Working to reduce pressure ulcers in Scotland

Susan Baxter, Susan Downie

Every year, thousands of people in Scotland are affected by pressure ulcers, which can be painful, debilitating and life-threatening (Hopkins et al, 2006). Pressure ulcers are areas of tissue damage that typically occur in people who are unable to reposition themselves, such as the acutely ill, the elderly and the malnourished. The cost of treating a pressure ulcer imposes a significant financial burden on healthcare services, and treatment costs can range from £1,000 to £17,000 depending on the severity of the ulcer (Bennett et al, 1994). Costs increase in the most severe cases because healing time is longer and the incidence of complications is higher. Pressure ulcers cost the NHS an estimated £1.4–2.1 billion annually (Department of Health [DH]). Such figures, however, do not include the rising litigation costs associated with pressure ulcers.

Significant effort has been made to improve pressure area care in NHSScotland, and to tackle associated treatment and potential litigation costs with limited financial resources.

The first phase of the programme focused on developing a suite of resources and tools which were made available via a web-based resource. This made accessing information on the prevention and management of pressure ulcers feasible for clinicians across a spectrum of care settings, including the NHS, community-based, voluntary or hospice-based.

The toolkit includes risk assessment tools, compliance measurement charts, a pressure ulcer grading scale, an excoriation tool, a dressing change package, and a best practice statement and associated audit tool on the prevention and management of pressure ulcers. Also included is the SSKIN care bundle, a powerful and central tool, which brings best and preventative practices together. SSKIN stands for: surface, skin inspection, keep moving, incontinence and nutrition, all aspects of care that staff are required to consider. A change package is also included.

By making the process of preventative care visible through a care bundle approach, the reliable delivery of best practice at every opportunity is maximised. This improves the pressure care that patients receive. The toolkit and supporting education pack are available online at: www.healthcareimprovementscotland.org.

What’s new?
NHS QIS has recently been succeeded by Healthcare Improvement Scotland, a new health body created by the Public Services Reforms (Scotland) Act 2010 launched in April 2011. Its key purpose is to provide assurance to patients and the public about the safety and quality of healthcare services in Scotland. Healthcare Improvement Scotland utilises the work of its predecessor organisations, NHS QIS and the Care Commission, issues advice based on the most up-to-date evidence and has been working with NHS boards to ensure that the appropriate methodology for making improvements is put in place.

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The integrated cycle of improvement (Figure 1) has been developed to articulate how the use of evidence and scrutiny supports improvement in health care. Healthcare Improvement Scotland works across all three areas (improvement, scrutiny and evidence) to meet the challenge of providing governance and public assurance in a way that also allows the flexibility and creativity that is necessary to support healthcare providers in delivering improvement.

The national tissue viability programme continues to be a priority for Healthcare Improvement Scotland. However, the focus is now on quality improvement rather than assurance. Building on the toolkit developed by NHS QIS, the current phase of the programme aims to make the following improvements at six test sites (with ‘site’ being defined as one hospital ward or care home) within a 12-month period:

- Reduce pressure ulcers by 50%
- Increase the number of days elapsing without a new pressure ulcer developing.

**Shared learning**

Recognising that pressure ulcers are a global concern, NHS QIS sought examples of success in pressure ulcer prevention before embarking on this work for NHSScotland. Through the programme’s quality improvement collaboration networks, this scoping exercise found:

- New Jersey Hospital Association, USA, achieved a 70% reduction in pressure ulcer incidence in one year
- Six Ascension Health hospitals in Texas, USA, had no pressure ulcers for one year
- Abertawe Bro Morgannwg University Health Board, Wales, achieved more than two years without a pressure ulcer.

It was evident from these examples that areas of good practice that changed care processes had led to measurable improvements in outcome. It was concluded that achieving a reduction in pressure ulcer occurrence and an increase in the number of days between these events in NHSScotland should be possible by increasing compliance with risk assessment and with all elements of the pressure ulcer prevention care bundle. This could lead to a consequential reduction in the number of complaints, shorter associated lengths of stay and decreased costs.

During the course of this analysis, the programme team worked closely with a range of clinicians, academics and quality improvement leads to learn about pressure ulcer prevention. This informed the approach taken in the programme, which is summarised in Table 1. This outlines the elements that were identified as changes, which, if made, should lead to a successful outcome. These changes were implemented in the six test sites.

