A static-led approach to effective equipment management

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The aim of this article is to give an insight into the provision of pressure relieving products and education in Ashton, Leigh and Wigan Primary Care Trust (ALW PCT). A static-led approach to pressure ulcer prevention and management has been in place for a number of years. Consensus opinion among tissue viability nurses is that a static-led approach is the most economical approach to pressure area care. However, the cornerstones of a successful static-led approach are the delivery of fundamental nursing care, and education in techniques to prevent pressure damage.

This article discusses the rationale for a static-led approach to pressure management, and presents the results of a survey among PCT nurses about the practice of equipment provision.

The growing pressure on pressure relieving services

The financial benefits of using any product should always remain secondary to the potential benefits experienced by the patient. Community health care aims to support those patients who are living at home. However, reduced length of hospital stays and a growing older population put a great deal of strain on resources if they are not effectively managed.

It is widely acknowledged that waiting lists for pressure-relieving products in some areas are unacceptable. Long waits for equipment can contribute to a host of detrimental outcomes for the patient, including delayed hospital discharge, pain and potentially pressure ulcer development. These outcomes have a ‘domino effect’ on the health service as a whole, requiring additional manpower and resources to manage. A lack of resources can also lead to frustration and poor morale in teams of community health-care providers.

ALW PCT faces the same challenges as any other PCT:
- Higher patient and relative expectation regarding service and provisions.
- Limited resources and growing patient group.
- A growing older patient group.
- Increased hospital discharge rate – resulting in a more vulnerable and needy patient group.

These challenges mean that the PCT’s approach to equipment management must be economical and effective. Consequently, ALW PCT prioritize the need to address issues relating to equipment provision and management. It was recognized that practical decisions made with regard to resource management should incorporate the changing culture and growing demands of community care.

Past and present attitudes towards product selection and management

Over the last 20 years the health service has become increasingly dependent on dynamic/alternating pressure mattresses in the prevention and management of pressure ulcers, and there is a wealth of evidence supporting the clinical benefits of dynamic mattresses.

However, there is a belief within ALW PCT that recognition of the limitations of dynamic systems is of equal importance. A simple survey carried out among nurses working in ALW PCT indicated that most had at one time, or currently, believed one or more of the following misconceptions regarding dynamic mattresses:

- ‘Patients should be allocated a dynamic mattress as a result of a high Waterlow score, typically 15 or above.’

This is incorrect. Such statements do not reflect the fact that the use of a dynamic mattress is a clinical decision, for which the responsibility remains with the health professional. Nurses must operate in a culture of individualized patient care; this should apply equally to product selection.

Oldman et al’s (2003) action research project gave an

ABSTRACT

Ashon, Leigh and Wigan Primary Care Trust has a static-led approach to the provision of pressure-relieving equipment in the community. This means that product selection must result from an individualised clinical assessment of the patients needs and not reliant on a blanket approach. The limitations of dynamics should be considered and the delivery of essential nursing care should be deemed paramount, rather than products. The emphasis within the PCT is on holistic assessment and informed clinical decision-making, combined with education of patients and carers in use of equipment. This article sets out the rationale for a static-led approach, and reports the results of a survey of district nurses which looked at their practice in this area.

KEY WORDS
Pressure-relieving equipment • Assessment • Nurses • Education
insight into the considerations when prioritizing the distribution of community health equipment loans. Their paper outlined the following criteria that should be considered during the decision-making process:

- Discharge/re-admission
- Risk of deterioration
- Waterlow score
- Pressure ulcer grade
- Mobility level
- Length of time in bed/Chair
- Clinical risk to nurse/carer
- Nutritional status
- Support systems available.

Oldman et al.'s approach reflects the growing emphasis on individual assessment as opposed to rigid guidelines or prescription based on risk assessment scores alone (i.e., Waterlow/Braden/Norton etc.).

