

Pressure ulcers: avoidable or otherwise?

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Clinical experience and published evidence indicates that in all 'at-risk' patients, there exists a complex combination of pathologies that contribute to the development of a pressure ulcer (PU). In some instances, these complex processes result in the development of an unavoidable PU (Berlowitz and Brienza, 2007). The formation of a PU is a multifactorial process which at times may not be averted even with 'best practice' prevention and treatment interventions (Thomas, 2003). No single interventional strategy consistently and reliably reduces PU incidence to zero (Thomas, 2001). Ethically and morally, the goal of care must be to do all that is possible to prevent the development of a PU.

Before the discussion of 'avoidable' or otherwise can reasonably start, it is imperative that the patient be appropriately assessed and all evidence-based interventions considered. To put this into context, it is necessary to review the available evidence for assessments and prophylactic/therapeutic interventions. To put the objective in other words, what did we know, and when?

The translation of research evidence into clinical practice is a process that has provoked heated argument, both within the field of tissue viability and of pharmaceutical medicine (Morris et al, 2011). In the latter case, it has been calculated that the delay in achieving a wide uptake of evidence into routine clinical practice is 17 years! How does tissue viability compare with this? Perhaps the most scientific, and robust evidence related to PU risk and development stems from the many bioengineering studies published. A cursory literature search reveals some important publications that report high quality scientific studies. For example, the proceedings of a conference on 'Bed Sore Biomechanics' establishes that our knowledge of the problem and its prevention was extensive at that time (Kenedi et al, 1975). In the succeeding 40 years or so, our knowledge has been refined, no more.

Clinically, the picture is no different. In an excellent book, Torrance (1983) succinctly presented the available evidence. There has since been publication of numerous textbooks on PU covering all aspects of development, assessment and nursing care. Research since that time has likewise refined our knowledge without changing the essential elements.

In spinal injury patients, the pioneering work of Guttman at Stoke Mandeville hospital, following the Second World War, established standards of care and clinical results which are still to be surpassed (Guttman 1955, 1979). Thus it can be argued that we had enough evidence available over 30 years ago to understand the pathophysiology, the risks, avoidance, pressure redistribution and PU management.

It is abundantly clear that we in the UK have not implemented all of the available evidence related to PU, even from 40 years ago. Yet the issue of 'avoidability' has become important due to clinical targets and litigation. Downie et al (2013) reported that having revisited the publications by Hibbs, the assertion of 95% hospital-acquired PU being avoidable, was based on personal experience and conjecture, not on empirical evidence. As a result of Hibbs' articles, clinical targets were set.

This brings us to the current topic of PU 'avoidability'. What appears implicit in making the decision 'avoidable' or 'not avoidable' is that there will be consequences. This is an issue as emotive as the Liverpool Care Pathway. If a patient is assessed as having an unavoidable PU, or that the development of a PU is unavoidable, will it influence ongoing care? If so, how?

Can we countenance a two-tier care option? Furthermore, who is to make that decision and take on full clinical (and legal) responsibility for it? The National Pressure Ulcer Advisory Panel (NPUAP) of the USA has offered a definition (NPUAP, 2009; Black et al, 2011), as has the National Patient Safety Agency (NPSA, 2010) in the UK. NPSA advocates a modified version of the avoidable and unavoidable PUs definitions from the Centres for Medicare and Medicaid services (CMS) 2004, to keep in with UK policy terminology.

The modified definition for avoidable PUs are thus: 'Avoidable' means that the person receiving care developed a PU and the provider of care did not do one of the following:

- ▶ Evaluate the person's clinical condition, and PU risk factors
- ▶ Plan and implement interventions consistent with the person's needs and

goals, and with recognised standards of practice

- ▶▶ Monitor and evaluate the impact of the interventions; or
- ▶▶ Revise the interventions as appropriate.

The modified definition for unavoidable PUs is: 'Unavoidable' means that the person receiving care developed a PU even though the provider of the care had evaluated the person's clinical condition and PU risk factors; planned and implemented interventions that are consistent with the person's needs and goals; and recognised standards of practice; monitored and evaluated the impact of the interventions; and revised the approaches as appropriate; or the individual person refused to adhere to prevention strategies in spite of education of the consequences of non-adherence.

To a degree, the outcome of the decision will be influenced by the clinical setting. Thus, for an older patient in the community, where the highest standards of nursing care and available equipment may not always be available, outcomes may be expected to be rather different from the specialist spinal injury unit. Nevertheless, it is important to recognise that all patients may be at risk whether or not they are neonates, obstetric cases, surgical patients, or older and poorly mobile. The assessment and care requirements are published and must be adhered to.