In conjunction with this, the team drew on the work of others, and tested and adapted a change package based on the 1000 lives campaign in NHS Wales (www.wales.nhs.uk/sites3/home.cfm?orgid=781), making it relevant for use in Scotland. The change package identifies and establishes recommended interventions, which have been proven collectively to bring about improvements in pressure area care as part of a whole system of care. The change package consists of three distinct parts – a driver diagram, change concepts and ideas and measurement.

A driver diagram is a way of describing the elements that need to be in place to achieve an improvement aim, helping to focus on the cause and effect relationships that often exist in complex circumstances. The primary drivers are high-level ideas that, if implemented, will achieve the improvement aim. Secondary drivers are the actions or projects, which will support implementation of the

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primary drivers. In contrast, change concepts and ideas are an approach aimed at improving an aspect of care. Measurement is important to know if the changes implemented have actually led to an improvement and to evaluate the effectiveness of change.

**Evaluating the approach**

A continuous process of evaluation was undertaken throughout the 12-month duration of the third phase of this project, which employed the use of the Institute of Healthcare Improvement Collaborative Model (Langley et al, 2009). The model involves selecting a topic and developing a mission statement, illuminating what the aims and goals of the work will be. Governance of the work is assured through an expert planning group to which a developed framework and its changes are proposed. Three learning sessions were planned and hosted for frontline staff and tissue viability nurses to attend over the course of the 12-month period. Before each learning session, staff were required to undertake an improvement learning activity. For example, reviewing the notes of the last five patients who developed a pressure ulcer on their ward or care home to identify potential reasons as to why a pressure ulcer occurred. Between the learning sessions, conference calls and support site visits took place to ensure a focus towards realising the goal of reducing pressure ulcer incidence, it is evident that team vitality has been enhanced in the test sites. The small cohort of frontline staff have focused on the need for change, having been given evidence that improvement is feasible and encouraged to maintain focus through the use of continuous quality improvement. An improvement impact, well-defined tools to be tested, adapted and adopted. The willingness of clinicians to embrace a developed framework and its changes are proposed. Three learning sessions were planned and hosted for frontline staff and tissue viability nurses to attend over the course of the 12-month period. Before each learning session, staff were required to undertake an improvement learning activity. For example, reviewing the notes of the last five patients who developed a pressure ulcer on their ward or care home to identify potential reasons as to why a pressure ulcer occurred. Between the learning sessions, conference calls and support site visits took place to ensure a focus on the need for change, having been given evidence that improvement is feasible and encouraged to maintain focus through the use of continuous quality improvement. An improvement support infrastructure, however, is required for national implementation and dissemination of this work.

**Signs of success**

A sample of data from the test site has been reviewed and the positive impact of this work is becoming clear. Two of the sites have achieved more than 200 days without a preventable pressure ulcer. Other test sites have moved closer to achieving their improvement aim. Healthcare Improvement Scotland makes it clear that this is not just research data for analysis — rather it is data collected for the NHS boards and should be used for sites to facilitate improvement. Data are also used as evidence that real improvements can be made to patient care.

It has also been encouraging to note the level of compliance with the various components of the toolkit and the willingness of clinicians to embrace this way of working, which have informed the improvements that they have made.

**Going forward**

**Building capacity and capability**

In addition to this significant step towards realising the goal of reducing pressure ulcer incidence, it is evident that team vitality has been enhanced in the test sites. The small cohort of frontline staff have focused on the need for change, having been given evidence that improvement is feasible and encouraged to maintain focus through the use of continuous quality improvement. An improvement support infrastructure, however, is required for national implementation and dissemination of this work.

Further information will be available in the National Tissue Viability Programme summary, expected to be published by Healthcare Improvement Scotland later this year.

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**Table 1: Programme summary**

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<th>Focus on prevention instead of detection and mitigation</th>
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<tr>
<td>Provide a framework to empower frontline staff to seek out new ways to improve continuously how they provide care</td>
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<td>Build a collaborative between tissue viability nurse specialists and frontline staff using a collaborative model</td>
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<td>Facilitate an approach which allows for high impact, well-defined tools to be tested, adapted and adopted</td>
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<td>Make the process of care visible to all, and thus increase the reliable application of evidenced-based care to impact on pressure ulcer reduction</td>
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**References**


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Do you have a topic that is pertinent and timely to your area of practice that you would like to raise and discuss in the Comment section of Wounds UK? If so, please contact binkie.mais@wounds-uk.com