

Support surface selection for long-term patients in the community

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This article looks at some case reports undertaken during a community initiative, which explored the importance of regularly reassessing patients' support surface needs in relation to their general wellbeing, comfort and personal relationships on a long-term basis. The comfort and dignity of patients who are prescribed long-term specialist dynamic mattresses is discussed through real patient stories. The importance of both involving and educating patients and their carers on pressure ulcer identification and prevention is also shown through this community initiative.

KEYWORDS:

- Pressure ulcers
- Community setting
- Patient comfort
- Support surfaces

Patient comfort is frequently used to describe both physical and emotional aspects of the patient experience (Kolcaba, 1994; Lin, 2010). A number of definitions exist in the literature, but, in the authors' opinion, there is a lack of clarity in applying this concept when prescribing support surfaces for long-term community use.

As part of a CQUIN project funded by St Helen's and Halton local clinical commissioning group (CCG), a specialist equipment nurse was employed to carry out individual patient assessments to audit the current prescribing of dynamic pressure-relieving support surfaces.

During this process of reassessment, case reports were undertaken to gain a deeper understanding of comfort from the perspective of patients who were prescribed pressure-redistributing support surfaces as part of their overall pressure ulcer prevention and management plan.

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The cases also highlighted how using support surfaces can have a greater impact on patient wellbeing in the community than acute settings, as the equipment also needs to fit in with patients' daily activities and lifestyle on a long-term basis.

In line with best practice, National Institute for Health and Care Excellence (NICE) guidance was followed during assessments, namely:

- ▶ NICE clinical guideline (CG138) was considered alongside an associated NICE quality standard (QS15) on patient experience in adult NHS services (NICE, 2012a, b). Both specify that people receiving care should be treated with dignity, have opportunities

to discuss their preferences, and be supported to understand their options so that they can make fully informed decisions

- ▶ NICE quality standard (QS89) for pressure ulcers (NICE, 2015), which states that patients at risk of pressure ulcer development should be provided with a high specification foam support surface or a dynamic support surface.

Ensuring that care is safe and that people of all ages have a positive experience of treatment is vital in a high-quality service (NICE, 2012a, b; NICE, 2015). Thus, it is important to consider these factors when planning and delivering services in the community.

To determine the most appropriate support surface for patients at risk of pressure ulcer development, assessment should consider their comfort preferences and the impact that the equipment might have on their daily lives, as it can effect their physical, social and psychosocial wellbeing (Pagnamenta, 2017).

Support surfaces are 'specialized devices for pressure redistribution designed for management of tissue loads, microclimate, and/or other therapeutic functions (i.e. any



THE SCIENCE — DYNAMIC VERSUS STATIC SUPPORT SERVICES

Support surfaces can work in two ways to reduce the risk of pressure ulcer development:

- ▶ Static systems: these conform to the shape of the body so that the contact area is increased, which minimises interface pressure
- ▶ Dynamic systems: these can produce an alternating action, so that tissue is exposed to periods of high pressure followed by low pressure, which is low enough to allow blood flow to return.

mattress, integrated bed system, mattress replacement, overlay, or seat cushion, or seat cushion overlay)' (National Pressure Ulcer Advisory Panel [NPUAP], 2007). They should be chosen on an individual basis, depending on the patient's need for pressure redistribution and other therapeutic functions, as pressure ulcer risk factors vary from person to person (NPUAP et al, 2014).

It is also important that patients with a pressure ulcer have access to appropriate pressure-relieving equipment 24 hours per day (NICE, 2014). However, in the authors' clinical experience, not only can reassessing patients' individual needs be overlooked when providing equipment in the community, but also their preferences, for example, a double bed for a couple.

Use of appropriate equipment can both maximise and facilitate independence for patients in their own home and on a long-term basis. Furthermore, to manage resources efficiently, healthcare professionals should ensure that the specification of equipment corresponds to the patient's needs. For example, lower specification equipment may be adequate. But, choice should always be based on detailed and comprehensive individual assessment, rather than solely on a risk assessment score (Department of Health [DH], 2001). This should involve:

- ▶ Patient level of mobility, e.g. can they get in and out of bed themselves and move when in bed
- ▶ Patient comfort
- ▶ Microclimate (see practice point box)
- ▶ Care setting — some systems are unsuitable for the home because of their weight or needing an alternative power source if

Practice point

In relation to pressure ulcers, microclimate refers to the skin's temperature and humidity/skin surface moisture where the skin interfaces with the support surface (International review, 2010).

there was a loss of electricity (International review, 2010).