To clarify some of these issues, three experts in the field of tissue viability have been approached to provide their responses to seven questions. *Richard White*

For many years, clinicians have been under the impression that a high proportion of PUs (~95%) are 'avoidable'. Given that new evidence is suggesting that the true figure might be much lower (~50%), how do you think that this will impact on practice?

FD: I think that we have to be cautious with the figure that potentially only 50% of PUs are avoidable, as the two published

papers (Downie et al 2013; 2014) pointed out. Both articles reported figures from the acute setting within a framework of both a standardised system to make a decision on the avoidability status and established PU prevention strategies. The figure may be different in a community or an in-patient organisation where prevention strategies have not been employed; this may be awareness or resource driven. An additional factor to be considered by organisations is the percentage of PUs that were actually prevented; presently, this is unknown.

Where I would like it to influence practice is to highlight and reinforce the importance of regular risk assessment with the resulting PU preventative strategies. In addition, the definition of an unavoidable PU needs to be reviewed/reconsidered, in view of the findings from these two papers.

CBA: If 95% of PUs are preventable then this suggests that nurses are not doing their best to prevent them — this suggestion alone may be a de-motivator for many individuals which, in turn, may result in less effective care provision.

However, by suggesting that '95%' is wrong and only half of all PUs are avoidable, this could result in a false sense of security among nurses with a complacency for the inevitable.

There is a need, therefore, to establish the true figure, in order to set a more realistic target that can be achieved by those with the determination and skills to make a difference. Tissue Viability Nurses (TVNs) are in the unique position to equip nurses with those skills and motivation.

However, these targets will not be uniform across all care sectors and with changing demographics, the figures will continually evolve. Both those that set the targets and those that work in differing sectors need to appreciate the fluidity of the situation and work with it to meet the changing challenges.

CI: If by practice, we are referring to

delivering care to prevent PUs, then it should not make any difference at all. One sure way to guarantee an increase in avoidable PUs is to stop trying to prevent them.

Practice should remain the same: assess risk and plan care to address those risk factors identified (not simply the total score); assess skin both formally and informally and escalate if there are signs of pressure/shear injury; reposition as required (not at a 'routine' interval for everyone); provide good skin care and strive to ensure good nutrition.

There is always the possibility that someone may attempt to justify total numbers of PUs on the basis that 'of course, we all know x% are unavoidable anyway', without actually evidencing that for their patients (if 95% can be accepted without specific justification, any other number can potentially be used the same way).

What we must not do is to let the new evidence tempt us to stop trying to avoid the avoidable. It is dangerously easy to just accept that 'most PUs are unavoidable so why try to prevent them?'

Should Best Practice Guidelines and assessment tools be updated to reflect the avoidable/non-avoidable prediction?

FD: Firstly, best practice guidelines have a focus on PU prevention strategies to prevent potential avoidable PUs so, as such, the rates of avoidable/unavoidable may not immediately influence practice change. However, unavoidable PUs deserve an increased scrutiny with the aim of identifying common themes in their development. For example, a patient who falls in his/her own home and lies unattended for several hours before help arrives, and subsequently develops a PU, would presently be deemed unavoidable. But could this PU have been avoided if the patient had been identified as at risk from falling, and a falls prevention package had been put in place?

PU risk assessment tools are useful

in practice, but must be used alongside clinical judgement, as the reliability and validity of PU risk assessment tools has been shown not to be 100% accurate (Pancorbo Hidalgo et al, 2006). Regardless of the percentage of PUs that are avoidable, in my opinion, PU risk assessment tools need reviewing/updating and potentially replacing with a tool that has an end point focus on what level of preventative measures needs putting in place for that individual at risk.

CBA: Best Practice Guidelines need updating, but in so doing, build in a higher degree of flexibility in order for them to be adapted accordingly. Although there are some generalities that form the basis of pressure area care, some patient groups will require different approaches. The problem with most guidelines is that there is a tendency to bring everything down to a 'one-size-fits-all' formula. This certainly makes for simplicity, but can be restrictive and stifling in some circumstances. It may be appropriate for specialist sectors (such as Intensive Therapy Units, Care for the Elderly or Spinal Injuries, for example) to have additional 'bolt-on' guidelines.

CI: Attempting to 'predict' avoidability for each patient would be a questionable approach as we all know that individuals with the same risk factors don't always get the same outcome (PU either develops or doesn't). In many ways, risk assessment tools already do this by using identified risk factors as predictors of the likelihood of PUs — a.k.a. the risk score itself.

