

# NATIONAL INSTITUTE FOR HEALTH AND CLINICAL EXCELLENCE

## SCOPE

### 1 Guideline title

Pressure ulcers: prevention and management of pressure ulcers

#### 1.1 *Short title*

Pressure ulcers

### 2 The remit

This is an update of 'Pressure ulcers', NICE clinical guideline 29 (2005) and 'Pressure ulcer prevention', NICE clinical guideline 7 (2003), available from [www.nice.org.uk/guidance/CG29](http://www.nice.org.uk/guidance/CG29) and [www.nice.org.uk/guidance/CG7](http://www.nice.org.uk/guidance/CG7).

This update is being undertaken as part of the guideline review cycle. This guideline will replace CG29 and CG7.

### 3 Clinical need for the guideline

#### 3.1 *Epidemiology*

- a) Pressure ulcers (also referred to as pressure sores, bed sores, pressure damage, pressure injuries and decubitus ulcers) are localised injuries to the skin and/or underlying tissue as a result of pressure or pressure in combination with shear. A number of contributing or confounding factors (including pressure, shear forces, friction and moisture) are also associated with pressure ulcers; the significance of these factors has yet to be elucidated.
- b) Pressure damage usually occurs over bony prominences, such as the sacrum or heels in adults, while presentation in infants and children is more likely to occur on the occipital area or ears.

- c) Pressure ulcers are more likely to occur in people who: are seriously ill; are neurologically compromised; have impaired mobility (including those wearing a prosthesis, body brace or plaster cast); have impaired nutrition; have poor posture; or use equipment such as seating or beds that do not provide appropriate pressure relief. A significant number of pressure ulcers arise during care for other disorders.
- d) Pressure ulcers represent a major burden of sickness and reduced quality of life for people with pressure ulcers and their carers. There are currently no nationally collated data on pressure ulcer incidence and prevalence. Estimates from hospital-based studies vary widely according to definitions used, the population studied and the care setting. Based on available data, new pressure ulcers are estimated to occur in 4–10% of patients admitted to hospitals in the UK; the precise rate depends on case mix. The rate is unknown in the community and care homes.
- e) The presence of pressure ulcers has been associated with a two- to four-fold increase in the risk of death in older people in intensive care units.
- f) The financial costs to the NHS are considered to be substantial, but recent cost data are not available. In 2004 the estimated annual cost of pressure ulcer care in the UK was between £1.4 billion and £2.1 billion a year, and the mean cost per patient of treatment for a grade IV pressure ulcer was calculated to be £10,551 a year. It is therefore likely that current costs to the NHS are higher.

### **3.2 *Current practice***

- a) Prevention of pressure ulcers usually involves an assessment to identify people most at risk of pressure ulcers, such as elderly, immobile people or those with spinal cord injury. Assessments are most commonly carried out using specific pressure area risk scores (for example, the Braden or Waterlow scales for predicting

pressure sore risk or the, Glamorgan scale for paediatric pressure ulcers).

- b) Pressure ulcers are assessed, and potential treatment options include wound dressings, debridement, physical therapy, antibiotics and antimicrobials. Mobilising, positioning and repositioning interventions, and support surfaces are used in combination with other wound management strategies. Nutritional assessment is usually carried out so that nutritional deficiencies can be addressed.
- c) Surgical interventions for debridement or to obtain coverage with skin flaps may be performed in some patients. If poor circulation is a contributory factor, vascular surgical intervention may be used. Infection may also be treated if it is a contributory factor to the persistence of the ulcer or is causing systematic illness or cellulitis.
- d) There is variation in the consistency of approach to pressure ulcer prevention, and to treatment and care of established pressure ulcers across the NHS in both secondary and primary care. There is a need for guidance to rationalise the approaches used for prevention, treatment and care of pressure ulcers, and to ensure practice is based on the best available evidence.

## **4 The guideline**

The guideline development process is described in detail on the NICE website (see section 6, 'Further information').

This scope defines what the 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.

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) People of all ages.
- b) Subgroups that are identified as needing specific consideration will be considered during development but may include:
  - people who are immobile
  - people with neurological disease or injury (including people with multiple sclerosis)
  - people who are malnourished
  - people who are morbidly obese
  - older people

### **4.1.2 *Groups that will not be covered***

- a) None.

## **4.2 *Healthcare setting***

- a) Primary care settings, such as general practices, health centres and polyclinics.
- b) Community care settings (including the persons' home) where NHS healthcare is provided or commissioned.
- c) Secondary-care settings where NHS healthcare is provided or commissioned.
- d) This guideline is commissioned for the NHS, but people providing healthcare in other settings, such as private settings, may find the recommendations relevant.

