Implementing a ward-based pressure ulcer prevention and management resource in an acute hospital trust

KEY WORDS

- ► Adult education
- ▶ Information cards
- ▶ Pressure ulcers
- ▶ Prevention

Nurses in the hospital setting face a number of challenges when delivering care to prevent pressure ulcers. Time and capacity to attend training are often extremely limited. In one Trust, a set of pressure ulcer cards was developed to provide information on the essentials of delivering effective pressure area care to patients. The cards were designed to provide 'at-a-glance' information on effective care and management of each category of pressure ulcer and moisture-associated skin damage. Each was linked to the SSKIN pathway. The cards were underpinned by adult learning theories to ensure they would be considered a valuable and supportive resource for ward-based nurses.

Pressure ulcers continue to present a significant healthcare challenge for patients, their families and carers (NHS Improvement, 2018a; Saleh et al, 2019). For many of those affected, the damage causes pain, reduced mobility and has other negative effects that can significantly impact their quality of life. If a pressure ulcer develops during a hospital admission, it may lead to delayed discharge.

For healthcare organisations and healthcare providers pressure ulcer prevention continues to be a key priority and is regarded as being a key care quality indicator (Newcomb and Warner, 2018; NHS Improvement, 2018a).

Over recent years numerous national strategies have been implemented to raise awareness of pressure ulcer prevention and management among healthcare professionals, e.g. NHS Improvement; National Wound Care Strategy Programme; Stop the Pressure; React to Red. Significant progress is being made to reduce the number of people affected by pressure ulcers, but they remain a considerable health burden. A recent study (Guest et al, 2018) revealed that up to 200,000 people developed a pressure ulcer in 2017/2018. Data from the NHS Safety Thermometer for England reported 24,674 patients developed a new pressure ulcer between April 2015 and March 2016. In England, the annual reported incidence of pressure ulcers was 0.9% between April 2017 and March 2018 (NHS Improvement, 2018a). Treatment costs

remain high, at more than £3.8 million every day (NHS Improvement, 2018a).

Whilst prevention and management strategies are a priority for all levels of an organisation's workforce, it is general ward-based nurses who provide hands-on pressure ulcer care. Whilst they are supported by their tissue viability colleagues, nurses must have an awareness of, and keep up to date with new developments in practice, changes in national and international guidelines that underpin their local pressure ulcer policies, initiatives and care pathways. Although these care issues are discussed at pressure ulcer training sessions, ward-based nurses often experience time restraints and capacity issues which prevent them from being able to attend this training. These factors can become a barrier to delivering effective pressure ulcer care and management.

To support nurses in delivering effective pressure ulcer management in one acute Trust, a ring-bound pack of pressure ulcer information cards was developed (*Figure 1*). The cards were intended to be a quick resource guide to provide information on the essentials of delivering effective pressure ulcer care to patients. The cards were intended to supplement face to face pressure ulcer training.

The relevance and importance of the pressure ulcer cards for the nurses was clear given the focus on reducing the number of hospital-

Table 1. The original SSKIN bundle and the extended aSSKINg module			
		a	Assess risk
S	Surface: make sure your patients have the right support	S	Skin assessment and skin care
S	Skin inspection: early inspection means early detection – show patients and carers what to look for	S	Surface
К	Keep your patients moving	К	Keep moving
Ι	Incontinence/increased moisture – your patients need to be clean and dry	I	Incontinence
N	Nutrition/hydration – help patients have the right diet and plenty of fluids	N	Nutrition
		g	Giving information

acquired pressure ulcers (Pittman et al, 2015; Newcomb and Warner, 2018; Etafa, 2018). When pressure ulcer care is scrutinised, the internal investigation process often shows these pressure ulcers are attributed to lapses in care (NHS, 2018a; Saleh 2019). One study suggests an estimated 3.5%–4.5% patients develop hospitalacquired pressure ulcers that could potentially be prevented (Etafa et al, 2018).

This situation has reinforced the ongoing need to not only increase the awareness among wardbased nurses of the importance of pressure ulcer prevention but to impart knowledge around pressure ulcer prevention and management to them in new and innovative ways.

BACKGROUND

Whilst the focus on pressure ulcer-related harm, particularly since the launch of the Stop the Pressure, and React to Red campaigns, has seen significant improvements in pressure ulcer prevention, less progress has been made to-date in terms of treatment once a pressure ulcer has developed (Fletcher, 2017); they are often complex and difficult to manage due to a multitude of factors including patient, as well as care delivery issues such as lack of awareness of appropriate management strategies.

