

Trauma

NICE quality standard

Draft for consultation

November 2017

This quality standard covers assessment and management of trauma (complex fractures, non-complex fractures, major trauma and spinal injury) in adults, young people and children. It describes high-quality care in priority areas for improvement. It does not cover hip fracture or head injury because these topics are covered in the quality standards on [hip fracture in adults](#) and [head injury](#).

It is for commissioners, service providers, health, public health and social care practitioners, and the public.

This is the draft quality standard for consultation (from 7 November to 5 December 2017). The final quality standard is expected to publish in March 2018.

Quality statements

[Statement 1](#) People with major trauma who cannot maintain their airway and/or ventilation have drug-assisted rapid sequence induction (RSI) of anaesthesia and intubation within 45 minutes of the initial call to the emergency services.

[Statement 2](#) People who have had urgent imaging for major trauma have their images interpreted within 60 minutes of the scan.

[Statement 3](#) People with open fractures of the long bone, hindfoot or midfoot have fixation and definitive soft tissue cover within 72 hours of injury if this cannot be performed at the same time as debridement.

[Statement 4](#) People who have had full in-line spinal immobilisation have their risk of cervical spine injury assessed using the Canadian C-spine rule.

[Statement 5](#) Major trauma centres have a dedicated trauma ward and designated consultant available to contact 24 hours a day, 7 days a week.

NICE has developed guidance and a quality standard on patient experience in adult NHS services (see the NICE pathway on [patient experience in adult NHS services](#)), which should be considered alongside these quality statements.

Other quality standards that should be considered when commissioning or providing trauma services include:

- [Rehabilitation after critical illness](#) (2017) NICE quality standard 158.
- [Blood transfusion](#) (2016) NICE quality standard 138.
- [Intravenous fluid therapy in children and young people in hospital](#) (2016) NICE quality standard 131.
- [Falls in older people](#) (2015, updated 2017) NICE quality standard 86.
- [Head injury](#) (2014) NICE quality standard 74.
- [Hip fracture in adults](#) (2016) NICE quality standard 16.

A full list of NICE quality standards is available from the [quality standards topic library](#).

Questions for consultation

Questions about the quality standard

Question 1 Does this draft quality standard accurately reflect the key areas for quality improvement?

Question 2 Are local systems and structures in place to collect data for the proposed quality measures? If not, how feasible would it be for these to be put in place?

Question 3 Do you think each of the statements in this draft quality standard would be achievable by local services given the net resources needed to deliver them? Please describe any resource requirements that you think would be necessary for any statement. Please describe any potential cost savings or opportunities for disinvestment.

Questions about the individual quality statements

Question 4 For draft quality statement 2: The timeframe for interpreting urgent images for people with major trauma within 60 minutes of the scan is derived from the [NHS England service specification for major trauma](#). Is this an aspirational timeframe for interpreting images?

Question 5 For draft quality statement 4: Assessment using the Canadian C-spine rule should be done in the pre-hospital setting and again when the person arrives at hospital. Which of these settings has more variation in the use of the assessment and the greater need for quality improvement?

Local practice case studies

Question 6 Do you have an example from practice of implementing the NICE guidelines that underpin this quality standard? If so, please submit your example to [NICE local practice case studies](#) on the NICE website. Examples of using NICE quality standards can also be submitted.

Quality statement 1: Airway management

Quality statement

People with major trauma who cannot maintain their airway and/or ventilation have drug-assisted rapid sequence induction (RSI) of anaesthesia and intubation within 45 minutes of the initial call to the emergency services.

Rationale

Failure to provide an adequate airway for people who cannot maintain one can result in brain injury, with long-term implications for function and quality of life, or death. Performing drug-assisted RSI of anaesthesia and intubation quickly improves ventilation, increasing the probability of survival and reducing long-term morbidity.

Quality measures

Structure

a) Evidence of the availability of healthcare professionals trained to perform drug-assisted RSI of anaesthesia and intubation at the scene, or of systems to transport people to the nearest emergency department where it can be performed.