Guidelines could incorporate a definition of 'unavoidable' similar to that already in use by NHS Midlands and East, but might this compromise their purpose — to inform on prevention methods?

Downie et al (2014) acknowledged that they could only measure the avoidability of the PUs that did happen, also citing significant reduction in overall incidence in the past few years. This supports the theory

that the existing best practice guidelines are effective as they are. Perhaps inclusion of that definition as an appendix would be a more productive way of using it as a learning tool if prevention fails.

Who should take the clinical responsibility for making a decision that an ulcer is 'avoidable' or is 'unavoidable'?

FD: The decision of the PU being avoidable or unavoidable should follow a standardised process, an example of which would be the following:

- ▶▶ Incident form completed in the ward/unit/community team in which the PU developed.
- ▶▶ A TVN confirms and validates the PU grading on the incident form where possible.
- ▶▶ Full root cause analysis (RCA) is carried out by the ward's/unit's/community team senior nurse with multidisciplinary (MD) input, including the TVN for final sign-off.
- ▶▶ Decision is made regarding the avoidability or unavoidability of the PU. This should be made in conjunction with the senior nurse, TVN and have executive sign off, i.e. director of nursing or clinical governance manager.

CBA: Prior to an ulcer developing, i.e. at initial and ongoing assessment stages, the answer to this is that it should be someone with the appropriate knowledge, experience and access to the data and resources. As it is, nurses may be that person, but if they do not have these skills/experience for themselves, then they must be provided with timely access to that resource (for example, access to more TVNs). TVNs should equally be given the resources to be able to equip the nurses with those skills and knowledge.

If this question pertains to post-ulcer development: the decision can only be made with certainty if it is deemed that best practice has been followed otherwise it remains speculation, and the question becomes, who is the best person to make that speculation.

It would be prudent to have decisions regarding whether or not a PU was avoidable or not to be made by a TVN who is not directly associated with the care provider where the injury developed, i.e. the decision should be made by a nurse with expertise in prevention and management of pressure injuries who has no conflict of interest. I believe that this would be the ideal, however, it is appreciated that this may not be a feasible option in everyday practice, particularly in smaller organisations.

CI: The final decision should not be left to a single individual who may potentially have a vested interest in demonstrating PU reduction for themselves or their organisation. That does not mean to say that a suitably qualified, experienced individual (not necessarily a TVN) should not give an opinion as to why each PU is avoidable or not as that forms the basis for final decision-making.

A collaborative approach with a degree of independent governance should be taken to reach that final decision where at least one professional who is not involved in either the direct care of each patient or has a quality monitoring function has to agree with the evidence of unavoidability.

In my own work, this is done in collaboration with CCG quality managers for all hospital acquired PUs category II or above and it works.

In clinical practice, who makes the decision, if anyone?

FD: See my previous answer to the above. I feel the decision process must be multi-disciplinary (MD), with TVN involvement. An MD approach will encourage ownership of the PU incidence, hopefully encouraging rigorous dissemination and ownership of subsequent action plans.

CBA: In clinical practice the person who has to make the decision at the assessment stage (i.e. before any ulcer has developed) is the person who is charged with taking responsibility for that patient's care,

regardless of whether or not they possess the appropriate skills, knowledge or access to resource.

Following the development of a PU, in my experience, it depends on which process is used. I have seen many decisions made by Adult Social Care with little or no input from specialist nurses. Equally, I see decisions made following a Root Cause Analysis, which then generally tends to be completed by, or in collaboration with, the TVN and this, I believe, is far preferable to the former process. Nonetheless, there is a real danger that there may be potential for conflict of interest when the TVN is employed by the provider and, therefore, an independent opinion would significantly reduce this risk.

CI: The recent evidence is based on acute trusts in a health region where strict definitions of avoidability were critically and impartially applied by experts (TVNs) to make that decision with a requirement to prove the claim to senior nurses and (in one location) review panels.

There is no reason why this approach can't work for every NHS provider, but in the whole health economy that is not always going to be practical. I suspect my community colleagues would cringe at the thought of having to assess every nursing or residential home acquired PU to a sufficient degree to establish avoidability — there simply isn't the resource for that.

That leaves the Clinical Commissioning Groups (CCGs), other commissioners and the Care Quality Commission (CQC) as potential decision-makers on avoidability. The CCGs and CQC could no doubt find someone with the skills, but where does it leave councils who may employ social workers but not registered nurses?

