1 Guideline title

Pressure-relieving devices: the use of pressure-relieving devices for the prevention of pressure ulcers in primary and secondary care

1.1 Short title

Pressure-relieving devices (prevention)

2 Background

a) The National Institute for Clinical Excellence (‘NICE’ or ‘the Institute’) has commissioned the National Collaborating Centre for Nursing and Supportive Care to develop a clinical guideline on the use of pressure-relieving devices for the prevention of pressure ulcers for use in the NHS in England and Wales. This follows referral of the topic by the Department of Health and National Assembly for Wales (see Appendix). The guideline will provide recommendations for good practice that are based on the best available evidence of clinical and cost effectiveness.

b) The Institute’s clinical guidelines will support the implementation of National Service Frameworks (NSFs) in those aspects of care where a Framework has been published. The statements in each NSF reflect the evidence that was used at the time the Framework was prepared. The clinical guidelines and technology appraisals published by the Institute after an NSF has been issued will have the effect of updating the Framework.
3 Clinical need for the guideline

a) Pressure ulcers (also known as pressure sores, bed sores, pressure damage, pressure injuries and decubitus ulcers) are areas of localised damage to the skin and underlying tissue and are believed to be caused by a combination of pressure, shear and friction. They usually occur over bony prominences and are common among the very ill, neurologically compromised and the immobile.

b) Pressure ulcers represent a major burden of sickness and reduced quality of life for patients and their carers (Franks et al. 1999) and the financial costs to the NHS are also substantial (Cullum et al. 1995). Pressure ulcers have been recorded as occurring in 4–10% of patients admitted to a UK district general hospital (the precise rate depends on case mix), and occur in an unknown proportion of patients in the community (Cullum et al. 2001). It has been estimated that preventing and treating pressure ulcers in a 600-bed general hospital costs between £600,000 and £3 million a year (Touche Ross 1993). The cost of treating a patient with a grade IV pressure ulcer has been calculated as £40,000 (Collier 1999).

c) A growing body of knowledge about the effectiveness of pressure-relieving devices (such as mattresses) in preventing the development of pressure ulcers has highlighted the need for clinical practice recommendations that incorporate an analysis of their potential cost-effectiveness.

d) In 2001, the National Institute of Clinical Excellence (NICE) issued a clinical guideline on pressure ulcer risk assessment and prevention commissioned by the Department of Health. At that stage, an assessment of the cost-effectiveness of pressure-relieving devices was not conducted, therefore no recommendations on their use were issued in the guideline.
4 The guideline

a) The guideline development process is described in detail in three booklets that are available from the NICE website (see ‘Further information’). *The Guideline Development Process – Information for Stakeholders* describes how organisations can become involved in the development of a guideline.

b) This document is the scope. It defines exactly what this guideline will (and will not) examine, and what the guideline developers will consider. The scope is based on the referral from the Department of Health and National Assembly for Wales (see Appendix).

c) The areas that will be addressed by the guideline are described in the following sections.

4.1 Population

4.1.1 Groups that will be covered

a) The guideline recommendations will apply to patients of all ages.

Although the guideline will not cover treatment of existing pressure ulcers, the guideline will be useful in preventing pressure ulcers on other areas of the body and further pressure damage to existing pressure ulcers.

4.1.2 Groups that will not be covered

a) The guideline will not include recommendations on the treatment of existing pressure ulcers, this will be addressed in a separate guideline due for publication in 2004.
4.2 Healthcare setting

a) The guideline will cover the care given by primary and secondary care professionals who are involved in the care of patients in hospital, nursing homes, supported accommodation and at home who are at risk of developing pressure ulcers (including those undergoing surgery and postoperative care). It will also help to guide patients and carers on the use of pressure-relieving devices.

b) This is an NHS guideline. Although it will address the interface with other services, such as those provided by social services, secure settings and the voluntary sector, it will not include services exclusive to these sectors.

4.3 Clinical management

a) The guideline will include information on whether the following pressure-relieving or pressure-redistributing devices are effective and cost-effective.

2. Alternative foam mattresses/overlays (for example, convoluted foam, cubed foam); these are conformable and aim to redistribute pressure over a larger contact area.
8. Alternating-pressure mattresses/overlays: the patient lies on air-filled sacs, which sequentially inflate and deflate and relieve...
pressure at different anatomical sites for short periods; these devices may incorporate a pressure sensor.

9 Air-fluidised beds: warmed air is circulated through fine ceramic beads covered by a permeable sheet; these allow support over a larger contact area.

10 Low-air-loss beds: patients are supported on a series of air sacs through which warmed air passes.

11 Turning beds/frames: beds that either aid manual repositioning of the patient or reposition the patient by motor-driven turning and tilting

12 Operating-table overlays: as in 11.

Items 1–7 are classified as ‘low-tech’ surfaces and items 8–10 as ‘high tech’.

The precision of the cost-effectiveness estimates will depend on the evidence available.

b) Other pressure-relieving aids such as water-filled gloves, synthetic and genuine sheepskins, doughnut-type devices, cushions, and limb protectors will not be considered in terms of cost effectiveness, as recommendations about their use have already been issued by NICE and are due for review in 2005.

c) Advice on interventions will be based on the best evidence available to the development group.

d) The guideline will be relevant to, but will not cover, other aspects of pressure ulcer assessment and prevention (such as identifying individuals at risk, the use of risk assessment scales, risk factors, skin inspection, positioning of patients and staff education and training). Recommendations relating to these areas were included in a guideline produced by the Royal College of Nursing (2001).
4.4 Audit support within guideline

Level 1 audit review criteria will be included within the guideline.

4.5 Status

4.5.1 Scope

This is the final scope.

4.5.2 Guideline

The development of the guideline recommendations will begin in March 2002.

5 Further information

Information on the guideline development process is provided in:

- *The Guideline Development Process – Information for the Public and the NHS*
- *The Guideline Development Process – Information for Stakeholders*

These booklets are available as PDF files from the NICE website ([www.nice.org.uk](http://www.nice.org.uk)). Information of the progress of the guideline will also be available from the website.

6 References


Appendix – Referral from the Department of Health and National Assembly for Wales

The existing NICE guideline on pressure ulcer risk assessment and prevention is to be supplemented by a guideline on pressure-relieving devices that includes consideration of their cost effectiveness.