Whilst pressure ulcer prevention and management require a multidisciplinary approach, responsibility for day-to-day pressure ulcer care is held primarily by nursing teams (Etafa, 2018). However, nurses have to contend with numerous challenges during each shift, including patient flow demands, managing heavy workloads, and the consequences of internal critical status of the hospital. These issues all put additional strain on a workforce that is already working to full capacity. Within this mix, pressure ulcer care must be delivered as part of and not as a separate clinical activity from other patient care needs (Adderley, 2020). For some nurses, these competing issues within their working environment impact negatively on their attitudes towards this care, which makes delivering effective pressure ulcer care in a timely way much more difficult to achieve (Etafa et al, 2018). This can also be compounded by a lack of knowledge and inadequate training - factors which also impact negatively on nurses' attitudes towards pressure ulcer care (Hill, 1992).

Whilst training sessions in isolation cannot mitigate challenging environmental factors, it is recognised that well-educated nurses are more aware of the importance of implementing effective preventative strategies (Moore and Price, 2004; Etafa et al, 2018). Locally, face-to-face teaching sessions for the nurses are held at least four times a year and provide the opportunity to improve their awareness, knowledge and understanding of the importance and relevance of different aspects of pressure ulcer care particularly for example around accurate categorisation, application of the elements within the SSKIN bundle (Table 1), and appropriate dressing selection. These sessions also enable the nurses to share examples of good practice, and provide time to discuss new initiatives, and address inconsistencies in care provision in a safe environment. Attendance varies and is often directly related to the status of the hospital. When the opportunity to attend training is reduced, different ways of imparting information, and addressing inconsistencies in practice, need to be developed. The pack of pressure ulcer information cards is one example of this.

DESIGNING THE CARDS

The Tissue Viability Nurse team receive several pressure ulcer-related referrals every day from different wards across the Trust. It became apparent from both the quality of some referrals and through experience of working closely with the ward nurses that standards of, and



Figure 1. Some examples from the set of pressure ulcer cards

knowledge in delivering best practice pressure area care were inconsistent between the wards. This ranged from a lack of confidence in accurate categorisation, and differentiating between moisture associated skin damage and pressure ulcers, to differences in awareness of when to request appropriate pressure relieving equipment.

Existing information on different aspects of pressure ulcer care was readily available on each Ward. This included posters covering categorisation, differences between moisture damage and pressure damage, and the SSKIN pathway. A pressure-relieving equipment selection pathway and information relating to ordering, decontamination and so forth were also available. This information was however fragmented, and at times difficult to readily locate as there was no consistent approach to displaying and sharing it. From the nurses' perspective, trying to quickly locate information that is spread over several different posters competing with an array of other documents on the walls becomes an issue. When time is limited having easily accessible information readily available in one place becomes even more important.

In addition, there was no easy to use pressure ulcer related educational tool or guide available for use on the wards. Nurses, therefore, did not have a reference source available in one place to support accurate categorisation, and appropriate equipment and dressing selection.

This gap was addressed by providing relevant pressure ulcer information in an easy to use ringbound set of cards. These aimed to provide the nurses on each ward with a checklist for pressure ulcer care. Each card was designed using the same format to provide 'at a glance' information on effective care and management of each pressure ulcer category, moisture associated skin damage, and heel pressure ulcer care to ensure the pressure area care they delivered was effective, timely and evidence-based.

Each card summarised information specific to the particular category being covered *(Figure 1)*. As they were intended to be a quick reference guide and not a complete training manual the information was kept brief and succinct. This meant that in terms of the detail, each card was not overcrowded with too much included in one block. This was considered to be particularly important, given the challenges around categorisation and appropriate equipment selection; too much detailed information would change the nature of the pack.

The information was displayed across both sides of the card with one side setting out the European Pressure Ulcer Advisory Panel (EPUAP, 2014) definition accompanied with a picture of the category, pressure-relieving equipment selection, and a basic dressing selection guide. They were linked together by a reference to the 'SSKIN' pathway.

The idea to include the full EPUAP (2014) definition and picture was to support more accurate categorisation. Classifying pressure ulcers correctly is challenging for many ward-based nurses, and particularly for junior or newly qualified members of the teams. The literature suggests clinicians are unable to categorise pressure ulcers correctly or reliably (Defloor et al, 2005), and that categorisation can be subjective (Fletcher et al, 2017). This situation was at times reflected in referrals received by the Tissue Viability Team. The combination of text beside a picture was intended to reinforce what the definition of the category looks like in terms of actual tissue damage.