Data source: Local data collection, for example from local protocols.

b) Evidence of local arrangements to support decision making about whether to dispatch trained healthcare professionals to the scene to deliver drug-assisted RSI of anaesthesia and intubation, or transport the person to the nearest emergency department where it can be performed.

Data source: Local data collection, for example from local protocols.

Process

Proportion of people with major trauma who cannot maintain their airway and/or ventilation who have drug-assisted RSI of anaesthesia and intubation within 45 minutes of the initial call to the emergency services.

Numerator – the number in the denominator who have drug-assisted RSI of anaesthesia and intubation within 45 minutes of the initial call to the emergency services.

Denominator – the number of people with major trauma who cannot maintain their airway and/or ventilation and have drug-assisted RSI of anaesthesia and intubation.

Data source: Local data collection, for example, audit of patient records. The [Trauma Audit and Research Network](#) collects data on intubation ventilation and use of drugs at the scene and in the emergency department.

Outcomes

a) Mortality rates from major trauma.

Data source: Local data collection, for example using the [Office for National Statistics](#) mortality database. The [Trauma Audit and Research Network](#) also collects data on deaths of trauma patients.

b) Rates of brain injury resulting from lack of oxygen caused by major trauma.

Data source: Local data collection, for example local audit of patient records.

What the quality statement means for different audiences

Service providers (ambulance services, major trauma centres and trauma units) ensure that there are protocols to identify people with major trauma who need drug-assisted RSI of anaesthesia and intubation and deliver it at the scene, or transport people to the nearest emergency department if this is not possible, so that it is received within 45 minutes of the initial call to the emergency services.

Healthcare professionals (paramedics, advanced pre-hospital doctors and anaesthetists) seeing people who need drug-assisted RSI of anaesthesia and intubation decide whether to call out healthcare professionals trained in RSI to the scene, or transport the person to the nearest emergency department if it cannot be performed at the scene. Paramedics maintain the person's airway using a suitable technique until trained healthcare professionals arrive at the scene, or until the person arrives at the emergency department. Advanced pre-hospital doctors who are

called out to the scene deliver drug-assisted RSI of anaesthesia and intubation at the scene within 45 minutes of the initial call to the emergency services. Drug-assisted RSI of anaesthesia and intubation is performed by anaesthetists or doctors in emergency departments within 45 minutes of the initial call to the emergency services if it cannot be performed at the scene.

Commissioners (clinical commissioning groups and NHS England) ensure that they commission services using a service specification that states that there should be local protocols on performing drug-assisted RSI of anaesthesia and intubation at the scene of the major trauma, or, if this is not possible, at the nearest emergency department within 45 minutes of the initial call to the emergency services. They undertake contract monitoring and seek evidence that service providers have this in place.

People who are not able to breathe on their own are given a general anaesthetic (a drug that puts a person to sleep) by a doctor before a breathing tube is placed into their mouth and down into their windpipe to help them breathe. If a doctor is not available, or if the breathing tube doesn't work well enough, the ambulance team should use other methods to help the person breathe until they can be taken to a major trauma centre or a trauma unit.

Source guidance

- [Major trauma: service delivery](#) (2016) NICE guideline NG40, recommendation 1.11.2
- [Major trauma: assessment and initial management](#) (2016) NICE guideline NG39, recommendations 1.2.1 and 1.2.3

Definitions of terms used in this quality statement

Major trauma

Major trauma describes serious and often multiple injuries that may require lifesaving interventions. [NICE's full guideline on [Major trauma: assessment and initial management](#)]

Rapid sequence induction of anaesthesia and intubation

A medical procedure involving prompt administration of general anaesthesia and subsequent intubation of the trachea. The procedure results in rapid unconsciousness (induction) and neuromuscular blockade (paralysis) and is used to maintain a patient's airway following a traumatic incident. [NICE's full guideline on [Major trauma: assessment and initial management](#)]

Quality statement 2: Image reporting

Quality statement

People who have had urgent imaging for major trauma have their images interpreted within 60 minutes of the scan.