A high Waterlow score (or other risk score) in isolation gives no reliable indications of the support surface the patient may need. Each patient's individual characteristics should be identified and examined. For example, there are many individuals who, when scored using Waterlow, appear to have a high or very high risk score (i.e., increased vulnerability/elevated risk (NICE, 2003)) but whose actual mobility outweighs any other risk factors.

'Patients who are receiving the benefits of an active system do not need to be turned, repositioned or observed as frequently.'

No product should ever claim to replace or replicate the delivery of essential nursing care, and this misconception may have contributed to inadequate delivery of essential nursing care. Patients on dynamic systems will still require regular skin observation and repositioning, as clearly stated in the NICE guidelines.

'Every patient who is perceived as being high risk should be allocated a dynamic mattress otherwise the nurse/HCP will be open to litigation claims.'

A nurse can not be sued or face litigation simply because of product selection in isolation. There are numerous reasons why patients who are considered to be at high risk of pressure ulcer development may not require or receive a dynamic mattress. The factor which remains the most effective in pressure ulcer prevention and management is the delivery of essential nursing care, in addition to the necessary documentation regarding observations, action planning, rationale and outcomes.

'It is not only the patient's clinical condition that needs to be considered when deciding the most appropriate equipment provision.'

At face value this statement is correct. But the implication is again that dynamic mattresses can replace care, and should be used when carers are unable to reposition the patient. In fact, consideration must be given to both the patient's and carer's ability to manage products. The Medical Devices Agency (2000) identified a range of common problems associated with product use. Inappropriate use of products resulted when individuals had received inadequate training in product use or lacked the perceptual or physical abilities necessary to operate the products effectively. Consensus achieved through informal discussions among the ALW PCT team was that reflection and consideration of the patient's environment and carer's cognitive and physical abilities to manage equipment is necessary in order to provide the most appropriate equipment.

ALW PCT

In order to enable nurses to make informed clinical decisions regarding pressure-relieving equipment, ALW PCT strives to provide health professionals, and when necessary carers, with up-to-date information and education in relation to pressure ulcer prevention and management. The education provided ensures that the necessary emphasis is placed and remains with the essential of care. Patients need are assessed on their individual merits, environment, care support and disease process. This approach of assessment rather than assumption is the fundamental factor in the successful implementation of a static-led approach. A static led approach aims to optimize the benefits of the static mattress and essential nursing care rather than inappropriately depending on expensive dynamic mattresses. Products have always been, and will remain, secondary.

The PCT has at its disposal educational and clinical support from its supplier of static pressure-relieving systems (MSS Ltd). Over the last 10 years ALW PCT has worked with MSS in the delivery of teaching sessions and clinical updates to the nurses and carers within this trust. It is a requirement of this relationship that all education sessions provided by the supplier should not be product-led, and that the emphasis remains predominately on pressure ulcer prevention techniques and the delivery of fundamental nursing care. ALW PCT feels strongly that it is not the role of the company to persuade or convince nurses about the apparent benefits of their specific products.

Pressure relief practice

In order to see whether the education provided in the PCT was effective, a survey was undertaken by the author among nurses in the PCT. The aim was to provide a snapshot of their practice in relation to the selection and provision of pressure-relieving mattresses and overlays to patients considered at risk of pressure damage. Questionnaires were distributed to a random selection of 50 PCT nurses, all of whom responded. The questionnaire was designed to be completed following the assessment of one patient for pressure-relieving mattress or overlay, so capturing a snapshot of current practice. Nurses were asked to complete the questionnaire within 1 week of receipt.

Product selection

There are no set rules with regard to product selection. Guidelines and recommendations, whether they be trust or national, provide guidance with regard to standards and the delivery of appropriate care, but should be viewed as what
they are – recommendations. To ensure effective product use and selection, nurses must assess each patient's needs on their individual merits and according to their own circumstances.

Figure 1 shows the proportion of patients at high-risk of pressure damage nursed on static pressure-relieving surfaces in comparison to dynamic systems. The Waterlow score, like all assessment tools, is designed to aid patient evaluation and should not be used in isolation to prescribe equipment. The selection of support surfaces within ALW PCT is dependent on the holistic needs of the patients. Other indicators/consequences of health and environment were observed to ensure the most appropriate surface was used.

