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Why do we bother grading pressure ulcers?

The use of grading tools for the description of the severity of pressure ulcers has been described for several decades. However, since their first use, many authors have identified considerable shortcomings with them, which have not improved significantly despite an increasing number of systems being available.

There is no evidence that grading the severity of the damage has any significant impact on the management of pressure ulcers, for example, the grade gives no indication of the size, tissue type, presence or absence of infection or any other clinical indicator, therefore it serves no useful purpose in terms of planning care aimed at, where possible, healing the ulcer. Some areas and some guidelines, most notably the National Institute of Health and Clinical Excellence (NICE, 2005) and the European Pressure Ulcer Advisory Panel/National Pressure Ulcer Advisory Panel (EPUAP/NPUAP, 2009), offer guidance based on two groupings, categories 1 and 2 and categories 3 and 4, where different levels of equipment may be used.

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However, they do not offer separate guidance for each category.

Why else may the category of damage be collected? Most trusts collect data on the severity of damage within both their prevalence and incidence data. However, in most other disease states this is not the case, both of these counting systems are about the occurrence of the disease, the patient either has, or does not have, a pressure ulcer, what additional information is gained from knowing the severity. The majority of documents, for example, the International Guidelines on Pressure Ulcer Prevalence and Incidence (MEP, 2009) or the Nurse Sensitive Outcome Indicators (CNO, 2010) do not mention the severity of damage in the calculation. Some may argue that identifying the severity has considerable cost implications citing the cost models used within, for example, the Pressure Ulcer Productivity Calculator (Department of Health [DH], 2010), costings which are based on averages which are based on guesstimates, no one really knows the cost of managing a patient with a pressure ulcer — and surely the cost varies so considerably between cases it would be impossible to determine.

The only reliable evidence that exists about pressure ulcers is that clinicians are unable to correctly grade them (Defloor and Schoonhoven, 2004; Briggs, 2006; Beeckman et al, 2007), and are often unable to distinguish them from wounds of other aetiologies such as moisture lesions or incontinence-

associated dermatitis (Beeckman et al, 2008; McDonagh 2008).

Yet, over the last two years, there has been increasing pressure put on tissue viability nurses to collect, interpret and manipulate data based on the frequency and grades of pressure ulcers occurring within their trusts. In many (but by no means all) trusts, the occurrence of a category 3 or 4 not only triggers an incident form but also a root cause analysis (this may take many and varied forms). CQUIN targets focus not only on reduction of occurrence of pressure ulcers, but reduction of particular grades. Is this all just a huge waste of time? Tissue viability nurses and university lecturers spend more man hours than is reasonable trying to educate clinicians to correctly identify these wounds — so far, with little success, so what is the point in basing quality metrics on what is clearly wildly inaccurate information? Can we judge the quality of care that is delivered when we have no reliable way to measure the outcome of interest?

Given these inaccuracies, would it not be better to have only three categories (and thus reduce the chance of inaccuracies purely by reducing choice), namely:

- ▶ Non-blanching erythema (NBE), as the late and very pragmatic Tom Defloor said, this is a warning sign of impending damage, a point clearly illustrated in the randomised controlled trial (RCT) by Vanderwee et al (2007) who used NBE as a risk indicator

CJ: ...only a small percentage of clinicians can accurately assess what is and is not pressure damage.

KO: ... students will often experience patients with skin damage early in their training and this may not have been covered in the curriculum. Thus, why have clinical staff not informed them about grading systems?

in a direct comparison against Braden. The patients who were risk assessed by NBE developed no more or no more severe pressure ulcers than those assessed using the Braden scale. However, the ward only used a third of the amount of equipment than the ward that used Braden — a huge cost-saving

- ▶ **Superficial damage, i.e. damage that only involves the skin, as long as appropriate care is implemented, seems to get better in a relatively straightforward way**
- ▶ **Deep tissue damage: in addition to any ulcers that obviously progress through the dermis, this could include all those pressure ulcers counted as 'unstageable, deep tissue injury, or evolving' anywhere, where it is clear from the texture, temperature and colour of the skin that there is clearly deeper damage.** **JF**

Do you believe clinicians accurately identify pressure ulcers as distinct from other aetiologies, particularly on the sacrum and heel?

KO: No. I have had many a conversation/debate with clinical staff regarding the differences between moisture lesions and pressure ulcers, or if, in fact, there is a difference between the two. With respect to pressure ulcers on heels, this can cause controversy between professional groups. For example, if I discuss damage to the skin on a heel in a patient with diabetes, many nurses will state it is a pressure ulcer and the patient has diabetes. If I discuss the same skin damage with a podiatrist, they will say it is a diabetic

foot ulcer. Who is correct? More importantly, should they follow the guidance on treating a pressure ulcer or the guidance on management of diabetic foot ulcers?