Rationale

Obtaining the results of imaging as soon as possible allows for earlier diagnosis and decisions to be made on management, for example whether interventions such as surgery or interventional radiology are needed. Earlier treatment can reduce mortality and length of hospital stay, and improve health-related quality of life.

Quality measures

Structure

Evidence of local arrangements to ensure that urgent imaging for major trauma can be interpreted within 60 minutes of the scan.

Data source: Local data collection, for example staff rotas.

Process

Proportion of urgent images for major trauma that are interpreted within 60 minutes of the scan.

Numerator – the number in the denominator that are interpreted within 60 minutes of the scan.

Denominator – the number of urgent images for major trauma.

Data source: Local data collection, for example, local audit of radiology reporting.

The [Trauma Audit and Research Network](#) collects data on the timing of CT and when the CT report is issued.

Outcomes

a) Mortality rates from major trauma.

Data source: Local data collection, for example using the [Office for National Statistics](#) mortality database. The [Trauma Audit and Research Network](#) also collects data on deaths of trauma patients.

b) Length of hospital stay for people with major trauma.

Data source: Local data collection, for example using [Hospital Episode Statistics](#) data from NHS Digital. The [Trauma Audit and Research Network](#) also collects data on length of stay in hospital for trauma patients.

c) Health-related quality of life for people who have experienced major trauma.

Data source: Local data collection, for example patient surveys.

What the quality statement means for different audiences

Service providers (major trauma centres and trauma units) ensure that healthcare professionals trained in image reporting are available to interpret urgent imaging for major trauma and deliver the definitive report within 60 minutes of the scan.

Healthcare professionals (radiologists, radiographers and other trained reporters) interpret urgent imaging for major trauma and deliver the definitive report within 60 minutes of the scan.

Commissioners (clinical commissioning groups and NHS England) ensure that they commission services that have the capacity and expertise to interpret urgent imaging for major trauma and deliver the definitive report within 60 minutes of the scan. They undertake contract monitoring and seek evidence that service providers have this in place.

People who have had urgent scans for major trauma have their scan results interpreted within 60 minutes of the scan.

Source guidance

- [Spinal injury: assessment and initial management](#) (2016) NICE Guideline NG41, recommendation 1.5.1
- [Major trauma: assessment and initial management](#) (2016) NICE guideline NG39, recommendations 1.4.3 and 1.5.28

- The timeframe of 60 minutes is based on the [NHS England service specification for major trauma](#) and expert opinion.

Definitions of terms used in this quality statement

Urgent imaging for major trauma

Imaging that takes place immediately on arrival at hospital. Imaging for major trauma includes imaging for chest trauma, haemorrhage and spinal injury. Types of imaging for chest trauma include chest X-ray, eFAST (extended focused assessment with sonography for trauma), CT and ultrasound. Types of imaging for haemorrhage include chest and pelvis X-rays, FAST [focused assessment with sonography for trauma] and CT. Types of imaging for spinal injury include MRI, CT (including whole-body CT) and X-rays. [NICE's guideline on [Major trauma: assessment and initial management](#) recommendations 1.4.4 to 1.4.7 and 1.5.29 to 1.5.33, and NICE's guideline on [Spinal injury: assessment and initial management](#) recommendations 1.5.2 to 1.5.15]

Question for consultation

The timeframe for interpreting urgent images for people with major trauma within 60 minutes of the scan is derived from the [NHS England service specification for major trauma](#). Is this an aspirational timeframe for interpreting images?

Quality statement 3: Open fractures

Quality statement

People with open fractures of the long bone, hindfoot or midfoot have fixation and definitive soft tissue cover within 72 hours of injury if this cannot be performed at the same time as debridement.