PATIENT REASSESSMENT

As said, funded by the CCG, an equipment nurse was employed to carry out individual patient assessments to review current prescribing of pressure-redistributing support surfaces in the St Helen's and Halton localities in line with NICE guidance (NICE, 2015).

A pathway for the prescription of pressure-redistributing equipment and an educational programme for community nursing teams, as well as a patient information leaflet, were developed in partnership with Drive DeVilbiss Healthcare clinical advisor team, to ensure patient involvement throughout the review process. The pathway was also devised to help community nurses gain confidence in using clinical judgment when prescribing support surfaces, in conjunction with the Waterlow Risk Assessment tool (Waterlow, 1985).

The equipment review, carried out with 413 individual patients in their own homes, identified inappropriate prescribing of pressure-redistributing equipment in relation to individual requirements. Out of 413 patients reassessed, 98 (23%) were stepped down from either a dynamic mattress to a high specification foam mattress, or from a high specification mattress to their own mattress. Thus, case reports were gathered to help clinicians understand the importance of appropriate pressure-redistributing mattress selection, as well as patient choice and involvement in a community setting. What follows is a representative sample of the cases gathered.

Case A

This 54-year-old male patient had been prescribed a dynamic mattress as part of his pressure ulcer prevention plan. He spent six hours on his bed in a 24-hour period, and was able to reposition himself independently and had no existing or previous pressure damage.

His main concern was that he had been prescribed this mattress when

Remember

Prevention is always better than cure, so identifying patients at risk of pressure ulcers and choosing the most appropriate interventions to prevent pressure damage is key.

discharged from hospital four years earlier following a stroke that left him with right-sided weakness. He felt that he still required the dynamic surface as this was his original assessment. He had been told by hospital staff that he would be on the mattress for life, as this was the only way to prevent pressure ulcer development.

During assessment, the specialist equipment nurse discussed with and educated the patient about pressure area management, such as the importance of skin care and looking for early signs of damage, repositioning and good nutritional intake. Following this, he agreed to change the mattress to a high-risk foam one.

As a result of the education and information given, the patient was able to understand his support surface needs and the pressure-reducing properties of a high specification foam mattress. Furthermore, he wanted to be able to share a double bed with his wife again, so, in agreement with the tissue viability team, he was prescribed a double mattress option. Thus, after four years in a single hospital bed at home, the patient was able to go back to sharing a double bed with his wife.

On further discussion about pressure-reducing support surfaces, it was discovered that he had not been on holiday for four years, as he believed he could not access a specialist mattress while away. Thus, the equipment nurse explained that he could get both a pressure-redistributing mattress and care support. However, through reassessment, it was identified that the patient would not require a specialist mattress for just a short break.

This case highlights the importance of talking to patients and the positive impact that appropriate support surface selection can have on an individual.

Case B

Patient B was a 78-year-old male with dementia. He lived at home with his wife, who was his main carer. In line with this community initiative, it was decided to reassess his needs, as he had a hospital bed and dynamic mattress system, which were situated in the living room. He had had this equipment since his last hospital admission three months previously, following deterioration in his long-term condition. He was able to transfer to his reclining chair in the day time with the help of his wife and a samhall turner.

After assessing the patient and talking to his wife, the specialist equipment nurse decided that the dynamic mattress was no longer required and he could be 'stepped down' to a high specification foam mattress. His wife was extremely happy with this change in support surface from a powered dynamic to a static foam. She had moved her husband into the living room, as she 'couldn't sleep with the noise of the mattress' — previously he had had a hospital bed in their bedroom.

With the introduction of the static foam mattress, the patient was now able to sleep next to his wife again.

Case C

Patient C was previously under the care of the district nurses, but had been discharged from their caseload as he no longer needed nursing care. He had been provided with a dynamic mattress following hospital admission for below-knee amputation in April 2012. The patient had no history of pressure ulcers, but had sustained a skin tear to his knee from his wheelchair in 2015. At reassessment, patient C was in his wheelchair and could reposition himself independently.

