

The high impact actions for nursing and midwifery 4: your skin matters

Pressure ulcers are a major sickness burden, and cause reduced quality of life for patients. The high impact team reveal how to prevent avoidable skin damage

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Pressure ulcers can occur in any patient but are most common in high risk groups such as: older people; those who are obese, malnourished or with continence problems; people with certain skin types; and those with certain underlying conditions. Pressure ulcers increase morbidity and mortality, and represent a significant proportion of NHS expenditure, yet the vast majority are avoidable. This article, the fifth in our series on the high impact actions for nursing and midwifery, looks at how nurses can prevent pressure ulcers in their patients.

INTRODUCTION

Pressure ulcers occur in 4-10% of patients admitted to hospital. It is more difficult to measure their occurrence in the community, but it is estimated that as many as 20% of people in nursing and residential homes may be affected, and up to 30% of the population in general (Clark et al, 2004).

These often devastating wounds are associated with an increased risk of secondary infection, and older people in intensive care units who develop them are 2-4 times more likely to die (Bo et al, 2003).

An estimated 4% of total NHS expenditure (£1.4-2.1bn a year) goes on treating pressure ulcers (Bennett et al, 2004). Treatment costs vary depending on the grade of ulcer, from £1,054 for a grade 1 to £10,551-24,214 for a grade 4 ulcer, depending on associated complications. Some 90% of daily care costs (£38-£196) are accounted for by nurses' or healthcare assistants' time.

Most pressure ulcers that develop in NHS settings are avoidable. Often, they occur because the processes that should prevent them fail. For example, nurses may not be able to obtain the right equipment or may be too busy to do an early assessment.

Preventing pressure ulcers needs input from multidisciplinary teams to create simple processes that work and that everyone follows. Each member of the team needs to take responsibility for the risk assessment, management and prevention of pressure ulcers.

WHAT CAN NURSES DO?

Pressure ulcers should be seen as avoidable, not inevitable, adverse events and ownership of the problem is crucial.

While preventing them is often viewed as the remit of tissue viability nurses alone, these specialists cannot tackle the problem in isolation – the whole multidisciplinary team needs to work together to address it. A cross organisational approach will help to reduce the occurrence of pressure ulcers both in the community and in hospital settings.

Nurses must investigate to find the root cause of the problem and then compare their approaches with best practice.

As a starting point, you need to:

- Think about your high risk patients, because risk is predictable;
- Carry out timely skin assessments;
- Make sure the right equipment is available;
- Improve nutrition and hydration;
- Initiate and maintain suitable measures of how you are doing;
- Use the expertise that is available to you – tissue viability specialists, medical staff, dietitians, physiotherapists, occupational therapists and the patient;
- Make sure that education and training focuses on prevention as well as treatment.

The Essential Collection (NHS Institute for Innovation and Improvement, 2010) includes four case studies from different settings, each of which shows success in addressing the issue of pressure ulcers.

THE ESSENTIAL COLLECTION



The Essential Collection, plus literature reviews for each high impact action, can be downloaded from the NHS Institute website. This also contains an opportunity estimator so that you can calculate potential savings, and a range of tools and resources.

Go to: www.institute.nhs.uk/hia

CASE STUDY 1: ENSURING THE RIGHT EQUIPMENT

East Kent Hospitals University Foundation Trust was keen to prioritise the use of pressure relieving mattresses to ensure they were available for patients who needed them the most.

The trust employed support workers (seconded healthcare assistants) to manage the use of these mattresses and instigated a "mattress amnesty" to encourage wards to return those they did not need – it took perseverance to convince wards to do this. The mattresses were returned to a central equipment library where they were decontaminated and safely stored. Support workers played a crucial role in this, and they needed strength of personality to challenge staff in higher grades.

They also helped to improve the reporting and collation of information about pressure ulcers, which means that grade 1 ulcers can now be targeted to help prevent them from progressing to grade 2.

A tissue viability multidisciplinary foundation course was created in 2006 and is held regularly for staff. The trust has also implemented revised tissue viability guidelines and a wound care formulary.

Impact of the initiative

In 2008, 42% of patients were considered to be receiving the most appropriate wound

care. By 2009, this had improved by 23.7 percentage points, to 65.7%. The prevalence of wound infection fell from 18% in 2008 to less than 9% in 2009. The patient experience has improved and staff are increasingly confident and empowered in their approach to wound management. The tissue viability course is popular and often oversubscribed.