Rationale

Delays in the fixation and cover of open fractures can lead to infections and further complications, such as amputations. Ensuring that fixation and soft tissue cover are completed within 72 hours of injury should result in fewer complications, reductions in unplanned surgery and length of hospital stays, and faster return to normal activities.

Quality measures

Structure

Evidence that orthopaedic and plastic surgery specialities have a joint orthoplastic surgery service that allows for fixation and definitive soft tissue cover of open fractures of the long bone, hindfoot or midfoot within 72 hours of injury if this cannot be performed at the same time as debridement.

Data source: Local data collection, for example local protocols.

Process

Proportion of open fractures of the long bone, hindfoot or midfoot where fixation and definitive soft tissue cover are performed within 72 hours of injury if this cannot be performed at the same time as debridement.

Numerator – the number in the denominator where fixation and definitive soft tissue cover were performed within 72 hours of injury.

Denominator – the number of open fractures of the long bone, hindfoot or midfoot where fixation and soft tissue cover cannot be performed at the same time as debridement.

Data source: Local data collection. The [Trauma Audit and Research Network](#) collects data on BOAST4 patients who received soft tissue coverage within the target of 72 hours.

Outcomes

a) Rates of unplanned surgery after surgery on open fractures.

Data source: Local data collection, for example local audit of patient records.

b) Amputation rates for people with open fractures.

Data source: Local data collection, for example local audit of patient records.

c) Length of hospital stay for people with open fractures.

Data source: Local data collection, for example using [Hospital Episode Statistics](#) data from NHS Digital. The [Trauma Audit and Research Network](#) also collects data on length of stay in hospital for trauma patients.

d) Time taken to return to normal activities for people with open fractures.

Data source: Local data collection, for example patient surveys.

What the quality statement means for different audiences

Service providers (major trauma centres, specialist orthoplastic centres, trauma units and district general hospitals) ensure that orthoplastic surgery lists and joint working arrangements are in place for consultants in orthopaedic and plastic surgery to perform fixation and definitive soft tissue cover of open fractures of the long bone, hindfoot or midfoot concurrently and within 72 hours of injury if this cannot be performed at the same time as debridement.

Healthcare professionals (orthopaedic and plastic surgery consultants) perform fixation and definitive soft tissue cover of open fractures of the long bone, hindfoot or midfoot concurrently and within 72 hours of injury if this cannot be performed at the same time as debridement.

Commissioners (clinical commissioning groups and NHS England) ensure that they commission services that have an orthoplastic surgery list and a combined

orthoplastic approach to performing fixation and definitive soft tissue cover of open fractures of the long bone, hindfoot or midfoot within 72 hours of injury if this cannot be performed at the same time as debridement.

People with breaks in a bone complicated by a wound have their broken bones fixed using wires, plates, screws or rods (known as internal fixation) or an external frame (known as external fixation). The wound then needs to be repaired to reduce the chance of infection. When possible all of these steps should be done during a single operation. When more than 1 operation is needed, the steps should be completed within 72 hours.

Source guidance

[Fractures \(complex\): assessment and management](#) (2016) NICE guideline NG37, recommendations 1.2.27 and 1.2.29.

Definitions of terms used in this quality statement

Open fractures of the long bone, hindfoot or midfoot

A fracture of the long bone, hindfoot or midfoot associated with an open wound. The skin may be pierced by the bone or by a blow that breaks the skin at the time of the fracture. The bone may or may not be visible in the wound. This term is synonymous with 'compound fracture'. [NICE's full guideline on [Fractures \(complex\): assessment and management](#)]

Fixation

The final surgical implantation of internal or external metalwork for the purposes of repairing a bone and fixing it into place. [NICE's full guideline on [Fractures \(complex\): assessment and management](#)]

Definitive soft tissue cover

Final closure of the open fracture wound, using a local flap of skin, or skin grafted from another part of the body. [NICE's full guideline on [Fractures \(complex\): assessment and management](#)]

Quality statement 4: Assessment for cervical spine injury

Quality statement

People who have had full in-line spinal immobilisation have their risk of cervical spine injury assessed using the Canadian C-spine rule.