A brief summary of pressure-relieving equipment selection was included alongside the definition. Pressure-relieving equipment is an integral part of pressure ulcer prevention and management (National Institute for Clinical Excellence [NICE], 2014; EPUAP, 2014). Timely installation of appropriate equipment forms part of a holistic package of care. Delays in requesting appropriate equipment have been identified locally as being a factor of pressure ulcer development on some occasions. The rationale for including this information on the card was therefore to ensure the criteria for requesting particular equipment was completely clear.

A more comprehensive equipment selection pathway was available on the Wards as a standalone poster. Signposting to this and the heel care pathway was included in this section of the card but not expanded on as this would have added too much information and distracted from the simplicity of this section

Inclusion of appropriate dressing selection within the card was intended to provide a summary of appropriate dressings for each pressure ulcer category. It covered primary and secondary dressing selection and dressing change frequency. For general nurses whose clinical area of work may not involve frequent wound management, this guide was intended to give them confidence in selecting appropriate dressings. Locally the Tissue Viability team provide support for hospital-acquired pressure ulcers category two and above but are not always able to review the patient on the same day as receiving a referral. It was anticipated that providing concise information on appropriate dressing selection before specialist input could be provided would engender the nurses' confidence that their dressing selection was appropriate.

The reverse side of each card was divided into two sections. The first contained a checklist covering general aspects of pressure ulcer management.

The second section covered the SSKIN pathway. Locally the pathway is embedded in a number of nursing documents. As this pathway provides a current approach to pressure ulcer prevention and management, adding it to the back of each card ensured its profile would remain high. It was intended to function as a prompt for the nurses to support them in using a structured approach to the delivery of their pressure ulcer care and documentation.

DISCUSSION

The development of the cards was underpinned by how adults learn, assuming they prefer selfdirected learning and learn by drawing on experience. Adult learning theories are based on helping learners to think about the learning process, reflect on it, and actively participate (Walkin, 2000). This is achieved by including the ability to draw upon previous experience, and motivation to learn new skills required to fulfil the work role (Reece and Walker, 2000). This is relevant to pressure ulcer care including accurate categorisation, and appropriate equipment and dressing selection. The humanistic model of learning based on the notion that learning is individual, and enables the learner to develop critical thinking and creativity also underpins the cards (Reece and Walker, 2000).

The cards were designed to cover the basic fundamentals of pressure ulcer management. Information was not intended to be comprehensive; to have done so would have changed the purpose of the cards. It is acknowledged that there are limitations to providing this type of succinct information in this format. A more thorough training pack is available with the Trust and nurses are signposted to this during training. A copy of this is included on the Tissue Viability intranet page which is easily accessible to all staff. Another limitation was not including information on device-related pressure damage within the cards. If the cards are reprinted this could be incorporated as a prompt to highlight this area of pressure damage. A reprint would also provide the opportunity to update the 'SSKIN' bundle with information from the extended 'aSSKINg' pathway.

IMPLEMENTATION

The four-stage PDSA cycle (Plan, Do, Study, Act) (NHS Improvement, 2018b) provides a framework for enabling new ideas, and changes to practice, to be tested on a small scale before full implementation. This process underpinned the project to design and implement the pressure ulcer packs across the Trust.

To test the cards before implementation, it was distributed to the senior management team to assess its effectiveness as a resource and to secure their support for it. Feedback from the Team Leaders and Senior Management has been positive. The idea of a cohesive approach to the delivery of what was a large body of information was welcomed.

In line with the PDSA cycle, the next step for the Tissue Viability team following implementation of the cards is to assess their usefulness for the nurses, and if they have had a positive impact on the practical issue of pressure ulcer management. One way to do this is by seeking feedback from the nurses via the Link Nurse meetings which provide a vehicle to disseminate information both from and to the nursing teams.

Feedback, in the form of discussion on the cards, can be collected and analysed. The results

of this analysis may impact on the future design and delivery of Tissue Viability pressure ulcer educational tools and resources.

CONCLUSION

Delivering high-quality pressure ulcer care remains a priority for nurses. To ensure this is provided effectively, in line with best practice, ward-based nurses need to be well educated in, and aware of the complexities involved in pressure ulcer management. Opportunities for nurses to attend formal classroom-based training sessions are often limited due to time and capacity issues. It, therefore, becomes challenging to address inconsistencies that may exist between different wards in terms of both the nurses' knowledge of, and standards in pressure ulcer care.

In one acute trust, these issues were addressed by developing a set of easy to use pressure ulcer information cards for the nurses to refer to. The cards were not designed to be a complete training manual. Rather, they were intended to provide the nurses with a quick, succinct and accessible educational reference guide to support, and promote best practice in pressure ulcer prevention and management.

