

Reducing unwarranted variation in chronic wound care

KEY WORDS

- ▶ Costs and cost analysis
- ▶ Health policy
- ▶ Injuries
- ▶ Wounds

The annual cost to the NHS for managing the 2.2 million wounds and their associated comorbidities is estimated to be between £4.5 billion and £5.1 billion. Improving the quality of wound care should reduce healthcare spending and improve patients' quality of life. The new NHS England wound care management project, which is part of the Leading Change, Adding Value nursing and midwifery framework, seeks to reduce unwarranted variation in the assessment and treatment of wounds across the patient pathway by developing a number of wound-focussed initiatives. This article introduces the project and outlines the development of an evidence-based wound assessment minimum data set that will be monitored by a wound assessment Commissioning for Quality and Innovation (CQUIN) indicator. This initiative demonstrates the need for good quality economic data to identify clinical issues of concern that can then be addressed by appropriate policy initiatives to improve patient care and make the best possible use of NHS resources.

For some years, the UK tissue viability community has been concerned about the quality of chronic wound care. A recent health economic paper (Guest et al, 2015) has prompted a health policy shift around the care of chronic wounds. This article is the first in a series outlining how NHS England is addressing the need to improve chronic wound care.

Evidence supporting the need to improve chronic wound care has existed for some time. For example, two prevalence surveys conducted nearly 10 years ago highlighted that leg ulcer care was sub-optimal. One study found that 23.6% of leg and foot ulcers were not assessed using Doppler and that 46% of people with venous leg ulcers (VLUs) were not in compression (Srinivasaiah et al, 2007). A second study found similar results, with 33.6% of leg ulcers not assessed using Doppler and 25% of people with VLUs not in compression (Vowden and Vowden, 2009). A more recent point prevalence survey has found similar results (Cullum et al, 2016). Although 87.6% of people with VLUs

were in compression, only 67.8% were in full compression. Forty per cent of leg ulcers had not been assessed using Doppler. Most treatment was delivered in primary or community care settings by district nurses or home care teams or in GP practices.

DETERMINING THE EXTENT OF THE PROBLEM

In 2014, a health economic assessment sought to estimate the prevalence of wounds managed by the NHS in 2012/13 (Guest et al, 2015). It also aimed to determine the annual levels of healthcare resource use attributable to wound management and the corresponding costs using The Healthcare Improvement Network (THIN) database. THIN database contains computerised information on over 11 million anonymised patients. The data are entered by GPs from 562 practices across the UK and have been shown to be representative of the UK population in terms of demographics and disease distribution. Guest and colleagues' retrospective cohort analysis of THIN database

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included the records of 1000 adult patients who had a wound in 2012/13. These patients were randomly selected and matched with 1000 individuals with no history of a wound. Patients' characteristics, wound-related health outcomes and healthcare resource use were quantified.

Results of the assessment

In 2012/13, the NHS managed 2.2 million wounds. The estimated cost to the NHS of managing these wounds and their associated comorbidities was between £4.5 billion and £5.1 billion (Guest et al, 2015). This is similar to the amount the NHS spends on obesity, which is recognised as a major health issue, with considerable associated healthcare costs and spending on public health campaigns. If the quality of wound care can be improved, it is likely that we can significantly reduce healthcare spending and improve patients' quality of life.

The call to action

In May 2016, Professor Jane Cummings – Chief Nursing Officer for England – launched *Leading Change, Adding Value: a framework for nursing, midwifery and care staff* (NHS England, 2016). This document provides a framework through which to achieve the 'triple aims' of:

- ▶▶ Better outcomes
- ▶▶ Better experiences
- ▶▶ Better use of resources.

One of the national programmes in *Leading Change, Adding Value* is wound care which highlighted the need for a project to consider a national approach to wound care management. This project was promptly commenced by NHS England establishing the new Improving Wound Care Project to reduce unwarranted variation in the assessment and treatment of wounds across the patient pathway. The initial focus has been on patients whose wounds are cared for within community and primary care services. Seven work streams have been identified.

- ▶▶ The development of a national Commissioning for Quality and Innovation indicator (CQUIN)
- ▶▶ The development of an evidence-based wound assessment minimum data set (MDS)
- ▶▶ The development of an economic case for

wound care using the RightCare methodology (NHS England, 2017)

- ▶▶ The development of resources for commissioning wound care services
- ▶▶ Improving the treatment of wounds of the lower leg (i.e. leg ulcers)
- ▶▶ Education and competencies for wound care
- ▶▶ The continued rollout of the React to Red Skin pressure ulcer prevention campaign.

In October 2016, a call went out to the nursing community to invite clinicians with an interest in wound care to join working parties for each of the work streams. These parties met for the first time in November and early December. All seven work streams are making significant progress.

This article reports on the work stream that was tasked with developing an evidence-based MDS (Coleman et al, 2017). The work being carried out in the other work streams will be reported on in subsequent articles.