How might the decision of 'unavoidable' impact on treatment — if at all?

FD: This is an interesting question. In theory, it should have no impact on the

treatment of the PU at all. In practice, nevertheless, the avoidability status may impact on the treatment. For example, if the patient has an unavoidable PU because they are haemodynamically unstable, and, therefore, cannot be repositioned, the unavoidable cause of the PU will continue to be a factor in management of pressure relief/reduction. Again, this reinforces the need for scrutiny/research into the 'unavoidable' PU.

I would like the decision of 'unavoidable' to have an influence in the commercial world in terms of the development of more sophisticated pressure redistributing/relieving support surfaces that can be employed when patients cannot be repositioned, or have very limited mobility in their own home. Also, ideally, it could have a bearing in the area of device-related PUs, where the device is seen as necessary to maintain a patient's life or haemodynamic stability. Are they really an 'unavoidable' PU in this instance? The device-related unavoidable PU needs reporting externally, perhaps via the Medicines and Healthcare Products Regulatory Agency (MHRA) alert reporting mechanism, so that medical device manufacturers are aware of this type of PU and can consider how the product can be made differently to prevent the effects of pressure/shear/friction etc.

CBA: Preceding development of an ulcer, i.e. at the assessment of risk stage, then there may be two potential outcomes:

- ▶▶ If the potential for a PU is perceived as unavoidable then optimum care may not be provided due to the belief that it would be a waste of resources
- ▶▶ On other hand, it may be argued that if something is statistically more likely to happen, the best resources should be employed in an attempt to mitigate the risk. This should result in the most appropriate and cost-effective provision of equipment and resource.

CI: This really shouldn't make any difference. Once a PU has occurred we can't just decide not to treat it because, say, patient non-concordance was part of the cause. We still treat smoking and alcohol-related problems and there's no reason why a PU should be any different. In these cases, future non-concordance might also compromise healing — you still can't just walk away.

If the PU has occurred because all prevention measures were taken, but failed, you can't blame the patient (or the carers) so treatment must still be provided.

As PU occurrence can, and often does, result in litigation, do you think that the newly-published 'avoidability' evidence will influence the legal process? If so, how?

FD: Yes, it absolutely should influence the legal process in the area of litigation. This influence would be enhanced if more organisations start publishing their avoidable and unavoidable rates, resulting in a greater evidence base. I hope this influence will be in two areas: that legal firms start using the terms 'avoidable' and 'unavoidable'; presently they do not; the general public starts to understand that not all PUs are preventable.

Another area of concern is the frequent freedom of information requests healthcare organisations get with regard to PU numbers. None of these requests mention the difference between prevalence or incidence recording; or the avoidable/unavoidable status of the figures. This results in healthcare organisations being wrongly accused of having high numbers of PUs, without any reference to the avoidability status of these PU numbers.

CBA: The substantiation of avoidability forms the basis for a successful claim. The claimant will argue that the increased risk should have been recognised and resulted in optimising preventative care interventions.

The defendant will use the inevitability argument to claim that on balance, it would have happened anyway.

The 'High Impact Actions — Your Skin Matters' document (NHS Institute for Innovation and Improvement, 2010) highlighted to the public that PUs might be avoidable and therefore paved the way for an increase in litigation in this area of care. Furthermore, the Department of Health's definition of avoidable PUs (2010) based on the Wound Ostomy and Continence Nurses Society Position Paper (2009) has provided a framework against which a decision as to avoidability can be made. From a legal point of view, I do not consider that the new evidence will influence this process as the issue lies with the evidence as to whether or not care met a reasonable standard and this will rely on the evidence (in the patient records) that appropriate interventions were applied.

CI: As with all new information, it will take some time for the evidence to be properly acknowledged and uptake may be influenced by existing beliefs. There are still those within nursing who believe that PUs are always a result of nursing failure, regardless of each individual situation. Expecting lawyers to make a similar change with less clinical judgement ability isn't going to be smooth or easy.

In actuality, the onus will still be on the litigant to prove that the defendant didn't take all reasonable and practical measures to prevent the PU and that is not a change at all.

It must also be remembered that the recent evidence relates to acute care. As such, it may be transferable to nursing homes, but must be used with caution when trying to apply it to environments such as residential care or patients' own homes where those providing care don't have 24-hour access to RNs with the knowledge and skills to identify early signs of PUs. It

would, therefore, be unrealistic to expect the same avoidability rate in those environments.