MC: The prevalence and incidence of pressure ulcers will be influenced by clinicians' ability to correctly identify early signs of pressure damage, as distinct from other changes in the skin at the anatomical locations where pressure ulcers commonly occur. One example of potential misdiagnosis can be seen in discussion of whether pressure or exposure to moisture (the so-called moisture lesion) caused the change in the appearance of the skin. Where pressure ulcer experts continue to discuss the accurate detection of early stages of pressure damage, it would appear logical that clinicians in everyday practice will face challenges in making differential diagnoses of the cause of skin changes. However, it would appear sensible to consider pressure and shear as probable contributors to early skin changes at body sites that usually support body weight, such as the sacrum and heel.

CJ: In our experience of working with trusts across the UK, the biggest issue is that nurses who are asked to identify pressure ulcers, have little if any training, and are relatively unqualified when it comes to grading. There are often only one or two specialist TVNs in any hospital and this lack of education puts an additional strain on already overstretched resources.

Only a small percentage of clinicians can accurately assess what is and is not pressure damage.

Do you think clinicians can reliably distinguish between different categories of pressure damage?

KO: I do not believe that all clinicians are able to categorise accurately pressure damage, especially junior members of staff. Many tissue viability specialists and tissue viability consultant nurses are able to distinguish between the categories with some clarity, yet many say that it is subjective and, as a result, in many cases, they make an 'informed decision'. Interestingly though, when I ask students which system they use to categorise pressure ulcers, the answer I often receive is Waterlow. When I discuss the EPUAP guidance on categorisation of pressure damage, the majority of students state that they have not heard of this, or will say, 'oh yes, I have seen those pictures on cards in the clinical areas, but I didn't know it had a name'. Who should be teaching the students about these systems? Arguably, academic staff should ensure that they know about national guidance and that the clinicians should be teaching them about local guidance and explaining how national and local guidance influences care delivery. However, students will often experience patients with skin damage early in their training and this may not have been covered in the curriculum. Thus, why have clinical staff not informed them about grading systems? Can we assume that some clinicians themselves do not understand the systems?

MC: There have been a number of publications reporting the reliability with which clinicians distinguish between the different categories of pressure damage (Beeckman et al, 2007; Defloor et al, 2006; Kottner

MC: ... recognition of non-blanching erythema by clinicians and the inclusion of some manifestations of intact skin within a deep tissue damage category are good examples where pressure ulcers would continue to be misclassified.

CJ: Clinical management has to be about the overall wellbeing of the patient and preventing pressure ulcers, or stopping the progression of an existing ulcer should be part of this plan.

et al, 2009). The consistent message from these reliability studies is that no pressure ulcer classification system is perfect, with clinicians failing to classify accurately some pressure ulcers. Perhaps the most problematic areas lie in the discrimination between partial- and full-thickness pressure ulcers (categories 2 and 3), and between different types of full-thickness pressure ulcers (categories 3 and 4). It may appear a positive step to remove the numbered categories and replace them with a simple scheme for classifying pressure ulcers (non-blanching, superficial and deep); however, this step would be most unlikely to improve pressure ulcer classification. The recognition of non-blanching erythema by clinicians and the inclusion of some manifestations of intact skin within a deep tissue damage category are good examples where pressure ulcers would continue to be misclassified.

CJ: For those clinicians that are not working with wound care and wound management on a daily basis, distinguishing the different categories of pressure ulcers is difficult and highly subjective. Proper assessment requires a great deal of experience and incorrect grading can often lead to incorrect care packages being recommended.

Do you believe that the clinical management of the pressure ulcer is influenced by the category into which it is put?

KO: I think a category is assigned to the wound, but results of wound bed assessment and surrounding skin determine the treatment plan, for example, whether it is necrotic, sloughy, red, infected, etc.

MC: The management of all pressure ulcers must take as its foundation the requirement to reduce or remove high mechanical loads being applied to vulnerable skin and soft tissue. As the vulnerability of the skin increases, or where severe pressure ulcers are present, it would appear sensible to use interventions that exert greater control over the duration or magnitude of tissue loading. This would suggest that the interventions used in pressure ulcer prevention and healing would change as risk increased, or where pressure ulcers are more severe, as reflected in the recent EPUAP/NPUAP pressure ulcer guidelines (EPUAP/NPUAP, 2009). However, clinical guidelines have not seen fit to discuss management strategies by individual category of pressure ulcer, with a distinction only being made between the management steps taken where partial or full-thickness pressure ulcers are encountered.

CJ: Absolutely, but again, by less trained and experienced staff. The higher the category, the higher the priority it receives in terms of clinical management. However, at Your Turn, we believe that it is as important to identify those that are at a high risk of developing category 1 pressure ulcers and having an appropriate strategy for this, as it is to identify a category 4 pressure ulcer. Clinical management has to be about the overall wellbeing of the patient and preventing pressure ulcers, or stopping the progression of an existing ulcer should be part of this plan. **WUK**

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