Rationale

If a person might have a spinal injury, it is important to protect their spine during assessment to prevent any damage. However, continuing with routine immobilisation for longer than necessary can lead to adverse effects such as discomfort, skin breakdown and poor patient experience. Using a risk assessment tool as soon as possible to determine whether continued immobilisation and imaging are needed, or if the person is not at risk and can have immobilisation removed, will improve patient comfort and experience.

Quality measures

Structure

Evidence of the documented use of checklists to ensure that the Canadian C-spine rule is used to assess people who have had full in-line spinal immobilisation for their risk of cervical spine injury.

Data source: Local data collection, for example service specifications.

Process

Proportion of people who have had full in-line spinal immobilisation who have their risk of cervical spine injury assessed using the Canadian C-spine rule.

Numerator – the number in the denominator who have their risk of cervical spine injury assessed using the Canadian C-spine rule.

Denominator – the number of people who have had full in-line spinal immobilisation.

Data source: Local data collection, for example, local audit of patient records. The [Trauma Audit and Research Network](#) collects data on spinal immobilisation.

Outcomes

a) Rates of neurological deterioration caused by inappropriate removal of spinal immobilisation.

Data source: Local data collection, for example, local audit of patient records.

b) Patient experience of ambulance and trauma services.

Data source: Local data collection, for example patient surveys.

What the quality statement means for different audiences

Service providers (ambulance services, major trauma centres, trauma units and district general hospitals) ensure that healthcare professionals in pre-hospital and hospital settings use the Canadian C-spine rule to carry out risk assessment for cervical spine injury for people who have had full in-line spinal immobilisation.

Healthcare professionals (paramedics and trauma teams) use the Canadian C-spine rule to carry out risk assessment for people who have had full in-line spinal immobilisation, and document this. The level of risk of cervical spine injury should be used to make decisions on whether spinal immobilisation and imaging are needed.

Commissioners (clinical commissioning groups and NHS England) ensure that they commission services that have checklists to document the use of the Canadian C-spine rule to assess the risk of cervical spine injury for people who have had full in-line spinal immobilisation, and inform decisions about when to continue with spinal immobilisation and request imaging.

People who have had their spine secured to stop it from moving are asked questions by the ambulance team about their age, the type of injury they have had and how they became injured, to find out how likely it is that they have a spinal injury, and which part of the spine might be injured. When they arrive at the hospital, they should be asked the same questions again to decide if they have a spinal injury and whether or not their spine needs to be secured, and have a scan to confirm this.

Source guidance

[Spinal injury: assessment and initial management](#) (2016) NICE guideline NG41, recommendations 1.1.5 and 1.4.5

Definitions of terms used in this quality statement

People who have had full in-line spinal immobilisation

A person who has had a serious event that might have caused injury to their spine is assessed for spinal injury. Full in-line spinal immobilisation is carried out to protect their spine if they cannot be assessed or if any of the following factors are present:

- any significant distracting injuries
- under the influence of drugs or alcohol
- confused or uncooperative
- a reduced level of consciousness
- any spinal pain
- any hand or foot weakness (motor assessment)
- altered or absent sensation in the hands or feet (sensory assessment)
- priapism (unconscious or exposed male)
- a history of past spinal problems, including previous spinal surgery or conditions that predispose to instability of the spine.

Full in-line spinal immobilisation usually involves fitting the person with a collar, placing them on a scoop stretcher, and using head blocks and tape to keep their head still.