In the UK wound care, especially Tissue Viability, is nurse-led. With respect to PU, to what degree does the medical profession engage with TVNs in arriving at decisions on patient assessment and on treatment for PUs?

FD: I think this is a very good question and, in my opinion, deserves more attention in the tissue viability fraternity. Presently, I think this engagement with our medical colleagues will vary and very much depend on where you work and the system that is set up to prevent and manage PUs. One area where I, and my fellow authors, would like to see a bigger engagement is in primary care with GPs at the frontline. Often the GP is the only healthcare professional who sees an 'at risk' patient, i.e. wheelchair bound/incontinent, but PU prevention is not necessarily at the forefront of the GPs mind. This potentially could be improved by the introduction of a quick PU risk screening tool in the GP surgery which would trigger PU preventative strategies for that individual in their own home; again, this could simply be a falls prevention package. For instance, GPs could take the opportunity to facilitate raising awareness of risk of pressure damage within their current work stream for enhanced services (NHS England, 2014), including identification of a named GP, for the most frail, older or complex of people.

CBA: It is my experience that in community, residential care and acute care settings, wound care and in particular PU care remains firmly within the remit of nursing. However, in some, more specialised fields, such as Spinal Injuries, the medical profession seem to provide a much more proactive role in prevention and management of pressure injuries and engage closely with the wider MD team

including Nurses, Physios, Dietetics and OT in order to address the issue of pressure injury. I perceive this to be because, in this client group, the development of a PU has a lasting impact on future care (as it does on all patients who develop a PU), but in this group, the impact can be much greater. This is not to suggest that other patient groups are not as badly affected, indeed, a diabetic may lose limb(s) as a direct consequence of pressure ulceration, but, the field of Spinal Injuries seems to have made pressure ulceration a priority in care whereas other fields of medicine have perhaps not given it such high priority.

CI: I'm lucky. I work closely with a plastic surgeon who takes PUs seriously and we run collaborative complex wound clinics. There is also a diabetologist and a gerontologist in the Trust who have a keen interest in the subject so some departments engage fully with a MD approach to PU prevention.

However, this is not universal. I recall some time ago trying to promote awareness of how what doctors do can affect PU development (e.g. sedation as a side effect of medication, time to theatre etc.) and one individual took that as an attempt to 'shift the blame away from nurses'. From conversations I have had with other TVNs, that perspective would seem to be predominant. **WUK**

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DR GEORGE W CHERRY: IN MEMORIAM

The world of wound care will be saddened to learn of the recent loss of George. He was an outstanding figure over the past 30 years through his research, teaching and his genial personality. The following appreciation is a combination of ‘official’ notice from his long-term colleague Professor Terence Ryan, and my own personal memories:

“With much sorrow I must inform you of the death of George Cherry. He died of gall bladder sepsis. His contribution to wound healing in Oxford was exceptional. He has been a wonderful colleague without whom the Department of Dermatology in Oxford would not have reached such heights. The Oxford International Wound Foundation and the Annual Wound Healing course for many years provided valued insights into the field of wound healing. George was responsible for Oxford’s initiation and contribution to the development of significant wound dressings and to important Societies concerned with tissue repair and regeneration. Many of today’s most prevalent Tissue Viability problems, such as pressure ulcers and the diabetic foot ulcer, are better managed as a consequence of his leadership. George’s contributions were not confined to USA and UK interventions; he has many admirers in China and Vietnam. Throughout his distinguished career he has had the support of his wife Christine to the benefit of all of us. They have led a team of nurses and tissue viability investigators of outstanding merit.” Terence J Ryan, Emeritus Professor of Dermatology, Oxford University and Oxford Brookes University.

I first met George at the old Slade hospital in Oxford in 1987 during my transition from Dermatology to wound care. I found myself in need of clinical and scientific knowledge and George was the man to go to. He invited me to visit for a couple of weeks during which I was brought up to speed on the lab research, clinical practice, and the social side of the department. Not only was it great fun, but valuable too! George always came across as generous and open — as well as being very knowledgeable and well-connected in his professional circles. I later realised that this hospitality afforded to me was extended to visitors from far and wide and would continue when the move to the Churchill hospital took place a few years later.

As time went by, George became the driving force behind the establishment of the European Pressure Ulcer Advisory Panel (EPUAP), the European Tissue Repair Society (ETRS) and the European Wound Management Association (EWMA). These achievements alone would have been exceptional, but, on top of that there are over 70 articles listed in Medline, numerous books and chapters, and a legacy of lecturing across the world.

Richard White