

Abstract

Chronic wounds are associated with a significant patient, healthcare and financial burden and can have extensive implications for healthcare. Age is a significant risk factor for developing chronic wounds due to the physical changes in skin integrity that is associated with age and several age-related complex comorbidities including poor nutrition and mobility, which make them more common in this patient group. Pressure ulcers (PU) are a common type of chronic wound that can have a substantial impact on health-related quality of life and patient outcomes. Understanding the extent of PU harm is problematic due to discrepancies in the definition, recording and reporting of PU on both a local and national level. Education and training are central to ensuring the risk factors associated with PU development are recognised and a consistent and coherent structure to the definition, measurement and reporting of PUs across the NHS is developed.

Key words: Older person; pressure ulcer; NHSi; definitions; national curriculum.

Key points

Age is concomitant with complex comorbidities, poor nutrition and mobility that make chronic wounds more common, which can have a considerable effect on health-related quality of life.

PUs are one of the most common types of chronic wound and frail, elderly patients are particularly vulnerable to PU development due to physiological changes in the skin, malnutrition, dehydration and reduced mobility.

Education and training of health care professionals (HCP) is crucial to influencing the impact of chronic wounds in general.

The implementation of NHSi's definitions, recommendations and PU core curricula will impact on clinical practice and it is essential that all HCPs are aware of these documents and share them with others.

Reflective questions

Consider how you will implement the new definitions document published by NHSi.

Discuss with your tissue viability team how the new definitions document impacts on your documentation.

Consider how the new pressure ulcer core curriculum will benefit staff working with patients who have a tissue viability condition, particularly the frail elderly patient for whom chronic wounds are more common.

Wound care continues to be an important area in healthcare and remains a major clinical, financial and patient burden (Vowden and Vowden, 2016; Guest, Vowden and Vowden, 2017) and living with a chronic wound can have a significant impact on the mental health and wellbeing to the patient (Renner and Erfurt-Berge, 2017). The importance of wound care has been recognised by a recent topical debate in The House of Lords (November, 2017). Therefore, generating mechanisms for improving the standard of wound care in healthcare is crucial to improving patient outcomes and quality of care.

Chronic wounds and aging

Chronic wounds are defined as those that do not follow the normal healing trajectory (Frykberg & Banks, 2015) and can include wounds such as diabetic foot ulcers (DFU), venous leg ulcers (VLU) and pressure ulcers (PUs). An estimated 2.2 million patients in the United Kingdom (UK) are thought to be living with a chronic wound (Guest, Vowden and Vowden, 2017) with the annual healthcare cost associated with managing and treating these patients being estimated at £5.3 billion (Guest et al, 2015), owing to the increased resources (including nursing time, dressings, equipment and increased length of hospital stay) associated with the treatment and management of these wounds. Chronic wounds are common in the older patient (Public Health England, 2015); skin integrity weakens with age, making it more susceptible to damage from forces such as moisture, friction and trauma (International Review, 2010). Age is concomitant with complex comorbidities, poor nutrition and mobility that make chronic wounds more common, which can have a considerable effect on health-related quality of life (Gorecki et al., 2009). For example, VLUs affect approximately 1% of the population and 3% of the population over 80 years of age (Posnett et al., 2009) and PU are more likely to occur in those over 70 years of age, due to complex associated health problems that increase the risk of developing them including hip fractures, incontinence, smoking and dry skin (Pressure ulcers: applying All Our Health, Public Health England, 2015). Indeed, Ousey et al (2013) reported PU prevalence was 18.1% in acute and community healthcare settings following an audit carried out in five NHS Trusts in England. Older patients with a PU also have an increased hospital length of stay (Theisen, 2012) and those PUs that are complex and severe are associated with increased costs and delayed healing (Dealey, Posnett and Walker, 2012).

An increasing aging population means that the number of older patients with complex, debilitating chronic wounds are increasing (Gould, 2015), placing increased demands on tissue viability services and the tissue viability nurses that work within them. PUs are one of the most common types of chronic wound, having extensive implications for healthcare. NHS Digital reported that 24,674 patients acquired a new PU between April 2015-March 2016, with an average length of hospital stay of 25 days (NHS Digital, 2016). The average length of hospital stay is reported at 5.6 days (Health and Social Care Information Centre, 2013) and those patients who suffer from a hospital-acquired PU have an increased length of stay of between 5-8 days (Dealey, Posnett and Walker, 2012).

[Pressure Ulcer Prevention in the older patient](#)

Effective management of the risk factors for PU development are a fundamental, preventative measure. Frail, elderly patients are particularly vulnerable to PU development due to physiological changes in the skin, malnutrition, dehydration and reduced mobility (Keevil and Kimpton, 2012). Important physical changes in the skin, such as the thickness of the epidermis (Baranoski and Ayello, 2004; Voegeli, 2007) and dermis (Haroun, 2003) make the skin more susceptible to damage. Dehydration reduces moisture in the skin (Watkins, 2011) and older people are more likely to suffer from a range of skin problems including splitting and cracking (All Wales TVN forum, 2011). Physiological changes also mean older patients are at an increased risk of developing skin tears (Stephen-Hayes and Carville, 2011).