## **4.3 Clinical management**

### **4.3.1 Key clinical issues that will be covered**

- a) Risk assessment, including the use of risk assessment tools and scales.
- b) Skin assessment.
- c) Prevention, including:
  - moisture lesions and the use of barrier creams
  - pressure-relieving devices<sup>1</sup>, including mattresses, cushions, sheepskins, overlays, beds, limb protectors and seating
  - skin massage/rubbing
  - positioning and repositioning
  - nutritional interventions (including hydration) as preventive strategies for people with and without nutritional deficiency
  - patient and carer education, including self assessment
  - education and training for healthcare professionals.
- d) Assessment and grading of pressure ulcers.
- e) Management, including:
  - debridement, including autolytic, mechanical and larval therapy
  - pressure-relieving devices<sup>1</sup>, including mattresses, cushions, sheepskins, overlays, beds, limb protectors and seating
  - nutritional interventions (including hydration) for people with and without nutritional deficiency
  - antimicrobials and antibiotics
  - wound dressings
  - management of heel pressure ulcers
  - other therapies, including electrotherapy, negative pressure wound therapy and hyperbaric oxygen therapy.

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<sup>1</sup> The term 'pressure-relieving devices' is used here to describe all pressure-reducing and pressure-redistributing support surfaces and devices.

### **4.3.2 Clinical issues that will not be covered**

- a) Prevention and management of:
- ulceration caused by ischemia or neuropathy
  - venous leg ulcers
  - pressure ulcers caused by devices
  - Kennedy terminal ulcers.

## **4.4 Main outcomes**

### **General**

- a) Quality of life.
- b) Adverse events.

### **Prevention**

- c) Proportion of people who develop new pressure ulcers.

### **Management**

- d) Pain
- e) Time to healing and/or rate of healing.
- f) Proportion of ulcers healed.
- g) Rate of change in ulcer.

## **4.5 Economic aspects**

Developers will take into account both clinical and cost effectiveness when making recommendations involving a choice between alternative interventions. A review of the economic evidence will be conducted and analyses will be carried out as appropriate. The preferred unit of effectiveness is the quality-adjusted life year (QALY), and the costs considered will usually be only from an NHS and personal social services (PSS) perspective. Further detail on the methods can be found in 'The guidelines manual' (see 'Further information').

## **4.6 Status**

### **4.6.1 Scope**

This is the final scope.

### **4.6.2 Timing**

The development of the guideline recommendations will begin in January 2012.

## **5 Related NICE guidance**

### **5.1 Published guidance**

#### **5.1.1 NICE guidance to be updated**

This guideline will update and replace the following NICE guidance:

- Pressure ulcers. NICE clinical guideline 29 (2005). Available from [www.nice.org.uk/guidance/CG29](http://www.nice.org.uk/guidance/CG29)
- Pressure ulcer prevention. NICE clinical guideline 7 (2003). Available from [www.nice.org.uk/guidance/CG7](http://www.nice.org.uk/guidance/CG7)
- Multiple sclerosis. NICE clinical guideline 8 (2003). Available from [www.nice.org.uk/guidance/CG8](http://www.nice.org.uk/guidance/CG8) (recommendations on pressure ulcers only)

#### **5.1.2 Other related NICE guidance**

- End of Life Care for adults. NICE Quality Standard (2011). Available from <http://www.nice.org.uk/guidance/qualitystandards/endoflifecare/home.jsp>
- The MIST Therapy system for the promotion of wound healing. NICE medical technology guidance 5 (2011). Available from [www.nice.org.uk/guidance/MTG5](http://www.nice.org.uk/guidance/MTG5)
- Diabetic foot problems. NICE clinical guideline 119 (2010). Available from [www.nice.org.uk/guidance/CG119](http://www.nice.org.uk/guidance/CG119)
- Surgical site infection. NICE clinical guideline 74 (2008). Available from [www.nice.org.uk/guidance/CG74](http://www.nice.org.uk/guidance/CG74)

- Obesity. NICE clinical guideline 43 (2006). Available from [www.nice.org.uk/guidance/CG43](http://www.nice.org.uk/guidance/CG43)
- Nutrition support in adults. NICE clinical guideline 32 (2006). Available from [www.nice.org.uk/guidance/CG32](http://www.nice.org.uk/guidance/CG32)
- Type 2 diabetes: prevention and management of foot problems. NICE clinical guideline 10 (2004). Available from [www.nice.org.uk/guidance/CG10](http://www.nice.org.uk/guidance/CG10)

## **5.2 Guidance under development**

NICE is currently developing the following related guidance (details available from the NICE website):

- Infection control. NICE clinical guideline update. Publication expected March 2012.
- Lower limb peripheral arterial disease. NICE clinical guideline. Publication expected October 2012.
- Incontinence in neurological disease. NICE clinical guideline. Publication expected October 2012.

## **6 Further information**

Information on the guideline development process is provided in:

- ‘How NICE clinical guidelines are developed: an overview for stakeholders the public and the NHS’
- ‘The guidelines manual’.

These are available from the NICE website

([www.nice.org.uk/GuidelinesManual](http://www.nice.org.uk/GuidelinesManual)). Information on the progress of the guideline will also be available from the NICE website ([www.nice.org.uk](http://www.nice.org.uk)).