Figure 2 shows the proportion of patients with existing pressure ulcers nursed on a static surface (Propad overlay or Softform mattress) in comparison to a dynamic surface. This graph suggests that nurses were using their clinical judgement in order to select the most appropriate piece of equipment for their patients. The presence of a pressure ulcer should not be a prerequisite for using a dynamic system. The site, grade and location of the pressure ulcer should be considered as part of the individual assessment. These insights give a clearer picture of the patients' needs and, in addition, the holistic environment and situation must be considered in the decision-making process.

Figure 3 shows the number of immobile patients nursed on static in comparison to dynamic surfaces. The consequences of immobility are a contributing factor to the development of pressure ulcers. It is therefore essential that the patient is repositioned, independently or with intervention. The reason for and level of immobility should be considered; following an acute episode or planned procedure, the patient may be participating in a rehabilitation regime. In such instances the majority of nurses questioned felt that it was unsuitable to provide a surface that can hinder independent transfers, so obstructing performance of rehabilitation techniques. Dynamic mattresses' uneven surface can hinder self-transfers and even assisted transfers, even when on static mode. Therefore if the benefits of improved mobility outweighed the risk of pressure ulcer development in relation to the support surface, then a static system was the preferred clinical choice.

Figure 4 shows the split by Waterlow score between patients nursed on dynamic and static surfaces. It indicates that individual patient assessment is responsible for equipment selection. If the nurses were solely relying on Waterlow score one would have expected to see a greater number of patients being nursed on dynamic mattresses. This figure clearly indicates the Waterlow score is being used correctly, and informal assessment of the patients' vulnerability, based on informed clinical judgement, is the predominant factor of product selection.

Nurses were asked to rate on a 1–5 scale the importance of a range of non-clinical factors on their choice of pressure-relieving surface with the patient they had assessed (with 1 being the least important and 5 being the most important). Figure 5 shows that all scores were close to 3, i.e. moderately important. This indicates that choices were...
based on individual merits and clinical judgement in conjunction with formal risk assessment tools.

For example if a patient was chronically or currently immobile and promoting independence was not an immediate goal, than the benefit of using a static surface for rehabilitation assistance would not be a consideration. However the performance of essential nursing care is still a consideration, as are many other criteria that aid the optimal use of equipment.

**Patient and carer education**

Education of patients and carers into the essentials of pressure ulcer prevention is fundamental in the prevention of pressure ulcers. The final question asked nurses to indicate which of a list of strategies to avoid pressure damage they had discussed with patients or their carers. There appear to be significant differences in the advice given (Figure 6); for some activities (repositioning and advising on pressure-relieving exercise) all respondents recorded participation, namely. Other activities, like using a knee brake, were discussed with patients in fewer instances. Not every activity is appropriate in every case (for example, the knee brake may not have been applicable if the patient's bed was not profiling), but the variation was of interest. Informal discussions with approximately 40 nurses showed that the benefits of some of the techniques listed were not as clearly understood as others, and they were therefore not utilised. Such information has helped to structure future education programmes, emphasizing and explaining the clinical benefits of such techniques and so contributing to the prevention of pressure ulcers.

**Conclusion**

A static-led approach to pressure ulcer prevention and management is ALW PCT's response to the increasing demand for community services, coupled with an emphasis on staff training, holistic assessment and informed clinical decision-making. Partnership with a supplier has enabled development of a trust-wide educational programme in best practice of pressure reduction and pressure damage prevention. The result is that nurses' choice of pressure-relieving surface is not ritualistic - the most appropriate surface is selected to meet the needs of the patient and carers.


**KEY POINTS**

- Pressure damage prevention is dependent on nursing skills rather than product selection.
- The static-led policy of ALW PCT emphasizes individual assessment above prescriptive approaches.
- Patient and carer education is essential to an effective static-led approach.