

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 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 major trauma including resuscitation following major blood loss with trauma](#)
- [Spinal injury assessment: assessment and imaging, and early management for spinal injury \(spinal column or spinal cord injury\)](#)
- [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) Major trauma is defined as an injury or a combination of injuries that is life threatening or life changing because it results in long-term disability.
- b) Major trauma represents a serious public health problem. In the UK, there are approximately 15,000 deaths a year from accidents. Almost 100 people per week die and 200 people are permanently disabled in road accidents. Major trauma is the leading cause of death in people under 45 years and a significant cause of disability.
- c) The early identification of life-threatening conditions and appropriate rapid interventions can be lifesaving. Good early interventions for all injuries speeds recovery, prevents complications and allows 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) Survival rates vary significantly from hospital to hospital, with between 5 unexpected survivors and 8 unexpected deaths per 100 trauma patients, reflecting the variable quality of care. 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 consultants 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 an integrated approach, regional trauma networks are being developed 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. A major trauma centre is a specialist hospital 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. A local hospital would 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*

4.1.1 Groups that will be covered

Adults, young people and children who present with a suspected major traumatic injury.

Adults, young people and children with a major traumatic injury.

4.1.2 Groups that will not be covered

Any person who is not considered to have a suspected or confirmed major traumatic injury.

4.2 *Healthcare setting*

All settings in which NHS care is received or commissioned.

4.3 *Service delivery*

4.3.1 Key service delivery issues that will be covered:

a) Defining an inclusive trauma system:

Major trauma services – draft scope for consultation 13 September to 11 October 2013

- provision of care in different settings:
 - pre-hospital
 - major trauma centre
 - trauma unit and local hospital.

- b) Pre-hospital triage:
 - triage tools to identify people with major trauma.

- c) Direct and indirect transfer to a major trauma centre:
 - criteria for direct transfer to a major trauma centre (including protocols for bypassing trauma units)
 - timing of transfer from a trauma unit or local hospital to a major trauma centre after stabilisation.

- d) Receiving a person with major trauma in the emergency department:
 - skills required to initially manage major trauma
 - tiered trauma teams according to severity of injury .
 - training, including training methods (for example, clinical skills training, simulation training)

- e) Services needed to provide care for people with major trauma (including pre-hospital and hospital care):
 - which services are needed (including diagnostic services, interventional services, surgical services, specialist services)
 - access to services:
 - availability

- location of services (including outreach services and on-site services)
- referral to specialist and tertiary services:
 - criteria for referral
 - timing of referral
 - shared care.
- f) Rehabilitation:
 - who benefits from rehabilitation
 - timing of rehabilitation prescriptions.
- g) Patient documentation.
- h) Audit.

4.3.2 Service delivery issues that will not be covered

- a) Prevention of trauma.
- b) Management and follow-up of pathological conditions.

4.4 *Main outcomes*

- a) Health-related quality of life.
- b) Mortality.
- c) Morbidity.
- d) Patient-reported outcomes.
- e) Functional scales that quantify level of disability.
- f) Return to normal functioning.
- g) Number and length of healthcare contacts.

- h) Time to treatment.
- i) Length of hospital stay.
- j) Place of residence at 90 days.
- k) Waiting times.
- l) Waiting lists.
- m) Staff 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 can be found in 'Interim methods guide for developing service guidance' (see 'Further information').

4.6 *Status*

4.6.1 *Scope*

This is the consultation draft of the scope. The consultation dates are 13 September to 11 October 2013.

4.6.2 *Timing*

The development of the guidance recommendations is TBC.

5 Related NICE guidance

5.1 *Published guidance*

- [Patient experience in adult NHS services](#). NICE clinical guidance 138 (2012).
- [Falls](#). NICE clinical guideline 161 (2013).
- [Osteoporosis](#). NICE clinical guideline 146 (2012).
- [Hip fracture](#). NICE clinical guideline 124 (2011).
- [Head injury](#). NICE clinical guideline 56 (2007).
- [Organ donation](#). NICE clinical guideline 135 (2011).
- [Venous thromboembolism: reducing the risk](#). NICE clinical guideline 92 (2010).
- [Pre-hospital initiation of fluid replacement therapy in trauma](#). NICE technology appraisal guidance 74 (2004).
- [Low intensity pulse ultrasound to promote fracture healing](#). NICE interventional procedure guidance 374 (2010).

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.
- Intravenous fluid therapy in children. NICE clinical guideline. Publication expected November 2015.
- Intravenous fluid therapy. NICE clinical guideline. Publication expected December 2013.
- Transfusion. NICE clinical guideline. Publication expected May 2015.
- Spinal injury assessment. NICE clinical guideline. Publication expected May 2015
- Non-complex fractures. NICE clinical guideline. Publication expected June 2015.

- Complex fractures. NICE clinical guideline. Publication expected June 2015.
- Major trauma. NICE clinical guideline. Publication expected June 2015.

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](#)
- [The guidelines manual](#).
- [The interim methods guide for developing service guidance](#).

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