NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

SCOPE

1 Guidance title

Major trauma services: service delivery for major trauma

1.1 Short title

Major trauma services

2 The remit

The Department of Health has asked NICE: 'To produce guidance on the service delivery of trauma'.

NICE is developing 5 pieces of guidance relating to trauma, with expected publication dates in April 2016. Each piece of guidance will focus on a different aspect of trauma care.

- Complex fractures: assessment and management of complex fractures
- Major trauma: assessment and management of airway, breathing and ventilation, circulation, haemorrhage and temperature control
- Non-complex fractures: diagnosis, management and follow-up of noncomplex fractures
- Spinal injury assessment: assessment and imaging and early management for spinal injury (spinal column or spinal cord injury)
- and
- Major trauma services: service delivery for major trauma
 NICE has commissioned the National Clinical Guideline Centre (NCGC) to develop the trauma guidance.

3 Need for guidance

3.1 Epidemiology

- a) Major trauma is defined as an injury or combination of injuries that are life-threatening and could be life changing because it may result in long-term disability.
- b) In the UK, there are approximately 15,000 deaths caused by accidents every year. Road traffic accidents form a considerable proportion of these fatalities. Major trauma is the leading cause of death and a major cause of disability in people aged under 45.
- c) 'Prompt identification and effective treatment of major trauma can save lives, prevent complications, speed recovery and allow an earlier return to active life'.
- d) The estimated annual lost economic output from deaths and serious injuries from major trauma is between £3.3 and £3.7 billion.

3.2 Current practice

a) According to a February 2010 report from the National Audit Office:

'There is unacceptable variation in major trauma care in England depending upon where and when people are treated. Care for patients who have suffered major trauma, for example following a road accident or a fall, has not significantly improved in the past 20 years despite numerous reports identifying poor practice, and services are not being delivered efficiently or effectively.'

- b) The National Audit Office estimates that 450 to 600 lives could be saved each year in England if major trauma care were managed more effectively.
- c) Care of patients with major trauma is divided into 3 overlapping phases: pre-hospital, hospital and rehabilitation.

- d) There is no systematic approach to care throughout these 3 overlapping phases and there is a lack of involvement of senior healthcare professionals, particularly in teams receiving patients with major trauma. Major trauma is most likely to occur at night and at weekends, when senior staff are not normally in the emergency department. A very small minority of hospitals have 24-hour consultant cover 7 days a week. Lack of involvement of senior healthcare professionals can result in poor or inappropriate decision-making and delays in treatment.
- e) To address this lack of a systematic approach, regional trauma networks are being implemented across England. Trauma networks are organised groups of services with agreed protocols that coordinate pre-hospital, hospital and rehabilitation care and ensure that people are treated at the right time, in the right place and by the most experienced healthcare professionals.
- f) Care of patients with major trauma is carried out in major trauma centres, trauma units and, more rarely, local hospitals. Major trauma centres are specialist hospitals responsible for the care of patients with major trauma across a region. Trauma units are hospitals that receive patients with major trauma who need resuscitation or stabilisation before transfer to the major trauma centre. Local hospitals do not normally receive patients with major trauma.

4 The guidance

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

This scope defines what the guidance will (and will not) examine, and what the guidance developers will consider. The scope is based on the referral from the Department of Health.

The areas that will be addressed by the guidance are described in the following sections.

4.1 Population

Major trauma is defined as an injury or a combination of injuries that are lifethreatening and could be life changing because it may result in long-term disability.

4.1.1 Groups that will be covered

a) Adults, young people and children (0-16yrs) who present with a major traumatic injury or a suspected major traumatic injury.

4.1.2 Groups that will not be covered

- a) People who do not have a suspected or confirmed major traumatic injury.
- b) People with burns.
- c) People with spinal injuries (this will be covered in the NICE guideline on spinal injury assessment.

4.2 Setting

a) All settings in which NHS funded care is received.

4.3 Service delivery

4.3.1 Key issues that will be covered:

- a) Access to the services needed to provide care for people with suspected or confirmed major trauma.
- b) Direct and indirect transfer to appropriate destination:
 - application of triage tools
 - travel times and quality of transfer
 - pre-alert.
- c) Location of services:

- · outreach and on-site services
- d) Competence of pre-hospital provider and receiving trauma team:
 - skills needed to initially manage major trauma
 - tiered trauma teams
 - training for paediatric trauma.
- e) Continuity of care:
 - · trauma coordinators
 - multidisciplinary team management of ongoing care and shared care.
- f) Rehabilitation assessment.
- g) Patient documentation and transfer of information.
- h) National audit systems to improve performance.
- i) Provision of information and support for families and carers.

4.3.2 Issues that will not be covered

- a) Prevention of trauma.
- b) Major trauma resulting from burns.
- c) Management and follow-up of pathological conditions (such as osteoporosis).

4.4 Main outcomes

- a) Health-related quality of life.
- b) Mortality.
- c) Functional scales that measure level of disability.
- d) Return to normal functioning.
- e) Number and length of healthcare contacts.

- f) Time to treatment.
- g) Length of hospital stay.
- h) Place of residence at 90 days.
- i) Staff views and satisfaction.
- j) Patients views and satisfaction

4.5 Economic aspects

Developers will take into account both clinical and cost effectiveness when making recommendations involving a choice between alternative services. 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, including where NICE's standard health economic approaches may not apply, can be found in the Interim methods guide for developing service guidance and the guidelines manual.

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 December 2013.

5 Related NICE guidance

5.1 Published guidance

- Falls. NICE clinical guideline 161 (2013).
- Osteoporosis. NICE clinical guideline 146 (2012).

- <u>Patient experience in adult NHS services</u>. NICE clinical guidance 138 (2012).
- Organ donation. NICE clinical guideline 135 (2011).
- <u>Hip fracture</u>. NICE clinical guideline 124 (2011).
- Venous thromboembolism: reducing the risk. NICE clinical guideline 92 (2010).
- When to suspect child maltreatment. NICE clinical guideline 89 (2009).
- Head injury. NICE clinical guideline 56 (2007).
- Post-traumatic stress disorder (PTSD). NICE clinical guideline 26 (2005).
- Pre-hospital initiation of fluid replacement therapy in trauma. NICE technology appraisal guidance 74 (2004).

5.2 Guidance under development

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

- Intravenous fluid therapy in adults in hospital. NICE clinical guideline.
 Publication expected December 2013.
- Head injury. NICE clinical guideline. Publication expected January 2014.
- Transfusion. NICE clinical guideline. Publication expected May 2015.
- Major trauma. NICE clinical guideline. Publication expected June 2015.
- Intravenous fluid therapy in children and young people in hospital. NICE clinical guideline. Publication expected September 2015.
- Non-complex fractures. NICE clinical guideline. Publication expected April 2016.
- Complex fractures. NICE clinical guideline. Publication expected April 2016.
- Spinal injury assessment. NICE clinical guideline. Publication expected April 2016.

6 Further information

Information on the guidance 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: 5th edition
- Interim methods guide for developing service guidance.
- The guidelines manual.

Information on the progress of the guidance will also be available from the NICE website.