CASE STUDY 2: FOCUSING ON CONTINENCE CARE

The opening of a new isolation ward to tackle high rates of *C. difficile* infection in Kettering General Hospital led to a request for 10 extra air mattresses, each costing £3,000. The hospital believed the mattresses were necessary to combat the possibility of pressure ulcers in patients with diarrhoea. However, the tissue viability team recognised that skin damage in patients with *C. difficile* was caused by incontinence rather than the type of mattress used, and that patients were at risk of developing moisture lesions rather than pressure ulcers.

The solution was a return to the essentials of patient care. Nurses needed to keep fluid away from patients' skin to prevent moisture lesions, which meant using the right incontinence products. The tissue viability specialist worked with the hospital's suppliers to identify which products were best suited to which categories of patient.

A training and education programme was developed for staff, covering how to measure patients, and how to fit the products and recognise when they need changing. After introducing the training to the isolation ward, it was rolled out to medical and surgical wards across the hospital.

Impact of the initiative

No moisture lesions developed on the isolation ward over the course of a year, while an audit of medical wards before and

after the change showed that their incidence was reduced by 80%. Typically, 5% of patients had moisture lesions before the change, and this fell to 1% or less after. The training sessions achieved 100% attendance for staff on the isolation ward.

CASE STUDY 3: WORKING WITH NURSING HOMES

Newham Primary Care Trust had a well established and highly effective tissue viability service with an active education and training programme as well as a wound formulary for routine care.

The service found it was receiving more and more calls from nursing homes in its area for advice on tissue viability for residents. Referrals from these homes tended to come late when pressure ulcers were advanced and often required hospital admission.

The tissue viability service appointed extra nurses to work specifically with nursing homes. It took perseverance to convince commissioners that additional funding was justified, but a new practice nurse and district nurses were appointed in November 2008 to work part time with staff in nursing homes. Although the nurses met some resistance initially, they worked hard to give nursing home staff the skills and confidence to detect pressure ulcers early and intervene.

Now, nursing home staff are proactive in contacting the tissue viability service for advice and support whenever they need it. They enjoy being able to improve the quality of life of their residents and have proved enthusiastic learners.

A forthcoming training course for healthcare assistants already has a waiting list. The trust wound care formulary has been introduced across nursing homes to ensure that dressing selection is appropriate for the wound type.

Impact of the initiative

There has been a reduction in the number and severity of pressure ulcers in nursing homes. Data from acute providers shows a decrease of 50% in the number of patients with pressure ulcers admitted from the community between April 2008 and August 2009. This has improved the quality of care and patients' quality of life and there have been fewer grade 3 and 4 pressure ulcers.

The team carries out root cause analysis for every patient admitted to hospital with a pressure ulcer. The local formulary for prescribing across the PCT has been rolled out voluntarily to nursing homes, with 80% compliance.

In 2009, following the changes, the

number of patients admitted from the community with pressure ulcers decreased by 72.5%. This equates to a saving of around £1.5m and a return on investment of £51 for every £1 spent.

CASE STUDY 4: A ZERO TOLERANCE APPROACH TO PRESSURE ULCERS

Nurses working in the plastic surgery unit of the Abertawe Bro Morgannwg University Health Board regularly admitted patients requiring surgery and skin grafts for severe pressure ulcers, many of which had occurred in hospital. The ward believed the majority of hospital acquired pressure ulcers are preventable and came up with the idea of a zero tolerance approach.

Staff audited the unit's own rate of nutrition and skin viability assessments and found improvements were needed. They introduced a SKIN (surface, keep moving, incontinence, nutrition) tool for patients who were identified as being at high risk. This single sheet of paper acts as a contract between staff and patients to ensure that best practice is followed.

The SKIN tool was introduced slowly, but is now in place across the trust's four sites and 92 wards. The number of pressure ulcers is publicly displayed and the number of "green" (that is, no pressure ulcer) days is a source of pride among staff. The director of nursing writes to staff when their wards reach 100 days free from pressure ulcers and the rate is regularly reported at board meetings.

Impact of the initiative

The pressure ulcer rate was reduced on Anglesey Ward from 4.5% to zero. The ward went 638 days without any pressure ulcers. Across the health board, the rate of pressure ulcers has been cut from 13% to zero. Many wards are now approaching a year without any pressure ulcers. Patients and families have become partners in the SKIN approach. The cultural shift is such that staff now regard pressure ulcers as unacceptable. This project also won a *Nursing Times/HSJ* patient safety award this year ●

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