[NICE's guideline on [Spinal injury: assessment and initial management](#) recommendations 1.1.3 and 1.1.4 and [information for the public](#)]

Canadian C-spine rule

The person with suspected spine injury should be assessed as having high, low or no risk of cervical spine injury using the following rule:

- the person is at high risk if they have at least one of the following high-risk factors:
 - age 65 years or older

- dangerous mechanism of injury (fall from a height of greater than 1 metre or 5 steps, axial load to the head – for example diving, high-speed motor vehicle collision, rollover motor accident, ejection from a motor vehicle, accident involving motorised recreational vehicles, bicycle collision, horse riding accidents)
- paraesthesia in the upper or lower limbs
- the person is at low risk if they have no high-risk features and at least one of the following low-risk factors:
 - involved in a minor rear-end motor vehicle collision
 - comfortable in a sitting position
 - ambulatory at any time since the injury
 - no midline cervical spine tenderness
 - delayed onset of neck pain
- the person remains at low risk if they are:
 - unable to actively rotate their neck 45 degrees to the left and right (the range of the neck can only be assessed safely if the person is at low risk and there are no high-risk factors).
- the person has no risk if they:
 - have one of the above low-risk factors and
 - are able to actively rotate their neck 45 degrees to the left and right.

Applying the Canadian C-spine rule to children is difficult and the child's developmental stage should be taken into account.

[Expert opinion and NICE's guideline on [Spinal injury: assessment and initial management](#) recommendations 1.1.5 and 1.1.6]

Question for consultation

Assessment using the Canadian C-spine rule should be done in the pre-hospital setting and again when the person arrives at hospital. Which of these settings has more variation in the use of the assessment and the greater need for quality improvement?

Quality statement 5: Major trauma service

Quality statement

Major trauma centres have a dedicated trauma ward and designated consultant available to contact 24 hours a day, 7 days a week.

Rationale

People with major trauma frequently have multisystem injuries that need management input from more than one specialist. This can mean that management is spread across multiple settings and specialities, which can lead to delays in treatment and a lack of coordinated care, resulting in a suboptimal outcome for the person. Having a dedicated trauma ward and consultant available can improve continuity of care, prevent delays in treatment and result in reduced length of hospital stay, lower mortality and improved patient experience.

Quality measures

Structure

a) Evidence of a dedicated trauma ward for patients with multisystem injuries.

Data source: Local data collection, for example from service specifications.

b) Evidence of the availability of a designated consultant 24 hours a day, 7 days a week.

Data source: Local data collection, for example from staff rotas.

Outcomes

a) Mortality rates from major trauma.

Data source: Local data collection, for example using the [Office for National Statistics](#) mortality database. The [Trauma Audit and Research Network](#) also collects data on deaths of trauma patients.

b) Length of hospital stay for people who have had major trauma.

Data source: Local data collection, for example using [Hospital Episode Statistics](#) data from NHS Digital. The [Trauma Audit and Research Network](#) also collects data on length of stay in hospital for trauma patients.

c) Patient experience of major trauma services.

Data source: Local data collection, for example patient surveys.

What the quality statement means for different audiences

Service providers (major trauma centres) ensure that they have a dedicated multidisciplinary trauma ward led by a consultant 24 hours a day, 7 days a week, to treat people with major trauma.

Healthcare professionals (doctors, nurses and allied health professionals) work together to treat people with major trauma on a dedicated trauma ward. A consultant is available to lead the multidisciplinary team 24 hours a day, 7 days a week. A key worker (often a senior nurse) coordinates care at each stage of the care pathway.

Commissioners (NHS England) ensure that they commission services using a service specification that states that there should be a dedicated trauma ward and a designated consultant available to contact 24 hours a day, 7 days a week. They undertake contract monitoring and seek evidence that service providers have these available.

People who have had major trauma can be treated in a special multidisciplinary trauma ward for people with multiple injuries. A consultant doctor is available who can be contacted 24 hours a day, 7 days a week and is in charge of the ward. Each person also has a named key worker, such as a senior nurse, who coordinates their care in hospital. The key worker stays in contact with the person, their family and carers, and the other healthcare professionals who are providing their care.