Whilst all the information covered in each card was readily available on the Wards namely categorisation, selection of appropriate equipment, and dressing products, it was fragmented and not always displayed in a consistent way. By summarising this information on individual cards, and collating these into one pack, a concise and consistent tool to address the complex area of pressure ulcer care was developed.

The use of a simple design ensured the cards were an innovative and engaging educational tool. Their development was underpinned by the PDSA cycle (plan, do, study, act) and by considering how adults learn. Using these theoretical perspectives ensures the cards form a part of the nurses learning needs, and enables them to be considered a valuable resource for and by the nurses. Positive feedback from the nurses to date suggests this has been achieved.

Referring to this pack will help improve consistency of, and standards in providing, pressure ulcer care Trust-wide. Whilst these cards are not intended to replace face to face training and learning, they do provide a tool by which nurses can be supported in their decision making, and delivery of effective pressure ulcer care within their daily clinical practice.

ACKNOWLEDGEMENT

This piece of work could not be undertaken without the support of the specialist nurses and Vascular Consultants who form the Wound Management Team. The nurses have discussed the packs with the Ward nurses to ensure they are a valuable resource for them. Special thanks are given to Mr Salter Consultant Vascular Surgeon for his constructive and invaluable advice without which the pressure ulcer cards or article would not have been possible.

REFERENCES

Adderley U (2020) *The National Wound Care Strategy Programme*. *Update* (2020). Available at: https://www.woundcare-today.com/ journals/issue/february-2019/article/national-wound-carestrategy-programme-update (accessed 24.02.2020)

European Pressure Ulcer Advisory Panel (2014) Prevention and

- Treatment of Pressure Ulcers: Quick Reference Guide. Available at: https://www.epuap.org/wp-content/uploads/2010/10/NPUAP-EPUAP-PPPIA-Quick-Reference-Guide-2014-DIGITAL.pdf (accessed 24.02.2020)
- Defloor T, Schoonhoven L, Fletcher J, et al (2005) Statement of the European Pressure Ulcer Advisory Panel--pressure ulcer classification: differentiation between pressure ulcers and moisture lesions. J Wound Ostomy Continence Nurs 2(5):302-6; discussion 306
- Etafa W, Argaw Z, Gemechu E, Melese B (2018) Nurses' attitude and perceived barriers to pressure ulcer prevention. *BMC Nurs* 17:14

- Fletcher J, Ousey K, Clark M, James C (2011) Why do we bother grading pressure ulcers? Wounds UK7(2):109–11
- Fletcher J (2017) With a national focus on prevention, how well do we treat pressure ulcers? *Wounds UK* Vol 13(2):10–16
- Guest JF, Fuller GW, Vowden P, Vowden KR (2018) Cohort study evaluating pressure ulcer management in clinical practice in the UK following initial presentation in the community: costs and outcomes. BMJ Open 8:e021769
- Moore and Price (2004) Nurses' attitudes, behaviours and perceived barriers towards pressure ulcer prevention. *J Clin Nurs* 13(8): 942–51
- Newcomb S, Warner V (2018) Audit of pressure ulcer healing rates in an acute hospital. *Wounds UK* 14 (3): 26–8
- National Institute for Clinical Excellence (2014) Pressure Ulcers: Prevention and Management. Clinical Guidelines CG 179. Available at: https://www.nice.org.uk/guidance/cg179/ resources/pressure-ulcers-prevention-and-managementpdf-35109760631749 (accessed 24.02.2020)
- NHS Improvement (2018a) Pressure Ulcers: Revised Definition and Measurement Framework. Available at: https://improvement. nhs.uk/resources/pressure-ulcers-revised-definition-andmeasurement-framework/ (accessed 27.01.2020)
- NHS Improvement (2018b) Pressure ulcers: revised definition and measurement. Summary and recommendations. *Plan, Do, Study, Act (PDSA) Cycles and the Model for Improvement.* Available at: https://improvement.nhs.uk/resources/pdsa-cycles/ (accessed 24.02.2020)
- Pittman J, Beeson T, Kitterman J, Lancaster S, Shelly A (2015) Medical device-related hospital-acquired pressure ulcers: development of an evidence-based position statement. J Wound Ostomy Continence Nurs 42(2):151-4; quiz E1-2
- Reece I, Walker S (2000) *Teaching Training and Learning. 4th Edition.* Business Education Publishers Limited, Sunderland
- Saleh MYN, Papanikolaou P, Nassar OS et al (2019). Nurses' knowledge and practice of pressure ulcer prevention and treatment: An observational study. *Journal of Tissue Viability* 28(4): 210–7
- Walkin L (2000) Teaching and Learning in Further and Adult Education. 2nd edition. Nelson Thornes Ltd, Cheltenham