Nutrition plays a vital role in the management and prevention of PU (Horn et al., 2004; Gilmore et al., 1995) and ensuring adequate nutrition and hydration through effective screening and assessment is central in promoting effective wound healing (NHS Improvement, 2018). Stopher and Jansen (2017) conducted a systematic review of the impact and treatment of malnutrition in patients with chronic wounds and found that nutrition plays a vital role in wound healing suggesting that a holistic approach to treatment and care is central in PU prevention.

[Education](#)

Disparity in the extent of education, training and knowledge of healthcare professionals (HCPs) treating patients with chronic wounds has been considered a crucial element and explanation contributing towards the high numbers of patients developing a PU (Greenwood and McGinnis, 2016). Education and training of HCPs in PU prevention and

management correlate with their prevention and development (Greenwood and McGinnis, 2016) with education being crucial to influencing the impact of chronic wounds in general.

The National Stop the Pressure Programme core curriculum (National Health Service Improvement [NHSI], 2018) was developed and designed to formally standardise the education of HCPs in this area by creating transparency, developing recommendations for practice and encouraging consistency for defining, measuring and accurately reporting prevalence and incidence of PUs within NHS Trusts in England. The curriculum is presented as 10 modules and is in two sections: one to be used by Higher Education Institutions and the other to be used in clinical practice. All modules are based around an extended Surface, Skin inspection, Keep your patients moving, Incontinence/increased moisture, Nutrition/hydration (SSKIN) framework referred to as ASSKING (Table 1).

Table 1: ASSKING Framework

A	Assess risk
S	Skin assessment and skin care
S	Surface
K	Keep moving
I	Incontinence
N	Nutrition
G	Giving information

Integral to this curricula is the importance of the learner being able to distinguish between causes of skin damage; for example, being able to distinguish between and accurately report and record PUs, medical device related skin damage and deep tissue injury (NHS Improvement, 2018). The development and implementation of this national educational programme and the introduction of a number of other initiatives to aid the reporting of the incidence of PUs (including the NHS Safety Thermometer incident reporting system; <http://www.safetythermometer.nhs.uk/>; and the Strategic Executive Information System <http://improvement.nhs.uk/resources/steis/>) should help in reducing incidence of PUs that remains elevated, at approximately 0.9% per year (NHS Safety Thermometer, 2018). This curriculum forms an educational resource to enable HCPs to gain appropriate knowledge

and skills to treat and manage PUs effectively, through implementing a minimum standard of education.

Defining and measuring pressure ulcer damage

Discrepancies in the definition and measurement of PU damage impact how they are recorded, both locally and nationally (Smith et al., 2016). Many PUs go unrecognised or are not accurately reported with this being particularly pertinent in relation to deep tissue injury, or skin damage resulting from medical devices (NHSi, 2017). Ascertaining the exact extent of PU harm is problematic. The Pressure Ulcers: revised definition and measurement document (NHSi, 2018) aims to address these variances in reporting. Through providing a summary and recommendations supporting a more consistent and coherent structure to the definition and measurement of PUs across the NHS; the aim of the document is to improve understanding of the level of pressure damage harm in England. Recommendations include standardisation on terminology, definitions and incorporating the reporting of the number of patients with differing types of PUs into local monitoring systems. The document recommends that PUs should have the terminology category assigned to the level of skin damage rather than grade and be defined as "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." The previous '72-hour rule' (NICE, 2014) stating that an 'old' pressure ulcer was defined as being a pressure ulcer that was present when the patient came under the care of that service, or developed within 72 hours of admission to the organisation has now been discounted and replaced with the recommendation this should be abandoned and Trust Boards should review their local reporting policies. In reality, this means that all PU on admission should be incorporated into local monitoring systems with all category 2 or above being incorporated into the local monitoring systems.

Some PUs can be caused by medical devices, e.g. nasogastric tubes (Jaul, 2010), adhesive tapes (Black et al, 2010), tracheostomy (Boesch et al., 2012). A PU that has developed due to the presence of a medical device should be referred to as a 'medical device related pressure ulcer' and should be identified and recorded by the notation (d) after the category e.g. category 2 (d). Categorisation of PUs follows the European Pressure Ulcer Advisory

Panel (2014) 4 categories and unstageable and deep tissue injury. The document further recommends that there should be avoidance of terms such as the 'Kennedy ulcer', previously associated with a PU developing at the end of life and the avoidance of using The Department of Health and Social Care's (2010) definition of 'avoidable/unavoidable harm'; discontinuing use these terms is thought to encourage transparency and promote investigation of all incidents, potentially identifying PUs that may well have previously been missed and therefore unrecorded.

Summary

Chronic wounds are common in the older patient due to changes in skin integrity making it more susceptible to damage (Public Health England, 2015; International Review, 2010). Malnutrition, dehydration and reduced mobility mean that older patients are at an increased risk of developing PU (Keevil and Kimpton, 2012) meaning that preventative measures are imperative to managing this at-risk patient group. Education is fundamental in ensuring PU are managed, recognised and reported accurately and efficiently. The implementation of NHS's definitions, recommendations and pressure ulcer core curricula will impact on clinical practice. It is essential all HCPs are aware of these documents and share them with others. Current identification and recording of pressure damage will require subtle changes to ensure the recommendation are adhered to.

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