

# NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

## SCOPE

### 1 Guideline title

Non-complex fractures: diagnosis, management and follow-up of non-complex fractures

#### 1.1 Short title

Non-complex fractures

### 2 The remit

The Department of Health has asked NICE: 'To produce guidance on the diagnosis, management and follow-up of fractures (excluding head and hip, pelvis, open and spinal).'

NICE is developing 5 pieces of guidance relating to trauma, with expected publication dates in June and October 2015 (to be confirmed). Each piece of guidance will focus on a different aspect of trauma care.

- [Complex fractures: assessment and management of complex fractures \(including pelvic fractures and open fractures of limbs\)](#)
- [Fractures: diagnosis, management and follow up of fractures \(excluding head and hip, pelvis, open and spinal\)](#)
- [Major trauma: assessment and management of airway, breathing and ventilation, circulation, haemorrhage and temperature control.](#)
- [Spinal injury assessment: assessment and imaging of patients at high risk of spinal injury](#)
- [Trauma services: service delivery of trauma services](#)

NICE has commissioned the National Clinical Guideline Centre (NCGC) to develop the trauma guidance. The fractures, complex fractures, spinal injury

assessment and major trauma guidelines will start development approximately 6 months before the development of the trauma service delivery guideline.

### **3 Clinical need for guidance**

#### **3.1 *Epidemiology***

- a) It is difficult to estimate accurately the incidence of non- complex fractures because of the lack of a standard definition. For the purposes of this guideline, non- complex fractures are defined as any fracture that does not need treatment in tertiary care.
- b) The annual fracture incidence (excluding head and hip) estimates for all ages ranged from 2.1 per 100 people to 3.6 per 100. Lifetime fracture prevalence among men ranged from 20.7% to over 50%, while the range for women was more than 40% to 53.2%. These estimates were derived using different methodologies and populations, which may account for some of the variation in figures.
- c) Fractures are not recorded as the main cause of death, but fractures are recorded as secondary or associated causes of mortality in death certificates. In 2010 there were 4260 recorded deaths for which fracture was an associated or secondary cause of death. There are variations in fracture-related mortality by age and sex.

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

- a) Fractures are initially seen in a variety of settings, including emergency departments, first contact services and primary care.
- b) Diagnosis of suspected fractures will typically involve triage, physical assessment, X-ray or CT scan, or another type of imaging depending on the type of suspected fracture.

- c) Multiple treatment options exist for fractures, both surgical and non-surgical.
- d) There is wide variation in fracture management, associated analgesia and anaesthesia as well as the timing of inpatient surgery within the NHS.
- e) There are variations in type, timing and duration of follow-up, fracture healing and physiotherapy required for each type of fracture and the selected treatment.

## **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**

Adults, young people and children who present with a suspected non-complex fracture.

Appropriate representative injuries will be referred to in the key clinical areas to be addressed, for example scaphoid injuries in acute stage imaging assessment. There may be a different index injury for each area not a single index injury to represent all questions

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

Any person with a complex fracture including:

- skull fracture
- hip fracture
- spinal injury
- open fracture.

## **4.2 *Healthcare setting***

All settings in which NHS care is received or commissioned.

## **4.3 *Clinical management***

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

- a) Assessment tools for initial triage
- b) Acute-stage imaging assessment:
  - choice and timing of imaging modality and imaging parameters using:
    - X-ray
    - CT
    - MRI.
  - timing of image reporting.
- c) Initial management and treatment plan
  - pain relief(including opiates and non-opioid analgesics)
  - immobilisation (including splinting)
  - manipulation ( including timing and type of anaesthetic)
  - referral (including timing).
- d) Ongoing management (including evaluation, and treatment plan):

- mobilisation (including timing)
  - timing of surgery
- e) Follow up clinics
- f) Skills to be present within the multidisciplinary team
- g) Documentation of clinical assessments and management for people with fractures
- h) Information and support needs of patients and their families and carers when appropriate

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

- a) Prevention of fractures.
- b) Management and follow-up of dislocations.
- c) Management and follow-up of pathological conditions (such as osteoporosis and arthritis) predisposing to fractures.
- d) Any management and follow-up of fractures once a patient has been referred to a specialist centre.

#### **4.4 Main outcomes**

- a) Adverse effects associated with assessment and management.
- b) Functional scales that quantify level of disability.
- c) Health-related quality of life.
- d) Return to normal activities.
- e) Healthcare contacts; duration and continuity.
- f) Morbidity.
- g) Mortality.

h) Patient-reported outcomes.

#### **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 June 2013.

## **5 Related NICE guidance**

### **5.1 Published guidance**

- [EXOGEN ultrasound bone healing system for long bone fractures with non-union or delayed healing](#). NICE medical technologies guidance 12 (2013).
- [Osteoporosis](#). NICE clinical guideline 146 (2012).
- [Patient experience in adult NHS services](#). NICE clinical guideline 138 (2012).
- [CardioQ-ODM \(oesophageal Doppler monitor\)](#). NICE medical technologies guidance 3 (2011).
- [Hip fracture](#). NICE clinical guideline 124 (2011).

- [Low intensity pulse ultrasound to promote fracture healing](#). NICE interventional procedures 374 (2010).
- [Head injury](#). NICE clinical guideline 56 (2007).
- [Falls](#). NICE clinical guideline 21 (2004).

## **5.2 Guidance under development**

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

- Head injury. NICE clinical guideline. Publication expected January 2014.
- Spinal injury assessment. NICE clinical guideline. Publication expected TBC 2015.
- Complex fractures. NICE clinical guideline. Publication expected TBC 2015.
- Major trauma. NICE clinical guideline. Publication expected TBC 2015.
- Trauma services. NICE clinical guideline. Publication expected TBC 2015.

## **6 Further information**

Information on the guideline development process is provided in the following documents, available from the NICE website:

- [How NICE clinical guidelines are developed: an overview for stakeholders the public and the NHS](#)
- [The guidelines manual](#), 2012

Information on the progress of the guideline will also be available from the [NICE website](#).