THE EVIDENCE-BASED WOUND ASSESSMENT MINIMUM DATA SET

This work stream has been led by Dr Susanne Coleman from the University of Leeds. The aim was to establish a generic wound assessment MDS that organisations would be expected to use to inform their wound assessment documentation (whether written or electronic) for wounds of more than 4 weeks' duration. It is anticipated that this will create a more consistent approach to wound assessment practice and facilitate improved decision making about care/treatment and wound healing progress for difficult-to-heal or chronic wounds. These types of wounds incur the greatest costs and have the biggest impact on quality of life. The detailed methods and results of this work have recently been published in the *Journal of Tissue Viability* (Coleman et al, 2017).

Coleman and colleagues' literature review identified key areas, referred to as domains, and potential assessment criteria to be included in the MDS. These were then considered by an expert group (comprising 17 nurses and doctors with an interest in wound care) using consensus techniques (Fitch et al, 2001). A face-to-face meeting and pre- and post-meeting questionnaire completion were used to inform what should be included in the

Table 1. Generic wound assessment minimum data set (Coleman et al, 2017)

Domain	Core generic wound assessment minimum data set
General health information	<ul style="list-style-type: none"> ▶▶ Risk factors for delayed healing (systemic and local blood supply to the wound, susceptibility to infection, medication affecting wound healing, skin integrity) ▶▶ Allergies* ▶▶ Skin sensitivities ▶▶ Impact of the wound on quality of life (physical, social and emotional) ▶▶ Information provided to patient and carers
Wound baseline information	<ul style="list-style-type: none"> ▶▶ Number of wounds ▶▶ Wound location ▶▶ Wound type/classification ▶▶ Wound duration ▶▶ Treatment aim ▶▶ Planned re-assessment date
Wound assessment parameters	<ul style="list-style-type: none"> ▶▶ Wound size (maximum length, width and depth) ▶▶ Undermining/tunnelling ▶▶ Category (pressure ulcers only) ▶▶ Wound-bed tissue type ▶▶ Wound-bed tissue amount ▶▶ Description of wound margins/edges ▶▶ Colour and condition of surrounding skin ▶▶ Whether the wound has healed
Wound symptoms	<ul style="list-style-type: none"> ▶▶ Presence of wound pain ▶▶ Wound pain frequency ▶▶ Wound pain severity ▶▶ Exudate amount ▶▶ Exudate consistency/type/colour ▶▶ Odour occurrence ▶▶ Signs of systemic infection* ▶▶ Signs of local wound infection ▶▶ Whether a wound swab has been taken
Specialists	<ul style="list-style-type: none"> ▶▶ Investigation for lower limb (ankle brachial pressure index) ▶▶ Referrals (tissue viability service, hospital consultants)
*Should be recorded in generic wound assessment minimum data set if not in the wider patient record	

generic wound assessment MDS (Coleman et al., 2017). Further consultation was undertaken with the Expert by Experience Group (comprising a service user and practising district and practice nurses), which was brought together to support the NHS England Improving Wound Care Project. This approach combined academic knowledge with technical and practical wisdom to inform the MDS. *Table 1* highlights the five domains and 37 core generic MDS items, including risk factors for

delayed healing and wound size, that were agreed upon by the expert group.

Implementation

To support implementation of the MDS in practice, a user document has been developed explaining the rationale and guidance to facilitate a standardised approach to completion in clinical practice. This user document has been shared with regional nursing teams. It is important to note that this is a MDS, and thus organisations can add other items should they wish.

In recognition of the varying approaches to wound assessment and the different types of patient records used (i.e. written, electronic and combined), this project aimed to identify the MDS assessment criteria that should be considered in wound assessment policies and documentation, rather than develop a specific assessment form that may or may not fit in with local documentation. This was considered important in avoiding duplication in patient records, which can be burdensome to staff and offer no additional patient benefit. To demonstrate how the MDS might be translated into data collection in practice, a sample wound assessment form is being developed. The form is being designed so that it can be used as it is or amended for local use as required.

The wound assessment CQUIN

The implementation of the MDS will be monitored by a wound assessment CQUIN. The CQUIN scheme aims to improve clinical quality and deliver transformational change, thus supporting the ambitions of the *NHS Five Year Forward View* (NHS England, 2014). The CQUIN for Improving the Assessment of Wounds requires community services to place a greater emphasis on wound care, leading to better patient and system outcomes though increasing the number of full assessments for wounds that have failed to heal after 4 weeks.


Use of photography

While the use of photography was not specifically included in the MDS, the expert group recognised photography as good practice for wound assessment and ongoing monitoring.

It is anticipated that this could be included in future iterations of the MDS when high-quality cameras are consistently available in clinical practice.

CONCLUSION

This initiative demonstrates the value of good quality health economic data to identify clinical issues of concern. Such issues can then be addressed by appropriate policy initiatives to improve patient care and make the best possible use of NHS resources.

The development of the MDS demonstrates how collaborative working between policy makers, clinical practitioners and academics can develop strategies that are scientifically robust and take account of the needs of clinical practice. Such initiatives are important in the drive to ensure that scarce resources are used as effectively as possible and patients get the best possible care. 

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