Source guidance

[Major trauma: service delivery](#) (2016) NICE guideline NG40, recommendation 1.6.2.

Definitions of terms used in this quality statement

Major trauma centre

A specialist hospital responsible for the care of the most severely injured patients involved in major trauma across the region. It provides 24/7 emergency access to consultant-delivered care for a wide range of specialist clinical services and expertise. It is optimised for the definitive care of injured patients. It also provides a managed transition to rehabilitation and the community. It provides all the major specialist services relevant to the care of major trauma, that is, general, emergency medicine, vascular, orthopaedic, plastic, spinal, maxillofacial, cardiothoracic and neurological surgery and interventional radiology, along with appropriate supporting services, such as critical care.

[NICE's full guideline on [Major trauma: assessment and initial management](#)]

Dedicated trauma ward

A multidisciplinary ward for people with multisystem injuries where different specialties input into the care of the patient. [NICE's full guideline on [Major trauma: assessment and initial management](#)]

Designated consultant

A consultant who has responsibility and authority for the hospital trauma service and leads the multidisciplinary team care. This can be a subspeciality consultant who has extensive experience of trauma. [NICE's full guideline on [Major trauma: assessment and initial management](#)]

About this quality standard

NICE quality standards describe high-priority areas for quality improvement in a defined care or service area. Each standard consists of a prioritised set of specific, concise and measurable statements. NICE quality standards draw on existing NICE or NICE-accredited guidance that provides an underpinning, comprehensive set of recommendations, and are designed to support the measurement of improvement.

Expected levels of achievement for quality measures are not specified. Quality standards are intended to drive up the quality of care, and so achievement levels of 100% should be aspired to (or 0% if the quality statement states that something should not be done). However, this may not always be appropriate in practice. Taking account of safety, shared decision-making, choice and professional judgement, desired levels of achievement should be defined locally.

Information about [how NICE quality standards are developed](#) is available from the NICE website.

See [quality standard advisory committees](#) on the website for details of standing committee 1 members who advised on this quality standard. Information about the topic experts invited to join the standing members is available on the [quality standard's webpage](#).

This quality standard will be included in the NICE pathway on [trauma](#), which brings together everything we have said on trauma in an interactive flowchart.

NICE has produced a [quality standard service improvement template](#) to help providers make an initial assessment of their service compared with a selection of quality statements. This tool is updated monthly to include new quality standards.

NICE produces guidance, standards and information on commissioning and providing high-quality healthcare, social care, and public health services. We have agreements to provide certain NICE services to Wales, Scotland and Northern Ireland. Decisions on how NICE guidance and other products apply in those countries are made by ministers in the Welsh government, Scottish government, and Northern Ireland Executive. NICE guidance or other products may include references

to organisations or people responsible for commissioning or providing care that may be relevant only to England.

Improving outcomes

This quality standard is expected to contribute to improvements in the following outcomes:

- mortality rates from major trauma
- long-term disability resulting from trauma
- health-related quality of life
- length of hospital stay for people with trauma
- time to return to daily activities.

It is also expected to support delivery of the Department of Health's outcome frameworks:

- [NHS outcomes framework 2016–17](#)
- [Public health outcomes framework for England, 2016–19](#).

Resource impact

NICE quality standards should be achievable by local services. The potential resource impact is considered by the quality standards advisory committee, drawing on resource impact work for the source guidance. Organisations are encouraged to use the [resource impact report](#) for the NICE guidelines on trauma (NG37 to NG41) to help estimate local costs.

Diversity, equality and language

During the development of this quality standard, equality issues were considered and [equality assessments](#) are available. Any specific issues identified during development of the quality statements are highlighted in each statement.

Commissioners and providers should aim to achieve the quality standard in their local context, in light of their duties to have due regard to the need to eliminate unlawful discrimination, advance equality of opportunity and foster good relations.

Nothing in this quality standard should be interpreted in a way that would be inconsistent with compliance with those duties.

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