He did smoke in bed and used a bucket at the end of the bed to dispose of cigarette ends. Previously, he had been referred to the fire safety

service by district nurses and had all fire equipment in place. During reassessment, this was an additional safety factor to consider, and so the patient was prescribed a high-specification foam mattress, which would meet his needs adequately. The replacement mattress met patient safety needs and reduced the fire risks associated with powered air-filled support surfaces. The patient's independence also improved, as he could reposition himself more easily on the static foam surface.

Case D

In February 2016, patient D — a 76-year-old female patient — was seen by the specialist equipment nurse, as she had had a dynamic bariatric mattress since November 2014. She was no longer under district nursing care. At this reassessment, it was identified that she had been placed on a bariatric dynamic system due to moisture lesions and had never had a pressure ulcer.

Patient D also spent the majority of her time either in a reclining chair or her electric wheelchair. She was able to relieve her own pressure and was not spending any time in bed during the day. She did not find the dynamic system comfortable and the noise of the pump unit kept her awake at night. Following reassessment, the dynamic system was replaced with a high-risk foam mattress, as she did not need a dynamic surface to maintain skin integrity. The patient was extremely happy, and found that the foam

Remember...

The NMC states that all nurses must use up-to-date knowledge and evidence to assess, plan, deliver and evaluate care, communicate findings, influence change and promote health and best practice. They must make person-centred, evidence-based judgements and decisions, in partnership with others involved in the care process, to ensure high quality care (Nursing and Midwifery Council [NMC], 2015).

mattress offered more comfort than the dynamic system, which aided a restful night's sleep.

Case E

This 75-year-old male patient had been admitted to hospital following a fall and had a grade 2 pressure ulcer to his sacrum. On discharge from hospital, he was prescribed a dynamic cushion and mattress. However, during the reassessment review, it was noticed that the patient had pushed the cushion back in his chair because it was uncomfortable. As a result, he was sitting on the edge of the cushion causing trauma to existing tissue damage.

The patient was mobile with a Zimmer frame and understood the importance of repositioning. Following reassessment and discussion with the patient, it was decided that a high-risk foam mattress and cushion could replace



Figure 1. Static pressure-redistributing mattress.

KEY POINTS

- Support surfaces can have a greater impact on patient wellbeing in the community than acute settings, as the equipment also needs to fit in with patients' daily activities and lifestyle on a long-term basis.
- It is important that patients with a pressure ulcer have access to appropriate pressure-relieving equipment 24 hours per day.
- Use of appropriate equipment can both maximise and facilitate independence for patients in their own home and on a long-term basis.
- To manage resources efficiently, healthcare professionals should ensure that the specification of equipment corresponds to the patient's needs.
- It is important to involve patients and keep their comfort in mind when prescribing pressure-redistributing support surfaces, as part of their pressure ulcer prevention and management plan.

the dynamic ones. The patient expressed his relief, as he found the dynamic systems very uncomfortable and difficult to mobilise from. He was shown how to use the foam cushion appropriately and educated about the importance of fully complying with his pressure ulcer prevention plan, e.g. why the cushion was in place and the benefits of utilising it fully as part of his pressure ulcer management and prevention plan.

Case F

This case focused on a 77-year-old lady (patient F) with Parkinson's disease, who had been referred to the specialist equipment nurse for review as she was using a dynamic mattress system. This mattress had been installed in January 2015 following a district nurse assessment of a grade 2 pressure ulcer to her right heel.

Patient F spent less than eight hours in bed, with the rest of her time being spent between an electric wheelchair and reclining chair.

After speaking with both patient F and her daughter, it was evident that she found the mattress uncomfortable. Patient F felt as though she was 'restricted' and that she 'dipped' in the middle of the bed. She also stated that her heels were painful and tender every morning when she woke up, and that they felt as though they were not getting any relief. After discussing the options, the dynamic system was changed to a high-risk foam system with extra protection for her heels using foot and heel protectors and a heel offloading plan.

After four weeks, patient F was again reviewed to assess her status. She reported that the mattress was comfortable and that she could move more independently, which helped the carers when getting her up and out of bed in the morning. Furthermore, her heels were less painful.

CONCLUSION

These cases highlight the importance of involving patients and keeping their comfort in mind when prescribing pressure-redistributing

support surfaces, as part of their pressure ulcer prevention and management plan. Support surfaces provided in the community impact on general patient wellbeing, as they should fit in with their everyday needs on a long-term basis. Thus, it is crucial that patients in the community are reassessed to ensure that the most appropriate support surfaces are in place to meet both their personal and clinical needs (King's Fund, 2012). **JCN**

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