midlands and East, 2012) has been constructed to capture all the fundamental preventative components.

1. **Surface:** Identify equipment/support surfaces to relieve pressure and prevent skin damage and evaluate regularly to review effectiveness.
2. **Skin:** Skin assessment is vital to prevent skin damage, manage existing PU’s or prevent further breakdown and skin fragility should be identified at each risk assessment. Assess all vulnerable regions such as the sacral area, bony prominences and any area where a patient is in contact with medical devices (which attribute to 1/3 of all PU’s) (Black et al., 2010; Epuap, 2014).

Apply finger pressure to vulnerable areas to assess whether erythema (reddening of the skin) or discolouration is blanchable (NICE, 2014). Record any indication of skin changes such as blanching and non-blanching erythema. Non-blanching erythema is an indication of pressure damage and should be actioned immediately. Start appropriate preventative action and reassessment at least every 2 hours until resolved (NICE, 2014). Assess the skin for localised heat, oedema and induration (hardness), and signs of redness (this is not always possible to identify signs of redness on darkly pigmented skin). Skin changes must be documented to prevent further skin breakdown.

Shear and friction are major contributing factors to pressure ulcer development. Shear is defined as a stress or straining force that leads to distortion or deformation of tissue when two materials move in opposite directions (NPUAP, 2007; Hanson et al, 2010). Shear is a recognised factor in the development of superficial and stage II pressure ulcers and can often cause damage below the skin surface (Hanson et al, 2010). A common example is when a patient is moved up the bed. The bones move while the skin remains in contact with the bed surface. Friction is a mechanical force defined as the resistance to motion in a parallel direction of two surfaces (NPUAP, 2007). Friction causes abrasion to the skin of the epidermis and dermis increasing vulnerability to pressure damage and can be most hazardous for patients requiring repositioning. For example, the skin layers slide over each other when the patient is moved up the bed (Hanson et al, 2010). Both factors either combined or separately can have negative consequences. These must be considered when assessing the skin and actions should be taken to mitigate any risk factors when possible.

Skin hygiene is an important factor in pressure area care. Clean the skin to remove any soiling or moisture. Avoid using any alkaline products to protect the acid base of the skin (Proksh et al, 2008). Any vulnerable areas should be protected using pressure redistributing devices (Epuap, 2014). Consider barrier creams for those at high risk of developing moisture lesions or incontinence associated dermatitis (NICE, 2014). Barrier creams and films can help reduced fiction. All existing pressure ulcers must be reassessed and documented using a validated measurement technique (e.g., transparency tracing or photograph) (NICE, 2014). With correct treatment and care, PU’s should show some signs of healing within 2 weeks (Epuap, 2014). If progress towards healing is not evident, refer to the tissue viability service.

A pre-existing pressure ulcer must be categorised according to the international NPUAP/EPUAP pressure ulcer classification system (2014). All PU’s grade I and above need to be recorded on DATIX or trust incident reporting systems.

***Please add the NPUAP International PU classification and photos and guidance***

1. **Keep moving:** Those who are identified as at risk of PU development need repositioning frequently (Epuap, 2014). NICE (2014) recommend repositioning at least every 6 hours and every 4 hours for those at high risk. Where possible encourage the patient to do this themselves. Repositioning frequency should be increased for any patients on non-pressure redistributing equipment (Epuap, 2014). If possible do not turn the patient onto a reddened area, redness is an indication that the body still has not recovered from previous pressure loading (Epuap, 2014). Massage is contraindicated and is not recommended as a strategy for pressure ulcer prevention (Epuap, 2014).

Ensure that the patient is comfortable and that at-risk patients have a repositioning chart in place (Epuap, 2014). Turning clocks have been found to be effective as a visual reminder when used in conjunction with repositioning charts (Wounds UK, 2013). When considering equipment, it is important to remember that a standard foam mattress is not adequate for a patient with a PU. High-risk patients need a high specification foam mattress, however, there is no evidence to suggest the superiority of one high specification foam mattress to another (Epuap, 2014). Use support surfaces to prevent heel PU’s such as heel protection devices which elevate the heel completely. Ensure the knee is in slight flexion when using this device (Epuap, 2014).

Staff safety must be considered when moving and handling any patient and mobility risk assessments should be in place. Pain must be addressed, documented and evaluated as necessary.

1. **Incontinence and moisture:** Any form of extrinsic moisture, can lead to the breakdown of vulnerable skin (Beeckman et al., 2014). For PU prevention, assess the patients’ elimination status and address any continence issues. Ensure regular skin care is carried out to manage sweat and clean soiled or wet skin. Consider seeking advice from the continence advisor if appropriate.

Hydration and nutrition are essential to tissue repair and PU management (Saghaleini et al., 2018). Assess the patients’ hydration and nutritional status. The nutritional assessment should start using a recognised tool such as the Malnutrition Universal Screening Tool (MUST; National Collaborating Centre for Acute Care, 2006). Correct completion of this tool guides interventions such as accessibility to food and fluids, dietary advice (how to follow a balanced diet with energy, protein and micronutrient requirements), dietitian referral, and further interventions such as supplement drinks or tube feeding if necessary (Wounds UK, 2013). Observe at-risk patients for signs of dehydration and commence fluid and food charts and escalate concerns to inpatient doctor or GP when necessary.

1. **Patient/family/carer engagement**

Any PU strategy should involve the patient, family and carers. In community settings equipment should be selected with consideration to the size of the patients’ room, the person using the equipment and what support the patient has (Epuap, 2014).

A comprehensive assessment of patients’ pressure areas informs the development of management and treatment plans to ensure appropriate monitoring and ongoing care (Epuap, 2014).

**Monitoring/ ongoing care**

Ongoing care and management should be agreed in conjunction with the patient, family and carer. Educate patients about their risk status and ways they can prevent pressure damage. Ensure regular skin inspection and complete a full reassessment if there is a change in clinical status, mobility or underlying conditions (NICE, 2014). Continuously monitor nutritional status and give additional nutritional support if necessary.

**Repositioning techniques**

Repositioning and early mobilization are imperative in prevention and treatment. Epuap (2014) recommend a 30-degree tilted side-lying position (alternately, right side, back, left side). Prone position can be used if the patient can tolerate this or if it is suitable for his/her medical condition (Epuap, 2014). If the patient is sitting in bed, avoid head of the bed elevation and slouched position, this places increased pressure and shear on the sacrum and coccyx. For patients who are seated, limit the amount of time seated in the chair, use a footstool if their feet do not reach the floor (Epuap, 2014).

1. Ensure the patients’ comfort and dignity is always maintained
2. Ensure that pressure is relieved or redistributed

3) Avoid subjecting the skin to pressure and shear forces.

1. Use transfer aids to reduce friction and shear. When repositioning patients make sure you don’t drag the patient and observe safe manual handling principles
2. Avoid positioning directly onto a medical device
3. Avoid positioning on bony prominences with non-blanchable erythema
4. Educate patients, family and carers about repositioning.
5. Use pressure redistributing seats, heal pads and high specification foam mattresses or pressure alternating mattresses where necessary. Avoid synthetic sheepskin pads, rings or doughnut style devices
6. Consider pressure relieving cushions for those sitting for prolonged periods of time (Epuap, 2014)

Nurses have a responsibility to deliver evidence-based care and are professionally accountable for their practice. Pressure area care is an important part of nursing practice. Most pressure ulcers are avoidable and nurses should ensure that all appropriate measures are taken to reduce harm and risk factors and prevent pressure ulcer development whenever possible.

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Medical device related

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