Data, information and the impact on promoting the work of wound care practitioners

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The coalition government set out in its 2010 vision, *Liberating the NHS* (Department of Health [DH], 2010), that all organisations in the NHS should become more transparent and improve accountability to assist people make better choices on what care they receive and from whom they receive it.

One of its strategies was an initial consultation (DH, 2011a) held in late 2010 and its response (DH, 2011b) in 2011, as part of its ambition to understand the 'information revolution' required to transform the NHS to deliver more efficiently, with data being the enabler to demonstrate that effectively.

The 'information revolution' is to have a major impact on how care is delivered. Its range will be from how care is delivered, where care will be delivered, expanding to the way we use data to both understand what resources are needed, to the outcomes of care received and the experience of that care. This will require information systems to collate data allowing people to be assured that care is high quality and safe, and for policy makers and service delivery leads to plan and to commission quality and efficient care and services.

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Patients and service users (according to the government) will have a major say in what care they receive, from whom and where care is delivered, and thus how this will impact on the new Clinical Commissioning Groups (CCGs) commissioning profiles based on transparent information. Information and data is central to giving service users the choice of their care in the future.

Current position

However, while data rich, the NHS remains currently information poor; while practitioners record much about the care they deliver, the systems do not allow them (currently) to join the bits of data together to give robust or practical information. While data is still traditionally captured in the majority of cases on paper, in particular nursing data is recorded in much the same way that it was done a generation ago, that is now changing as electronic patient records are being introduced.

NHS information comes from health records and ultimately through coded data. This is the activity of identifying what has happened and assigning an agreed code. The information gets collated and used to compare what has happened to patients. In essence, coding focuses on the diagnostics and procedure codes (operations/tests, etc) [process] and some degree of diagnosis [outcome]. As such, healthcare practitioners are unable to demonstrate effectively what the outcomes of care are based on: the inputs of resources, therapeutics and competence of professionals. This is currently the case in relation to coding data of care.

Coding in the NHS and its issues

The NHS uses several different coding systems. Some are used to code procedures known as OPCS codes (Classification of Interventions and Procedures [OPCS-4]), while others code medical diagnosis. Within the NHS there are two main diagnosis-coding systems in place:

1. In acute and hospital care there is Hospital Episode Statistics (HES), which codes diseases against the World Health Organization ICD10 (WHO, 2007) — an internationally recognised diagnostic coding system. It was developed as an international approach to understand the causes of death. It is based within hospital care settings and allows UK data to be compared with other countries. The HES data is used across the NHS in hospital settings and the data is compiled locally while submitted centrally to the NHS Information Centre.
2. Within community services, especially in general practice (GP), READ coding is used. This is a parallel coding system, which GPs, their teams and some providers in social care use to code their care. It is an NHS system that is aligned to other coding systems. However, the data is held locally as opposed to nationally.

The current coding systems have limitations. Firstly, coding does not transcend the patient's pathway. If a patient, while under the care of their GP, has a series of tests and diagnosis, that information stands alone. Although some of it will be analysed nationally, the data

is not linked to the care record used in the local hospital.

Secondly, the care of the patient in hospital is coded without direct linkage to GPs' systems, and equally stands alone. However most, if not all, coded data is reported to the centre for compilation and national analysis.

Thirdly, while both systems capture diagnosis, the level of detail of the diagnosis is limited. While some activity is captured not all of it is, and several systems are used, for example, diagnostic coding systems and procedure coding (see below). GP systems are coded using READ codes, many using computerised systems. However, many of the NHS secondary and tertiary care providers predominantly hold health coding and diagnostic data on paper, and manually code this information. This limits granular understanding of care.

Finally, the systems are broadly based on the medical model. While this provides a definitive diagnosis for the individual, it fails to capture nursing (or other professional) diagnosis because of the lack of a common language or system. A nursing diagnosis has been described by Gordon (1998) as the nurse's clinical judgement about the client's response to actual or potential health conditions or needs.

Coding and wounds

HES uses WHO's ICD-10 Version 2007 diagnostic coding and currently has only two codes for tissue viability and wounds:

1. L89.1 for decubitus ulcers, which includes plaster ulcers
2. Varicose ulcers (I83.0 and I83.2). There is also an L97, an ulcer of lower limb, not elsewhere classified. This limits what is coded.

UK coding of pressure ulcers does not currently have a sub-division for the agreed European classification of pressure ulcers. For healthcare staff, especially nursing staff caring for wounds, this means that they are unable to robustly document and articulate the impact of their care. This disadvantages nursing's ability to demonstrate how it contributes to the outcomes of care that could be captured by having adequate coding in place. The ability to be able to accurately code incidence of pressure ulceration is vital, as pressure ulcer occurrence is a recognised indicator of good nursing care (Griffiths et al, 2008).

Current NHS coding systems have resulted in archaic systems limited in purpose, predominately counting rather than providing outcome-focused information, which do not use a flexible clinical terminology (basically an accepted language) to support better data capture. While health languages — nomenclatures and taxonomies — are not coding systems, they do have flexibility of being able to link to central coding systems from agreed phrases, including activities and diagnosis.

Coding, language and the future for health and wounds

The DH has recently clarified the situation on the future of health terminology (DH, 2011c). It recognises that as part of the information revolution and the need for a system which captures information on health, a standardised approach is needed. SNOMED CT (systematised nomenclature of medicine clinical terms) is that approach, consisting of comprehensive, scientifically validated multiprofessional language.

As a standard clinical internationally used language, it is used across health, with healthcare professionals being central and necessary to capture what is happening in an accepted way in the electronic health record across care settings. It is much more than just a set of clinical phrases, for example, it also includes groups with relationships between terms and is sensitive enough to be used for coding.

In relation to wound care, there are currently just two broad codes in HES and several in READ. However, SNOMED has over 55 terms directly related to the history, assessment, impact and categories of pressure ulcers. It has over 16 terms regarding leg ulcers. When you further apply who is providing or assessing care, where the care is provided, the processes, actions, anatomical areas being treated, there is now a language which allows practitioners to be able to articulate their inputs and value, as well as the outcomes of the care they have delivered.

Before you think you need to know these codes and systems, you do not. A change to a standardised health language will not affect direct practice of care. In the future, healthcare professionals will be entering data into handheld systems and computers, using systems with agreed language, which behind the scenes will apply these SNOMED-codes. It will compile the data to allow you to understand who is doing what, where, and when to patients with wound-related issues. It will help the profession to look at the impact of care on outcomes, and all from the initial time an entry is made in a care record. Benchmarking of practice will become easier, if not automatic in the future, without having to spend hours over spreadsheets. The future in health informatics and management of wounds will be part of that information revolution.

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